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Research Report on International Resources

An Age of Primary Products in Ascendance ***—Dramatic Restructuring of Supply and Demand—*** ***Strategic Response from Japan Urgently Needed***

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Key Points

- The upward price spiral differs structurally from the rising prices of the 1970s
- The existence of multiple, intertwining factors must be borne in mind
- Strategy must be formulated for national security, diplomacy, and the environment

The price of crude oil, which early in 2008 climbed above \$100 per barrel on the New York futures market, later broke the \$110 barrier. At the same time, financial markets around the world have been reeling under the impact of the US subprime mortgage crisis (involving housing loans to low-income individuals), and growth has been decelerating noticeably in North America and Europe. Some are even saying that the American economy has already entered a recession.

In its April 2008 World Economic Outlook, the International Monetary Fund (IMF) observes that commodity markets have continued to boom despite the slowdown in global economic activity. The report takes note of the broad-based nature of the commodity price boom, pointing to the main factors involved: (1) biofuel-related demand has pushed up prices of major food crops; (2) demand from emerging economies, which account for much of the increase in commodity consumption, remains strong; (3) supply adjustments to high prices have lagged, especially in the case of oil, and inventory levels in many markets have fallen to medium- to long-term lows; and (4) financial factors seem also to have played a part in the boom.

In order to examine these intertwining factors, the Japan Center for Economic Research established a research group on resource constraints and the world economy, inviting experts including businesspeople to take part, and I served as the chair. After a year of study, the group released its conclusions in the report “Resources and the Paradigm Shift in the World Economy” (in Japanese).

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International prices of crude oil, iron ore, nonferrous metals, coal, and other commodities have spiraled upward to record highs in the world’s resource markets. The

prices of wheat, soybeans, and other grains have also reached all-time highs. We are witnessing “resource inflation,” with prices of primary products in general rising.

Mention of resource inflation calls to mind the two oil crises of the 1970s. What happened back then was that when oil prices skyrocketed, the world economy stalled, oil-consuming nations worked hard to economize on resource consumption, and demand for oil dropped. This set the stage for the long-term slump in oil prices from the second half of the 1980s through the 1990s. Today, can we expect this scenario to play itself out once again? The answer is no.

The skyrocketing prices of the 1970s represented a supply shock administered by artificial production cutbacks of OPEC, the Organization of Petroleum Exporting Countries, a cartel of oil producers. The situation today is basically different in that prices are being driven upward by a demand shock. The world economy has been growing at a fast pace for a long time, and the growth is being spearheaded by China, India, and other emerging economies that consume resources intensively, with the result that resource demand is steadily mounting.

In one respect today’s rising prices are just like those of the oil shocks: They are causing a huge transfer of income from countries importing oil (consumer nations) to countries exporting oil. During the 1970s the process of income transfer acted as a heavy drag on the real economies of the importing countries, and factors pushing up prices in general were also at work, causing the condition known as stagflation, simultaneous stagnation and inflation. This time, however, crude-oil prices have shot higher at the same time as the world economy is rapidly growing. In a reversal of the cause-and-effect relationship of the 1970s, strong demand is causing oil prices to soar.

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The pace of the global economy’s growth has clearly slowed since the start of 2008. According to the April outlook of the IMF, the world economy’s rate of real growth will drop from 5.0% in 2006 and 4.9% in 2007 to 3.7% in 2008. The slowdown in the United States will be especially sharp, with growth coming in at just 0.5% in 2008 and 0.6% in 2009, well below the American economy’s potential growth rate. Nonetheless, booming prices for oil and other resources are not the reason for this deceleration. The fundamental cause is financial contraction sparked by the subprime crisis originating in the United States, a crisis that was triggered by the collapse of housing bubbles in the United States and some other countries and by defaults on subprime loans.

A divergence of views on oil prices has recently become evident. On one side are those who argue that oil prices are booming because of a structure of tight supply and demand, a structure brought about by the world economy’s fast growth accompanying the rise of China and other major new economic actors. On the other side

are those who argue that a bubble is forming, with oil prices being inflated by speculative demand in a context where belief in persistent market tightness has taken firm hold. The former argument tends to be favored by economists who specialize in macroeconomics and experts in the field of finance, while the latter is the mainstream view in the major oil-producing countries as well as among such oil majors as Exxon Mobil Corp. of the United States. But even those who support the bubble theory acknowledge that there has been a structural shift in demand, and they do not expect a repeat of the scenario of the oil shocks, when demand contracted after artificial price hikes, ushering in a long price slump.

Structural change has not, moreover, been limited to the demand side. As I touch on later, there has also been change on the supply side. For this reason, if the global business downturn becomes prolonged and speculative demand falls off, oil prices could drop sharply for a while. Even in that case, however, the price slump would not repeat the pattern of the 1990s. There would be larger-than-normal volatility over the medium to long run, with a strong upward bias.

The various factors pushing up the prices of energy and other resources are intertwining, and they need to be studied in the context of a paradigm shift in the world's geopolitical and geoeconomic landscape. This is particularly so in the case of oil. Demand is growing with the rise of the emerging economies, which exhibit an energy-intensive pattern of development, and it is shifting even as it climbs. There is particularly strong demand for automobiles and other means of transportation and for the products of the petrochemical industry. In these areas alternative forms of energy cannot be easily substituted for oil, and price elasticity is diminishing as a result.

A number of new factors have come into play. (1) Once crude-oil prices rise above a certain level, moves to conserve resources pick up momentum in OPEC members and other resource-rich nations, which see their income expand, and the will to invest in and produce resources begins to decline; (2) resource nationalism is gaining strength, leading countries with resources to step up regulation of investment by foreign companies and demand larger shares in the allocation of output; (3) global environmental problems are becoming more acute, and there is a possibility the constraints will be imposed on the use of coal, of which reserves are still abundant; (4) the areas in which new development projects are concentrated tend to lie within countries where resource nationalism is prominent or regions where geopolitical risks are high; (5) in this context, the risks and costs of new development investments are rising, even for the oil majors. Because of these new factors, the time lag in the market mechanism's adjustment to price changes has grown longer.

Against a backdrop of growth in the size of commodity funds, a new phenomenon involving the evolution of crude-oil futures into financial products is to be seen. This trend is functioning as an amplifier of price movements induced by changes

in supply and demand.

In addition, when we look not at dollar prices but at the relative prices of industrial products versus primary products (the terms of trade), we can see a trend dating from early in the twenty-first century that can be interpreted as a historic shift toward the ascendance of primary products. Such a change would necessitate a fundamental revision of Japan's industrial development pattern, which has been premised on importing relatively inexpensive resources, processing them into manufactured products with higher added value, and exporting these products.

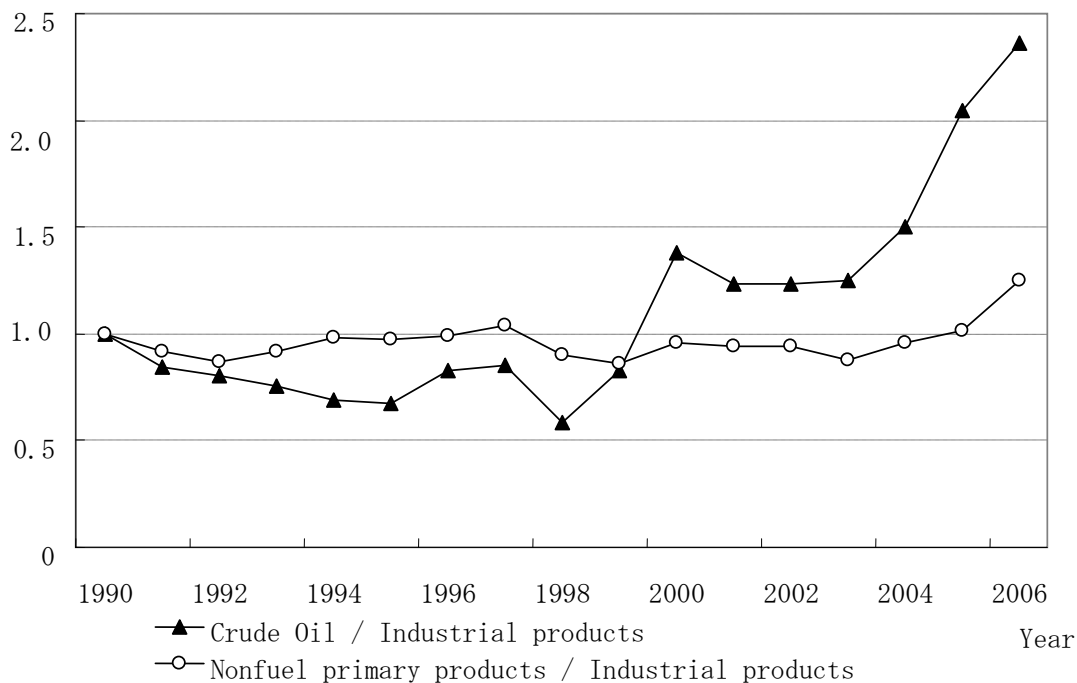
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Japan also has many other items on its agenda. One is the task of achieving "energy and resource security" by securing stable supplies of oil and other resources, and another is the task of achieving "environmental security." Moreover, national security on these two fronts must be reconciled with each other. We should make preparations on the assumption that in the coming paradigm, not just oil prices but prices of all sorts of resources will follow an upward trend. This means Japan will be in need of strategic thinking that looks beyond the development of resource-saving technologies to include the development of alternative energy resources and that rises to the challenge of constructing a new economic and social system, one that includes recycling.

Japan will continue to be in need of a strategy for minimizing the risk of disruption in the oil supplies from the Middle East. This is because projections indicate that even by 2030, only some 10% of the nation's energy needs will be met by new or renewable energy resources. The traditional importance of fossil fuels will remain basically unchanged, with oil and natural gas serving as the primary energy sources, and significantly reducing Japan's reliance on supplies from the Middle East will prove to be difficult. No doubt it will be vital for Japan to explore paths for cooperating with other countries, notably the United States and China, in achieving energy and resource security. The Middle Eastern oil producers have a vast treasure of oil dollars, and they have begun to formulate long-range strategies for economic development that does not rely on oil. In this situation, Tokyo should replace its conventional energy diplomacy, which uses Japanese funds and technologies as trump cards, with a more comprehensive diplomatic strategy.

On the technology front, meanwhile, Japan attracted the attention of the world with the advances it achieved in conserving energy after the oil crises of the 1970s, but it failed to sustain this technological development in after the 1990s, when oil prices were in a long-term slump. As a result, we now must face the fact that Western countries have rapidly caught up with us in this area. The time has come to discard the myth of Japan as number one in energy-saving technology.

Changes in Relative Prices of Natural Resources and Industrial Products



Source: International Monetary Fund, *World Economic Outlook*.

Note: Calculations are based on trade price indices for each category (1990 = 100).

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