Supply and demand – example of oil price assignment

What is driving oil prices so high? Oil prices have hit a record high at $100 a barrel. Prices have doubled from the rates seen in January 2007 and more than quadrupled since 2002. What factors are causing this unremitting increase and what are the likely consequences for consumers and the global economy? What is causing the latest price spike?

This was triggered by concerns about violence in Nigeria and Algeria as well as the delay of the elections in Pakistan. The assassination of the former Pakistani Prime Minister Benazir Bhutto increased oil prices because stability in Pakistan is important to US policy in the Middle East. Threats to oil workers and facilities in Nigeria have cast a long-term shadow over oil supplies from the world’s eighth largest oil exporter. Suspected militant attacks on Wednesday in Nigeria’s main oil city, Port Harcourt, heightened concern over the potential for further disruptions in shipments. With the military and the militant warlords engaged in a violent tit-for-tat, the risk for oil disruptions in Nigeria remains higher than in the past few months,” said Olivier Jakob of Petromatrix. The weak dollar, which makes it cheaper for importers to buy dollar-denominated oil supplies, is also a major factor. Is demand for oil continuing to soar? Yes. The biggest catalyst for oil’s seemingly remorseless rise has been the simplest economic driver there is: the balance between demand and supply. Demand is at an all-time high, fuelled by the continued breakneck economic expansion of the Indian and Chinese economies.

With more than a billion people in each country, and both economies growing fast, manufacturers and consumers are sucking in energy at an ever-increasing rate. China overtook Japan as the world’s second-largest consumer of oil in 2003 and is closing in on the US, with demand for oil

growing at about 15% a year. Analysts worry global demand for oil is so intense that supplies may not keep pace. Demand will rise by an average of 2. 2 million barrels a day next year, the International Energy Agency says, compared with the 1. 5 million-barrel rise seen in 2007.

It says annual demand will rise 2% up to 2012, while other projections suggest demand could soar from about 90 million barrels a day to as much as 140 million over 25 years. What is Opec doing about the situation? As the leading oil supplier in the world, producers' cartel Opec is under constant pressure to do something about the price bubble. It recently bowed to pressure to pump more oil, agreeing to raise its production quotas by 500, 000 barrels a day from 1 November. Reports suggest the move was forced through by Saudi Arabia and that few other Opec members either have much stomach for increasing output or much capacity to spare.

Opec has said the market is " very well supplied" with crude and will continue to be so in the immediate future. It has blamed speculation by market traders – who can make money by betting on the future direction of prices – for the continuing price rises. Critics of Opec say it must act more aggressively to bring prices down. " The response from Opec has been pretty poor so far," says John Roberts, an energy security analyst with commodities research firm Platt's. " The sentiment in the market is that it is time for Opec to increase production again. Who are the winners and losers from costly oil? Taking inflation into account, prices are still below levels seen in late 1980, when a barrel of oil – in today's prices – was worth more than $101. Back then, costly oil helped contribute to a recession in the US and similar fears are resurfacing now. The Bush administration has said it is " very concerned"

about current price levels, at a time when the economy is already expected to slow significantly next year. High energy prices make life more expensive for consumers and businesses, having an knock-on effect on their spending in other areas.

Gasoline prices are hovering not far below the $3-a-gallon mark in the US, while UK petrol retailers have warned prices could soon rise above ? 1 a litre. But on the other side of the fence, oil giants such as ExxonMobil and BP are having a wonderful time, while oil-rich countries are also smiling. Oil wealth has underpinned President Hugo Chavez's efforts to reshape Venezuela, allowing him to fund extensive social programmes and reject US criticism of his policies. Russia's oil and gas bonanza has underwritten efforts by President Vladimir Putin to exert state control over the country's energy sector.

Where will prices head next? Many people scoffed when analysts from investment bank Goldman Sachs said in 2005 that prices could eventually top $100 a barrel. " All of the factors that pushed us above $80 are now moving us higher," said Peter Beutel at Cameron Hanover in Connecticut. " Until we get more supply or demand starts to take a hit, there is no reason we can't see any number. " PART 1 1. Demand for Oil was increased due to: – Strong economic growth in countries such as China and India created more factories and more cars that need more oil to run them. In 2008, fearing that conflict between Iran and Iraq cause further cuts in supply, many oil brokers increased purchases in order to lock in suppliers at current prices. 2. Supply for Oil was increased for the following reasons: – OPEC decided to raise its production quotas. – New oil fields came on line all over the world in places

such as Mexico, Russia and the North Sea. – New achievements in technology supported firms in processing oil. 3. The chart above provides information about selling and buying oil.

Obviously, both demand curve and supply curve were shifted to the right. Firstly, the rapid development of economy and transportation caused the using of gasoline to rise. For this reason, the demand for oil increased and the demand curve shifted to the right. Secondly, new achievements in technology supported the oil processing a lot, so more gas and petrol were made and sell. Totally, the supply curve also moved to the right. For the last 40 years, both the supply and the demand for oil grew considerably and caused the increase in the price. 4.

Comments on elasticity: – Both the demand and supply of oil are relatively inelastic in the short run: changes in price have little impact on either the quantity demanded or the quantity supplied. When oil prices rise we spend considerable time and energy complaining but spend almost no effort in trying to adjust our habits to consume less. Similarly changes in price do little to spur new supplies in the short run. Exploring for, drilling, and bringing new sources on-line can take many years. Since the quantities demanded and supplied change very little as prices rise and fall.

Besides, the substitute for oil is very scarce. – Demand and supply are far more elastic in the long run. After oil prices rose, firms began shifting to less energy-intensive ways of manufacturing goods and services. Similarly, consumers started to conserve as well. They insulated homes heated by oil furnaces and shifted to alternative energy sources, switch to public

transportation and move closer to where they work. More importantly, people began buying different types of cars. PART 2 a. Winter starts and the weather turns sharply colder. b.

The price of tea, a substitute for hot chocolate, falls. c. The price of cocoa beans decreases. d. The price of whipped cream falls. e. A better method of harvesting cocoa beans is introduced. f. The Surgeon General of the U. S. announces that hot chocolate cures acne. g. Protesting farmers dump millions of gallons of milk, causing the price of milk to rise. h. Consumer income falls because of a recession, and hot chocolate is considered a normal good. i. Producers expect the price of hot chocolate to increase next month. j. Currently, the price of hot chocolate is $0. 50 per cup above equilibrium.