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FACTORS RESPONSIBLE FOR GLOBAL OIL PRICE AND ITS POLICY IMPLICATIONS

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Abstract

This paper qualitatively reviews the determinants of oil price volatility. The main aim is to examine the fundamental factors that influence oil price change. The unprecedented increase in oil prices after covid 19 pandemic has renewed the debate over who are the real culprits responsible for this upward movement. These factors have been established through a literature review relying on a constructivist theory. The study identified the factors to include, demand and supply, that the growth for oil in international markets of the United States and China are linked to oil price behavior; OPEC behavior, the financial markets behavior, speculation, and conflict. These oil price determinants were found to vary with time. By implication, they can be conducive to increasing oil prices, particularly in the short run, although they are not taken to be reciprocally restricted but complement one another or take turns in sequential succession.

Keywords: Oil price, Volatility, OPEC, Demand, and Supply

Introduction

Globally in the past several years, oil prices have increased, fallen, and the trend keeps replicated over time at striking rates.[2] Currently, the world is experiencing high oil prices.[3] Examining the oil price volatility is vital for an improved understanding of the changes in the level of uncertainty in the oil market that is typically reflected in oil price fluctuations.[4] It is paramount to note that, crude oil prices tend to be very volatile due to several factors that determine those dynamics.[5] Since Oil prices play a significant role in many aspects of the global economy from determining the prices of necessities and luxuries to economic development, investment, and economic stability of countries.[6] Meanwhile, the price fluctuation of commodities like energy, metal, and foods, is almost synchronously with oil prices.[7] There is a great need to

[1] PHD LAW -2021-04-10480

[2] Andres Gallo and others, 'What Is behind the Increase in Oil Prices? Analyzing Oil Consumption and Supply Relationship with Oil Price' (2010) 35 Energy 4126.

[3] https://edition.cnn.com/2022/06/03/energy/oil-prices-what-next/index.html

[4] Ioannis Chatziantoniou and others, 'A Closer Look into the Global Determinants of Oil Price Volatility' (2021) 95 Energy Economics 105092 <https://doi.org/10.1016/j.eneco.2020.105092>.

[5] Asim Kumer Dey, Audrene Edwards and Kumer Pial Das, 'Determinants of High Crude Oil Price: A Nonstationary Extreme Value Approach' (2020) 14 Journal of Statistical Theory and Practice 1 <https://doi.org/10.1007/s42519-019-0070-7>.

[6] Dey, Edwards and Das (n 4).

[7] Li Liu and others, 'Disentangling the Determinants of Real Oil Prices' (2016) 56 Energy Economics 363 <http://dx.doi.org/10.1016/j.eneco.2016.04.003>.

understand those factors attributed to determining oil price volatility.[8] These factors are said to oscillate from changes in market structures of demand and supply, the role and behavior of the Organisation of the Petroleum Exporting Countries (OPEC), to the growing consumption from emerging economies like China and developing countries.[9]

Ultimately, oil price volatility has become a focal point for many studies caused by the financialization of oil markets in addition oil is lately regarded as a financial asset by market participants.[10] Besides understanding factors responsible for the oil price, helps among others, to explain the origins of oil price volatility, as well as a guide to policy implications. For instance, regulators and policymakers can mitigate the impacts of volatile oil prices on the economy through policies on derivative markets. Thus, governments can improve the efficiency of regulation and economic policy.[11]

Oil price is one of the widely published items in financial times, with different prices fixed every day. This is determined by the number of oil grades traded as well as the important oil wells production.[12] Oil is graded according to the chemical composition, in particular, the sulfur content (sweet or sour) and its density (heavy or light).[13] Therefore the rule of usage is that a model grade has been set and that is transferable to other oil grades as well. For example, North Sea Brent, West Texas Intermediate (WTI), Dubai, and Nigeria Brass. Each of these represents high quality with a specific production or trade location,[14] that is to say, the WTI and Dubai prices represent USA and Asia, while, North Sea Brent is used as a gauge for world reference to specify 2/3 of crude oil worldwide exchange, and the focus is on the spot price of a barrel of Brent negotiated on the physical market.[15]

Factors responsible for oil price change

This section gives a brief review of related literature. A considerable number of papers have examined the factors responsible for oil price change.[16]

[8] Dey, Edwards and Das (n 4).
[9] Gallo and others (n 1).
[10] Chatziantoniou and others (n 3).
[11] Liu and others (n 6).
[12] Kilian Lutz, 'American Economic Association Not All Oil Price Shocks Are Alike : Disentangling Demand and Supply Shocks in the Crude Oil Market Author (s): Lutz Kilian Source : The American Economic Review , Vol . 99 , No . 3 (Jun ., 2009), Pp . 1053-1069 Published' (2016) 99 1053.
[13] Andreas Breitenfellner, Jc Cuaresma and Catherine Keppel, 'Determinants of Crude Oil Prices: Supply, Demand, Cartel or Speculation?' (2009) 4 Monet Policy Econ Q 111 <http://www.nationalbank.at/en/img/mop_2009_q4_analyses_06_tcm16-181766.pdf>.
[14] Breitenfellner, Cuaresma and Keppel (n 12).
[15] Guillaume Chevillon and Christine Rifflart, 'Physical Market Determinants of the Price of Crude Oil and the Market Premium' (2009) 31 Energy Economics 537.
[16] Liu and others (n 6).

Demand and Supply

The first strand of literature argues that the key determinant of oil price is oil demand and supply. this strand asserts that oil demand promotes the price but there is no consensus as to whether demand from emerging economies and developing countries should be the primary determinant.[17] They emphasize that demand coupled with a reduction in global oil production plays a significant role in price change.[18] Traded in an imperfect market, oil is a commodity with a few suppliers and many consumers. This creates an oligopolistic structure where, unlike other exhaustible commodities, oil price does not simply react to demand and supply in an imperfectly competitive market.[19] This implies that oil is not a standard commodity that can be marred by geopolitics and OPEC behavior.[20] Therefore attention must be paid to oil-producing countries' power they wield to influence the price.[21] Change in demand and supply is attributed to many factors, like; change in the economic activities of consuming countries, exchange rates, and supply shocks. [22] Analytically, OECD economies are said to contribute to 58% of world consumption and demand. This coupled with the demand from emerging economies of China, India, and developing countries are said to be the driving force behind the oil price surge globally.[23] That is to say, the rapid growth in China, India, and Asian countries is the force behind the rise in the world's energy demand.[24] This shifts the demand curve to the right and hence increases the oil price.[25] So we can undoubtedly allude that, oil demand[26] promotes prices and represents a significant driving force behind global price changes.[27] For example, the periods of 2008 and after 2010 witnessed unexpected growth from the Asian economies of China and India which contributed to an intense surge in oil prices.[28] Accompanied by the increase in oil demand, the increase in global demand and higher oil prices were responsible for lower price volatility.[29] Similarly, an increase in emerging stock markets is said to put pressure on oil prices to rise. Thus, emerging economies, the oil market, and oil prices are significantly connected.[30]

[17] Lutz (n 11).
[18] Liu and others (n 6).
[19] Yong Jiang and others, 'Does the Price of Strategic Commodities Respond to U.S. Partisan Conflict?' (2020) 66 Resources Policy.
[20] Chevillon and Rifflart (n 14).
[21] Guy Neal Mauldin and others, 'The Determinants of Crude Oil Price Adjustment in the World Petroleum Market'.
[22] Mauldin and others (n 20).
[23] Krichene, N. 2006. World Crude Oil Markets: Monetary Policy and the Recent Oil Shock. IMF Working Paper
[24] Hamilton, J. 2009. Causes and Consequences of the Oil Shock of 2007–08. Brooking Papers on Economic Activity. Spring.
[25] Breitenfellner, Cuaresma and Keppel (n 12).
[26] Kilian, L. 2009b. Not all Oil Price Shocks are Alike: Disentangling Demand and Supply Shocks in the Crude Oil Market. In: American Economic Review 99(3). 1053–1069
[27] (Hamilton, 2008; Hicks and Kilian, 2009; Kilian, 2009b; Wirl, 2008)
[28] Samya Beidas-Strom and Andrea Pescatori, 'Oil Price Volatility and the Role of Speculation'.
[29] Chatziantoniou and others (n 3).
[30] Dey, Edwards and Das (n 4).

Correspondingly, the supply of oil is considered one of the factors behind oil price change. As earlier noted, the oil sector is well known for its oligopolistic nature that is systematized around a few global private oil companies, the OPEC cartel, and the status of Saud Arabia within the oil-producing countries explains a lot on price change. OPEC through its supply regulation policy plays a crucial role in price formation. In addition, oil supply and eventually, price is affected by other factors such as;

1). *Cost of production*, given the fact that production costs differ across different regions and production methods, it is expected that more active drilling rigs may reduce the price of crude oil and vice versa.[31]

2). *Global refining capacity*. This is the maximum oil processed in a calendar year.[32] oil prices are said to relate to changes in refining capacity where noticeable global demand exceeds the global refining capacity, and hence, this scarcity might be the reason for rising oil prices.[33] Also, it is indicated that increases in refining capacity have the possibility of absorbing short-run demand changes.[34]

3). *USA -Shale oil and Canada-oil sands,* the oil supply and price have been affected by the unconventional means of oil extraction and the costs involved.[35] This made the USA become the largest crude oil producer and net exporter around the world and thus have greater control over the oil price.[36] Research indicates that the shale revolution has an impact on oil prices[37] and can cause a sharp increase in oil prices.[38] Accordingly, a positive global oil supply shock indicates a response to an increase in world production that also leads to a positive oil price volatility.[39] For example, the

[31] Liu Mingming and others, 'Production Sharing Contract : An Analysis Based on an Oil Price Stochastic Process' 408.
[32] Theodosios Perifanis and Athanasios Dagoumas, 'Living in an Era When Market Fundamentals Determine Crude Oil Price' (2019) 40 The Energy Journal 1.
[33] Hotelling, H., 1931. The economics of exhaustible resources. J. Polit. Econ. 39, 137–175. Huntington, H., 1994. Oil price forecasting in the 1980s: what went wrong? Energy J. 15,
[34] Krzysztof Drachal, 'Forecasting Spot Oil Price in a Dynamic Model Averaging Framework — Have the Determinants Changed over Time?' (2016) 60 Energy Economics 35 <http://dx.doi.org/10.1016/j.eneco.2016.09.020>.
[35] Oluwasegun Babatunde Adekoya and Anthony Noah Adebiyi, 'Oil Price-Inflation Pass-through in OECD Countries: The Role of Asymmetries, Impact of Global Financial Crisis and Forecast Evaluation Oil Price-Inflation Pass-through in OECD Countries The Role of Asymmetries, Impact of Global Financial Crisis and Forecast Evaluation' [2019] Article in International Journal of Energy Sector Management <www.emeraldinsight.com/1750-6220.htm> accessed 1 May 2022.
[36] Chi Wei Su and others, 'Factors Driving Oil Price —— from the Perspective of United States' (2020) 197 Energy.
[37] Lutz (n 11).
[38] See. the years 1990 and 1999. Studies show that a significant rise in realized oil price volatility is caused from 1990 to 1991 which is associated with Iraq's invasion of Kuwait and the collapse of the former Soviet Union, one of the three largest oil producers in the world in 1991 as well as during 1998–1999 which coincides with oil production cuts by OPEC
[39] Liu and others (n 6).

oil price fluctuations in the periods of 1990-1991, 1998-1999 are attributed to flow supply shocks and speculative demand shocks.[40]

4). *The OPEC factor* owing to price formation was created in 1960 and aimed at protecting the interests of its members,[41] OPEC controls oil supply by its policy when it pushes the oil-producing countries to cut oil supply in order to raise the market price and thereby earn profits.[42] Hence, a decision to reduce or increase production quotas may raise or lower the price of crude oil.[43] For example, in the mid 1990s, OPEC managed an important fraction of world production which let the price stabilize at US$ 18-19 per barrel of North Sea Brent in 1997.[44] Although this stability did not last for long due to the effects of the Asian crisis of 1998 which saw the fall in demand and the oil price collapse to about US$ 10 per barrel.[45] The most recent OPEC's attempt to stabilize oil prices was seen after the effect of the COVID 19 pandemic which hit the world oil market. This resulted in reduced air travel and demand for jet fuel, lower economic activity globally, and total country lockdown reduced demand for motor fuel (petrol and diesel).[46] These disruptions led to a slowdown in production and mobility worldwide and led to a drop in global demand for oil.[47] On the supply side, OPEC+ agreed to cut production,[48] in response to the collapse in oil demand.[49] Although the intervention had little impact at the time as the oil prices went low to about US$ 20 per barrel.

5). *Geopolitical, war, and terrorism.* These are said to have a significant effect on oil prices.[50] Geopolitical tend to affect the oil price when the financial market volatility exhibits large spikes, especially during times of economic and financial turbulences.[51] For example, the Persian Golf war (1990-1991), the USA recession in early 2000, the 2007 GFC, the Libyan war in 2000s, the 2009 European sovereign debt crisis, the

[40] Lutz Kilian and Daniel P Murphy, 'The Role of Inventories and Speculative Trading in the Global Market for Crude Oil' (2014) 29 Journal of Applied Econometrics 454.
[41] (cf. Griffin (1985), Jones (1990), Ramcharran (2002), De Santis (2003), Kaufmann (2004)
[42] See. The impact OPEC has had on prices has evolved, (1983 OPEC production quota on OPEC supply, a target corridor between 22 and 28 US dollars in March 2000.) However, aftermarket prices continued to rise above 28 US dollars for more than a year OPEC suspended its corridor in June 2005.
[43] Barsky and Kilian (2004), Kaufmann et al. (2004) and Slaibi et al. (2006).
[44] Kaufmann, R.K., Ullman, B., 2009. Oil prices, speculation and fundamentals: interpreting causal relations among spot and futures prices. Energy Econ. 31, 550–558
[45] Kilian, L., 2008. Exogenous oil supply shocks: how big are they and how much do they matter for the U.S. economy? Rev. Econ. Stat. 90, 216–240.
[46] OPEC Confronts Covid-19 | Center for Strategic and International Studies (csis.org)
[47] IEA (2020), *IEA Oil Market Report - April 2020*, https://www.iea.org/reports/oil-market-report-april-2020
[48] Blas, J. and E. Pismennaya (2020), *Saudis Boost Oil Output, Defying Trump's Plea To End Price War*, https://www.bloomberg.com/news/articles/2020-04-01/saudi-arabia-resists-trump-s-attempt-to-broker-an-oil-war-truce
[49] Brower, D. (2020), *Why the record Opec cut is no match for coronavirus hit to demand*, https://www.ft.com/content/2a91fd26-c337-427f-8b24-9f53bc321bb2
[50] Mohamed Albaity and Hasan Mustafa, 'International and Macroeconomic Determinants of Oil Price: Evidence from Gulf Cooperation Council Countries' (2018) 8 International Journal of Energy Economics and Policy 69.
[51] Dey, Edwards and Das (n 4).

2014 oil price crash, the war in the middle east, and recently the Ukraine war have caused financial uncertainty with oil market[52] and are also associated with the change in global oil prices.[53] Similarly, the USA-funded conflicts and partisan politics have had a great impact on the global oil market and prices.[54] USA is the largest consumer and second-largest producer of crude oil globally and occupies a special place in the crude oil market.[55] Thus, it is possible to play a significant role in influencing the pricing of international commodities such as oil given the special position occupied by the USA, in the global market. To further consolidate its position, the USA is said to launch conflicts in oil-producing countries, mostly in the Middle East so as to obtain illegal oil during the war to meet its local consumption needs.[56] Research has proven that there is a relationship between political production halts and oil price shocks.[57]

This is largely due to the fact that geopolitical events in oil-producing countries affect the oil supply, while the oil prices spike. For example, the Gulf war affected the oil industry in Iraq, and the wars in Afghanistan led to a sharp drop in oil supply and a surge in oil prices.[58]

Similarly, the USA's partisan politics is believed to influence the oil market.[59] This is viewed by the fact that the combination of increased polarization with the divided government affects the decision of investors in the financial market and also affects private investment which in turn has a critical impact on the stock market.[60] For example, the 2013 great US recession that was accelerated by partisan politics, the Trump-Clinton election of 2016, and the Trump-Biden election in 2020 had a significant upward trend, and the crude oil prices had a corresponding upward trend.[61] Further, the petro-dollar economy has a significant effect on oil price volatility. In the petro-dollar economy that started after the collapse of the Bretton Woods system in 1971,[62] the U.S. shifted its monetary policy to oil which re-established the dollar-

[52] Chatziantoniou and others (n 3).
[53] Chatziantoniou and others (n 3).
[54] James D Hamilton, 'Understanding Crude Oil Prices' (2009) 30 Energy Journal 179.
[55] Balcilar, M., Bekiros, S., & Gupta, R. (2017). The role of news-based uncertainty indices in predicting oil markets: a hybrid nonparametric quantile causality method. Empirical Economics, 53(3), 879-889
[56] Su and others (n 35).
[57] Hamilton (n 53).
[58] Su and others (n 35).
[59] Marina Azzimonti, 'THE POLITICS OF FDI EXPROPRIATION' (2018) 59 International Economic Review 479.
[60] Maryam Ahmadi and others, 'Global Oil Market and the US Stock Returns'.
[61] J Wakeford and M Swilling, 'Implications of Increasing World Oil Scarcity for National Food Security in South Africa' (2014) 53 Agrekon 68.
[62] Iwami, T. (1995). The Bretton Woods System as a Gold Exchange Standard. In: Japan in the International Financial System. Studies in the Modern Japanese Economy. Palgrave Macmillan, London. https://doi.org/10.1057/9780230372634_1

centered international currency system where in agreement with OPEC, the U.S. dollar was set to be the sole denomination and settlement currency for oil exports and the petrodollar hegemony was born.[63] In that way, the U.S. consolidated the dollar position in the international monetary system and hence controlling the oil trade. Therefore, by the fact that the oil price is denominated in U.S. DX, it has a significant and close relationship with oil price volatility.[64] For example, the weakness of the U.S. dollar contributes to oil price upsurge, because, oil producers will aim to regain purchasing power of their export revenue; demand increases in countries whose currencies appreciate against the dollar; commodity investments gain attractiveness over U.S. dollar investments, and currency markets reflect fundamental factors pivotal to commodity markets.[65] Studies have proven that there is a relationship between the national currencies of oil-producing countries and consuming countries and the U.S. dollar. It is reflected when there is an appreciation of the U.S. dollar making it expensive for non-U.S. oil importing countries and therefore reducing their oil demand,[66] or depreciation of the U.S. dollar, the oil prices increase,[67] which is reflected in oil price volatility.[68] Ideally, there is a positive relationship between the global exchange rate and an appreciation U.S. dollar value that can indicate a rise in the price of oil and presents a real potential determinant of oil volatility.[69]

Speculation

The second strand argues that oil prices are highly influenced by speculation[70] about oil prices. The main arguments in favour of financial speculation: (i) the overall increase in activity in the oil futures market; (ii) the effect of non-commercial firms' positions; and (iii) the effect of non-commercial firms on market expectations.[71] In as much as there is no consensus on the role played by speculation in the oil market, it is not denied that speculative demand shifts are responsible for oil surges between 2003-2008.[72] It is indicated that the speculative component of the real price of oil is reflected in speculative demand that tends to shift the oil price, as was seen in the

[63] Su and others (n 35).
[64] The Case and others, 'Creating a Favourable Deployment Mechanism of Oil and Gas Revenues with Regard to Volatile Oil Prices ': 179.
[65] Su and others (n 35).
[66] Y Wang, C Wu, L Yang Oil price shocks and stock market activities: Evidence from oil-importing and oil-exporting countries, 2013, Journal of Comparative economics,
[67] Aloui, Riadh, Shawkat Hammoudeh, and Duc Khuong Nguyen. "A time-varying copula approach to oil and stock market dependence: The case of transition economies." *Energy Economics* 39 (2013): 208-221.
[68] Liu and others (n 6).
[69] Chatziantoniou and others (n 3).
[70] "speculation" is defined as a firm holding a net position, either long or short, in the expectation of earning a positive return, and not because it is a commercial user of oil (see Working 1960).
[71] R Alquist, O Gervais-The Energy Journal and undefined 2013, 'The Role of Financial Speculation in Driving the Price of Crude Oil' [2011] iaee.org <https://www.iaee.org/en/publications/ejarticle.aspx?id=2537> accessed 11 June 2022.
[72] Lutz (n 11).

2003-2008 oil upsurge caused by the unexpected increase in world consumption.[73] That notwithstanding, Alquist and Gervais argue that the speculative index and the daily price changes of crude oil are weakly correlated, which indicates a minor role of trader activity in determining oil prices,[74] and that does not cause significant increases in the price of oil.[75] However, a few studies highlight the importance of speculation in oil price volatility. For example, Einloth[76]stated that, the increases in oil prices in 2007-2008 were driven by speculation although the unanticipated decline in aggregate demand caused the crash. Similarly, Hache and Lantz[77] identify the impact of non-commercial traders the speculators having the possibility of switching to a ‘‘crisis state’’ when large fluctuations in crude oil prices are observed. And Juvenal and Perella[78] emphasize that speculative shocks are the most important drivers behind the global demand shocks in as much as global demand shocks account for the largest share of oil price fluctuations.[79]

Implication for policy

In recent years, the large fluctuations in the prices of crude oil have been a matter of great concern to economists, market participants, and policymakers. The identification of price determinants not only helps to explain the origins of volatile oil prices but also has important policy implications. For example, if the major determinant of oil price is speculation, regulators and supervisors could weaken the negative impacts of volatile oil prices on the economy by implementing strict policies on the derivative markets. If the price of oil is determined by demand and supply fundamentals, then policymakers can do little to affect prices but only focus on promoting energy conservation or developing alternative energy sources. Moreover, Kilian first noted that the impacts of oil price shocks on macroeconomic activity differ greatly depending on whether this shock is caused by supply or demand changes. Therefore, disentangling oil price determinants is helpful for governments to improve the efficiency of economic policy. Oil producing economies are still oil dependent, although to varying degrees. These economies are signiicantly affected by decreases in the oil price, either through global demand or access supply.[80]

The question of whether oil price shocks are caused on the supply or the demand side raises debate about their exogenous or endogenous treatment in macroeconomic

[73] Kilian and Murphy (n 39).
[74] Alquist, Journal and 2013 (n 70).
[75] Celso Brunetti, Bahattin Buyuksahin and Jeffrey H Harris, ‘Speculators, Prices and Market Volatility’ [2011] SSRN Electronic Journal <https://papers.ssrn.com/abstract=1736737> accessed 11 June 2022.
[76] James Einloth, ‘Speculation and Recent Volatility in the Price of Oil’.
[77] Emmanuel Hache and Frédéric Lantz, ‘Speculative Trading and Oil Price Dynamic: A Study of the WTI Market’ (2013) 36 Energy Economics 334.
[78] Luciana Juvenal and Ivan Petrella, ‘Speculation in the Oil Market’ [2011] SSRN Electronic Journal <https://papers.ssrn.com/abstract=2038977> accessed 11 June 2022.
[79] Liu and others (n 6).
[80] Albaity and Mustafa (n 49).

models. The different impacts of the shocks – depending on the underlying cause – would also have consequences for determining an adequate monetary policy response.[81] Alongside demand developments that occur as a result of short-term changes in economic activity, the economies' energy intensity is another relevant, structural variable. An increase in energy consumption for a given output level has an impact on the oil demand and thus possibly on the oil price.[82]

Today, the theory of peak oil has been widely accepted regarding easily exploited oil sources.[83] As such, it is natural to attribute the change in supply and demand to a wide range of factors. These include changes in the economic activities of consuming countries, exchange rates, and, some exogenous variables, such as supply shocks.[84] Bernabe et al. and Yousefi and Wirjanto stressed that supply and demand market forces, gross domestic product, stock market activity, exchange rates, and even weather conditions greatly influence oil price.[85] Indeed, certain seasonal drifts occur due to demand peaks during the winter season (as the distillate heating oil and residual fuels consumption increases).[86] Oil supply Starting with the impact of a positive shock in oil production on realized oil price volatility is evident.

Conclusion

Four groups of explanatory factors are identified as possible dterminants of crude oil prices: 1. fast-growing demand due to high global economic growth 2. Declining supply or anticipated shortages in supply. 3. Coordinated action on the part of crude oil producers 4. the behavior of financial market participants, and speculation. These determinants are not necessarily mutually exclusive but can complement each other or take turns in chronological succession. These can be outlined as follows: Increasing demand encounters stagnating supply, triggering speculation about future shortfalls, which subsequently materialize as the producing countries stockpile oil reserves.[87]

As much as there are suggestions that fundamental factors trigger and dominate price trends, there is no conclusive evidence to support monocausal explanations. Rather, the price of oil is the outcome of complex processes occurring within the global economy. Research results suggest that of the short-term factors on the supply side, consumer price inflation plays a significant part in modeling crude oil price fluctuations. Moreover, Saudi Arabia's production quota – a factor relating to the market structure – gained increasing prominence in the 1990s, while in the 2000s,

[81] Dey, Edwards and Das (n 4).
[82] Dey, Edwards and Das (n 4).
[83] Dey, Edwards and Das (n 4).
[84] Mauldin and others (n 20).
[85] 'The Empirical Role of the Exchange Rate on the Crude-Oil Price Formation by Ayoub Yousefi, Tony S. Wirjanto :: SSRN' <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2241880> accessed 11 June 2022.
[86] Albaity and Mustafa (n 49).
[87] Dey, Edwards and Das (n 4).

both supply and demand factors (European demand for oil and refining capacities) are most prevalent in determining crude oil prices. Furthermore, the role of speculation and financial market participants' investment strategies, although not easy to prove, can hardly be excluded. Although financial flows essentially follow fundamental market trends, they can nevertheless determine price developments over the short to medium term.

The econometric results do not necessarily contradict the view that the most recent oil price shock was caused by a chronological sequence of all four groups of determinants (demand, supply, structure of the oil market, and speculation). Originally, the demand trend from emerging economies seems to have played a decisive role. This perhaps also accounts for the initially rather moderate macroeconomic effect in comparison with historical oil price shocks, which were primarily caused by (expectation of) short-term scarcity of supply.[88]

Bibliography

Adekoya OB and Adebiyi AN, 'Oil Price-Inflation Pass-through in OECD Countries: The Role of Asymmetries, Impact of Global Financial Crisis and Forecast Evaluation Oil Price-Inflation Pass-through in OECD Countries The Role of Asymmetries, Impact of Global Financial Crisis and Forecast Evaluation' [2019] Article in International Journal of Energy Sector Management <www.emeraldinsight.com/1750-6220.htm> accessed 1 May 2022

Ahmadi M and others, 'Global Oil Market and the US Stock Returns'

Albaity M and Mustafa H, 'International and Macroeconomic Determinants of Oil Price: Evidence from Gulf Cooperation Council Countries' (2018) 8 International Journal of Energy Economics and Policy 69

Alquist R, Journal OG-TE and 2013 undefined, 'The Role of Financial Speculation in Driving the Price of Crude Oil' [2011] iaee.org <https://www.iaee.org/en/publications/ejarticle.aspx?id=2537> accessed 11 June 2022

Azzimonti M, 'THE POLITICS OF FDI EXPROPRIATION' (2018) 59 International Economic Review 479

Beidas-Strom S and Pescatori A, 'Oil Price Volatility and the Role of Speculation'

Breitenfellner A, Cuaresma J and Keppel C, 'Determinants of Crude Oil Prices: Supply, Demand, Cartel or Speculation?' (2009) 4 Monet Policy Econ Q 111 <http://www.nationalbank.at/en/img/mop_2009_q4_analyses_06_tcm16-

[88] Dey, Edwards and Das (n 4).

181766.pdf>

Brunetti C, Buyuksahin B and Harris JH, 'Speculators, Prices and Market Volatility' [2011] SSRN Electronic Journal <https://papers.ssrn.com/abstract=1736737> accessed 11 June 2022

Case T and others, 'Creating a Favourable Deployment Mechanism of Oil and Gas Revenues with Regard to Volatile Oil Prices ': 179

Chatziantoniou I and others, 'A Closer Look into the Global Determinants of Oil Price Volatility' (2021) 95 Energy Economics 105092 <https://doi.org/10.1016/j.eneco.2020.105092>

Chevillon G and Rifflart C, 'Physical Market Determinants of the Price of Crude Oil and the Market Premium' (2009) 31 Energy Economics 537

Dey AK, Edwards A and Das KP, 'Determinants of High Crude Oil Price: A Nonstationary Extreme Value Approach' (2020) 14 Journal of Statistical Theory and Practice 1 <https://doi.org/10.1007/s42519-019-0070-7>

Drachal K, 'Forecasting Spot Oil Price in a Dynamic Model Averaging Framework — Have the Determinants Changed over Time?' (2016) 60 Energy Economics 35 <http://dx.doi.org/10.1016/j.eneco.2016.09.020> Einloth

J, 'Speculation and Recent Volatility in the Price of Oil'

Gallo A and others, 'What Is behind the Increase in Oil Prices? Analyzing Oil Consumption and Supply Relationship with Oil Price' (2010) 35 Energy 4126

Hache E and Lantz F, 'Speculative Trading and Oil Price Dynamic: A Study of the WTI Market' (2013) 36 Energy Economics 334

Hamilton JD, 'Understanding Crude Oil Prices' (2009) 30 Energy Journal 179

Jiang Y and others, 'Does the Price of Strategic Commodities Respond to U.S. Partisan Conflict?' (2020) 66 Resources Policy

Juvenal L and Petrella I, 'Speculation in the Oil Market' [2011] SSRN Electronic Journal <https://papers.ssrn.com/abstract=2038977> accessed 11 June 2022

Kilian L and Murphy DP, 'The Role of Inventories and Speculative Trading in the Global Market for Crude Oil' (2014) 29 Journal of Applied Econometrics 454

Liu L and others, 'Disentangling the Determinants of Real Oil Prices' (2016) 56 Energy Economics 363 <http://dx.doi.org/10.1016/j.eneco.2016.04.003>

Lutz K, ‘American Economic Association Not All Oil Price Shocks Are Alike : Disentangling Demand and Supply Shocks in the Crude Oil Market Author (s): Lutz Kilian Source : The American Economic Review , Vol . 99 , No . 3 (Jun ., 2009), Pp . 1053-1069 Published’ (2016) 99 1053

Mauldin GN and others, ‘The Determinants of Crude Oil Price Adjustment in the World Petroleum Market’ 0

Mingming L and others, ‘Production Sharing Contract : An Analysis Based on an Oil Price Stochastic Process’ 408

Perifanis T and Dagoumas A, ‘Living in an Era When Market Fundamentals Determine Crude Oil Price’ (2019) 40 The Energy Journal 1

Su CW and others, ‘Factors Driving Oil Price —— from the Perspective of United States’ (2020) 197 Energy

‘The Empirical Role of the Exchange Rate on the Crude-Oil Price Formation by Ayoub Yousefi, Tony S. Wirjanto :: SSRN’ <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2241880> accessed 11 June 2022

Wakeford J and Swilling M, ‘Implications of Increasing World Oil Scarcity for National Food Security in South Africa’ (2014) 53 Agrekon 68