A View of Energy from the Private Financial Sector

Irene King*
A View of Energy from the Private Financial Sector

Irene King

Abstract

Speech given at Session 3: Challenge Facing Resource Development. Ms. King focused on some of the uncertainties, changes, risks, and opportunities from the viewpoint of the private financial sector, again with regard to energy. She also highlighted some of the uncertainties in the specific sectors. And there are big differences between electricity and natural gas, on one hand, and oil, on the other.
Good morning. I will now focus on some of the uncertainties, changes, risks, and opportunities from the viewpoint of the private financial sector, again with regard to energy. I will start with the main conclusions. Some of them agree with the previous speaker;¹ and that was not planned.

We do not see supply shortages or sharp or sustained increases in energy prices as the result of the rapid growth in energy demand. In terms of geology, technology, and also financing, there is ample energy supply to fuel the projected growth in demand. Most importantly, experience shows that under free markets, even unanticipated price increases trigger compensating supply adjustments that eventually cap and reverse the original price increase. Our concern, therefore, is not about supply adequacy but about the process — about the terms, conditions, and timing of its availability. This is mainly affected by governments — by their energy policy, regulatory policy, overall economic policy, foreign policy, and, most importantly, by the consistency of these policies.

The first and most important point about energy supply I would like to make from the viewpoint of financial markets is that the same forces that are boosting economic growth and energy demand are also boosting supply. And these forces are today's buzz words: deregulation, decentralization, globalization, and privatization. In other words, the same forces that are creating this fantastic growth in demand that we just saw are also creating an equally fantastic growth in supply. Moreover, most of the projected supply increase is in the emerging economies themselves, especially for oil and gas.

I would like to highlight now some of the uncertainties in the specific sectors. And there are big differences between electricity and natural gas, on one hand, and oil, on the other.

---

¹ Senior Oil Economist and Vice President, J.P. Morgan.

I. ELECTRICITY AND GAS

In the electricity area, one of the important trends is that the incremental demand will be fueled mainly by natural gas. This has not been such a strong trend in the past or such a global trend. The reasons for the change are very well-known: the environmental attractiveness of natural gas, its ample and growing reserves—which, by the way, have grown faster than natural gas demand in the past twenty years—and its low overall cost, if you include not just the cost of the fuel but also the cost of building the generating capacity.

And the trends for both natural gas and electricity are deregulation everywhere; in some countries privatization and restructuring as well; and, eventually, the enlargement of the various trading areas.

In some cases these changes will result in lower costs for electricity and at times even gas. As you know, electricity and gas have transport limitations. They require dedicated and expensive infrastructure to travel. Thus, the markets are regionally segmented not only among continents and countries, but also within the same country or the same state, as we know in the United States.

As deregulation proceeds and the barriers fall, trade will grow. The result will be fewer regional segmentations and smaller cost differences among regions. We do not see, of course, the complete elimination of regional differences and the creation of one global market in electricity and gas because that will require travel over oceans, and so far the technology is not conducive to a lot of travel over the oceans for electricity or gas.

The driving force behind the deregulation, privatization, and restructuring of electricity and gas is cost. In the industrial world, the driving force is cost to industrial consumers. Industry has cut almost all other costs and now is demanding lower electricity costs, and threatening to move to other regions if it doesn't get them.

For the emerging economies, cost is also an issue, but in a different sense. It has to do with securing the necessary financing to build the new electricity capacity and pay for the gas that will be used to make the electricity.

The trend towards deregulation in electricity and gas is clear. The process, though, is not likely to be smooth. There
will be setbacks, triggered by the following issues: Issues of return to the investor versus price to the consumer. This issue is sort of burning in some areas of the United States. It has also become important in parts of India and China. Issues of price differences between industrial users and residential consumers—again, a burning issue in the United States. It will get more attention in the next few years, and soon it is likely to appear in Europe and some parts of the emerging world. Another issue is that of regional price differences, as I mentioned, but also within the same economic unit. That will be the case in the European Community. A further issue is that of national security, safety, and pollution related to nuclear and coal-fired power generation. And, finally, there are issues of employment. As coal-fired energy is displaced by gas, net employment will fall in the energy sector since gas requires fewer people to be produced than coal. There could, therefore, be trouble in some areas about that as well.

I will now turn to some of the regional trends. In the United States, the end result of the deregulation of electricity will be the creation of a national market in the forty-eight states. Even in this country, which is so committed to the free market, however, the process will not be smooth. Currently there are at least forty-eight deregulations taking place in the United States, a patched landscape that the financial markets sometimes have trouble understanding or following.

It is likely, moreover, that at some point Congress will step in and set national standards for certain key aspects of electricity and gas, such as the stranded costs for nuclear power, or the excessive market share that is being created in some areas as natural gas and electric entities merge. The trigger for Congressional intervention could be the huge differences that are likely to result in the price of electricity between industrial users and residential users.

I'm not saying that this is our expectation, but it is a risk. When we look back to the deregulation of natural gas production in the United States during the 1980s and to the current deregulation of cable TV and telecommunications, we are fearful that we could have in electricity a similar situation: policies that are changing quite often. The bigger risk behind all this, of course, is that the bases on which investments have already been
made and new capacity has been built will change as a result of new regulations or changes in regulations.

In Europe, the deregulation of electricity and gas will be less complete than in the United States. It will also be less uniform. There will still remain differences between the north and south and the west and the east. The process of deregulation in Europe, however, will be less contentious than in the United States, because the deregulation will be negotiated centrally, in Brussels. Around the table will be the member governments, the consumers, and the producers. Whatever comes out in the end will, therefore, be something that they all agree to begin with.

In the emerging economies, the patterns of deregulation and privatization of electricity and gas will vary, of course. Some countries will not be able to obtain all the required financing to expand capacity, but the cause of this will be credit issues, financial policy, and overall economic policy, not shortages of energy supply. In general, we expect resource-poor but growing emerging economies to move faster towards deregulation and restructuring and to be able to secure financing. Those with ample energy resources will have no problem anyway. The concern remains about those countries that are in the early stage of development, where the finances are not yet strong and where they don’t have efficient markets, or the ability to deregulate or to attract private investors. In certain regions, there will be increased trade in electricity and gas among emerging economies, and this is already happening in Latin America and parts of Asia.

One final word of caution about electricity and gas deregulation: the competition among energy and construction companies and among financial institutions to support and get involved in the process is lowering the cost of many products. That is good. It is also leading in some cases, however, to hasty decisions with respect to location and fuel choice, and this is bad. It could create surprises in the long term.

II. OIL

I have left oil supply last, partly because this is my main area of expertise, but also because it tends to produce more surprises than electricity and gas. Oil already has a global, efficient, and transparent market. The market provides price signals both for spot and forward transactions.

Oil deregulation and privatization are further along than
those of electricity or natural gas. The reasons are well-known. The oil price shocks of the seventies and early eighties woke up the oil consumers. The oil price collapses of the mid-eighties and early nineties woke up the oil producers. Moreover, oil has no transport difficulties, unlike electricity and natural gas, and this is supporting and enhancing deregulation and global trading. What remains in terms of deregulation for oil is the internal market in some emerging economies, especially for refined products, rather than crude oil.

The broad underlying trend, the buzz word for oil supply, is expansion. New areas are opening up for investment and exploration. There is competition among countries to attract foreign investment in their oil sectors. As we already heard, there is new technology that has lowered oil production costs and increased the rate of reserve recovery from around thirty percent to fifty percent or more in some cases. Most importantly, however, the oil industry has strong cash flows; in fact, it has excess cash and is looking for investment opportunities. In some cases, oil companies are buying back their shares. It is a creditworthy industry and, as you know, quite big.

From an economic viewpoint, there is ample oil supply to meet the projected growth in demand of 2% to 2.5% per year, or about two million barrels a day per year. In fact, in the next three years, if the major economies move briefly into the cycle of a recession, we will even have a temporary glut of oil — small, but a glut nevertheless.

The risks and uncertainties for oil supply have to do, as I mentioned already, with government policy and the timing of supply expansion in some areas, because the timing is controlled by political events.

Also, please keep in mind that the risks for oil are important in a broader macroeconomic sense. The oil market is global, so a problem in supply in one area affects oil prices for every consumer everywhere. In addition, since oil is the largest fuel in energy consumption and has no substitutes in the transport area, which is its main use, changes in oil prices affect economic activity in general — that is, GDP — and the financial markets as well. For example, during the Gulf War, oil prices doubled and we had a recession in the United States. For the past two winters, U.S. natural gas prices have tripled, but nothing has hap-
pened to the U.S. economy. Our analysis shows that, in fact, oil has the best, positive correlation with inflation in terms of long term trends.

Here is the list of risks and uncertainties for oil supply, starting from the more definable ones and moving to the more opaque ones. First, environmental policy, otherwise known as the car. There are no substitute fuels for transport. Yet the car has been found to be one of the main sources of pollution. So far, the policy has been emissions control through changes in fuel quality and car design.

Consumers, although verbally concerned about pollution, have been unwilling to change their life style or to pay more for driving. That could change, however, and the key to that is the United States. We do not see such a change as imminent, but there is a risk of a change longer term. Moreover, the current focus on fuel quality and car design has created a variety of standards among countries and within the same country. The policy on fuel quality and car design has been unpredictable in its application and has created artificial barriers to trade in refined products. Occasionally, it has created supply curtailments even though the underlying supply has been more than available.

The second area of uncertainty for oil supply is China, which has already been discussed in some way. China is a net oil importer. It is small right now, but its requirements will rise steadily in the future. What is important is the basic direction of economic and political development in China. We expect a gradual rise in oil imports balanced, on one hand, by the need for oil in order to grow and, on the other, by the fact that sharp increases in oil imports will create increases in oil prices and inflation, and the government does not want that. So far, that has been the policy, a sort of balancing act. There could, however, be extremely rapid expansion of the Chinese economy in an unexpected way, or a sharp slowdown. That will affect not just China’s energy and oil demand, but also global oil prices; and of course the domestic political situation could change abruptly.

Another factor about China that is less realized is the locational decisions of the government. So far, most of the economic boom is on the coast. If a decision is made to expand other areas internally, then China’s transport requirements — that means oil demand — will grow more rapidly. It will mean
much faster global demand growth for oil and higher oil prices than we are expecting.

The third area of uncertainty is Russia. It has huge energy resources. It is a net exporter of energy, unlike the United States and China. We expect gradual expansion of demand and of supply and, therefore, the ability to maintain the current rate of oil exports of three million barrels per day and possibly even raise them a bit. The uncertainties, however, abound, as you know.

What is going to be the economic policy, the economic trend? Are we going to have the recent pattern of two steps forward, one backward? Or will there be a sharp move away from reform? Could the trend become the opposite, that is, a rapid move towards reform that will boost economic growth and oil consumption? It is not clear.

The climate for foreign investment in Russia’s oil sector remains unclear, to put it mildly. So far, indications are that most of the investment will be done by the domestic companies, and that the role of foreigners will be limited, but that could change. If you had a big expansion in foreign investment in Russia, if the barriers currently prohibiting its expansion were to fall, we would have a lot more oil.

Finally, we have to consider Russia’s policies with respect to its neighbors, Central Asia and the Middle East. Russia is already moving to secure oil supplies in the Middle East, in Iraq specifically. It also effectively controls the rate of flow of oil from Central Asia to the world market. This brings us to the fourth uncertainty, Central Asia. It has huge reserves, the ability to export oil equal to about three percent of current global oil demand and maybe six percent longer term. However, Central Asia is land-locked. Additionally, to get to the sea, the oil has to travel through the following places: Russia including Chechnya, Armenia, Georgia, Turkey, Iran, or Afghanistan. So what the foreign companies are doing — and there are a lot of foreign companies investing in Central Asia — is to aim at multiple pipelines, sort of hedging their bets. This is a wise policy, which we believe will ensure timely availability of Central Asian oil supply. The supply will be there and the growth will be gradual, but one cannot deny that there are risks of cutoff, delays, and other surprises given the political situation in this region.
Now we move to the risks with the greater opaqueness, one of which has to do with Iran. Iran has limited potential for a sharp rise in oil supply, much less, let’s say, than Central Asia, and it needs a lot of investment. It is also a big power in the region. It can affect political developments to the south in the countries of the Gulf, and to the north in Central Asia. Most important, it is the easiest and cheapest route for Central Asian oil. The United States has an embargo on Iran, however, and is making sure that no one else will invest in Iran’s oil sector and that Iran’s access to external credit remains limited.

What happens in Iran will, therefore, affect global supply in two ways: directly in terms of its own production and indirectly in terms of Central Asia oil supply.

Finally, we come to the biggest uncertainty, Iraq. It has huge potential for increasing oil production; it has the second-largest oil reserves after Saudi Arabia; the country has not been fully explored; and the costs are very low. There is pent up demand for consumer goods in Iraq, and the country would, therefore, export oil in large amounts to buy the goods it needs. We have a U.N. embargo on Iraqi oil exports, however, and the little they export now, 700,000 barrels per day, is just to pay for medicine and food.

It does not appear that the trade embargo will be lifted while Saddam is in power. The reasons have to do with weapons control. They are strategic and mainly related to the United States. They have little to do with oil.

Most important, regardless of what happens to the trade embargo, I cannot visualize the long-term political outlook for the country. When I look down the road two to five years, anything is possible. Saddam could be in power or not in power, the country may be in a civil war or may not be in a civil war. I cannot even predict what it will look like under various scenarios. That kind of uncertainty is not good for financial markets.

In sum, then, the process of globalization and deregulation is boosting economic growth. The same forces are boosting energy demand but also energy supply. There is no physical or economic shortage of energy supply. The risks as outlined are many but are manmade.

Thank you very much.