

FRBSF WEEKLY LETTER

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Japan's Stock Market

The Japanese stock market is now the world's largest stock market. The market value of its listed shares accounts for over forty percent of total world equity. This compares with the roughly thirty percent share covered by the New York stock market.

Since 1982, Japanese stocks have grown almost 350 percent in value. Even the October 1987 global stock crash only temporarily slowed the rise. At year-end 1988, the Tokyo stock market stood more than 10 percent above its pre-crash peak, compared to the U.S. Dow Jones index, which was still almost 20 percent below its previous high attained in August 1987.

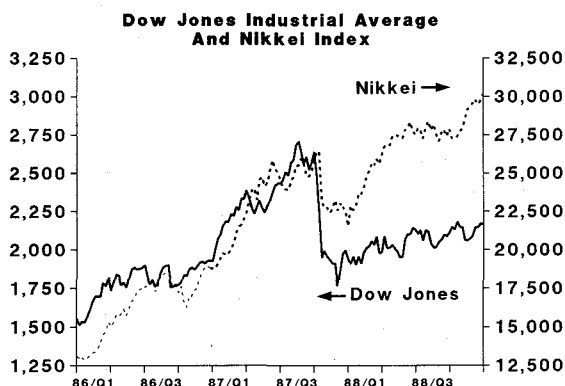
This *Letter* discusses the reasons for the Tokyo stock market's apparent resilience and the prospects for its continued growth.

The crash

Between October 1982 and September 1987, stock market prices in Japan grew more than threefold, as measured by the Nikkei index of 225 selected stocks, the most widely followed indicator. Most of this rise can be attributed to the rapid growth in Japan's economy; during this period, real GNP averaged four percent growth annually. However, the Japanese stock market surged even during 1986, when the Japanese economy was lagging, hurt by the rising yen. One factor contributing to the continued rise was the cuts in interest rates in 1986 and 1987 that were intended to spur the economy but also raised share prices by lowering the discount rate applied to future stock dividends. In addition, limited taxation of capital gains encouraged investment in the stock market, particularly as ongoing financial market deregulation made funds more liquid for potential investors. Speculation in land also may have played a role, as investors sought to buy shares in companies that owned valuable real estate in a market of booming property values.

The worldwide crash in stock markets in October 1987, however, also halted the upward trend of

stock prices in Japan. (For a discussion of the possible causes of the worldwide phenomenon, see the *Letter* of April 29, 1988.) During the week of October 14, 1987, the Nikkei index fell 18 percent. This decline, however, was well below the 30 percent drop of the New York Stock Exchange over the same week. (See chart.)



What explains the relatively limited decline of the Japanese stock market during the period following the crash? Various factors related to the structure of the market and the regulatory involvement of the government apparently played a role.

For one, Japan's Ministry of Finance (MOF) maintains a rather close relationship with the Tokyo Stock Exchange (TSE) and its principal members. Brokers routinely lend employees to the ministry, and ministry workers are lent to the exchange for extended periods. Most analysts believe that during the crash the MOF informally advised Japanese brokers and institutional fund managers not to sell. In fact, most of the drop in Japanese share prices during October was attributable to sales by individual and foreign investors, rather than to institutional investors. The Bank of Japan also helped reduce concerns about a possible shortage of funds following the crash by indicating that it would maintain liquidity, and in fact did so. (The Federal Reserve adopted a similar policy stance following the U.S. stock market crash.)

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A second factor that limited stock sales and kept prices from falling further in the Tokyo market is its relatively high concentration of ownership. Financial and nonfinancial institutions own more than three-quarters of all shares, and a large chunk of these shares are held by groups of shareholders with close business relationships. For example, companies often own shares in their customers or suppliers as tokens of long-term relationships and good faith. In addition, complex webs of cross-shareholdings have arisen because holding companies are banned. By curtailing share trading, the concentrated market structure limited downward pressure on prices.

Not only are shares concentrated in the hands of institutions and industrial firms, but the marketing of them is controlled, as well. Share-holding institutions closely follow the advice of the four leading securities companies, Nomura, Daiwa, Nikko, and Yamaichi, which account for 60 to 75 percent of the trading in Tokyo.

Share-trading rules also may have played a role in limiting the decline of prices during the crash. First, although the Japanese government does not establish specific minimum margin requirements for purchasing stock with borrowed funds, the Tokyo Stock Exchange sets a minimum required payment, which it adjusts depending on market volatility. Similarly, the Tokyo Stock Exchange suspends trading in a stock if the stock's price rises or falls by more than a predetermined percentage (10–20 percent), or if the number of buy or sell orders exceeds the other by ten times. Such a wide disparity in the numbers of buy and sell orders could be viewed as a signal that stock prices were under pressure since, unlike the specialist system of Wall Street, the *saitori*, or "matchmakers," in Tokyo simply match up buy and sell orders; they do not trade for their own accounts.

In addition, the Japanese government had not yet allowed trading in stock futures and options, nor the use of computer-programmed trades at the time of the crash. (The MOF allowed futures trading in 1988.) In contrast, futures and options trading, as well as computerized program trading, are believed to have exacerbated the decline in the U.S. stock market.

Lastly, prudential regulation of financial institutions in Japan limits the role of such institutions as large active investors in the market. Institutional investors such as life insurance companies, which typically do not have cross-share-holding relationships with other firms, are not permitted to keep more than 30 percent of their assets in shares. These restrictions further lessen the extent to which large blocks of shares are traded in the market.

Resurgence

Since early 1988, the Tokyo stock market has fully recovered from the decline of last year and has surged to new highs. As of the end of December 1988, the Nikkei index stood at 30,159, compared to its pre-crash peak of 26,646, a rise of 13 percent.

Why has Japan's stock market been so resurgent? Are the gains sustainable? Is another crash in the offing?

The general growth of the Japanese economy in the past year has been one factor in the recent stock market surge. Despite a downturn in the second quarter, the economy grew at an average annual rate above five percent over the first three quarters of 1988. Robust growth is expected in 1989.

Several government actions in 1988 also played a significant role in bolstering market confidence and spurring more stock buying in Japan. In January 1988, the MOF postponed for one year new accounting rules on special investment funds called *tokkin*, which offer reduced exposure to capital gains taxes. The new rules originally had been proposed to dampen the speculative use of these funds for tax avoidance. The postponement was adopted in order to deter the large investment institutions, which account for an estimated 70 percent of *tokkin* assets, from selling off their holdings ahead of the end of the fiscal year in March 1988, in order to realize capital losses before the rules applied. The day the postponement was announced the Nikkei index rose 5.6 percent.

In April, the government further bolstered the stock market by ending the tax-free status of \$2.4

trillion in small, low-yield savings accounts, known as *maruyu*. In response, some of these funds moved into the stock market. Also, the government has allowed life-insurance companies to boost from 3 percent to 5 percent the proportion of their assets that can be placed in *tokkin* investments. And the opening of stock-index futures trading should increase investor activity in the market by facilitating more sophisticated investment strategies.

How sustainable is Tokyo's rise?

Many analysts argue, however, that these "fundamentals" still do not justify the heights to which the Japanese stock market has risen. They contend that a speculative bubble is at work in Japan, and that it may soon burst. These financial experts worry that should the bubble burst, investors would pull money out of other markets, triggering another worldwide crash.

By American standards, Japanese stocks do indeed trade at astronomical prices relative to the earnings of the firms that issued the shares. On the New York Stock Exchange, price-earnings ratios run about 15 to 1, while in Tokyo the multiples are closer to 60 to 1. Nippon Telegraph and Telephone has traded at 158 times its earnings. Relatively low dividend yields are also cited as evidence that shares are overvalued.

However, many Japanese analysts argue that these indicators do not represent good measures of the true value of Japanese firms. They attribute the high-price earnings ratios in part to accounting rules that allow firms to understate earnings and thereby reduce their taxes. In addition, because many Japanese companies cross-hold large blocks of stock issued by other companies, which are seldom traded, few shares are actually bought or sold. As a result, Japanese companies

often treat their shares more like bonds, and act to ensure investors steady, though low, dividends, with the investor making money from tax-free capital gains on rising share prices.

Although these arguments suggest that the recent rise in prices is not due to a speculative bubble, further rises on the order of past gains are not likely, either. In fact, several factors may work to slow down the market in the period ahead. Effective capital gains taxes will be raised as a result of the recent tax reform legislation. The real estate market has leveled off, in part because of stricter government requirements for property transactions, abolition of tax breaks on property sales, and government "guidance" encouraging banks to curb their property loans. This is dampening demand for real-estate related stocks. In addition, because private bond markets are relatively undeveloped in Japan, Japanese firms are expected to issue large amounts of equity in coming months to finance capital expansions. Because of new international guidelines on capital adequacy, Japanese banks, which have relatively low accounting capital ratios, also may need to raise new capital. By increasing the supply of equity shares, these factors may slow down the market. Macroeconomic developments, such as higher interest rates, also could slow the flow of funds into equities.

On balance, ongoing financial market deregulation and the general good health of the Japanese economy should stimulate the continued flow of investment into the stock market over the long run, though possibly at a slower rate than in the past.

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