The crude oil price

Crude oil prices behave much as any other commodity with wide price swings in times of shortage or oversupply. The crude oil price cycle may extend over several years responding to changes in demand as well as OPEC and non-OPEC supply. This is evident from the tremendous changes that the world oil market has been going through in the past thirty years. In the following report, we would be identifying the events that have occurred in the past decades and analyzing how they have affected the world oil market in terms of both, prices and output. The underlying concepts used to explain the changes due to various factors affecting the oil market are the Laws of Demand & Supply. The related concept that is used in the discussion of the report is of the shifts in, and the movements along the demand & supply curves.

In this regard, it should be noted that whenever the quantity demanded changes due to changes in the price of the good in question, there is movement along the curves. On the other hand, whenever demand and supply increases (or decreases) due to changes in factors other than price of the good in question, there is a rightward (or leftward) shift in the curves. Events affecting the oil marketFormation of OPEC (1960)Prior to 1970, world oil prices were set through negotiations among major private sector companies. OPEC was formed in 1960 with five founding members Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. By the end of 1971 six other nations had joined the group: Qatar, Indonesia, Libya, United Arab Emirates, Algeria and Nigeria. From the foundation of the Organization of Petroleum Exporting Countries through 1972 member countries experienced steady decline in the purchasing power of a barrel of oil. Throughout the post war period exporting countries found increasing demand for their crude oil but a 40% decline in the purchasing power of a barrel of oil. In March 1971, the balance of power shifted.

That month the Texas Railroad Commission set proration at 100 percent for the first time. This meant that Texas producers were no longer limited in the amount of oil that they could produce. More importantly, it meant that the power to control crude oil prices shifted from the United States (Texas, Oklahoma and Louisiana) to OPEC. In October 1970, Libya increased its posted price and tax rate on oil produced by private companies. This was followed by other OPEC members, and by January 1971, the oil companies also agreed to accept the 55% oil production tax. This led to an immediate increase in world oil prices. Yom-Kippur War (1973)In 1972 the price of crude oil was about $3. 00 per barrel and by the end of 1974 the price of oil had quadrupled to over $12.

00. (As in exhibit 1) The Yom Kippur War started with an attack on Israel by Syria and Egypt on October 5, 1973. The United States and many countries in the western world showed support for Israel. As a result of this support several Arab exporting nations imposed an embargo on the countries supporting Israel and announced a 25% cut in production. If there was any doubt that the ability to control crude oil prices had passed from the United States to OPEC it was removed during the Arab Oil Embargo. The extreme sensitivity of prices to supply shortages became all too apparent when prices increased sharply from $5. 12 to $11. 65 a barrel in six short months.

Even when the OPEC lifted the embargo in 1974 and increased its production capacity, the oil prices remained relatively flat at around $15 per barrel range. This was a result of the expansion of the US and other economies which meant an increased demand for crude oil as compared to the supply. Crisis in Iran and Iraq (1978-79)Events in Iran and Iraq led to another round of crude oil price increases in 1979 and 1980. The Iranian revolution resulted in the loss of 2 to 2. 5 million barrels per day of oil production between November, 1978 and June, 1979. While Iranian oil production dropped from 1. 5 million to 500 thousand barrels a day, Saudi Arabia also announced a significant cut in production with a ceiling of 9. 5 million barrels per day.

These and other events like cancellation of contracts between Iran and the US, led to a massive shortages in oil-importing nations. As a result of these shortages, the oil prices shot up to $24 per barrel, by the end of 1979. While the Iranian revolution was the proximate cause of what would be the highest prices in post-WWII history, its impact on prices would have been limited and of relatively short duration had it not been for subsequent events. Iran weakened by the revolution was invaded by Iraq in September, 1980. By November the combined production of both countries was only a million barrels per day and 6. 5 million barrels per day less than a year before. As a consequence worldwide crude oil production was 10 percent lower than in 1979. The combination of the Iranian revolution and the Iraq-Iran War cause crude oil prices to more than double, increasing from $15 in 1978 to $32 per barrel by the end of 1980.

The curious price fall (Mid-1980s)Curiously, by mid-1980s, the price had fallen to $11/barrel. In real terms (adjusting for inflation), this was effectively at the pre-1973 levels. This drastic fall in oil prices can be attributed to both demand and supply side factors.* Fall in demand (1980-82): Surging prices caused several reactions among consumers, who now resorted to better insulation in new homes, increased insulation in many older homes, more energy efficiency in industrial processes, and automobiles with higher efficiency. These factors along with a global recession caused a reduction in demand which led to falling crude prices.* Increase in supply (1982-85): the fall in prices exacerbated even further due to increased exploration and production outside of OPEC, and non-OPEC production increased 10 million barrels per day during this period. Even when OPEC attempted to stabilize prices by imposing quotas on oil production, their attempts failed as various members of OPEC produced beyond their quotas. Taking into consideration the above mentioned reactions, it is clear why the period between 1980 and 1985 witnessed a substantial fall in oil prices.

OPEC was faced with lower demand and higher supply from outside the organization, and unfortunately for OPEC, most of the changes were permanent and would never respond to lower prices with increased consumption of oil. As a result, crude oil prices plummeted even below $10 per barrel by mid-1986. Invasion of Kuwait (1990)The price of crude oil spiked in 1990 with the lower production and uncertainty associated with the Iraqi invasion of Kuwait and the ensuing Gulf War. The invasion resulted in a decline of 4 million barrels/day in world’s oil production, making the prices go up to $32/barrel. Some other events during this period also affected the oil market. The loss due to destruction of oil facilities in Kuwait was compensated to some extent in 1991, when US withdrew 33. 75 million barrels from its Strategic Petroleum Reserve. Then by March 1991, OPEC announced a production cut, an after-effect of increased surplus of unsold oil held by oil producers.

Also, Kuwait resumed oil production by 1992 and an oil embargo was imposed on Iraq's oil exports. Though not as prominent as the others, these events contributed to the volatility in oil prices (As can be seen from the exhibits). While the US action and resuming of production by Kuwait resulted in lowering of prices, events such as production cut by OPEC caused it to rise. Production cuts by OPEC (1998-2000)During the period 1998 to 2000, various political, economic, and environmental events affected the oil market and caused the prices to again shoot up by the end of 1999. The rapid growth in Asian economies had come to a halt due to the 1998 Asian financial crisis. The Asian Pacific oil consumption declined for the first time since 1982. The combination of lower consumption and higher OPEC production sent prices into a downward spiral. In response, OPEC cut quotas by 1.

245 million barrels/day in March and another 1. 355 million barrels/day in June. Price continued down through December 1998. Prices began to recover in early 1999 when non-OPEC oil producers agreed to cut production, and OPEC reduced production by another 1. 716 million barrels/day. As usual not all of the quotas were observed but between early 1998 and the middle of 1999 OPEC production dropped by about 3 million barrels per day and was sufficient to move prices above $25 per barrel. With growing US and world economies the price continued to rise throughout 2000 to a post 1981 high. (As shown by exhibit 1)September 11 attack (2001)There was some

softening in the oil market after the September 11, 2001 terrorist attack on the US causing the oil prices to fall in the $15 range (Exhibit 1).

The OPEC responded by cutting back on production by 1. 5 million barrels/day and was even joined by some non-OPEC nations like Russia and Norway. Mexico also announced an export cut of 100 thousand barrels/day. ConclusionFrom the discussion, it can be inferred that OPEC, though referred to as a cartel, has seldom been effective at controlling prices. Though OPEC continued to have mixed success in controlling prices, there were mistakes in timing of quota changes as well as the usual problems in maintaining production discipline among its member countries. Moreover, OPEC also lost power because its soaring prices shrunk demand. As judged from this case, it is quite evident that when a high price is applied, the demand side of the market responds more quickly and more vigorously than the supply side and its response lasts far longer. Thus, what should be done to keep the oil prices moving down is no secret.

High energy prices can, in fact, be the most effective tool to encourage conservation and more efficient utilisation of our energy resources.