Japan's New Inflation-Indexed Government Bonds

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1. Background and Scheme of Inflation-Indexed Bonds

Japan will soon start issuing inflation-indexed government bonds in March 2004. While the Ministry of Finance plans to issue only 600 billion yen in fiscal 2004—less than 0.4% of the total bond issuance—the significance of the new bonds should not be overlooked.

With inflation-indexed bonds, the value of the principal and interest payments are adjusted to reflect the effects of inflation. Indexed bonds follow the Canadian scheme in most countries including the U.S., whose market is the largest. The principal is indexed to the consumer price index (CPI) and payable at maturity (Figure 1). The coupon rate is fixed, but the value of interest payments varies based on the adjusted principal. In some cases, the original value of the security is guaranteed against deflation. Japan has already decided not to guarantee the principal of the bonds. In addition, bonds will be indexed to the CPI excluding fresh food.

Figure 1　Countries Issuing Inflation-Indexed Bonds

Country	Index	Coupon rate	Guarantee of principal	Canadian scheme
U.K.	Retail prices index	Fixed	No	×
Australia	CPI in the eight capital cities	Fixed (4%)	Yes	×
Canada	National CPI	Fixed	No	○
Sweden	National CPI	Zero/fixed	Yes/no	○
U.S.	CPI for all urban consumers (CPI-U)	Fixed	Yes	○
France	CPI excluding tobacco	Fixed	Yes	○
Japan	CPI excluding fresh food	Fixed	No	○

The emergence of inflation-indexed bonds can be attributed to several factors. First, in an efficient market, indexed bonds guarantee investors the real rate of return (after inflation), a feature not offered by other stocks and bonds. Second, for the government, indexed bonds increase the diversity of bond issues, which facilitates absorption of government bonds in the bond market. In addition, the bonds allow the government to match the redemption of principal with tax revenue, which is highly correlated to inflation.

2. Investment by Pension Funds

Inflation-indexed bonds are important not only in diversifying risk beyond conventional stocks and bonds, but also as a hedge against inflation risk.

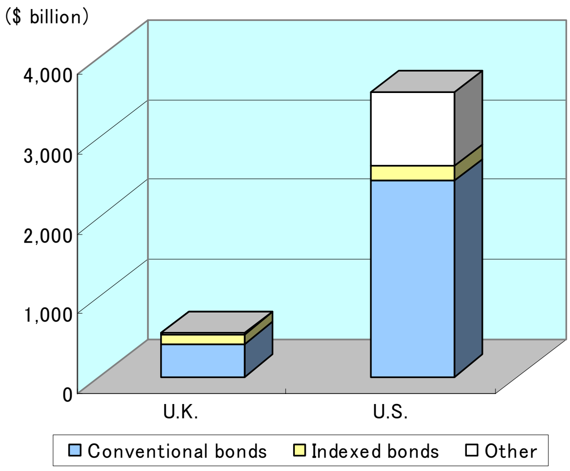
An example of this is corporate pension funds. Although not many corporate pensions in Japan have fully inflation-indexed benefits, benefits are often based on final salary at retirement, and thus reflect inflation through basic wage hikes. For this reason, pension funds seriously need to hedge against inflation. In the past, pension managers considered equity investment to be an appropriate hedge against inflation. However, no strong correlation is observed between annual returns on stock and the inflation rate, while some studies report that stocks are a poor inflation hedge.

Investing in inflation-indexed bonds solves this problem because the principal of indexed bonds grows at approximately the same inflation rate as pension benefit obligations. By investing in indexed bonds the amount that benefit obligations grow for each year of service, pension funds could eliminate inflation risk. In this way, indexed bonds are highly useful to investors, particularly those who invest in long-term assets.

3. Current Problems and Future Issues

The inflation-indexed bond market has expanded in the U.S. to comprise 4.9% of the U.S. Treasury securities market (as of December 2003), and approximately 24.0% of the government bond market in the U.K. (as of September 2001; Figure 2). The market is expected to grow in Japan as well.

Figure 2 Inflation-Indexed Bond Markets in the U.S. and U.K.



However, several issues must be resolved for Japan's indexed bond market to grow successfully. First, greater market liquidity and transparency need to be achieved. As mentioned earlier, purchasers of indexed bonds will mainly be sophisticated institutional investors such as pension funds. If poor liquidity and transparency cause the execution price and transaction costs to become exorbitant, investors could quickly turn to more established markets in conventional government bonds or other investments, thereby defeating the purpose of indexed bonds.

In addition, Japan's relative price stability raises questions about the need for an instrument that offers a real rate of return. Particularly with deflation being so persistent in recent years, the lack of a guarantee of principal could spurn investors away from indexed bonds.

Another issue arises regarding compatibility with other systems. For example, under current tax rules, any increase in the inflation-indexed principal becomes a tax liability. However, this would offset the bond's hedging effect against inflation risk, eliminating the incentive to invest in indexed bonds.

However, considering the growing importance of pension management in the aging society, and the new demand for investment diversification, inflation-indexed bonds represent an attractive instrument, and the market's response to them will be followed with keen interest.