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## Key Strategy Issues (Vol. 276)

# Japan must create a means of valuing the Earth

The rapid rise in the price of crude oil has increased the risk of inflation even though the flames of the subprime loan crisis are still burning. Financial policymakers are thought to have little room to maneuver. One tiger (a financial crisis) waits outside the front door while another tiger (inflation) is lurking by the back door.

As these events unfold, Japanese stocks stand out because of their strong performance as other stock markets worldwide continue to slump. Investors are slowly beginning to show interest in reevaluating Japan and Japanese stocks. I believe there are two reasons. First is the “quality premium” that Japan receives because of its overwhelming lead in advanced technologies. Rising living standards in resource-rich nations and emerging economies are giving consumers more buying power. And as this buying power grows, the importance of quality high-tech equipment that can conserve energy and resources will become even greater. Investors are now realizing that Japan is a country with an enormous and broad-based pool of expertise involving technologies for high-quality products.

The second reason for the relative strength of Japanese stocks is the large volume of funds available for investments worldwide, irrespective of subprime loan problems. Moreover, oil-producing nations are taking in an extra 150 trillion yen annually now that the price of crude oil has spurted by 50% in only six months. The majority of this massive amount of extra income will flow back to international financial markets. But there are now very few attractive opportunities for investing these funds. During the past year, investors have lost money on stocks, credit instruments, investments in emerging economies and finally government bonds. Commodities have been the only source of profits. But this situation cannot last forever. Investors will always find the next profitable investment theme. I believe that theme will probably be the “global value play.” Basically, this involves the discovery of “value” in the form of the ability to generate consistent cash flows even amid economic adversity. When searching for this value, investors cannot ignore Japanese stocks. These stocks are now considerably undervalued following an 18-year bear market that brought down stock prices more than in any other country.

I believe that the Japanese economy and stock markets are about to come back to life. With the G8 Summit taking place next week in Hokkaido, there is growing interest in environmental issues. Rising attention on these issues should be another positive factor for Japan.

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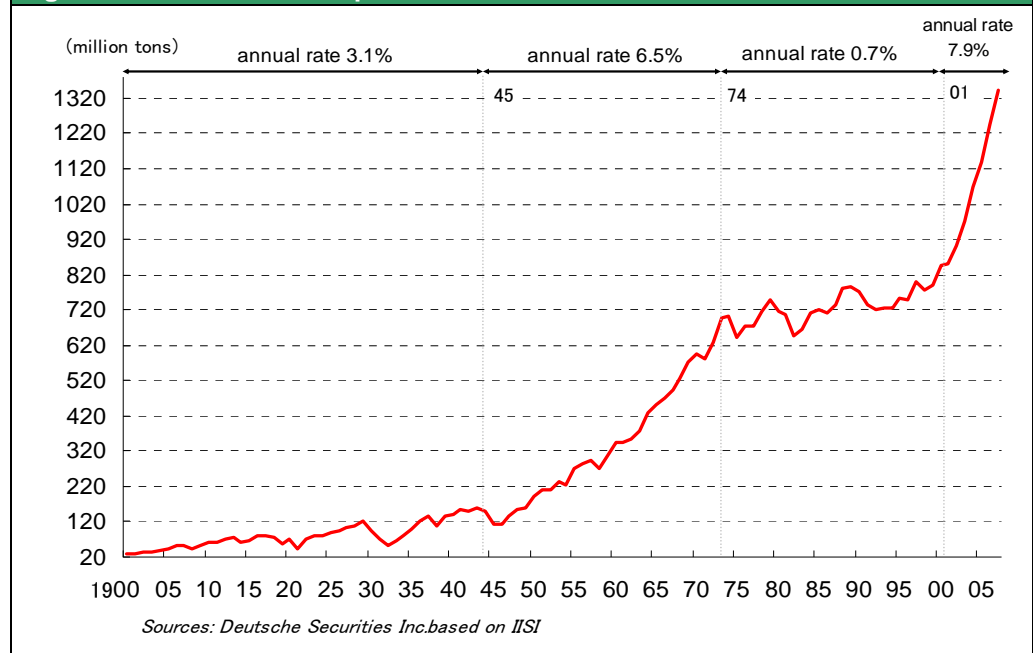
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# (1) The two barriers to global economic growth: the environment and excess capital (lower returns)

## Explosive global economic growth

Global capitalism is expanding at an unprecedented pace, producing remarkable improvements in living standards in many countries. This process is creating large numbers of affluent, well educated people in regions that used to be undeveloped and primitive. Crude steel output is indicative of this transition. During the 1960s, the world's crude steel production increased at an annual rate of 6%. The growth rate fell to less than 1% during the next three decades, but is rising at an 8% rate in the current decade. Obviously, the global economy has returned to volume-based growth that has been unaffected even by the subprime loan crisis. This growth has contributed directly to the sharp increase in prices of commodities, especially crude oil.

**Figure 1 : World raw steel production (1900~)**



## Barrier 1: The environment

However, we have seen the emergence of two barriers that stand in the way of this prosperity. The first is the destruction of the global environment. Ozone depletion, global warming, spreading deserts, rapidly shrinking forests, shortages of natural resources, extinction of species and other problems threaten the Earth.

## The environment is China's greatest risk factor

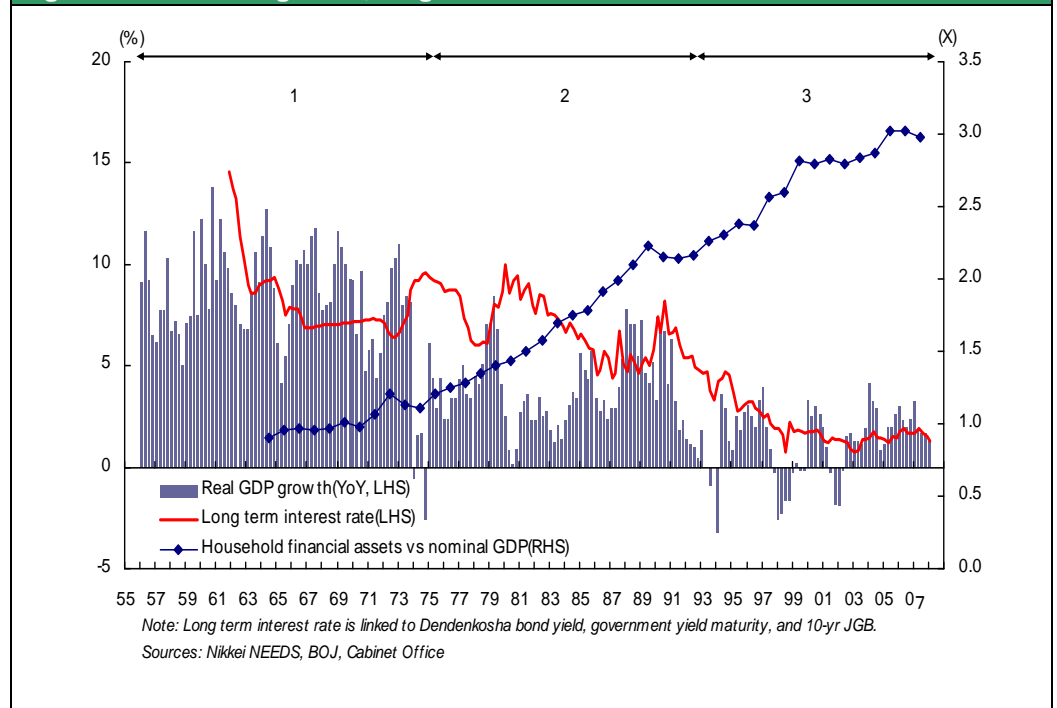
There have been fears about the fragile nature of economic prosperity for many years in industrialized nations. But now, China as well has rapidly come to realize that environmental issues pose the greatest threat to its economic growth in the near future. "One of every five major Chinese cities suffers from severe air pollution and two-thirds of all cities do not have an adequate supply of drinking water. Acid rain affects one-third of China's land area and soil erosion and desertification are problems in one-third of the country. More than 90% of China's natural grasslands are deteriorating, posing a threat to the country's biodiversity. If consumption in China approaches the current consumption level in the United States, China alone will consume more petroleum than today's total world consumption. Furthermore, at this level of consumption, China would account for three-fourths of the world's CO2 emissions.

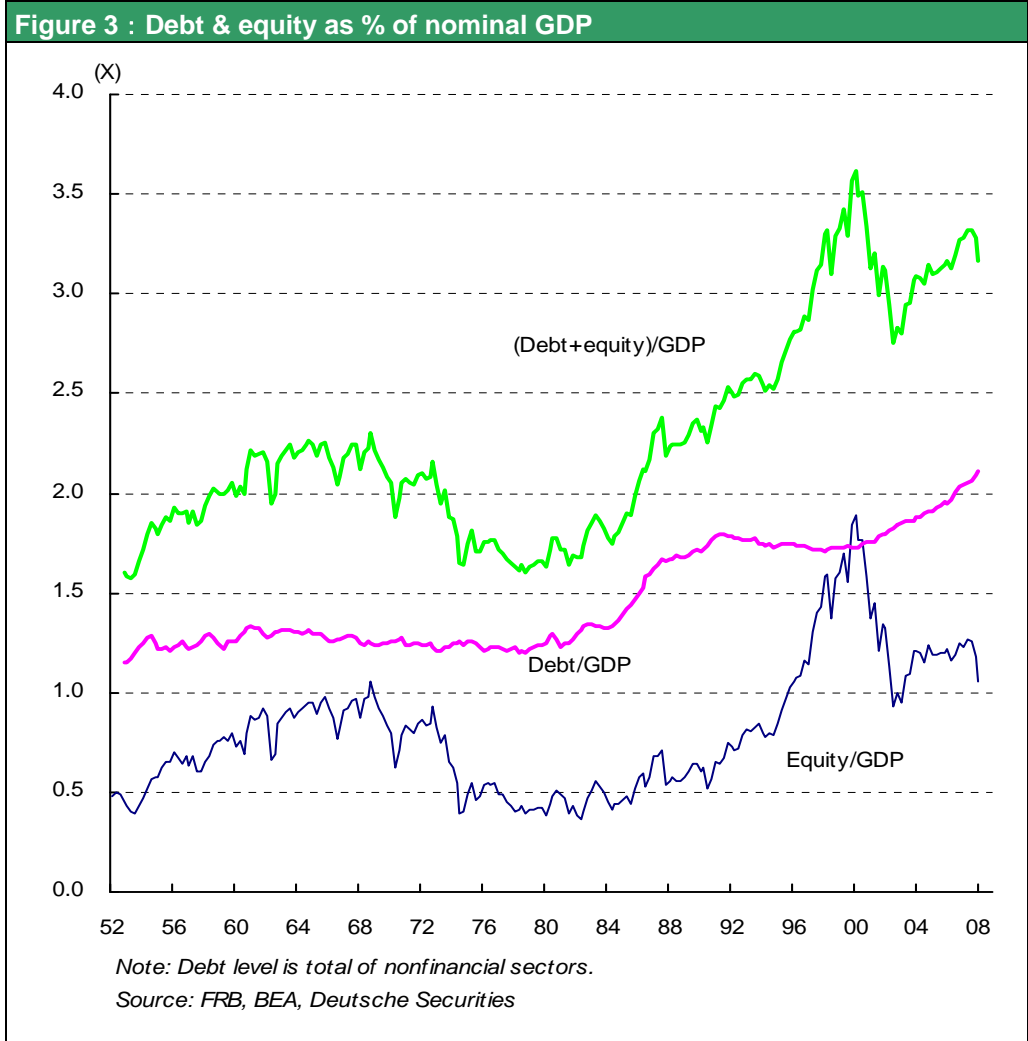
"But it is highly unlikely that China will achieve an industrialized nation living standard that depends on the consumption of large amounts of natural resources. At the 17th national communist party conference, ecology became a national strategic goal for the first time. During China's 11th five-year plan (2006 to 2010), the country plans to reduce energy consumption by 20% and emissions of major pollutants by 10% in relation to GDP. China also plans to increase forests from 18.2% of its land area in 2005 to 20% in 2010. Additionally, China has established the goal of raising the share of renewable energy from the current 7% to 15% by 2020." (Economic Report, May 2008, Zhai Ye, Director, Government Research Center, Tsinghua University)

## Barrier 2: Excess capital

There are fewer and fewer places to use the world's excessive volume of funds available for investment. In the United States, Japan and Europe, the pace of capital accumulation is far greater than economic growth rates. Through the 1970s, Japan's individual financial assets were about the same as the GDP. But these financial assets grew to twice GDP in the 1980s and more than three times GDP in the current decade. The same trend is occurring in the United States. Household financial assets were 2.3 times nominal GDP during the 1970s, 2.6 times during the 1990s and 3.2 times in 2006. This growth is far higher than the U.S. economy's growth. Since financial asset growth has outpaced economic expansion, there has been a big increase in the amount of capital employed while simply maintaining the same rate of economic growth. Clearly, a long-term decline in the return on capital is inevitable. The increasing accumulation of capital and the resulting declining returns on capital are contradictory. But this process is an inevitable problem with capitalism. Economists have long debated whether or not this is a fatal disease.

**Figure 2 : Real GDP growth, long-term interest rate and household financial asset**



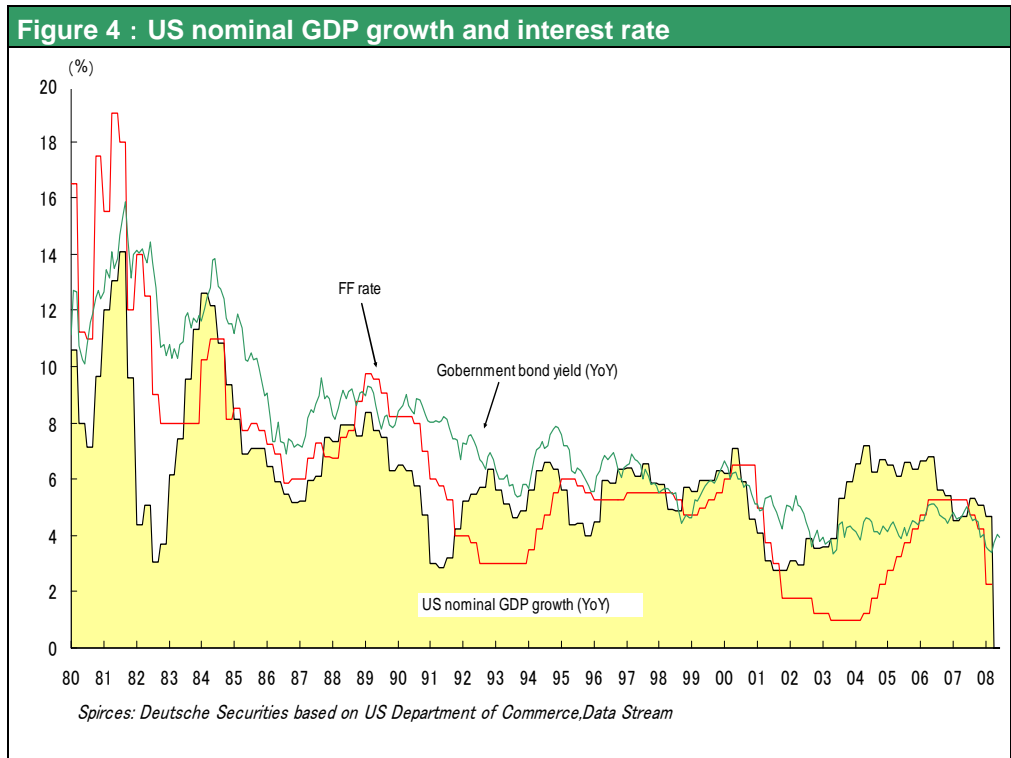


### Faster growth in capital accumulation

The pace of capital accumulation has been increasing since the beginning of this decade. During that time, the Internet revolution and healthy global economy have greatly improved corporate profitability. At the same time, interest rates have dropped significantly due to the low rate of inflation. The gap between high returns on capital and low interest rates is responsible for the faster pace of capital accumulation (see graph showing U.S. and Japanese average profitability and interest rates). Capital expenditures have been insufficient to absorb the large profits and cash flows that companies generated as they took advantage of cheap labor in emerging economies. Companies in Japan, North America and Europe have been accumulating excess capital since 2002. With nowhere to go, these funds have been channeled to investments that have brought down long-term interest rates. We are witnessing the mechanism by which fast economic growth and strong earnings produce low interest rates. High economic growth and low interest rates are precisely the conundrum pointed out by former Fed chairman Alan Greenspan. This conundrum is also a cause of further increases financial assets. Significantly, there has been no change at all in this conundrum even after the subprime loan crisis and the upturn in the crude oil market.

### Massive excess funds from crude oil

Oil-producing nations will take in an extra 150 trillion yen every year because of the 50% increase in the crude oil price over the past six months. But most of this enormous amount of capital will simply flow back to financial markets. This will make it extremely difficult for asset managers to locate attractive investments in international financial markets.



### History tells us how to maintain high profitability

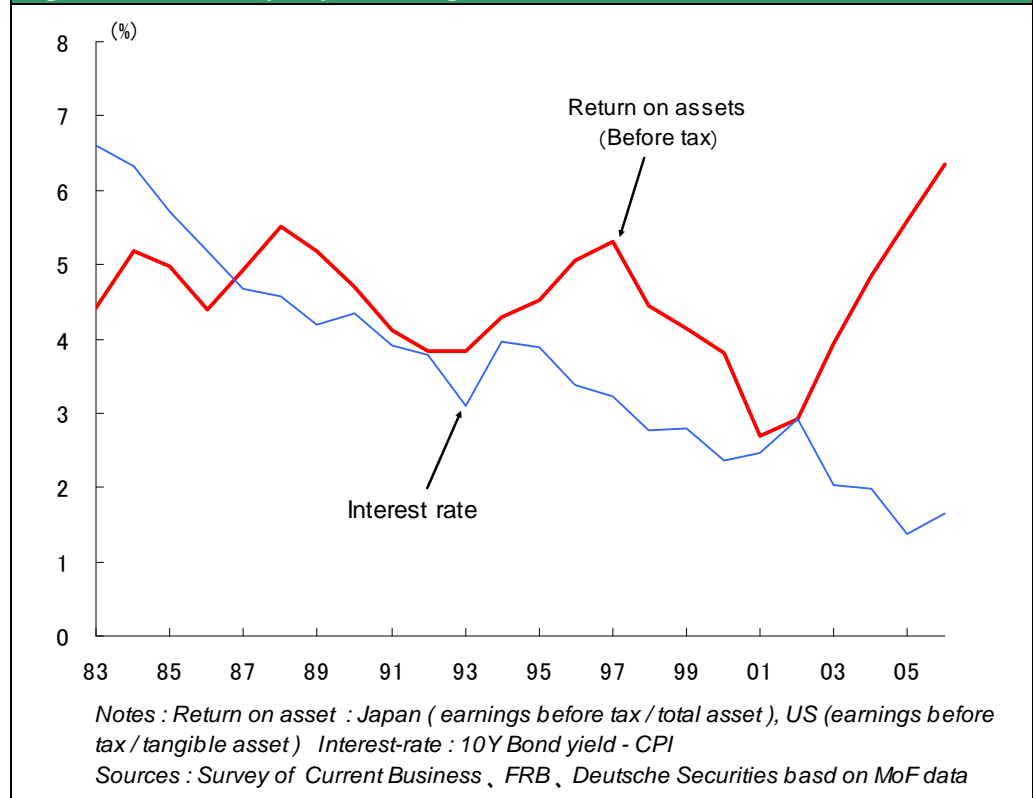
How can we avoid the decline in the return on capital caused by the accumulation of too much capital? Throughout history, countries have repeatedly resorted to wars and invasions in an attempt to solve this problem. Wars consume capital and create demand for more capital. The winning country gains the advantage of capturing a new economic zone. Keynes and Hobson agreed that using governments to create demand for capital can eliminate the barrier to growth posed by excess capital. Going farther back in history, we can learn a lesson from the Egyptian pyramids. Why was there a need to build these huge structures? The pyramids are much too large to view them simply as the product of a tyrannical ruler's selfishness. The economic significance is that the pharaoh created demand and consumed capital without starting a war. Therefore, the pyramids probably fulfilled the role of maintaining returns on capital.

## (2) The inadequate depreciation of the Earth

### The inadequate depreciation of the Earth

Today's excess of capital leads us to two questions. Can we really say that capital has been accumulated? And are earnings being properly backed up? To generate the current high levels of earnings, we are consuming a piece of equipment called the Earth without recording a sufficient amount of depreciation expenses. That means these are nothing more than empty earnings. If this is true, then we should greatly reduce earnings and net assets by deducting expenses to establish a suitable reserve to cover depreciation of the Earth.

**Figure 5 : U.S. & Japan profit margins and interest rates**



### Investments to revitalize the Earth will be a big industry

To repeat, the world is now facing two barriers to growth: destruction of the environment and the lack of places to invest capital. I believe that both barriers are caused by the inadequate depreciation of the Earth. From a different angle, though, this can work to our advantage. Excess capital can be eliminated by determining the economic cost of using the Earth. In other words, we need to charge depreciation expenses for the Earth. This would require investments equal to depreciation in order to restore the Earth to its previous condition, thereby creating demand for capital. There would be no wasteful use of capital for pyramid-like projects or a war. Instead, revitalizing the Earth would create an enormous need for investments and thus create demand for capital.

### Charging Earth users and making new investments

Specific methods will have to be studied. First is devising a way to set a value for consumption of the Earth and charge a commensurate Earth utilization fee. There are several possibilities: (1) purpose-specific taxes like an environmental tax; (2) general taxes; (3) higher prices for resources and utilization of the Earth; and (4) emission allowance trading (cap and trade) and other environmental impact mechanisms using private-sector markets. Another problem is determining who should pay the depreciation expenses. Next, how should we provide for the funds needed to restore the Earth to its previous condition? One way is adopting the Keynes approach of relying on the public sector. Another is

incorporating this expense into the market economy. Overall, there are many ways to create more demand for investments.

**Assign the greatest value to preserving the Earth**

Right now, the international environmental movement is focused on how to reduce CO2 emissions, which are closely linked to global warming. Al Gore's book *An Inconvenient Truth* and the Intergovernmental Panel on Climate Change (IPCC) have both helped raise awareness of global warming. Using market forces, such as the trading of emission allowances, is attracting support as the primary means of cutting CO2 emissions. This movement has been gaining momentum with the Kyoto Protocol, 2007 G8 summit in Germany and now the upcoming 2008 G8 summit in Japan.

There are many critics. Some people doubt that CO2 should be named the primary villain. Others wonder about the wisdom of using emission allowance trading to make emitters pay expenses while reducing CO2 emissions. There are many persuasive arguments against global warming, including opinions in a book titled *Don't Be Deceived by the Global Warming Theory!* by Shigenori Maruyama, a professor at Tokyo Institute of Technology. But there is no doubt that most people now place the greatest value on environmental sustainability. As a result, we will probably see growth in the practice of charging companies for environmental expenses along with a rapid increase in environmental investments.

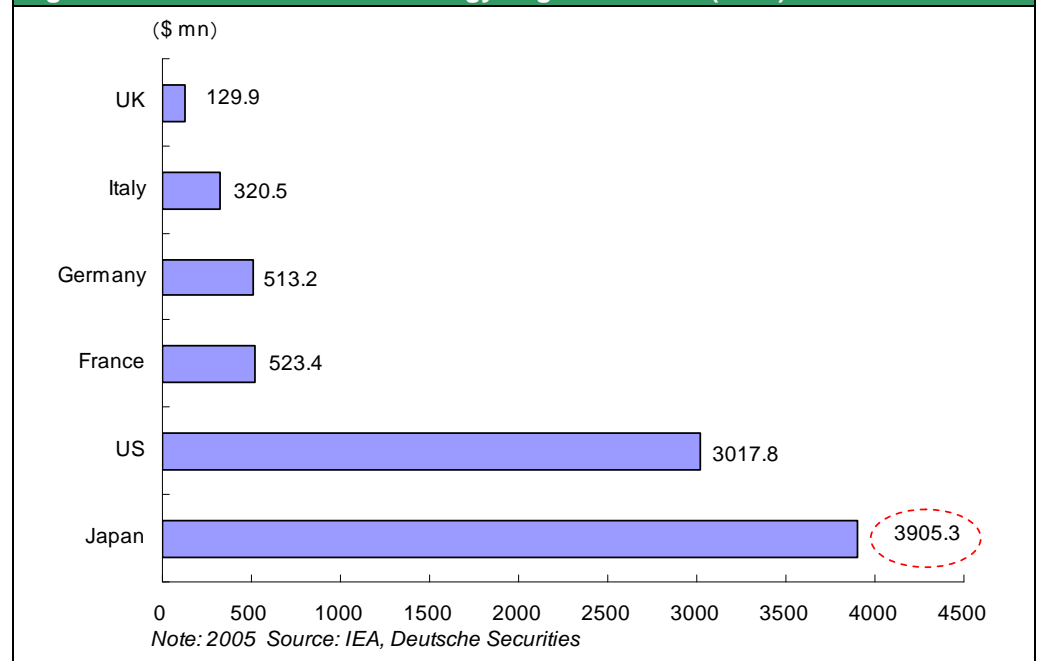
### (3) Opportunity is knocking on Japan's door

#### Japan can play a key role

The concept of depreciating the Earth is particularly advantageous for Japan. First, Japan has substantial excess capital. Also, Japan is struggling with the world's highest excessive savings rate of capital and accompanying decline in returns. That means Japan in particular is faced with the urgent need to find a way to link its excess savings with an effective source of demand for capital. Second, Japan has many technologies that can be used to revitalize the Earth. Japan can convert its excess capital into investments to restore the Earth to its previous condition. Making these investments would give Japan the industrial base needed to serve as the leader of the Earth revitalization industry. There would be no wasteful use of capital for pyramid-like projects or a war. Instead, revitalizing the Earth would create an enormous need for investments and thus create demand for capital.

Japan has the world's most advanced technologies in numerous environmental fields: resource recycling, seawater desalination, CO2 removal, planting greenery, energy conservation, developing clean energy, and many other areas. In the future, the Earth revitalization business is likely to become the biggest industry of all. That means the world will soon advance to a phase where Japan can heighten its presence.

**Figure 6 : R&D Investment for energy of governments (2005)**



## (ref.) Japan's advantage regarding the international division of labor

### Growing trade surplus, strong corporate earnings, highly competitive industries

#### International division of labor based on specialization and mutual reliance

An enormous shift is taking place in the international division of labor now that the global economy has become completely unified. Companies no longer compete against each other by producing the same kinds of goods. Until five or ten years ago, Japan, China, South Korea and Taiwan all manufactured color televisions and washing machines. But this type of competition is a thing of the past. Japan can no longer be competitive with South Korea, Taiwan and Taiwan by making low-end products. This is why companies in Japan specialize in high-end products. Japan has allowed China, South Korea and Taiwan to take over many product categories. As a result, Japanese factories specialize in only very few products. All countries are basically specializing in products that other countries cannot supply. This process of specialization has created an economic system where all countries can continue to prosper while relying on each other.

#### Pricing power is the most important factor

But not all countries are enjoying the same prosperity that comes from this co-existence. In fact, there are very big differences in the benefits of the division of labor from country to country. For example, both Japan and China export products. But the prices of those products are different. Under the current system of the international division of labor, the key to success is a country's ability to charge high prices for its products. Some countries can sell their products only at low prices, or not at all. Even if labor productivity improves, these countries will see no improvement in earnings or living standards for their citizens.

From this standpoint, Japan is in an extremely advantageous position with regard to the international division of labor. All manufacturing activities for cheap products have been shifted to other countries. Japanese factories concentrate almost exclusively on sophisticated materials and components and high-end machinery. More important still, Japan supplies the world with components, materials and machinery that are essential for making high-tech products. Final assembly is delegated to factories in South Korea, China, Taiwan, Europe and other overseas locations.

#### The pricing power of high-tech Japanese products

This extensive international division of labor has altered the factors that determine a country's trade balance. Japan's trade surplus is still one of the largest in the world. Furthermore, Japan has a large trade surplus with almost every country in the world except the oil-producing nations. The biggest cause of Japan's substantial trade surplus is the high prices of its exports. The only explanation for Japan's ability to maintain a trade surplus is the extremely favorable prices at which the country can sell its products. Because of these high prices, Japan can receive the benefits of income produced overseas on favorable trading terms. These benefits are derived primarily from the dramatic increase in productivity in countries like China and India with rapidly growing economies. Benefits appear in the form of both corporate earnings and the increase in effective income for consumers as prices fall. This is the position that Japan has reached as the global economy became increasingly integrated.

#### Much potential for higher valuations for Japan's global players

Japan is positioned to achieve volume-based as the world becomes more prosperous. At the same time, Japan will continue to receive high prices for its exports. This gives Japan advantages in terms of export volume and prices. Consequently, there is much potential for an increase in the valuations of Japan's global players.

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