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FROM VALUE TO POWER: THE RISE OF OIL AS A POLITICAL ECONOMIC COMMODITY

Bülent Temel

July, 2012

From Value to Power: The Rise of Oil as a Political Economic Commodity

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ABSTRACT

This paper traces the historical trajectory of oil's transformation from an economic resource into a political economic commodity. Since its beginning as an industrial raw material in the mid 19th Century, petroleum has become an increasingly significant commodity relevant to a number of domains from domestic politics to international trade, environment to foreign affairs. An historical account of the rise of oil in international political economy sheds light on the dynamics that generate the political power associated with it, the constraints that restrict the policy space for many governments in international relations today, and the unpredictable nature of its economic value.

Keywords: Crude oil, political economy, international relations, OPEC.

INTRODUCTION

"We will never again permit any foreign nation to have Uncle Sam over a barrel of oil." Former US President Gerald Ford's words were desperate acknowledgment of the political significance of oil in international politics in the mid 1970s. Petroleum is a natural resource with tremendous potential to impact various political and economic mechanisms. The term oil sword is used to refer to the price setting power of the world's largest oil exporter, Saudi Arabia while the country with highest oil production volume, Russia is called the energy superpower despite a score of domestic and international malfunctions in its autocratic oligarchy. Bierman (2010). Classified negotiations between governments that own nationalized oil production companies, multinational distributors like ExxonMobil or Shell, and governments of the largest oil consumer nations like the US or China ignite speculations

¹ Gerald R. Ford, speech to the Anti-Defamation League of Bnai Brith, West Palm Beach, Florida, January 26, 1974. Congressional Record, February 4, 1974, Vol. 120, p. 2044.

that some *arcanum imperii* are conspired around this essential resource that influence the very livelihood of billions of people around the world.

Economic value of petroleum is substantial to the degree of bringing forth some peculiar challenges. Many oil producing countries such as Azerbaijan or Kuwait are prone to a macroeconomic condition called resource anathema. Also known as Dutch disease, the phenomenon refers to a seemingly negative correlation between a country's revenues from a natural resource and its utilization of its industrial potential. More an economy extracts and exports an internationally valued natural resource, more its national currency would be inclined to appreciate, and consequently, higher its manufacturing products would be priced abroad. Lower international price competitiveness as a result of strong local currency hampers the country's struggle for industrialization and social progress, and increases the systemic risk as a result of the lack of macroeconomic diversification. Much like the Netherlands during the 1960s and the 1970s; Venezuela, Nigeria, Ecuador, Trinidad and Tobago, Algeria and Indonesia experienced inflation, industrial contraction and unemployment after the discovery of oil in their soils since then. In an effort to alleviate the negative effects of resource anathema, some countries establish sovereign wealth funds, which is a way of keeping oil revenues outside of the country and introducing them to the local economy more gradually over a period of time.

Systemic risk induced by a lack of diversification in a national economy has been exemplified by the current case of Libya. In an effort to compel the Gaddafi administration to accommodate the demands by pro-democracy rebels, the European Union imposed sanctions on numerous Libyan entities. The EU issued travel bans, froze financial assets and prohibited doing business with seven state agencies, 39 individuals and one private company –Al-Sharara that delivers fuel to regions controlled by Gaddafi. Pawlak (2011). While the persuasive potential of the EU's move remains to be seen, it is predictable that the Gaddafi regime that relies heavily on oil for electricity generation and its resistance against the NATO and the rebels cannot sustain its case any longer than what oil reserves in the country will permit.

Dominance of oil in a national income can also introduce a dynamic that jeopardizes welfare in a given country. If an economy employs a very small proportion of its population

to generate most of its national income, majority of the people become vulnerable to external macroeconomic shocks in the international conjuncture. Saudi Arabia where 2-3% of the population is employed in oil industry that counts for 70% of the country's national income is a case in point. Noreng (2004). Saudi Arabia's revenues from oil are so substantial that the country follows a *no tax-no work* policy for millions of its citizens. In such a *rentier state*, the country's future is determined largely by a highly volatile commodity like petroleum, and human development stagnates due to a lack of investment in social capital.

Equatorial Guinea is another example. McSherry (2006). The tiny African country's discovery of oil on its Atlantic shores in 1996 led to an extravagant increase in its GDP growth. Despite the fact that the World Bank ranks the country's average income in the same level as the incomes in some rich countries like Japan and Iceland, most of the 500,000 people in the country continue to live in abject poverty. Increased revenues from the sales of 360,000 barrels of oil every day created more means as well as reasons for the country's dictatorial leadership to continue the *status quo*. Today, Equatorial Guinea is a country that simultaneously has one of the highest average incomes in Africa alongside the worst records of life standard, democracy and political stability. Malaysian researchers Saka Luqman and Fatima Lawal find a similar story in Nigeria. They write "more than serving as the financial bastion for the implementation of a diversify economy, the massive infusion of oil revenue promoted corruption, encouraged patronage in the dispensing of public service, and gingered a rentier economy that is tilted towards the wasteful spending of oil rents rather than productive creation of wealth in Nigeria." Luqman and Lawal (2004).

DISCOVERY OF OIL AND THE INDUSTRIAL HISTORY

Although petroleum was known to mankind since 2000 BC, its use other than medicinal purposes can be traced back to the mid 19th Century. When a Polish pharmacist named Ignacy Lukasiewicz invented a process to distill the combustible hydrocarbon liquid called kerosene from petroleum (crude oil), oil emerged as a cheaper alternative to whale oil as a fuel for lighting. Oil exploration and extraction became a major economic activity throughout the world, predominantly in the Eastern Europe and the Caucuses. Later discoveries in Ohio, Pennsylvania, Oklahoma and Texas in the late 19th Century were followed by others in Persia –today's Iran, Kuwait, Qatar and the United Arab Emirates in

the early 20th Century. Internal combustion engine technology, rise in commercial transportation and increasing use of plastic further fueled drilling activities to explore, extract and refine petroleum in the following decades.

Oil's increased significance during the first half of the 20th Century introduced oil companies as the new behemoths of the Western industrial establishment. A drilling company established in Ohio in 1870, Standard Oil, grew to be the world's largest refiner and one of the most expansive business conglomerates. The company's wide spread operations in practically every area of the oil industry –from exploration to drilling, extraction to refining, led to charges of monopolistic behavior in the following years. Manns (1998). In 1911, the US Supreme Court found Standard Oil guilty of breaking the Sherman Antitrust Act, which prohibited applying high prices to consumers and low prices to competitors by using affiliated companies. In a rather unprecedented move in American industrial history, the court ruled that Standard Oil had grown too large to sustain fair competition in the oil industry, and ordered it to be split into 34 companies. Three of these newly formed companies called *Baby Standards* later became Exxon, Mobil and Chevron, and Standard Oil's founding President John Rockefeller became an industrial icon in the Western World.

In 1908, a government backed project called Model-T accelerated oil's transformation from an industrial support product into a primary household consumption item. The project promoted Ford's Model-T as the world's first automobile that was a personal transportation item for the middle class. The government's endorsement of gasoline run automobiles led to the emergence of oil industry as a privileged segment of corporate America and a perception of essentiality in the common American mind. Economic historian Joseph Pratt (2008) noted "once government's promotion of oil had been designed into energy markets, oil remained politically favored over coal for over half a century. In those years, it was not unusual to hear oil executives extolling free market and cursing government interference at a time when oil prices were stabilized by government regulation of production. 'Free markets' in oil thus included substantial government promotion deeply embedded in the market and largely erased from public consciousness." Pratt (2008, p.80).

Oil became vastly instrumental in the rapid revival of the Western Europe from the catastrophe of the World War-2. During the 24 years following the war, oil consumption

grew by fivefold globally, doubled every 6.5 years outside the North America (Maugeri, 2003). In this "Golden Age", oil passed coal to become the world's primary energy source, the Persian Basin beat the United States as the top provider of oil to Europe, and the US turned from a net exporter into a net importer of oil. Abundant and cost effective Middle Eastern oil, which at $20\phi/bbl$ costed less than a quarter of the prices in Venezuela and Texas, enabled electrification, mechanization and industrial oil-byproducts to spread widely in the West.

Between 1930 and 1960, seven largest distributors in the global petroleum business established a discreet cartel, which was later called *Seven Sisters*. Having recognized the tremendous economic potential oil represented, they set up agreements with the Middle Eastern producers to buy crude oil at preset prices, and sold it around the globe at international market rates. With the help of this lucrative scheme and an insatiable global demand for energy; BP, Shell, Exxon, Mobil, Gulf, Texas Oil and Chevron have grown to be some of the largest corporations in the world today. The average annual revenue in this group of companies is higher than the gross domestic products of 149 of the 181 countries in the world today. IMF (2011).

In 1960, major oil producing countries realized that the global demand for oil was price inelastic, which meant that they had been giving up substantial income by engaging in price stabilization deals with oil distributing companies. They started their own cartel under the name OPEC (Organization of Oil Exporting Countries) in an effort to take a larger share of the global energy pie and reclaim their power to dominate the industry. Each of the twelve members of the union agreed to restrain its production with a certain quota in order to curb the role of non-production actors in price determination process. Restricting oil output allowed OPEC to control international per barrel crude oil prices, and emerged as an instrument of soft power with economic as well as political consequences.

THE ERA OF POLITIZATION

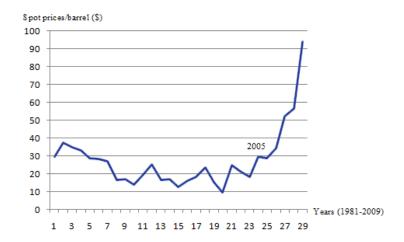
1973 marked a pivotal point, on which oil began to transform from an economic resource into a political economic commodity. The Arab members of OPEC (called OAPEC or Organization of Arab Petroleum Exporting Countries) joined forces and cut down their

supply in response to the US support for Israel against Egypt, Syria, Jordan and Iraq during the Yom Kippur War. Drastic cuts increased oil prices from \$3 to \$12 a barrel, which led to a contraction in global output, and stagflation in the US and Canada. Crude oil prices doubled once in 1974 and once again in 1980. The US Government, at the peak of its international power, had to step back as a result of the economic pressure imposed by the six month long embargo. The 1973 crisis spelled the emergence of oil as an economic sanction tool deployed to accommodate political agendas.

A following shock in 1979 deepened the perceived political power of oil producers as it made clear that the remedies imposed after the 1973 crisis by oil importing nations against the threat of oil politics were ineffective. Establishing an international institution to control the global energy market (IEA or International Energy Agency), replacing oil with domestic substitutes, increasing taxes on oil, implementing energy saving programs, and reducing energy subsidies were all proven to be futile ideas. Western economics were hit by yet another episode of supply side politics with significant economic consequences that year. As the Iranian Revolution replaced President Reza Pahlavi with theocratic revolutionist Ayatollah Khomeini, sociopolitical turmoil in this country resulted in a 4% reduction in Iran's oil exports, and drove oil prices up above the 20\$ line. Nordhaus (1980). The unstable 1970s reaffirmed the power of oil politics, and oil producing countries carried out a movement called New International Economic Order and nationalized their oil industries in an effort to reclaim global oil income from private Western corporations.

More recent history of international oil prices registered an unprecedented pace of increase in 2008 (Figure-3). After a 25-year period of modest changes, prices dramatically increased from \$30 to \$100 a barrel between 2005 and 2008.

Figure-3: International per barrel crude oil prices between 1981 and 2009



The drastic hike in the wake of the US operation in Iraq reignited the decades-long discourse on energy dependence and the political value of oil in the global economy. In order to understand how political factors influence oil prices, the mechanism that determines international prices need to be unraveled. Following chapter will present a general pricing function in the global oil business, and analyze several incidences from various countries in an effort to understand the interplay between oil and politics.

OIL AND POLITICS

Political power attached to oil derives from the pricing mechanism in international energy markets. In the four main mercantile exchange markets where oil instruments trade (NYMEX-New York, SMX-Singapore, TOKOM-Japan and MCX-India), bids on crude oil prices are determined out of three aggregate factors:

- . Economic factors such as futures trading, global demand and supply, technology and knowhow, capacity utilization rates, prices of other commodities like natural gas or propane, and global economic growth,
- . Environmental factors such as climatic conditions, proximity of newly found eextraction plants to markets, and the quality of the extracted petroleum, and
- . Political factors like the political use of oil supply, laws and regulations in oil producing and consuming countries, and the quantity of oil kept in international reserves.

Economic factors that apply downward pressure on prices are discovery of new deposits, economic contraction, subsidies on oil extraction, laws that incentivize oil investments, above-optimal level strategic reserves, and technology and knowhow. Braginskii

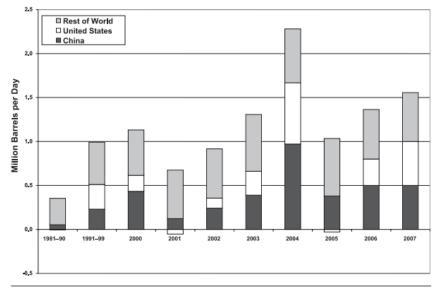
(2009, p. 2486). Reversely; a fast GDP growth, depletion of current deposits, ending of or decrease in cheap-production capabilities, restrictive laws and regulations, suboptimal-level strategic reserves and a colder winter push barrel prices up (Table-1).

Table-1 Economic determinants of crude oil prices. Braginskii (2009, p. 2486)

Factors that decrease the barrel price	Factors that increase the barrel price
Economic slowdowns	GDP growth
Discovery of new deposits	Depletion of current deposits
Free-production capacities	End of free-production capacities
Incentive laws	Restrictive laws
Keeping strategic reserves above optimal	Suboptimal level strategic reserves
level (85-90%)	
Warm winter	Cold winter
Technology & knowhow	-

Hamilton argues that the sharp increase in international crude oil prices in 2008 was largely attributable to increased demand from China, capacity stagnation and dependency-driven price inelasticity of oil. Hamilton (2008). Data from the US Energy Information Agency that shows the positive correlation between global economic growth and oil consumption supports these findings (Figure-1).

Figure-1: Oil consumption in the US, China and the world. The Council of Foreign Relations (2006).



Source: EIA, Short-Tenn Energy Outlook, February 2006 (1981–90 and 1991–99 are annual averages).

Financial speculation is a major determinant of international oil prices. In their analysis of daily crude oil prices in the spot and future derivative markets, Kaufmann and Ullman (2009) find that derivative trading was the primary element responsible from the price increases in 2008. Increased demand for oil and stagnant production by non-OPEC producers created a bullish sentiment in the derivatives market. When derivatives traders bought futures that locked the price of oil to a certain higher level on a future date (typically 18 months later), the market settled in a state of inertia that was hard to reverse. When traders with sufficiently large trade volume invest in a certain future value of oil, it provides incentives for producers to increase their stock of oil for future sales rather than supplying those oil at a lower rate now, which raises the prices up.

An instigator of financial speculation on oil is a common perception that economic odds point to a bullish future for the oil industry. Projections for global oil demand are strongly upward, and oil substitutes are too cost ineffective to develop and popularize in our time. As an essential element of most of the sectors in the global economy, demand for oil is price inelastic, and political instability in oil producing regions raises oil's value even further. Such a strongly bullish outlook in a financial market with a heterogeneous power distribution creates a moral hazard. Financial markets that trade oil instruments are largely influenced by a small number of large financial firms. Cho (2008). These companies, like Vitol whose holdings that make 11% of the futures contracts in New York Mercantile Exchange were

investigated by the SEC for speculation, can enter trades that are large enough to influence price movements in the market. When these companies bet on a substantially higher price for a future date, they initiate a *self-fulfilling prophecy*, with which prices actually increase as a result of a common belief in higher prices regardless of whether or not that belief is substantiated by economic fundamentals. Producers further this dynamic by increasing their current reserves (that is, decreasing their supply, but not production) in order to take advantage of the prices that are likely to be higher in the near future. This speculative mechanism, which benefits speculators and producers in the oil industry to the expense of the larger economy, spells the need for increased regulations in the international energy markets.

Capacity utilization has been another element that feeds speculators' positive outlook on the future of oil. The capacity utilization rates of OPEC and its largest-producer Saudi Arabia between 1980 and 2005 indicate that the capability of the supply side to decrease prices has been diminishing. While oil producing countries used less than 70% of their production capacity in the 1980s, they have been extracting within the range of 80% to 100% since the 1990s. There is less and less room for oil producers to decrease international prices by means of increasing their production (Figure-1).

Figure-1 Monthly capacity usage in OPEC and Saudi Arabia between 1980 and 2005. Wirl (2008).



The second major determinant of oil prices is nature. A standard measure called *API* gravity, which shows petroleum's weight in comparison to the weight of pure water, and the sulfur content determine the commercial usability of extracted petroleum. Such natural

formations are largely created by environmental conditions such as a warm winter that typically leads to higher grade petroleum. Oil industry factors in nature as an unpredictable component of the oil pricing mechanism. Maugeri (2003).

The changing place of oil in global economy advances a third factor of oil pricing whose impact has become too large to be considered within the margin of error postulated in the traditional model: politics. Mautinovic (2009). Contrary to the popular opinion, leading players in the international price-determination game today are governments, not corporations. Total production of the world's largest private oil company ExxonMobil is a mere 3.1% of the global production, and combined market shares of the five largest private oil companies is only 12% of global output. Hamilton (2008, p. 2). While 85% of the oil reserves in the world were controlled by large distributors like Exxon Mobil, Shell or BP in the 1970s (Mautinovic (2009, p. 4252), today 65% of confirmed oil reserves in the world are within the borders of only five countries, all of which have autocratic leaderships with nationalized oil extraction companies: Saudi Arabia, Iraq, United Arab Emirates, Kuwait and Iran. Maugeri (2003, p. 19). The spread of *resource nationalism* signals that international relations is evolving into an unorthodox game, at the core of which lies oil interests. Stanislaw (2008).

Turkey makes a case study of how oil economics translates into political capital. As a country that sits on the intersection of Europe and Asia, Turkey offers a valuable route, over which oil from the newly-emerging extraction areas in the Caucuses can be transported to the consumption markets in the West in the most efficient manner. This geographical location of the country grants significant political leverage to the Turkish government as it is one of the authorities that enable the flow of oil between the two areas. Turkish parliament's authority to locally shut down the Baku-Tbilisi-Ceyhan pipeline in the case of an international conflict is likely to compel the governments of countries that would be impacted from such a move to follow more friendly policies with the Turkish state. Any interruption in the regular transportation of oil from the source to the end markets would lead to higher prices for the countries that are involved in the route directly and indirectly. Even though a decision to disallow the flow in the pipeline could also mean higher prices or various forms of embargo from retaliating trade partners of Turkey, it indisputably gives a substantial bargaining chip to the Turkish leadership when potential benefits of such a decision outweighs the potential

costs. The motivation to get along well with each other can function to be a stabilizing element in the politics of the Southern Caucasus region.

Although cases like Yom Kippur War (1973), Iran-Iraq War (1980-1988), Gulf War (1990-1991), Asian Financial Crisis (1997) and September 11 (2001) became examples of supply-side power demonstrated by OPEC towards political ends, OPEC may never be able to become a political economic powerhouse with formidable power to make changes on a global scale. Hamilton (2008) argues that, despite representing a large portion of the global oil production, OPEC is far from being a unified group of collaborators that can efficiently control a complicated stage like the global energy sector. Its institutional design actually has an intrinsic flaw that instigates its members to disobey the union's own quota agreements:

"If OPEC were operating as an effective cartel, [...] it would try to set the marginal revenue for the group equal to the marginal cost. The marginal revenue for the group associated with producing one more barrel of oil would be calculated as the price of that barrel minus the revenue that OPEC would lose if [...] it had to lower the price to all its previous buyers. By contrast, the marginal revenue for an individual OPEC member would be the price minus the lost revenue to the member. Because any one member is a small fraction of the entire group, the marginal revenue for an individual member is always a bigger number than the marginal revenue for the group as a whole. As a consequence, if group marginal revenue is set equal to marginal cost, individual marginal revenue [would be] greater than [the] marginal cost, [which means] there would always be an incentive for members to try to "cheat" on the cartel's production decisions, [that is] producing a little more for themselves than the group agreed." Hamilton (2008, p. 4).

Predictably, members like Kuwait and Saudi Arabia typically produce significantly above their quotas set by the OPEC. When in 1986, OPEC's largest producer, Saudi Arabia decided to break the union's quota rules in order to regain market share lost by committing to OPEC quota restrictions, consequences became substantial. Influx of cheap Saudi oil dropped international crude prices below $10\phi/bbl$, and it became apparent that economic interests of individual OPEC members precede political interests of OPEC when individual and collective political interests are not institutionalized to overlap.

International conflicts can impact oil prices just as oil interests can create them. Leigh et al. (2003) reckon that a 10% increase in the probability of war in Iraq was likely to increase oil prices by \$1 and decrease S&P 500 index value by 1.5%. In 2008, several years into the war, \$10 of oil price increases and 15% of the decline at S&P 500 were attributed to the Operation Iraqi Freedom. However, whereas econometric studies can provide reliable information for policymakers and the public, the link between international conflicts and oil prices seemed to have been established mostly by unscientific works. When the phrase "international conflicts and oil prices" is entered in a collegiate search engine such as Summon, the first academic article appears in the 48th place, much after a long list of newspaper and magazine articles that argue for the subject link by simply tracing occurrence of wars and oil price hikes in history.

The link between international political events and changes in oil prices is too complex to establish by simple observations of simultaneous occurrence. Monodimensional coexistence analyses often employed by commercial sources pose the challenge of *selective perception*. Since international political events are omnipresent and unavoidable components of time –especially in the Middle East with a turbulent political climate, changes in commodity prices would always be coinciding with some conflicts. If prices are observed to change simultaneously with the elevation of an international conflict, the link is argued to be intuitively obvious. If prices begin to change after a conflict, it is put forth as a clear manifestation of the causal relationship between the two phenomena. When price changes seem to have begun prior to a major international event, then speculation would conveniently be there to blame. As shown in Figure-2, oil prices seemed to respond only selectively to some of the developments in the global scene. For political crises to be argued to impact international oil prices convincingly, the conditions under which this dynamic occurs have to be identified descriptively.

Another example of the connections created out of historical observations is the relationship between recessions and oil price increases in history. Theoretically and intuitively, higher oil prices lead to diminished investment and growth, which is a contractionary force in the economy. However, because the actual relationship between oil prices and recessions may be correlational, but not necessarily causal; oil price hikes do not have to lead to economic slowdowns in a linear fashion. Recessions are an outcome of

various factors, only one of which can be increases in oil prices. Because factors other than oil prices can impact economic activity in various degrees at different occasions (*ceteris paribus challenge*) and the outcomes of these impact take different amounts of time to become visible (*lagging effect*), simple coexistence observations are of limited use in studying a complicated subject like oil politics.

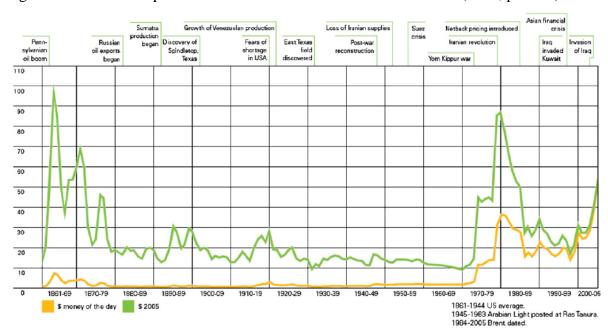
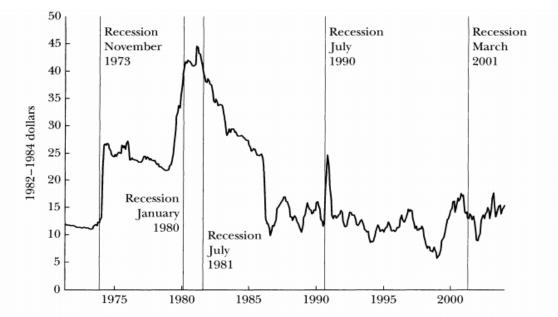


Figure-2 Historical oil prices and events between 1861 and 2005. Wirl (2008, p. 1030)

Congruently, economic contractions began at different phases of the historical trend of oil prices in the US between 1971 and 2003 (Figure-9). The Recession of 1973 began at a time when oil prices had been stable whereas the 1980 recession began after a long period of price increases in oil. Counter to the prevailing view that higher oil prices hamper economic activity, three of the five recessions examined started after a period of price decreases in crude oil. The contractions in 1981 and 2001 began when oil prices are low and ended when they were even lower. During the slowdown in 1990, oil prices increased alongside the economic activity.

Figure-9: Real crude oil prices and recessions in the US between 1971 and 2003. Barsky and Kilian (2004)



Source: Department of Energy, Federal Reserve Economic Database (FRED), and National Bureau of Economic Research. The oil price data are constructed as in Barsky and Kilian (2002). The oil price has been deflated by the U.S. CPI for urban consumers.

Barsky and Kilian (2004) argue that the impact of international conflicts on oil prices can be linked to the demand side rather than the supply side. When conflicts break out in the Middle East, distributors in the West perceive a higher likelihood that oil extraction will be interrupted and increase their stocks of oil. When demand increases for precautionary purposes, but producers cannot match the new demand levels due to the near-full capacity of extraction, the pressure manifests itself on prices. Crude oil prices increase as a result of increases in demand rather than decreases in supply. Indeed, oil demand and prices rose significantly more when supply dropped by 7.2% during the Iran-Iraq War in the late 1980s compared to a proximate cut (8.8%) during the Invasion of Kuwait.

The difficulty of establishing the link between oil and politics positively creates a suitable climate for counterfactual speculation in oil politics. In a controversial article in 2009, investigative journalist Khadija Sharife (2009) argued that "Darfur Genocide" was a manufacturing of the US Government in order to remove from power the Sudanese leadership it disfavored. In the mid-1970s, the then US-backed Sudanese administration led by President Jaafar Nimeiri gave an area of over half a million square kilometer to Chevron company for petroleum exploration. When substantial reserves were discovered in Southern Sudan a few years later, President Nimeiri backed out of its assurances laid out in the Oil Exploration Act he had signed, and shifted all rights on the exploration sites and refineries to

his energy ministry. When Omar Bashir claimed ruling power after a coup d'état in 1989, political instability drove foreign oil companies out of the country. In an effort to remove Bashir from power and reopen the Sudanese fields for American oil companies, the US Government deployed special forces to the country and spent \$20M to support Bashir's political opponents. When a civil war broke out in the early 2000s, the US Government labeled Bashir's handling of the conflict as genocide in order to tarnish his international reputation, and oust him and his allies who jeopardize the US oil interests in the region. Portraying the Southern side of Sudan as a Christian region populated by repressed native Africans who desire to break out as a sovereign country has been another piece in this strategic game the Western powers play on Sudan.

Oil can be a source as well as an outcome of international conflicts. Economic importance oil pipelines represent makes them a potential target for terrorist attacks. Environmental scholars Lisa and Denis Hayes (2002) hypothesize that a well-planned terror attack against several of the tankers that handle the 18 Million barrel/day oil transportation can upset the energy markets, which, with its spillovers, could lead to a global recession. The controversial Operation Iraqi Freedom has become the latest conflict argued to involve oil politics in its back stage. In 2003, the Bush Administration secured Congressional approval for the operation using intelligence reports that linked Iraq's leadership to the September 11 attacks, and argued that the country possessed weapons of mass destruction that presented an imminent threat to the United States. The opponents of the operation highlighted that President Bush's connection to the oil industry as a former oil businessman and Vice President Dick Cheney's link to the defense industry as a former executive of Halliburton – one of the largest beneficiaries of defense contracts, created a conflict of interest. While the actual motivations of the US leadership is unclear, several circumstantial evidence that are available today eight years into the operation are in line with the suspicion that controlling oil resources, maintaining the Dollar's status as an international reserve currency and expanding business for American defense contractors were the primary motivations behind the Operation Iraqi Freedom. A 2007 documentary titled No End in Sight revealed footage that Iraq's Energy Ministry was the only building the US forces protected during the rampant lootings in Baghdad in 2003. Several defense companies like Halliburton, Washington Group International and Aegis were granted sizeable contracts to support the military operation in Iraq.

In an award winning book, security analyst William Clark (2005) wrote that the operation in Iraq was a punitive action against Iraq's administration that discontinued the policy of selling oil in Dollars. Clark draws a parallel between the Iraqi leadership's forceful dissolution by the US military and its announcement in 2000 that it would accept Euro for its oil sales from then on. Clark notes that this was a serious threat to the economic vitality of the United States as it was able to finance its wasteful lifestyle and resultant deficits thanks to the position of the Dollar as the main currency in international trade for decades. Iraqi government's decision to end the privilege of the "Petrodollar" in its 42 Billion Dollars a year oil trade and its potential to spread to other areas of the international trade was the motivation that moved the US government to engage the military to unilaterally attack Iraq.

The interim Iraqi Government established under the auspices of the Bush Administration adopted an energy policy that is much favorable to American interests in the region. An ardent promoter of neoliberal capitalism, *The Economist* magazine (2010) wrote that Iraq would increase its oil production by fivefold to a level that is 30% higher than Saudi Arabia's current output. The report presented the policy as an income-generating move by the new Iraqi government to provide public services while making no mention of the prospects that the policy would result in cheap and stable oil for the US market.

THE FUTURE

Oil is a global commodity that is relevant to billions of lives around the world today. It makes a substantial source of national income for countries that produce it. It is indispensable for developed countries as it sustains their industrial potency and consumerist lifestyle they have grown to be addicted to. Developing countries need oil to expand their industrial capacity as alternatives are too inefficient and time-consuming to replace with oil on a large scale. Poorest countries have to use oil in order to raise their living standards by enhancing economic activity, which also leads to increased consumer demand for oil.

The story of oil in the world history conforms to the prescriptions of neoclassical economics. Just as what Alfred Marshall and his followers postulated in the late 19th Century, higher prices compel producers to produce more and consumers to buy less. Motivations of

producers who aspire to sell their products above a certain amount at each output level, and those of consumers who would not be willing to spend above a certain amount meet at an equilibrium point of price at each output level. This is the point where downward-sloping curve from the demand side intersects with the upward-sloping curve from the suppliers, pointing the intrinsic determination of price in the market. The current picture of the global oil market resembles one, in which supply is approaching an end while demand is increasing ever faster. In a market with high capacity utilization rates, reproduction costs and price inelasticity of demand, economic prospects have few chances but being upward.

Accordingly, oil's hypertrophic economic value is likely to continue to influence the political stage in the 21st Century. Many governments whose national economies are rapidly becoming dependent to oil will continue to feel pressured to adopt policies that are congenial to oil-producing governments with dissonant international aspiration. Chinese government develops cozy relationships with Iranian, Saudi Arabian, Nigerian and Sudanese governments in expectation of securing oil supply for its increasing thirst for oil as a result of rapid industrialization. It offers to build infrastructure (a railroad, airport and telecommunications system in the Nigerian case) as well as stock shares in Chinese blue-chip companies in exchange for a guaranteed supply and delivery of oil.

Iran and Russia find most of the European Union to be less enthusiastic about countering their foreign policies due to the fact that European countries increasingly need natural gas and oil from Iran and Russia, and European firms are expanding their business volume with in these countries. Many governments are more reluctant to confront Iran's nuclear weapons program as the country is a major oil exporter that produces 2.5 Million barrels of crude oil a day. China used its veto power in the UN to block international intervention with the human rights abuses and genocide in Darfur at a time when it accelerated its oil investments in Sudan to extract and transport oil to China.

Global distribution of oil reserves suggests that the economic interests of the world's largest economy that produces one fifth of the global output may, in the future, be subordinated to political interests of the government that is in charge of it. Nine of the ten countries that have larger reserves than the US (Canada is the only exception) are American adversaries that would not refrain from policies hostile to the United States (Table-5).

Table-5: Amount of strategic oil reserves by country. The Council of Foreign Relations (2006, p. 18).

Country	Oil Reserves
Saudi Arabia	264.3
Canada	178.8
Iran	132.5
Iraq	115.0
Kuwait	101.5
United Arab Emirates	97.8
Venezuela	79.7
Russia	60.0
Libya	39.1
Nigeria	35.9
United States	21.4
China	18.3
Qatar	15.2
Mexico	12.9
Algeria	11.4
Brazil	11.2
Kazakhstan	9.0
Norway	7.7
Azerbaijan	7.0
India	5.8
Rest of World	68.1
World Total	1,292.5

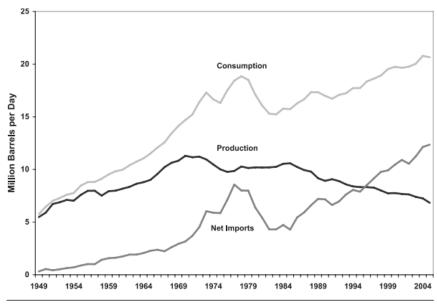
Source: "Worldwide Look at Reserves and Production," Oil & Gas Journal 103: 47 (December 19, 2005), pp. 24–25.

A 2006 report by The Council of Foreign Relations reads that

"Iran proceeds with a program that appears to be headed toward acquiring a nuclear weapons capability. Russia is able to ignore Western attitudes as it has moved to authoritarian policies in part because huge revenues from oil and gas exports are available to finance that style of government. Venezuela has the resources from its oil exports to invite realignment in Latin American political relationships and to fund changes such as Argentina's exit from its International Monetary Fund (IMF) standby agreement and Bolivia's recent decision to nationalize its oil and gas resources. Because of their oil wealth, these and other producer countries are free to ignore U.S. policies and to pursue interests inimical to our national security." The Council of Foreign Relations (2006, p. 28).

The council recommended that the United States redesigns its foreign policy under the light of its energy security. This position is an outcome of the projection that net oil imports of the United States, which currently consumes 25% of global oil production with less than 5% of the world population, has been increasing for half a century (Figure-4).

Figure-4: US consumption, production and imports of oil between 1949 and 2005. The Council of Foreign Relations (2006, p. 16).



Source: EIA, Annual Energy Review 2005.

Oil's greatest impact on civilization could be more abstract than economics or politics. Its transformation from an economic resource that boosts industrialization to a political economic commodity that shapes behaviors of governments is a testimony to the impropriety of a vision of capitalism that is based solely on short-term self-interest. Blinded by a radical ideology that embraces prosperity above everything else including social responsibility and environmental sustainability, American political establishment for the last century violated the principle of diversification to control systemic risk, and promoted oil as the sole backbone of American industry. Increased dependence to oil over the last 50 years mutated into formidable political power to the global actors who can influence oil prices. The US policymakers turned a blind eye on potential damages created by an oil-dependent economy in the areas of national security and environment out of a false belief that such outcomes were uncontrollable costs that would not impact the price of oil. "A political system creative enough to find a way to regulate domestic production in a fragmented oil industry",

writes historian Joseph Pratt, "surely could have thought more creatively about such externalities before the 1970s." Pratt (2008, p. 80).

Today, entanglement of the oil industry with governments is a well-rooted that institutionalized the subjugation of the public interest in favor of the private one. In his account of the discovery of oil in North Dakota in 1951, political scientist Robert Engler noted that tremendous economic growth that followed the extractions in the state led to a form of commercial government that saw promotion of business interests rather than controlling them for the welfare of the society as its primary mission. With the discovery of oil deposits in North Dakota, private companies flocked in the state to extract and sell the valuable resource. The speed by which they developed facilities, technologies and institutions were so fast that the rural people and politicians of the state often only followed the private companies in their quest for more business. These companies transformed the social, economic and political institutions of the state remarkably well, and mutually-beneficial arrangements between private businesses and government became a norm in the political climate of the day. Engler (1961) argues that this was consistent with the motivations of companies that exist to make money, but it was a betrayal of the government officials who are entrusted to put public's interest above everything else:

"... The spotlight here belongs more on lawmakers and respectable men with bulging brown brief cases entering the portals of government rather than lawbreakers and furtive men with little black bags using side entrances of hotels. Government policy on oil has increasingly become indistinguishable from the private policies of oil, with this development carried to new extremes under the Eisenhower Administration, which held as principle that government ought to be in the hands of the concerned business community, that is, that the part of the government which had not already been turned over outright to private control." Engler (1961, p. 419).

The legacy of oil as a medium over which moral hazard was engrained in the very fabric of public service will continue to haunt the mankind in the future. Engler writes

"... Corruption has not been of individual men or even of programs for oil, but of the very concept of public policy. Those who most contribute to the corruption of our times thus foster the popular view of politics as dirty and

government as evil. By so doing, people are effectively deterred from understanding and then using politics and government for the formulation of public policies. The fundamental question thus involves the nature of oil as a system of power and the impact upon American institutions and values. It concerns the requirements for responsible government and a democratic society." Engler (1961, p. 9).

On the final account, economic fundamentals like growing world population, increasing industrialization, low substitutability, high price inelasticity and high capacity utilization indicate that oil will continue to remain as a politically-charged commodity that challenges national security, democracy and welfare across the globe in the years to come. It will prevail as a medium that grants special privileges to companies in the oil industry, influences national governments to conduct foreign policies favorable to oil interests, and strengthens moral decay by means of social and environmental irresponsibility. This prospect raises oil to the ranks of a truly phenomenal natural resource that influences any political economic outcome with irreversible certainty. With its political as well as economic significance, oil is an empirical support for the classical economists who used the term "political economy" instead "economics" in order to foretell about the political ramifications of economic phenomena.

REFERENCES

- Barsky, Robert B. and Lutz Kilian. "Oil and the Macroeconomy since the 1970s." *Journal of Economic Perspectives*, 18/4 (2004): 115-134.
- Bierman, Sherman. "Russian Oil Output Hits Post-Soviet Record in 2010." *Bloomberg*, January 2, 2012.
- Braginskii, O. B. "Crude Oil Prices: History, Forecast, and Impact on Economy." *Russian Journal of General Chemistry* 79/11 (2009): 2486.
- Cho, David. "A Few Speculators Dominate Vast Market for Oil Trading," *Washington Post*, Aughust 21, 2008.
- Clark, William R. *Petrodollar Warfare: Oil, Iraq and the Future of the Dollar*. Gabriola Island, British Columbia: New Society, 2005.
- Engler, Robert. The Politics of Oil. New York: The MacMillan Company, 1961.

- Ford, Gerald. Congressional Record 120 (1974).
- Hamilton, James D. "Understanding Crude Oil Prices," NBER Working Paper #14492.
- Hayes, Denis and Lisa A. Hayes. "Oil and Power" On Earth 23/4 (2002).
- Kaufmann, Robert K. and Ben Ullman. "Oil Prices, Speculation and Fundamentals:

 Interpreting Causal Relations between Spot and Future Prices," *Energy Economics* 31 (2009): 550-58.
- Leigh, Andrew et al. "What do Financial Markets Think of War in Iraq?" Discussion paper distributed by Stanford Institute of Economic Policy Research, Stanford, California, 2003.
- Luqman, Saka and Fatima Lawal. "The Political Economy of Oil and the Reform Process in Nigeria's Fourth Republic: Successes and Continue Challenges." *Journal of Arts, Science and Commerce* 82/2 (2004).
- Manns, Leslie. "Dominance in the Oil Industry: Standard Oil from 1865 to 1911." In *Market Dominance: How Firms Gain, Hold, or Lose it and the Impact on Economic Performance*, edited by David I. Rosenbaum, 11. Santa Barbara, CA: Praeger, 1998.
- Maugeri, Leonardo. "Time to Debunk Mythical Links between Oil and Politics." *The Oil & Gas Journal* 101/48 (2003).
- Mautinovic, Igor. "Oil and the Political Economy of Energy," *Energy Policy* 37/11 (2009): 4254.
- McSherry, Brendan. "Political Economy of Oil in Equatorial Guinea." *African Studies Quarterly* 8/3 (2006): 23.
- Nordhaus, William. "The Energy Crisis and Macroeconomic Policy." *Energy Journal* 1 (1980): 11-20.
- Noreng, Øystein. "The Predicament of the Gulf Rentier State." In *Oil in the Gulf: Obstacles to Democracy and Development*, edited by Daniel Heradstveit and Helge Hveem, 3-12. Burlington: Ashgate Publishing, 2004.
- Pawlak, Justyna. "EU Hits Libyan Oil Firm al-Sharara with Sanctions." *Reuters*, August 10, 2011.
- Pratt, Joseph A. "The Politics of Oil Revisited." Review of *Crude Politics: The California Oil Market, 1900-1940*, by Paul Sabin, *Reviews in American History*, 2008.
- Sharife, Khadija. "Oil Politics," New African (2009).
- Stanislaw, Joseph. "Power Play: Resource Nationalism, the Global Scramble for Energy, and the Need for Mutual Interdependence," *Deloitte* (2008).

- The Council of Foreign Relations, "National Security Consequences of US Oil Dependency," Independent Task Force Report, New York, 2006.
- The Economist. "Crude Diplomacy: Iraq, Iran and the Politics of Oil." *The Economist*, February 20, 2010.
- The International Monetary Fund, World Economic Outlook Database-April 2011: Nominal GDP list of countries. http://www.imf.org/external/pubs/ft/weo/2011/01/ (accessed June 3, 2011).

The US Energy Information Administration (2011). International Energy Statistics. Wirl, Franz. "Why Do Oil Prices Jump (or Fall)?" *Energy Policy 36* (2008).