

August 22, 2007

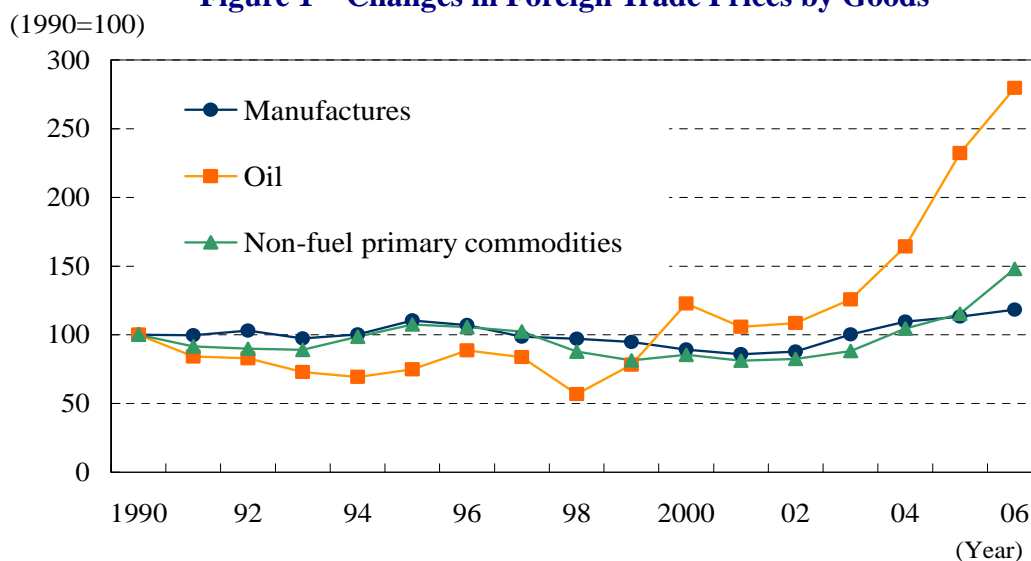
## Relative Resource Prices on the Rise

Yukio Nishikawa  
Senior Economist

Resources have emerged as a major theme of discussion. There are two major problems pertaining to resources. One is a surge in resource prices, which has spread from crude oil and metals to agricultural products (such as maize), which are now regarded as a source of alternative energy. The other is the possibility of the depletion of non-reusable resources, as represented by the “peak oil theory.” This report focuses on the prices of industrial products and primary products, and expounds that a relative decline in industrial product prices which began in the latter half of the 1990s has been a major factor in the increase in resource prices. It will also demonstrate that this development has taken place against the backdrop of the emergence of new economic powers, especially China, as new exporters of industrial products.

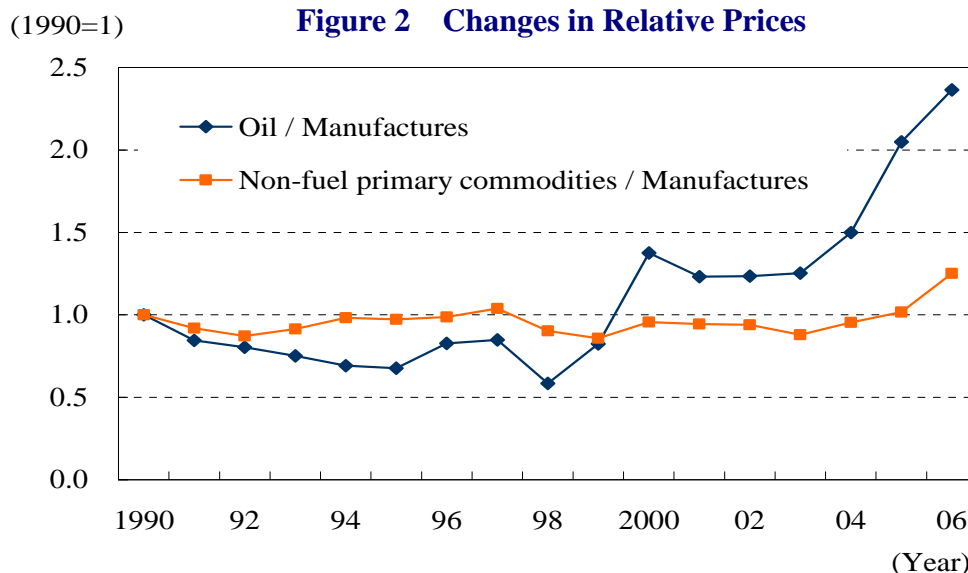
The first step in this treatise is to select data that represent the prices of industrial products and primary products. Since there are few global price indices by goods, this writer has used foreign trade prices by goods (in U.S. dollars) compiled by the International Monetary Fund, which classifies goods into the three categories of 1) manufactures, 2) oil and 3) non-fuel primary commodities. Out of these prices, those of oil and non-fuel primary commodities can be traced back to 1980, using an IMF database. Since there is no series of manufactures prices, this writer has used the figures carried in the latest issue (April 2007) of the IMF’s *World Economic Outlook* for 1999-2006. Figures for the period between 1991 and 1998 were calculated based on the rate of year-on-year change which was carried in an earlier issue of the *World Economic Outlook*. Based on the figures thus obtained, prices were converted into indices with 1990 as 100 (Figure 1).

**Figure 1 Changes in Foreign Trade Prices by Goods**



Sources: International Monetary Funds, *World Economic Outlook* (April 2007 and October 1999 issues) and IMF databases.

During the 16 years from 1990, oil prices increased 2.79 fold, non-fuel primary commodities prices 1.48 fold and manufactures 1.18 fold. Due to the differences in their rates of increase, relative prices of manufactures declined vis-à-vis those of oil and non-fuel primary commodities (Figure 2). Resource prices rose in both absolute and relative terms.



Sources: As for the Figure1.

### *Industrial product prices fall for six consecutive years*

When, then, did relative resource prices begin to increase? To answer this question, the following two phenomena should be noted.

First, industrial product prices fell for six consecutive years from 1996 to 2001. An examination of data on the rate of change in industrial product prices going back to 1983 shows that these prices declined for one or two years depending on business conditions, but except for the period between 1996 and 2001, they never fell for six years in a row. In 2002, industrial product prices turned upward again, but their rate of increase remains lower than in the past.

Second is the fact that the increase in crude oil prices preceded increases in other prices. Crude oil prices rose sharply in the mid-1990s. However, since the rate of increase in industrial product prices then was higher than that in crude oil prices, this was not regarded as a problem. Subsequently, after a temporary drop due to the influence of the Asian currency crisis, crude oil prices rose sharply from 2002. Meanwhile, non-fuel primary product prices moved nearly in parallel with manufactures prices through 2003. For several years now, they have been rising more sharply than industrial product prices. Therefore, it would be logical to assume that the upward trend of resource prices began in the mid-1990s and has been gathering momentum in the 2000s.

What, then, is responsible for the secular decline in industrial product prices? In the latter half of the 1990s, China emerged on the world stage as a major exporting nation of industrial products. China had fast expanded its productive capacity through the introduction of foreign capital and other means after it adopted an economic reform and “open door” policy in 1978. The amount of China’s exports (in U.S. dollars) increased by

more than 20 percent in 1997. By 2006, it had increased more than six fold from the level of 1996. The collapse of the Soviet Union brought about the end of the Cold War, thus changing the structure of the world. As a result, China and other newly-emerging economic powers began to supply inexpensive industrial products to the world market. This brought industrial product prices down, curbing the increase in prices.

Needless to say, any interpretation of relative prices depends on which year is used as the base year. If we take 1982 as 100, the level of current manufactures prices is 170.4, that of oil prices is 202.4 and that of non-fuel primary commodities prices is 172.2. Thus, they are more or less in equilibrium. From the standpoint of resource-exporting nations, resource prices have finally caught up with the increase in industrial product prices after a quarter of a century.

The first oil crisis of 1973 and the second oil crisis of 1979 brought surges in resource prices, centering on crude oil prices, and sharply depressed the economic growth rate of the advanced, industrialized nations. This, in turn, brought a sharp decline in resource prices. At the same time, the advanced, industrialized nations, which were the principal suppliers of industrial products, raised their prices to pass the increase in raw material prices on to customers. As inflation deepened on a global level, the advanced, industrialized nations improved their terms of trade and offset the negative impacts of the two oil (resource) crises.

### *Sustained increases in resource prices expected in the near future*

This time around, will relative prices of industrial products rise as they did the last time? The personal view of this writer is that the possibility of this happening in the near future is small. There are three reasons for this view: 1) The weight of the emerging economic powers, with China at their helm, as engines of growth has increased and growth rates are rising in the countries of Africa and Latin America, where growth rates used to be very low. 2) In the newly-emerging economic powers, the efficiency of resource use is lower than in the advanced, industrialized nations. Therefore, the increase in their production leads to an increase in demand for resources. 3) The rise in non-fuel primary commodities prices has just begun. Agricultural products are touted as a source of alternative energy, and this is expected to further push up their prices. This writer is inclined to feel that the massive amounts of funds, which will flow into resource-rich countries due to the surges in resource prices, could disrupt the world economy, depending on how they are applied.

*Yukio Nishikawa*

*Senior economist in the Asia Research Department.*

*His principal fields of interest are trends in the international economy and politics.*

*For inquiries regarding this paper, please contact at 81-3-3639-2892 (phone).*

Copyright © 2007 JCER

※ Copying of this report is prohibited. Please contact us for further details.

---

#### **Japan Center for Economic Research (JCER)**

Nikkei Kayabacho Bldg. 2-6-1 Nihombashi Kayabacho, Chuo-ku, Tokyo 103-0025, Japan  
Phone:81-3-3639-2801 / FAX:81-3-3639-2839 / E-mail:jcernet@jcer.or.jp