

# Japanese Retail Investment in Overseas Securities and FX Margin Trades

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## ABSTRACT

Aggressive overseas investment by Japanese households has been drawing a good deal of attention as a factor behind the yen's weakness against other major currencies. A number of factors have been noted as being behind the increase in foreign currency trading since 2005, in the form of investment in overseas securities via investment trusts and forex margin trades. Those include (1) structural factors such as the lifting of the ban on over-the-counter sales of investment trusts by banks and the emergence of forex margin trading as a result of revisions to the Foreign Exchange Law, (2) the long-running low interest rate environment, and (3) a growing tendency away from principal guaranteed investments to those with good returns on the back of improved business sentiment until very recently. We also present estimate showing that FX margin positions in each currency can be explained to a certain extent by (i) policy rate levels, (ii) upward or downward divergence from historical trends, and (iii) the degree of currency's liquidity.

In recent years the forex market has tended to focus on the boom in Japanese retail investment in overseas securities as the major factor behind the yen's long-term weakness against other major currencies. Forex market participants at home and abroad have been monitoring forex trading on margin, a comparatively new means by which retail investors can acquire foreign currency assets. In this report we look at the current level (and the factors behind the sharp increase in recent years until 2007) of Japanese retail investment in foreign currency assets.

**PART 1: Factors behind increase in Japanese retail investment in overseas securities via investment trusts**

The data on Japanese investment trust investment in overseas securities show that it has been a major and continuous source of capital outflows in recent years (EXHIBIT 1). Those outflows have continued uninterrupted since April 2002, gradually increasing in size until 2007. In particular, Japanese retail investors have continued to purchase foreign currency bonds via investment trusts despite the recent strengthening of the Japanese yen against all other major currencies since mid-2007. Japan's surplus on trade and services is only about ¥10trn a year, and thus retail investment in overseas securities via investment trusts now has a major

impact on yen exchange rates.

We see three factors behind the continuous outflow of Japanese retail money into overseas securities via investment trusts: (1) an increase in the number of sales outlets for investment trusts (principally, since banks have been allowed to sell them); (2) the continuation of Japanese interest rates at record low levels; and (3) the impact on the attitude of retail investors of increased confidence in the economic outlook (namely, a weakening demand for a guarantee of the original investment and a growing demand for high returns).

In our view, the first factor (ie, an increase in the number of sales outlets for investment trusts) has underpinned the increase in retail investment in overseas securities by making it easier for retail investors purchase investment trusts. Banks have been allowed to sell them since December 1998 and post offices since October 2005. The increase in the number of sales outlets has been dramatic since the days when investment trusts could only be purchased either from securities companies, for which branches tended to be relatively few and far between, or from the investment trust companies themselves.

Banks accounted for only 5.2% of equity investment trust sales in 1999 (ie, during the first 12 months after they were allowed to sell them) but now accounted

for roughly 50% (EXHIBIT 2). Therefore, roughly half of Japanese retail investment in overseas securities via investment trusts, which totaled well in excess of ¥10trn a year in 2005-07, took place at outlets that did not exist 10 years ago.

In addition, the past 10 years have seen a sharp increase in the number of internet banks and securities companies, and in the volume of internet trading via existing financial institutions as more households have access to the internet. As a result, retail investors can now purchase investment trusts, whether from banks or securities companies, from the comfort of their homes with almost no time restrictions. In our view, those regulatory and technical factors have underpinned the increase in retail investment in overseas securities by making it easier for retail investors to purchase investment trusts.

We think the second factor (namely, the continuation of Japanese interest rates at record low levels) has, not surprisingly, also played a major part in the increase in Japanese retail investment in overseas securities via investment trusts. Even though the BOJ discontinued its policy of zero interest rates in July 2006 and raised policy rate another 25bp in February 2007, the rate still stands at the historically low level of 0.5%. The rate is also lower than the policy rates of other countries with major currencies, although the margins are gradually narrowing in

2008.

The spread remains wide between Japanese long-term (10-year government bond yield) and policy interest rates and the average long-term (10-year government bond yield) and policy interest rates of six other countries with major currencies (namely, the US, the Euro zone (Germany), the UK, Switzerland, Australia, and Canada) weighted by the transaction volume of their respective currencies as reported by the Bank for International Settlements (BIS) triennial report (EXHIBIT 3, 4). The long-term interest rate spread has been steadily fluctuating around 2.5ppt since mid-2004, in general. Meanwhile, the policy rate spread expanded remarkably in 2005-06, then followed by a sharp contraction since mid-2007, when the US Federal Reserve started to cut its policy interest rate. But the spread safely remains in a positive territory.

Compared to the two relatively secular factors mentioned above, the third factor has a more cyclical aspect. In our view, the third factor, ie, the trend away from principal guaranteed investment and recovery in a focus on profitability on the back of improved business sentiment among households, catalyzed the surge in outflow of Japanese retail money into overseas securities. In spite of ultra low interest rates throughout late 1990s, there was no pickup in households investing in

risk assets, such as equities and foreign currency-denominated assets, which we think was due to growing uncertainty about the future given the prolonged economic slump and deterioration in employment conditions.

Indeed, the Central Council for Financial Services Information's Public Opinion Survey on Household Financial Assets and Liabilities hints at the possibility Japanese households became increasingly averse to investment in risk assets throughout the 1990s. The section of the survey dealing with the selection of financial products offers three broad criteria: safety, liquidity, and profitability. We note the proportion of responses for principal guaranteed, which is included in safety, has moved in negative correlation to that for profitability responses (the safety criteria are divided into "the principal is guaranteed" and "the financial institution handling the product is safe and trustworthy," but we have taken the principal guaranteed figure to highlight the preference according to financial product types, not to financial institutions).

Past survey results confirm the proportion of principal guaranteed responses rose more or less consistently throughout the 1990s (EXHIBIT 5). The figure climbed from 18.2% in 1991 to 38.1% in 2003. In contrast, the figure for profitability in 1991 of 29.1% was above that for principal guaranteed, but in 2004

that had fallen to 13.9%. That indicates to us growing demand from Japanese households for financial products with guaranteed principal throughout the 1990s, and an increasing tendency to shun profitability. As a result, the string of monetary easing measures implemented by the BOJ during the 1990s failed to stimulate investment in equities or foreign currency-denominated assets by households, and the high proportion of assets held in cash and deposits became an increasingly entrenched trend.

In our view, one reason for the continued aversion to risk investment among households throughout the 1990s was growing uncertainty over the future resulting from the deterioration in business sentiment. As the economic slump in Japan intensified in the 1990s, employment conditions also deteriorated steadily. The unemployment rate had fallen to 2.0% in March 1990 but began to climb sharply around end-1992, and employment conditions continued to deteriorate more or less throughout the decade. Unemployment peaked at 5.5% in August 2002. The period of prolonged deterioration in employment conditions essentially coincided with the growing demand for guaranteed principal investments and shunning of profitability by households.

Indeed, plotting the difference in principal guaranteed and profitability

response figures closely matches the line for the Japanese unemployment rate (EXHIBIT 6). Therefore, we think the reason for increased demand for principal guaranteed investment by households was the growing sense of uncertainty over the future caused by deterioration in employment conditions. Even when interest rates are low, strong concerns over deteriorating employment conditions and the risk of losing one's job seem bound to increase demand for investment in assets that offer high levels of security despite low returns, and make people avoid aggressive purchase of risk assets.

Moreover, growth in incomes was limited, and that made it more difficult for people to increase savings. Against that background, not only was there little increase in demand for diversified investment, there was no growth in funds available for such investment. In the Public Opinion Survey on Household Financial Assets and Liabilities, the increased focus on principal guaranteed assets coincided with an increase in the proportion of respondents saying the balance of their financial assets had declined (EXHIBIT 7). Among reasons provided, there was a sharp increase in "decrease in regular income", suggesting the deterioration in employment and income conditions restricted savings (EXHIBIT 8).

As their savings grow, households increasingly tend to be attracted to



diversified investment. Looking at responses for financial products that households plan to hold or acquire by size of savings reveals a large proportion of those with outstanding financial assets of less than ¥5mn planning to increase their holdings of deposits and savings (including postal savings), and only limited numbers wanting to hold products that incur the risk of price volatility, such as securities and foreign currency-denominated financial products (EXHIBIT 9). However, as the size of financial asset holdings increases, the proportion of responses for deposits and savings decreases and those for securities and foreign currency-denominated products increases, with an increase in real estate investment trusts among the very wealthy (financial assets of over ¥100mn). Those responses indicate that appetite for diversified investment tends to be stronger among those with large financial assets, those with plenty of funds available for diversified investment, and those who are relatively unconcerned about the future. The prolonged economic slump led to an increase in the number of households with only small savings, and we think that prevented growth in demand for diversified investment even though interest rates remained at historically low levels.

As such, the entrenched economic slump in the 1990s curbed households' preference for risk assets and demand for diversified investment. Thus, there was

no growth in investment in overseas securities via investment trusts despite expansion in sales channels, interest rates remaining low, and the low proportion foreign currency-denominated assets held by retail investors.

Those conditions have undergone significant change since 2003, when the Japanese economy started to recover. The economy has pulled itself out of its slump and unemployment has started declining again. The unemployment rate fell below 4% in April 2007 and remained low until summer 2008, when the US economic slowdown started to weigh on the Japanese labor market. Looking at the Public Opinion Survey on Household Financial Assets and Liabilities, the response rate for principal guaranteed has declined and the figure for profitability has risen, more or less in step with the decline in unemployment and indicating a change in asset selection criteria by households.

## **PART 2: Trends in forex margin trading in Japan**

Forex margin trading in Japan is growing in presence by the day. Market interest is high because margin trading trends have the potential to impact on the forex market, depending on the currency. Against a backdrop growth in margin trades, the Tokyo Financial Exchange announced that it would add five new

currencies in October 2008 to the major seven currencies already listed on its market, namely the US dollar, the euro, the UK pound, the Swiss franc, the Canadian dollar, the Australian dollar, and the New Zealand dollar. The five new currencies to be added to the exchange on 27 October are the Norwegian krone, the Swedish krona, the South African rand, the Polish zloty, and the Hong Kong dollar.

The forex margin trading market, participants of which are mainly Japanese individual investors, is widely recognized even overseas as a market where “Mrs Watanabe” (i.e., the typical Japanese housewife) can make her influence felt. Net yen short positions on the Tokyo Financial Exchange peaked in late July 2007, at US\$4.22bn (¥447bn) (EXHIBIT 10). Transaction volume on the same exchange is around 5-10% of total margin positions taken by individual investors. With some data unavailable to be verified, we estimate that at the peak, forex margin positions held by “Mrs Watanabe” had swelled to US\$40-80bn (around ¥4-8trn).

Over the past two years, differences in the size of currency positions have been evident. Of the US\$1.97bn (¥200bn) total positions on the Tokyo Financial Exchange during that period, the top three currencies were the US dollar (US\$630mn, 32.1% of the total), the New Zealand dollar (US\$420mn, 21.1%), and

the Australian dollar (US\$350mn, 17.8%), which together accounted for US\$1.4bn, or 71.0%, of the total. We note that the New Zealand dollar, by no means a major presence in the major currency markets, occupies one of the leading positions in the world of Japanese forex margin trading.

We looked at each currency to determine the ratio of forex margin positions to all currency transactions on financial markets. Based on past speeches by Deputy BOJ Governor Kiyohiko Nishimura, we assumed that the Tokyo Financial Exchange accounts for 5.8% of the total forex margin trading market. The New Zealand dollar, taking one example, accounts for 1.9% of total global forex transaction value (daily average of US\$3,210bn in April 2007), according to a report by the BIS, with around US\$61bn traded in the currency every day ( $US\$3,210bn \times 0.019$ ). Meanwhile, net positions in the New Zealand dollar through the Tokyo Financial Exchange came to US\$280mn (2007 average), from which we calculate total margin trades in the New Zealand dollar at US\$4.82bn ( $= US\$280mn \div 0.058$ ). We therefore calculate that margin trades account for 8.0% of total transactions in the New Zealand dollar ( $= US\$4.82bn \div US\$60.99bn$ ).

On the whole, this ratio is high for high interest-rate currencies—the New Zealand dollar (8.0%), the Australian dollar (2.6%), and the UK pound (1.4%)

(EXHIBIT 11). In the case of the New Zealand dollar, we think volatility in the balance of margin trades could have a similarly large impact on the value of the currency. For instance, net long positions in the New Zealand dollar occasionally increase or decrease by some 30% in a single day. On such days, Japanese individual investors could well be accounting for 2–3% of transaction volume in the currency.

Next, we compared changes in New Zealand and Australian dollar positions on Japan's forex margin trading market and net positions in both currencies on the CME's International Monetary Market (IMM) (EXHIBIT 12). The CME's IMM is typified by the presence of hedge funds and other professional speculators. In comparison, we can see that Japanese individual investors in the forex trading market tend to adopt a contrarian investment stance, building up long positions when high interest-rate currencies are falling and unwinding them when those currencies are rising.

So, why this contrarian approach? There is little room for argument that the New Zealand and Australian dollars are favored currencies given the high interest rates in those nations. Compared with 0.50% in Japan, policy rates were much higher, at 7.50% in New Zealand and 7.00% in Australia until very recently.

Individual investors seeking gains from the interest rate differential between two currencies (the swap point) tend to sell to lock in profits from forex differences when a currency's value is rising, and to place stop orders in an effort to cut losses prior to an expected drop in value. As such, we think the two Oceania currencies make it easier for individual investors to unwind positions.

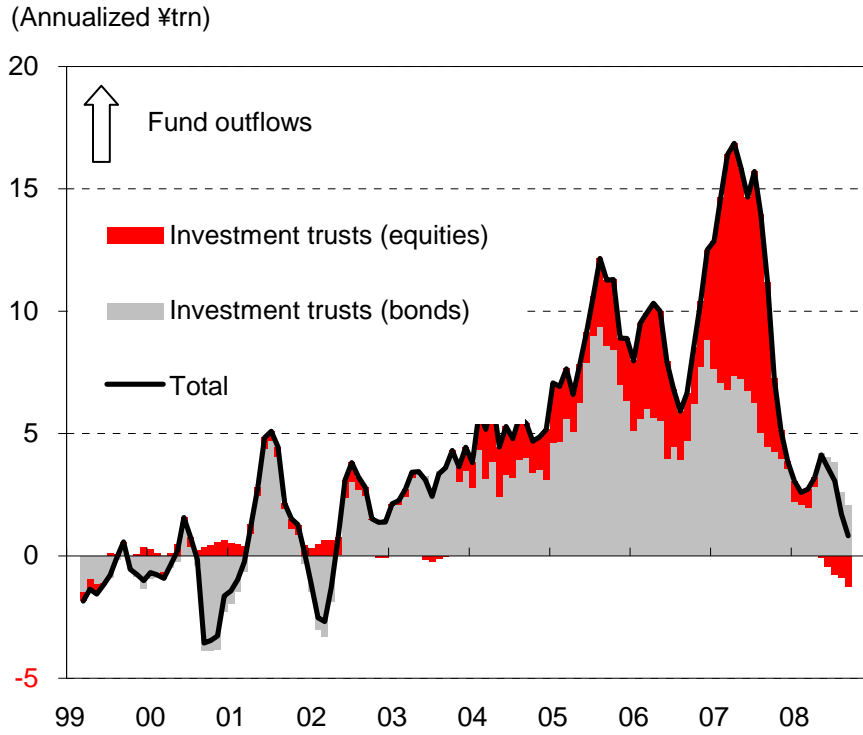
In addition, whereas hedge funds and other main IMM participants tend to make currency forecasts with a focus on fundamentals, individual investors tend to base their projections on chart analysis. In other words, we think they choose to buy or sell a currency because it looks undervalued or overvalued based on a single aspect (whether it be the moving-average line or stochastics).

Based on the aforementioned characteristics, we attempt to provide a quantitative explanation of the trading volume of each currency in the Japanese forex margin trading market. In estimating the various currency positions (average between July 2006 and September 2008), we used three explanatory variables: (1) the average policy rate in each economy, (2) deviation from the lagged three-month moving average for each currency's rate against the yen, and (3) the ratio of actual demand to forex transaction value. We assumed that (1) was a proxy for profitability, (2) a proxy for the degree to which a currency is undervalued or overvalued, and (3)

a proxy for each currency's liquidity (EXHIBIT 14).

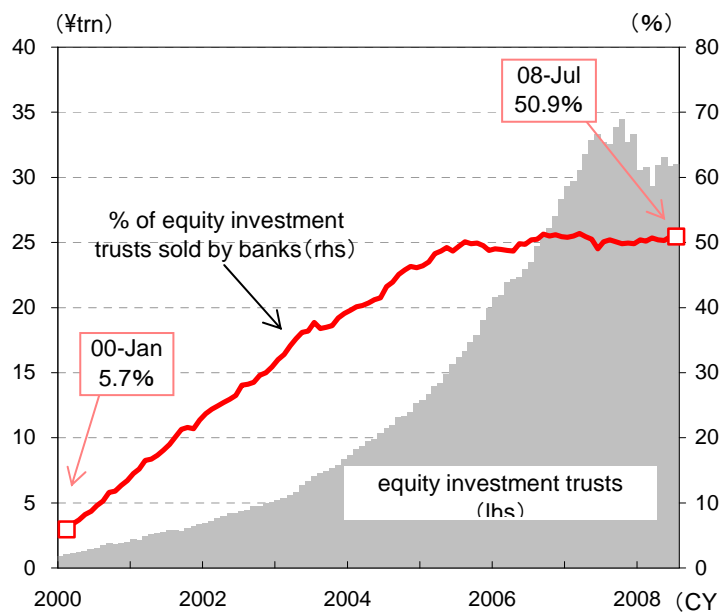
From our estimates, we find that positions tend to build up in currencies (1) from countries with high policy interest rates, (2) that deviate downward from the moving average and thus look undervalued, and (3) that have high liquidity.

**EXHIBIT 1: Japanese investment trust investment in overseas securities**



Note: 3-month moving average.  
Source: Ministry of Finance (Japan)

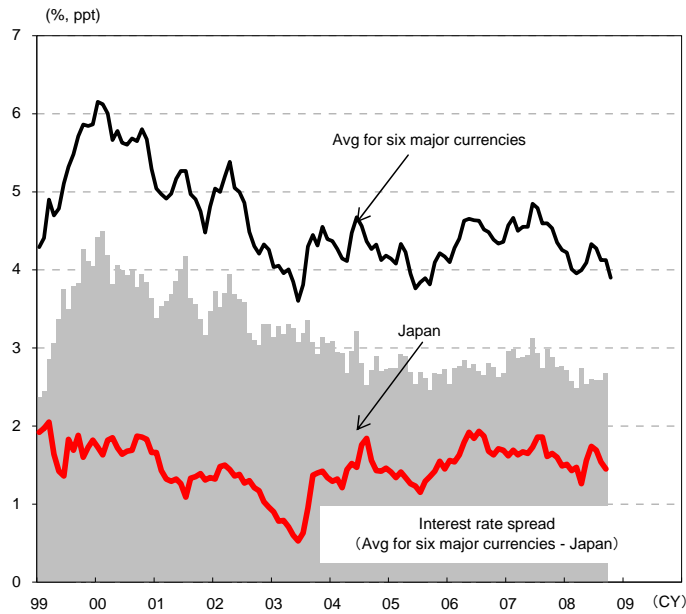
**EXHIBIT 2: Percentage of equity investment trusts sold by banks**



Source: Nomura, based on the Investment Trusts Association Japan data



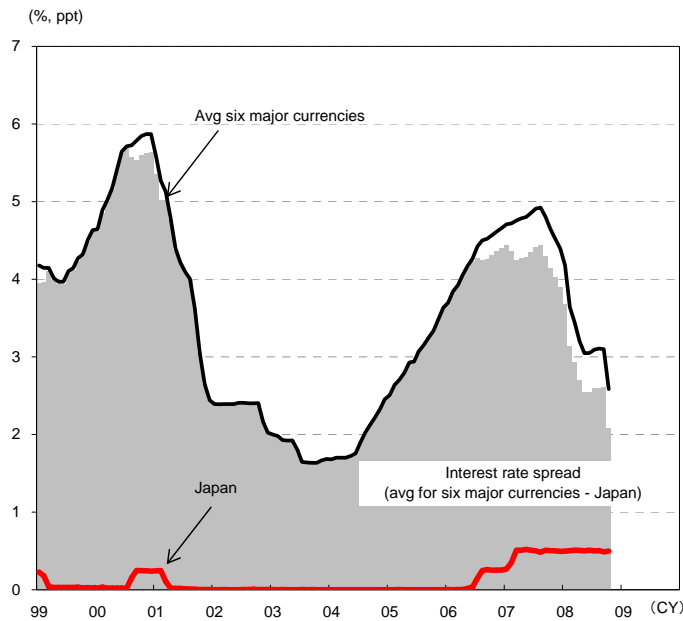
**EXHIBIT 3: Average long-term interest rate (and spread vis-à-vis Japan) of six countries with major currencies**



Note: (1) the average long-term interest rate is the average 10-year government bond yields of the US, the Eurozone (Germany), the UK, Switzerland, Australia, and Canada weighted by the relative transaction volume of their respective currencies as published by the BIS. (2) the market estimates of Japanese long term interest rates are as according to the ESP Forecast.

Source: Nomura, based on BIS, Economic Planning Association data

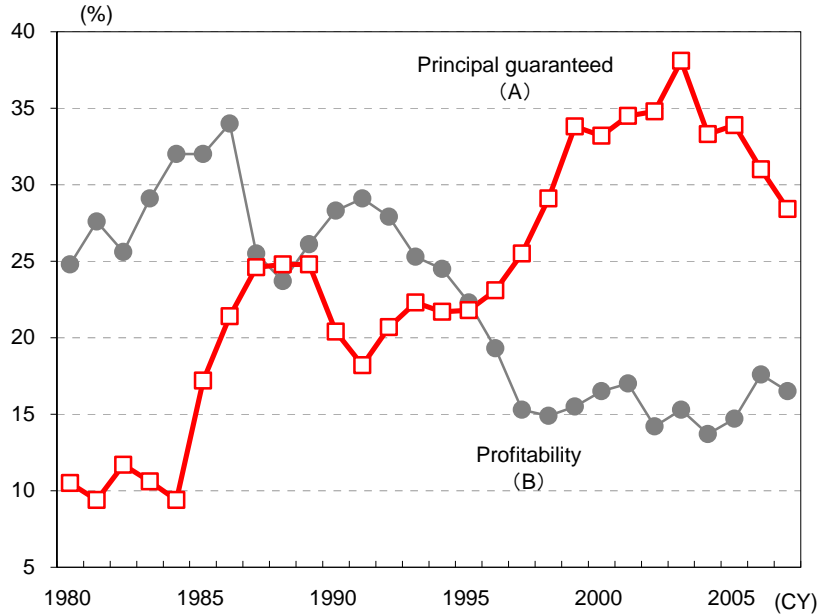
**EXHIBIT 4: Average policy interest rate (and spread vis-à-vis Japan) of six countries with major currencies**



Note: (1) the average policy interest rate is that of the US, the Eurozone (Germany), the UK, Switzerland, Australia, and Canada weighted by the relative transaction volume of their respective currencies as published by the BIS. (2) the market estimates of Japan's policy interest rates are as according to the ESP Forecast.

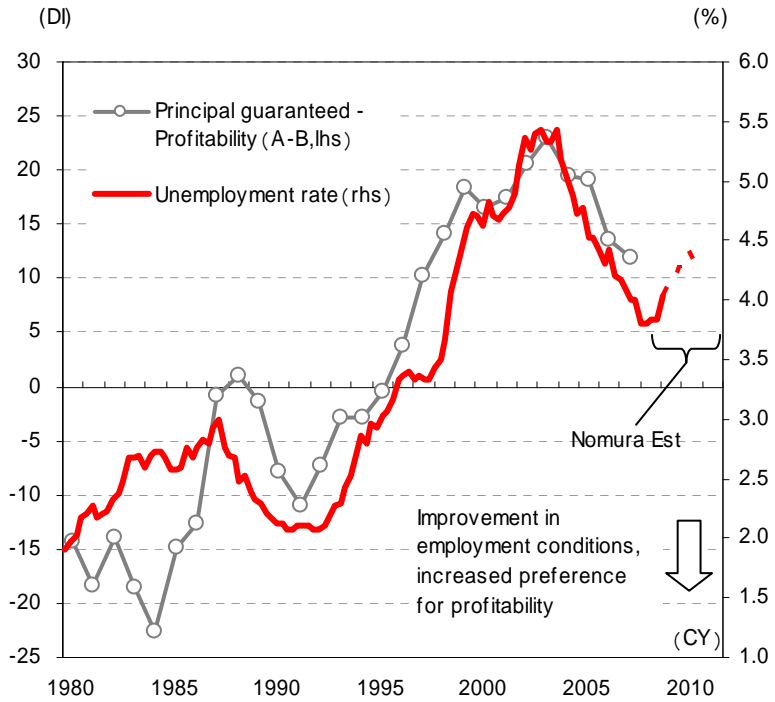
Source: Nomura, based on BIS, Economic Planning Association data

**EXHIBIT 5: Important criteria in the selection of financial products**

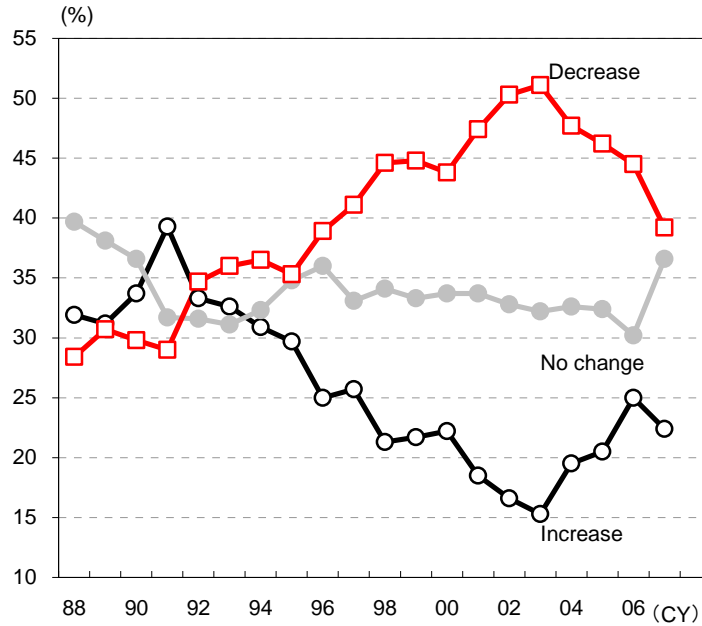


Note: % of survey responses  
 Source: Nomura, based on the Central Council for Financial Services Information

**EXHIBIT 6: Unemployment rate and difference between “principal guaranteed” and “profitability” response rates**

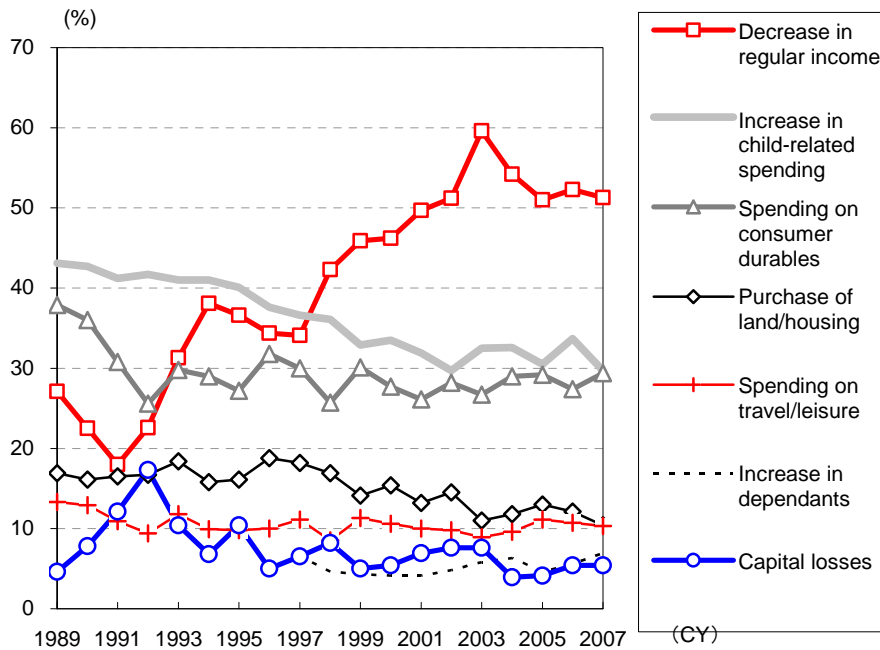


**EXHIBIT 7: Change in outstanding amount of financial assets**



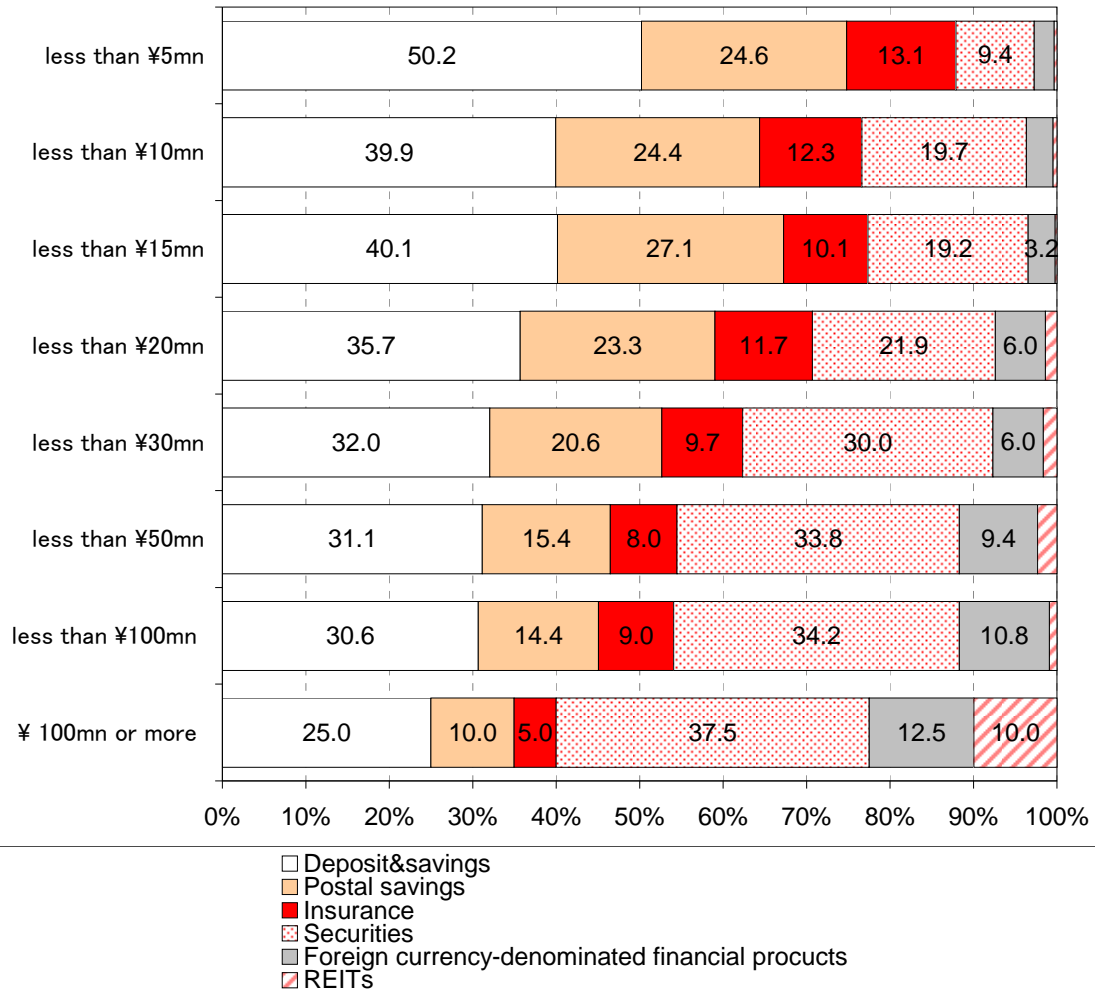
Note: Percentage of responses saying increased, decreased, and no change.  
 Source: Nomura, based on Central Council for Financial Services Information

**EXHIBIT 8: Reasons for decrease in outstanding amount of financial assets**



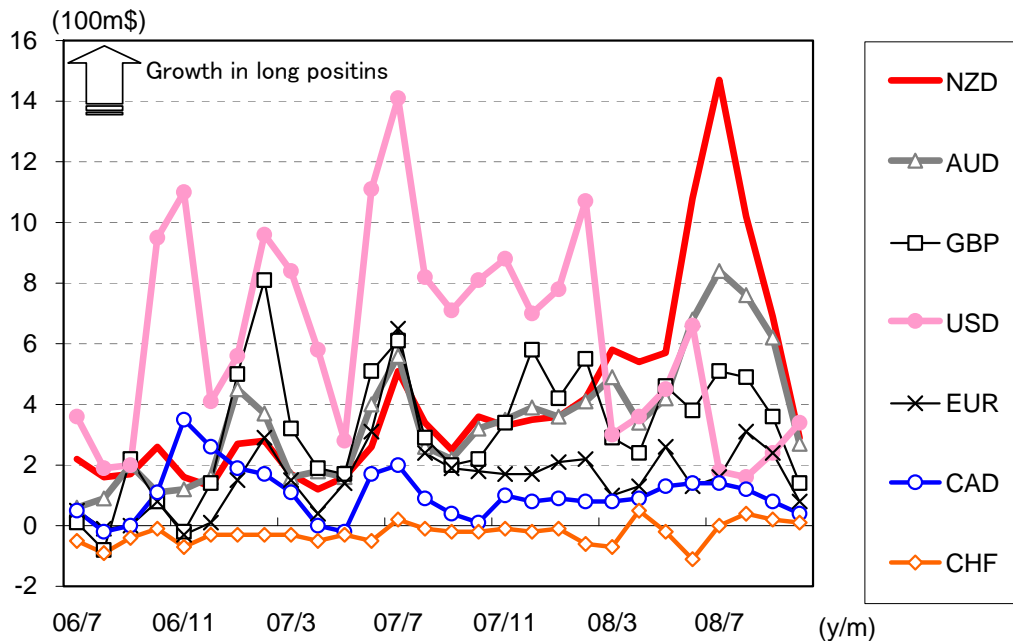
Note: Totals do not add up to 100% as multiple responses were allowed.  
 Source: Nomura, based on Central Council for Financial Services Information data

**EXHIBIT 9: Financial products of which households intend to hold or acquire a large amount, by size of outstanding financial assets**



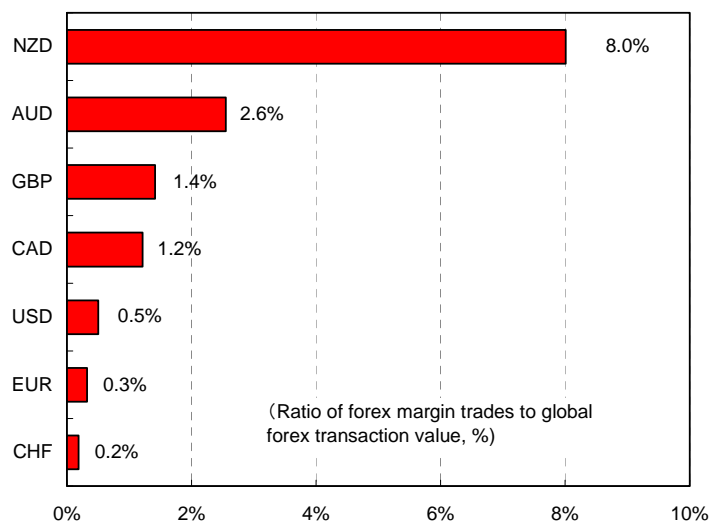
Note: (1) Actual response figure do not total 100% because of multiple response, but we have adjusted the figures to total 100%. (2) Securities is the total of investment trusts, government and municipal bonds, bonds other than government and municipal bonds, equities, equity real estate investment trusts, and government and municipal bond investment trusts. insurance is the total of savings-type insurance products and

**EXHIBIT 10: Forex margin positions in Japan by currency**



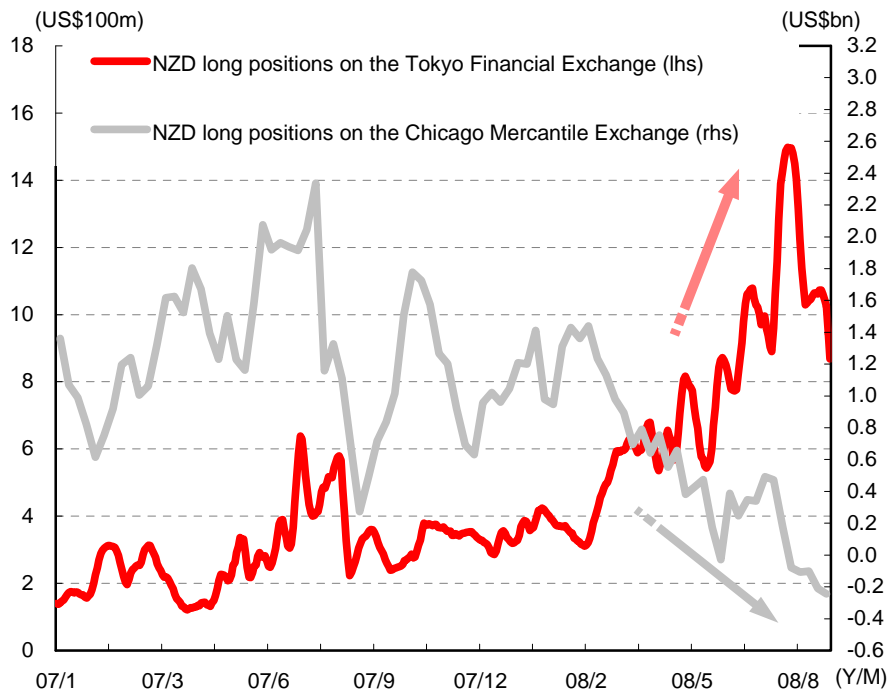
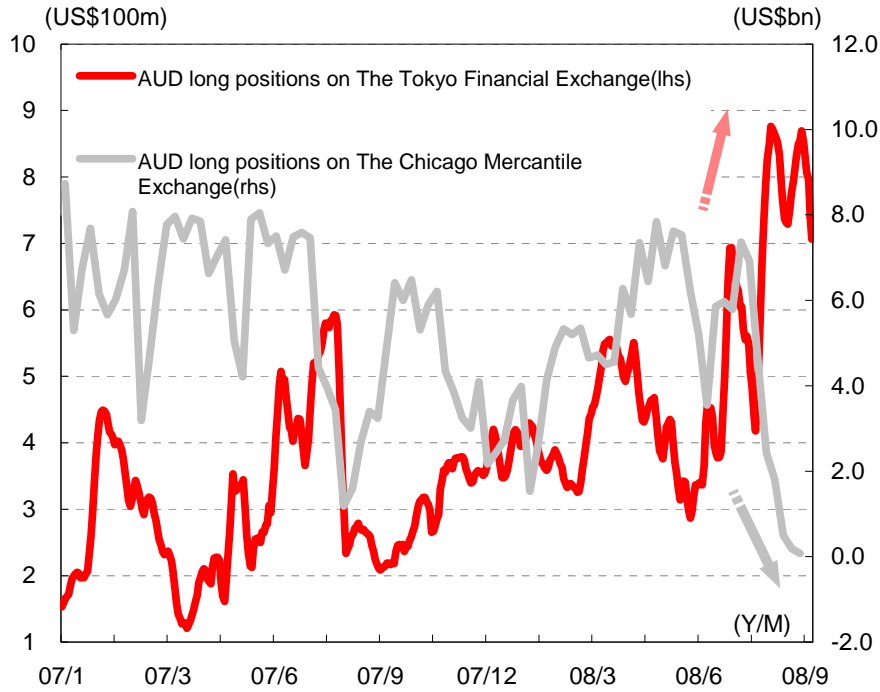
Note: (1) Daily trading data released by Tokyo Financial Exchange converted to monthly basis, using data through 17.October. (2) Net positions for each currency are at end-month (converted to dollar basis using USD/JPY at the given time point).  
Source: Nomura, based on Tokyo Financial Exchange

**EXHIBIT 11: Ratio of forex margin positions in Japan relative to overall global forex transaction value, by currency**



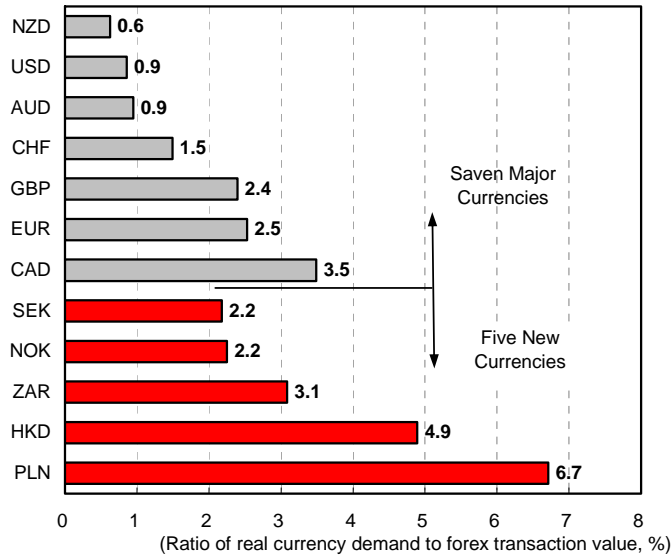
Note: Position in each currency is divided by global daily transaction value for each currency (as of April 2007).  
Source: Nomura, based on Bank for International Settlements(BIS) and Tokyo Financial Exchange data.

**EXHIBIT 12: Comparison of Tokyo Financial Exchange and Chicago Mercantile Exchange (CME)**



Source: Nomura, based on Bloomberg and Tokyo Financial Exchange

**EXHIBIT 13: Liquidity gauge by currency**  
 (Ratio of real currency demand to forex transaction value, %)

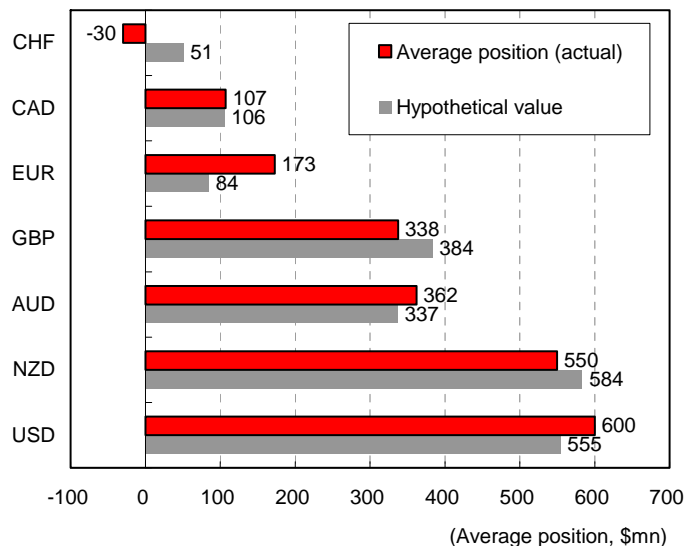


Note: (1) Figures are based on each country's real transaction value divided by annual transaction value for each currency (1year = 240 trading days) based on the BIS report.

(2) Real transaction value=goods/services trade transactions + income transactions + current transactions.

Source: Nomura, based on BIS and Tokyo Financial Exchange data.

**EXHIBIT 14: Estimates of currency positions**



Note: Based on results of estimates using the average position for each currency as a dependent variable and ( $\alpha$ ) the average policy rate, ( $\beta$ ) deviation from the lagged three-month moving average, and ( $\gamma$ ) ratio of real currency demand to forex transaction value as three explanatory variables.

$\alpha = 0.78$ ,  $\beta = -0.47$ ,  $\gamma = -0.03$ , and adjusted R-square = 0.93, based on estimation period between July 2006 and September 2008.

Source: Nomura, based on Tokyo Financial Exchange data