1

The Challenges of Resource Curses and Globalization

The coincidence of oil and financial crises can be traced back historically to the time of the industrial revolution. Our story begins, more modestly, with the dramatic increase in crude-oil prices in 1973 – an episode that continues to live as a vivid memory in Western and Middle-Eastern imaginations alike. For the former, this memory serves as a constant reminder of Western economies' vulnerability to market and geopolitical forces, especially in the Middle East. For the latter, it feeds nostalgic yearning for the moment when the Organization of Petroleum Exporting Countries (OPEC) cartel's market and political power reached its zenith.

As the world continues to struggle with the task of containing the economic, financial, and geopolitical ramifications of the financial crisis of 2007–9, it is important to recognize this and the previous 1970s crisis, as well as a number of others, as phases of a larger ongoing cycle. To paraphrase Mark Twain, rumors of the death of the business cycle – as well as the energy-price cycle, the financial boom-and-bust cycle, and the cycle of Middle-East geopolitical turmoil – have all been greatly exaggerated. In this book, we study the interaction of the global business cycle with these closely related energy-price, financial, and geopolitical cycles. We show that this super cycle is endogenous and self-perpetuating.

Like the human ego, this cycle is most dangerous when we assume that we have tamed or killed it.[1] Prolonged periods of stability and prosperity become grounds for hubris, which in turn breeds unrealistic levels of confidence and greed and compels policy makers to relax counter-cyclical regulations and policies. We argue in this book that financial and energy-sector investment cycles, as well as income distribution within and across countries, play pivotal roles in perpetuating the cycle, which can be attenuated only with proper understanding and vigilance.

We write this book to gain a better understanding of the perennial cycle and its driving forces. This is especially important for informing policies today, as globalized financial contagion and the spread of weapons of mass destruction make the cyclical swings increasingly, and potentially catastrophically, more dangerous.

Over the past four decades, the alternating ebb and flow of petrodollars have been key forces influencing financial markets. Petrodollar recycling has amplified as well as perpetuated recurring global financial and currency crises. These crises have, at times, reached severe proportions in "perfect storms" driven by three forces:

(i) The first force is the Dollar-centered and debt-driven global finance that has emerged since the early 1970s. Thus, our story of petrodollars and financial crises is as much about the U.S. Dollar, and its role in global finance, as it is about gyrating energy prices and Middle-East geopolitics.

(ii) The second force, to which we have already alluded, is the volatile market for oil and gas, which is governed not only by the real-economic business cycle, but also by investment cycles and financial-market speculation.

(iii) The third factor is the continuation of Middle-East geopolitical conflicts, which are driven by self-perpetuating arms races funded by petrodollars and serving as one of the main tools for the West to recycle the latter.

1973–80 vs. 2001–8 – Déjà Vu?

With perfect hindsight, we may notice many striking similarities between the two crises of 1973 and 2008, which highlight the importance of understanding the cyclical nature of such perfect storms. The oil crisis of 1973 was very much the product of the three factors that we have listed: (i) sustained global economic growth accelerated the growing demand for oil and other commodities, (ii) U.S. deficit spending had just recently forced the United States to abandon the quasi-gold standard of the Bretton Woods Accord in 1971, thus ushering in a new era of inflation, and (iii) the Arab-Israeli war of 1973 served as a catalyst for OPEC to restrict supply, thus forcing oil prices to rise tenfold. Higher oil prices (1973–80), in turn, resulted in a flood of recycled petrodollars that led to an international debt crisis.

Those same forces were again coinciding and reinforcing one another in 2001–8: (i) global economic growth that started in the 1980s and continued through the millennium mark – with the briefest of interruptions by historical standards – had resulted in accelerating demand for oil; (ii) United States indebtedness was growing unchecked, putting pressure on the Dollar and jeopardizing its dominance and anchoring effect in global finance; and (iii) terrorist attacks on the United States and military invasions by the latter of Afghanistan and then Iraq in 2001 and 2003, respectively, served as catalysts to inflate oil prices fivefold. Now, as then, the higher oil prices drove a new wave of Middle-East petrodollar outflows that contributed substantially to an international credit bubble. In turn,

that bubble eventually caused an international financial meltdown the economic ramifications of which are not yet fully understood or recognized.

Left unchecked, U.S. dependence on oil in the coming years will continue to contribute to her precarious level of national debt, especially if oil prices recover their upward path with global economic recovery. In the meantime, the latest round of petrodollar inflows to the Middle East is unlikely to bring lasting economic growth and political stability to the region. Now, as in the 1970s, Middle-East economies exhibit limited absorptive capacities, and petrodollar flows have fueled real estate, stock market, and credit bubbles regionally and globally. The façade of political and social stability in some Middle-East countries, made possible in part by rising government spending on security, masks significant threats throughout the region. The latter include a potential nuclear arms race, conventional armed conflicts, sectarian strife, increasing income inequality, and continued failure to diversify regional economies. The recent rise in global terrorism is but one of the consequences of fermenting forces of regional discontent.

Progressively Increasing Financial Contagion

The forces that made globalized financial contagion possible in the new millennium will continue to influence international finance for the foreseeable future. In this regard, advances in communication and financial technology have led to financial integration at a scale that dwarfs other forms of globalization. In the 1970s, recycling of Middle-East petrodollars fueled a credit bubble of bank and sovereign loans to developing countries, especially in Latin America. That bubble crashed in the early 1980s following the rise in United States interest rates, with substantial repercussions for global finance and economics. Later crises in Asia, Latin America, and Eastern Europe in the late 1990s illustrated that similar financial shocks today would have significantly greater impact on the international financial system and economic conditions worldwide.

It is against this backdrop of today's precarious geopolitics and global finance that we seek to revisit the history of boom-and-bust petrodollar cycles that have influenced economic and political development in the Middle East, and financial conditions worldwide, since 1973. Until very recently, oil exporters have recycled petrodollar trade surpluses by investing mainly in Dollar-denominated assets. Investment in United States debt instruments has helped simultaneously to keep interest rates low and the Dollar from depreciating precipitously. This has allowed spending in the United States, financed by debt, to serve as an engine for domestic as well as global economic growth. However, continued strength of the U.S. economy and Dollar is predicated on other countries' continued willingness to hold their investments and reserves in Dollars, even in the face of mounting U.S. debts. Most observers agree today that the status quo is not sustainable.[2]

History, of course, does not repeat itself, and the circumstances of today's energy and financial markets are very different from those of the early 1970s. However, there is today, more than ever, a need to anticipate potential future crises and to understand the means to avoid them by managing various risk components. Toward that end, understanding the anatomy of previous crises, especially those of 1973 and 1979, is the most logical starting point. In the process, our story will focus on the three risk components that we have identified, which are likely to interact again to create the next perfect storm: Dollar-centered and debt-driven global finance, volatile energy prices, and Middle-East geopolitics.

The Dollar, Gold, and Black Gold

The story of the 1973 oil crisis began on August 13, 1971 in Camp David, where President Richard Nixon met with his economic advisers, including Secretary of the Treasury John Connally, Federal Reserve Board Chairman Arthur Burns, and Undersecretary of the Treasury Paul Volcker. The Dollar had already come under pressure by market speculators. Under the Bretton Woods monetary system that had prevailed following the end of World War II, countries aimed to keep their exchange rates fixed, with balance-of-payments support and supervision from the International Monetary Fund (IMF). However, the United States, as the world's largest economy, did not have the option of devaluing its currency or getting help from the IMF. As a remnant of the gold standard that had prevailed before World War II and had made the earlier waves of globalization at the turn of the twentieth century and between the two world wars possible, the U.S. maintained convertibility of the Dollar to gold at a fixed price.

Leading up to 1971, the U.S. started to run deficits that raised doubts regarding her ability to maintain the long-standing price of gold at $35 an ounce, and international financial speculators were already challenging that price (by selling Dollars and buying gold). In August 1971, Britain demanded that all of its Dollar reserves, $3 billion in total, be paid in gold. Two days later, on August 15, 1971, President Nixon dropped the gold-Dollar link. The Dollar then depreciated multiple times, allowing U.S. exporters to become more competitive once again in international markets. By 1973, the Bretton-Woods monetary system was dead.

If we think of oil priced in gold, which was effectively the case under the gold standard and the Bretton-Woods monetary system, we would have expected Dollar-denominated oil prices to increase steadily after 1971. In fact, however, as the Dollar depreciated and monetary policies allowed inflation in the prices of most commodities, Dollar prices of oil remained remarkably stable, as we can see in Figure 1.1. The resulting decline in oil prices relative to gold between 1971 and 1973 is illustrated more clearly in Figure 1.2. Between 1970 and 1973, the gold price of oil (gold ounces per barrel) had been cut in half. In fall 1973, the dramatic

rise in the Dollar price of oil allowed the gold price to quadruple, overshooting the 1971 level, to which it returned briefly in 1975.

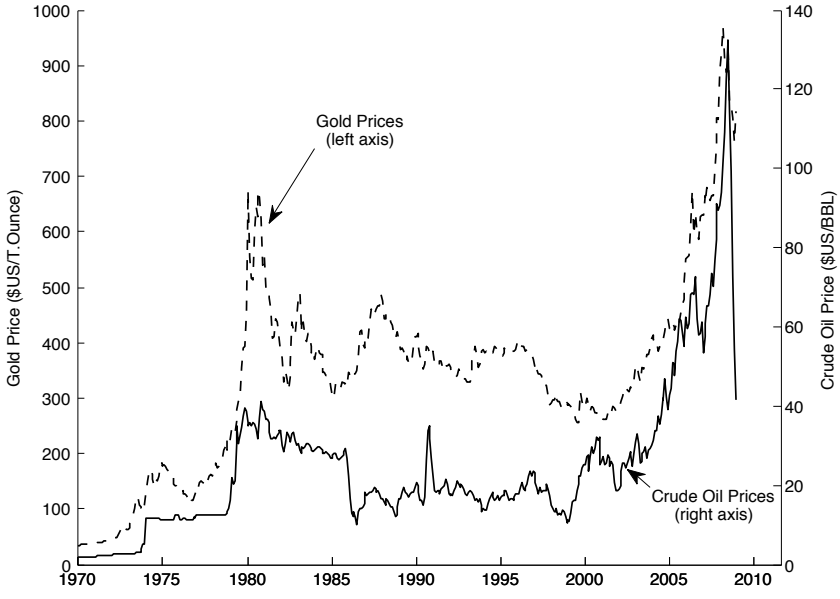

Figure 1.1. Dollar prices of gold and oil 1970–2009. *Source*: IMF – International Financial Statistics.

It is instructive to note that the same pattern was repeated before the oil shock of 1979. Inflation in the mid-1970s allowed gold prices to rise faster than oil prices, again cutting the gold price of oil in half between 1976 and 1979, leading to a major correction in oil prices following the Iranian revolution in 1979. The inflation of the 1970s was finally brought to an end when Paul Volcker, appointed as Chairman of the Federal Reserve Board by President Carter in August 1979, began a series of dramatic increases in United States interest rates, doubling them from 10 percent to 20 percent, and held them at those extremely high levels until 1982. This drove the United States and world economies into recession, which brought down gold from price levels that it did not revisit until the spike in commodity prices post 2003. It is clear from this simple narrative that the dynamics of the Dollar price of oil and the resulting petrodollar flows are governed in large part by United States economic policies that influence the real value of the Dollar.

Using gold prices to measure the real value of the Dollar, we can see in Figure 1.1 that the dramatic increase in Dollar prices of oil since 2003 is overstated

by the declining real value of the Dollar. Indeed, Figure 1.2 clearly illustrates that the gold price of oil has remained below its high in 1979 throughout this latest phase of the cycle. Countries with currencies that appreciated relative to the Dollar, for instance in the Euro zone, were thus insulated to some extent from the higher Dollar prices of oil. The declining real value of the Dollar has prompted Kuwait to dismantle the long-standing peg of the Kuwaiti Dinar to the Dollar. The possibility that other countries may shift their exchange rate pegs, and possibly their foreign reserves, away from the Dollar will be discussed in Chapters 6 and 7.

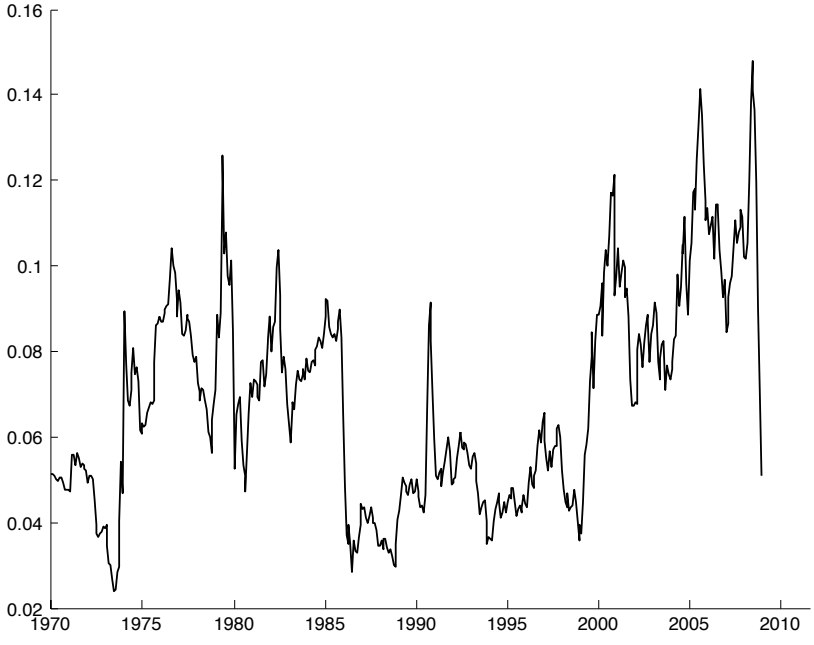

Figure 1.2. Gold price of crude oil 1970–2009 (troy ounces/barrel). *Source*: IMF – International Financial Statistics.

Oil Supply and Demand

The second set of factors that must be considered in our story of Middle-East petrodollars are the forces of energy supply and demand. The seemingly sudden ability of OPEC to exercise power in 1973 cannot be explained on the basis of Arab nationalism alone, nationalistic rhetoric of an "oil weapon" notwithstanding. The forces of global supply and demand for oil were very important contributing factors. In the background, there was the secular increase in demand for energy

as the world economy reintegrated and enjoyed one of its longest periods of economic growth after World War II.

This increase in demand initially prompted the United States' regulators, such as the Texas Railway Commission, to eliminate all restrictions on production. This meant that because Texas was producing the maximum that it possibly could from its fields, no excess capacity remained as backup to be brought to the market in case of supply-shortage emergency. The resulting loss of excess capacity, in turn, eliminated a long-standing stabilizing force in global oil markets.

Another set of stabilizing forces in the global oil market, the oligopoly of large multinational oil companies, known generally as the "seven sisters," were losing market power due to the advent of independent oil companies and a trend toward nationalization of oil resources. As we shall show in Chapter 2, those forces of supply and demand coincided to give OPEC an incredible oligopolistic power to determine crude oil prices directly.

There was, of course, a nationalistic aspect to the Arab OPEC members' strategy to put pressure on the United States and the West more generally by using "the oil weapon." However, it is not clear whether these political considerations could have dominated the oil-exporting countries' economic self-interest. As early as 1974, Secretary of State Henry Kissinger announced after a series of discussions with oil-exporting Arab countries that the use of petroleum as a weapon to influence the outcome of the Arab-Israeli conflict had little merit in reality.[3]

In fact, some supply disruptions unrelated to the conflict appear to have contributed significantly to the oil shock of 1973–4.[4] Meanwhile, Saudi Arabia was secretly selling oil to the U.S. military to help fuel America's operations for the Vietnam War, even as it was publicly announcing its oil-sale boycott of America in solidarity to the Arab cause.[5]

Nonetheless, those other considerations did not undermine the significance of the oil-weapon rhetoric. As we shall discuss in Chapter 3, there is ample evidence that oil prices have been often influenced significantly by fear of supply disruptions, which expectations may be based mainly on political rhetoric. Therefore, our analysis of oil-price fluctuations, petrodollar flows, and the possibility of financial crises must take into account not only physical supply-and-demand considerations, but also market sentiments. The importance of the Middle East in the global supply of oil and gas thus makes its geopolitics an important component of our analysis.

Middle-East Sociopolitics

Every oil-exporting country makes its supply decisions based on multiple economic, political, and social considerations. Different factors dominate at different times, but a baseline economic model may help to predict supply decisions. In this

regard, the seminal work of Hotelling can be used to explain the basic economic dynamics of oil extraction.[6] Hotelling argued that the owner of a nonrenewable mineral such as oil makes a decision whether to extract the resource and sell it based on a simple investment calculus: The owner has to choose between extracting the oil and selling it at the current price, or keeping it in the ground for extraction at a later date. It must therefore compare the expected present value of future prices of oil to the current price that it can fetch on the market. The analysis is thus reduced to comparison of the rate of return that the resource owner can expect to make by investing the potential oil-sale proceeds with the implicit expected rate of return that it would make were it to keep the oil in the ground for future extraction.

Keeping this economic analysis in mind, we can explain the fact that the price of oil depends not only on actual supply disruptions, but also on expectations of potential future disruptions, as discussed in Chapters 3 and 4. Expectations of turmoil, even in the distant future, mean not only higher oil prices in the future, when supplies may be disrupted, but also higher prices immediately, as the opportunity cost of extracting oil increases, other things being constant. Of course, other things are far from constant. When oil prices increase significantly, that gives incentive for energy consumers to seek other sources of energy, thus bringing prices back to sustainable levels. In this manner, the global recession starting in 2008, brought about in part by high energy prices and the associated petrodollar-flow contribution to the credit bubble, brought the latest wave of petrodollar flows to an abrupt end.

Starting with their dramatically increased revenues in 1973, however, OPEC members did not react as predicted by economic models. Instead of planning long-term strategies for optimal investment of their limited mineral wealth, those countries behaved as if their resources were inexhaustible and high prices were going to continue indefinitely. Jahangir Amuzegar, who observed the behavior of OPEC countries firsthand, described how those countries essentially consumed their mineral wealth instead of investing it:

> When oil prices were on the rise, the assumption ordinarily was that they would continue uninterrupted. . . .
>
> Unrequited oil receipts tended to introduce a new politics of rising expectations, social welfare largesse and greater state paternalism. Fiscal policy in the form of reduced taxes, increased subsidies, enhanced welfare payments or expanded public employment encouraged profligate consumerism, relaxation of fiscal discipline and living beyond one's means. . . .
>
> Exchange-rate policy, as the kingpin of other macro policies, not only influenced the sectoral composition of the domestic development model but (and more importantly) invited and reinforced an insidious rent-seeking behavior. The latter helped create a new class of

social parasites, i.e. wheeler-dealers or apparatchiks – which often sabotaged needed timely adjustments. . . .

The absence of foresight and prudence in the selection of policy alternatives during oil booms made it doubly difficult to shift gear, correct mistaken policies or adopt counteracting adjustment measures once booms turned inevitably into busts.[7]

Despite this largesse on the part of their ruling elites, the limited absorptive capacities of the oil-exporting countries left them with large petrodollar surpluses. The trade surpluses of OPEC countries during the 1970s corresponded to massive trade deficits for oil importers. Dealing with this financial imbalance required the development of a massive petrodollar recycling scheme, which eventually fueled a debt crisis in Latin America, as we shall discuss in Chapter 2. The latest wave of petrodollar flows and the credit bubble that it helped to inflate, with mounting U.S. debt and a weakening Dollar at the center of the financial storm, will be discussed in Chapter 5.

As we shall discuss in Chapter 3, the Middle-East oil-exporting countries' reaction to the most recent wave of petrodollar flows was very reminiscent of their response in the 1970s. The lessons of that earlier episode of the cycle have not been learned. The failed economic policies of the 1970s and 1980s, in both oil and capital-exporting countries, as well as their labor-exporting neighbors, meant that high economic expectations of the middle class – driven by boom-year euphoria – were dashed in the 1980s. Denied economic aspirations of middle-class youths, together with built-up anger at the insulated rent-seeking elites and their Western patrons, were significant contributors to the region's security problems.

The resulting geopolitical disturbances had the unintended consequence of bringing oil prices to new highs. This, in turn, allowed the ruling elites in those countries to use the new wave of petrodollars to pacify their populations with a combination of security heavy-handedness and economic relief. However, recent stock-market and real-estate bubbles in the region suggest that economic absorptive capacity continues to be relatively low, and the long-term economic prospects for the region remain dim. Most recently, the global recession – brought about because of the high energy prices, and in the aftermath of the financial crisis caused by the deflating credit bubble – has brought this wave of petrodollar flows to an abrupt end. With limited excess capacity in oil production, the region's geopolitical turmoil is thus intricately connected to global financial conditions. The region's economic and political problems are typical of regions that suffer from a resource curse, which has now been globalized, as we discuss in Chapter 7.

Volatilities: Financial, Economic, and Geopolitical

We have identified three main factors that interact to perpetuate, and potentially to amplify, cyclical movements in petrodollar flows: financial conditions, energy supply and demand, and Middle-East geopolitics. The manner in which petrodollars are used domestically in oil-exporting countries and recycled internationally, in turn, feeds back into the cycle through those three channels. As we have seen in our brief description of the circumstances surrounding the 1973 spike in oil prices, extreme events are more likely when multiple factors coincide. (In 1973, the factors were high energy demand, a deteriorating Dollar, and technical and geopolitical disruptions of Middle-East oil supply). Consequently, to understand past volatilities and to anticipate the nature and extent of potential future crises, we need to understand the relationships between those three factors. We now review pairwise interaction mechanisms briefly, further detailed historical analysis occupying the bulk of Chapters 2 through 7.

The Dollar and Energy Economics

The current energy markets blossomed during the golden age of the Dollar post World War II. Hence, despite occasional attempts to trade oil for currencies other than the Dollar, the fortunes of oil-exporting countries have been intimately intertwined with the strength of the Dollar. In May 2007, Kuwait decided to revalue its currency relative to the Dollar, abandoning a long-standing peg. Perhaps this was done in preparation for the Gulf Cooperation Council's (GCC) common currency. However, the explanation that accompanied the announcement of abandoning the Dollar peg cited the falling dollar and its effect on domestic inflation.[8] Some part of inflation in the GCC may be, indeed, attributed to the falling Dollar. However, the main driving force behind inflation, for example in real estate, is simply the increased liquidity due to petrodollar inflows and limited absorptive capacities of the oil-exporting countries' economies.

There is no doubt, historically, that the denomination of energy prices in Dollars has been a complicated issue, as we shall discuss in Chapter 6. Shortly after the first oil shock of 1973, National Security Advisor Henry Kissinger helped to orchestrate a system for petrodollar recycling, which featured most prominently the agreement that oil would continue to be priced in Dollars. Major OPEC countries, especially Saudi Arabia, were also given incentives to continue extracting oil and selling it for Dollars, by providing investment opportunities for their petrodollars in Dollar-denominated assets and debt instruments such as federal bonds and FNMA (Fannie Mae) mortgage-backed securities.[9]

As long as big portions of oil-exporting countries' assets remain invested in Dollar-denominated instruments, those countries will have every incentive to