Our appetite for oil feeds terrorism, former Secretary of State George Shultz told more than 350 alumni and friends at the opening of Chicago GSB’s London Campus on September 12. “How many times will we be hit in the head with a two-by-four before we make a really determined effort to use less oil?” asked Shultz, former dean of Chicago GSB, as he made a case for reducing oil dependence during a panel discussion on energy, geopolitics, and the global economy.

Joining Shultz were Nobel laureate Gary Becker, University Professor of Economics and of Sociology; Nick Butler, group vice president of strategy and policy development of BP; Kenneth Crews, ’74, managing director of Greenhill & Co.; and Raghuram Rajan, economic counselor and director of research at the International Monetary Fund and Joseph L. Gidwitz Distinguished Service Professor of Finance. Dean Edward Snyder moderated. Excerpts of their discussion follow.

Nick Butler
Group Vice President of Strategy and Policy Development, BP

On Hurricane Katrina An event that started out affecting three states is now affecting the whole world. It shook the international oil market, knocking out 900,000 barrels a day of oil production and seriously damaging six major refineries. Since there’s no great excess of refining capacity anywhere in the world, demand is pushing up prices worldwide. But the market coped and supply and demand came back into balance remarkably quickly.

On the need for environmental incentives As the use of hydrocarbons—oil, gas, and coal—goes up, so will emissions into the atmosphere. Many people are trying to do things to reduce emissions, but emissions won’t be reduced unless there is a clear incentive package that is agreed upon at the government level. This should begin with carbon pricing.

On alternative energy We’re the world’s second-largest solar business, and it still needs a multifold increase in the efficiency of the technology to make it competitive with the grid. That’s comparable to the increase in technical productivity that occurred in the computer industry between 1970 and 1985. The short-term answer will probably lie in the conversion of other products into petroleum, particularly coal but possibly
also bio waste. We’re working on all these plus wind power and the technology of sequestration, which captures and stores the carbon in hydrocarbons and allows the hydrogen to be used to produce carbon-free electric power.

On the lasting effect of the current shock This shock is driven by the very rapid growth in demand, and I don’t think its impact will fade away quickly. The real challenge here is that this isn’t a normal market; in a normal market, the response to what’s happened now would be a rise in the supply of crude oil. Supply likely won’t rise because it’s not in the interest of all the producers to increase capacity. Some of them can’t increase it further, physically. And on the production side, this industry is becoming run by governments more and more each year. Much of the supply that could come out in the world over the next 18 months, above what’s on line or safely predicted, is controlled by governments in Saudi Arabia, Russia, and Iran. In those countries, the private sector lacks the freedom to bring out the needed resources. Activity is strictly controlled. That’s why the outlook for oil is not predictable.

On the failure of signals Many industrial countries are running a large current account deficit, and the emerging markets are for the first time running surpluses. This has helped the world survive these crises with very little loss in growth, but it’s come at a cost. Policy in industrial countries has been extremely lax, and we’re awash in liquidity because central banks have pushed interest rates to very low levels, which has prevented traditional signals from flipping on and restraining growth. For example, when we have strong growth, typically inflation rises its head and interest rates rise, and that naturally restrains growth. Inflation hasn’t worked much because we’ve had a lot of supply from emerging markets and restraining price increases. Wages have been restrained for the same reason. And interest rates have been held very low by extremely accommodating monetary policy. Without traditional price signals working, you start having bottlenecks, then other signals start working, and that’s where oil comes in. Oil prices are rising, and this could be a signal that needs to operate to restrain growth and bring us back.

On investment, consumption, and growth We now have extremely high growth relative to trend in the world economy, low inflation, and low interest rates; at the same time we have large additional demand that are driving the price—in fact, before Katrina, the supplies of crude were at a six-year high in the United States. Instead, there are a couple of things. One, demand for particular distillates: gasoline and heating oil. It’s not that there’s a current supply shortage, but it’s the fact that there may not be enough down the line, so there’s a fear of a shortage. And now that every refinery in the United States is focusing on gasoline, maybe there will be a shortage of heating oil in winter. It’s these supply shortages that are now driving the concerns. It’s not demand. In fact, demand, especially of crude, has come in lower than what was anticipated. That’s why I think we may be moving into a somewhat different situation than what has persisted so far, and the price of oil may have larger effects than what we’ve thought earlier or seen so far.

We don’t have an oil problem in the United States right now; we have a refining problem.

—Kenneth Crews, ’74
On demand-driven vs. supply-driven shocks

During the oil crisis of the early 1970s, due to the formation of OPEC, oil shot up almost vertically virtually overnight, and that had an enormous disruptive effect on the world economy. The second oil crisis resulted from the Iran-Iraq War. Oil prices rose rapidly and again there were serious disruptive effects. This time we've had a significant increase in oil prices, but the world economy overall is doing well. This is a demand-driven oil shock; the others were supply driven. There's been a great growth in demand, and that's the source of the price increase in oil, combined not with the decline in oil production as in the previous crises, but with increasing oil production, although at a slow rate. What are some of the consequences? An important difference is that, at least in the developed countries, the share of oil and other energy in the GDP of the major countries is a much smaller share of GDP than in the 1980s. It's true in the United States; it's certainly true in the UK and the rest of Western Europe. It is much less true in China and India, where energy shares are high because manufacturing enterprises pay an artificially low price for energy. But in the developed world, the shares have come down significantly despite the fact that in the 1980s and the 1990s, oil prices were generally coming down in real terms. The economies were adjusting partly by reducing their manufacturing output, partly by adjustment within sectors.

The immediate impact of any given oil increase, especially on the developed world, is a lot smaller than it was in earlier times.

On human ingenuity and the flexibility of the economy

At different times, various natural resources were thought to provide bottlenecks to world growth. But human ingenuity has demonstrated a great capacity for overcoming problems that seem like they're just for a long time, as long as you provide the right signals. In a free enterprise economy these are basically profit signals. Answers come along if we let the signal system operate. Throughout history people have underestimated the ability of the economy to adjust to high prices. British economist W. Stanley Jevons wrote a book in 1865 called The Coal Question. Jevons predicted that by 1890 the world would run out of coal and England would become a second-rate nation because it was heavily dependent on its coal output. Jevons was aware of a potential for innovation, but his imagination was limited. He didn't realize oil and gas would develop as alternatives. That limitation on the imagination is important in assessing the future. History, economics, and common sense tell us that when prices remain high, profit seeking companies and individuals find ways to reduce their dependence on resources. Economies have become more flexible in general. When you take the United States, you have 9/11, a recession that started before 9/11, the Iraq War, and the high price of oil, but the U.S. economy is doing well. Productivity in recent years has been very high relative to the 1970s and 1980s—not quite as good as in earlier quarters, but the overall quarters were unsustainable. I think we'll see a greater ability of the U.S. economy to adjust to shock than it may appear at present, and I think that's found in other economies as well.

On demand-driven changes

Whenever there's a demand-driven change in the economy, there's an interaction between the growing demand and the availability of the capacity to increase supply. The less you can increase supply, the more those particular prices are driven up. Still, you have to interpret such price increases as the result of demand, not as the result of some supply shock. It's the inability to respond in the short run because we have a limited refinery, so you have to raise the price to cut off demand. That's not a supply shock, that's the response of what we call unresponsive supply to increased demand. Now Katrina comes along; that's a supply shock. How devastating and lasting it will be is only time will tell. If you look at the current price of oil, virtually all of it was there before Katrina. The rise in the price of oil, the refinery limitations, and the refinery capacity were already in existence as a result of the increase in demand we experienced. Katrina, as a supply shock, is going to worsen some aspects of that. But in the long run, the adjustment will be made.

On terrorism and disaster

The terrorism problem is acute, and to some degree, our appetite for oil feeds that problem. This is something we have to work at. Some have asked me about the differences between Katrina and a massive terrorist attack; there are many. With Katrina, we had a lot of warming. For decades people have said, "New Orleans is below sea level; it's vulnerable, we should do something." As the storm approached, people had warning. Maybe you could have built stronger levees, taken the warnings more seriously, but essentially it comes at you. With terrorism, you look for intelligence, and if you know of an impending attack, you preempt it. When I was secretary of state, many terrorist attacks didn't happen because we preempted them. Doubt many in London have been preempted. A terrorist attack using a nuclear weapon would make Katrina look like child's play. Because if you had a nuclear explosion, or vast contamination with chemical or biological agents, you wouldn't be in there with your bulldozer cleaning up; you wouldn't go near it.

On alternative energy

We have to start somewhere, and there are many things we can do. Many people around the West Coast are driving hybrid cars, which are a little more expensive but they drive well and get better mileage. The other day I drove a Toyota Prius; extra batteries enabled the car to go about 20 miles without using gasoline. I realize how long it takes for a car fleet to turn over, but the impact of having a car you could charge and go for miles before using any gasoline would be huge.

On seizing the moment

I think we're delinquent for not doing more for a long time now about using less oil, but I think there is something that can be done as public policy to get at this problem, in part because now we are seeing an unusual confluence of people who are worried about the environment, people worried about economic pressures, and people worried about what happens if you suddenly have a cutoff of what you use to move your vehicles around. While they differ in what they worry about, they're very similar in what they think should be done about it. This is a moment to seize and get going in a positive direction.

—Ivy Coast