

Case 1-2

Nasdaq Japan: E-Merging Markets¹

The most difficult thing to change is culture. Japan is not a culture of individual investors. There is some ¥1400 trillion sitting in postal savings accounts.² People above 60 years old own 80 percent of this private household money. They don't know English. They don't want to use computers. They don't care about the Internet. They invest in postal savings accounts because they don't trust stock. We've also got to change the culture of the companies that issue stock. They announce only good news. They don't want to tell bad news. We've got to change the culture of brokerage firms. And we need to create a new culture for our company. We have to blend a spirit of innovation and change with traditional Japanese values. Considering all of the change required, it's a miracle we made this happen.

Tatsuyuki "Ted" Saeki, President and CEO of Nasdaq Japan³

The success of Nasdaq Japan's new market model will represent much more than a shift in Japan's financial markets from indirect to direct financing. This shift will stimulate structural reform in Japan's economy and contribute to a rebirth . . . The Nasdaq Japan market represents the Osaka Securities

This case was prepared by Professor Lynda M. Applegate with assistance from Research Associates Kristin Kohler, David Lane, Evelyn Goldman, and Heather Miller.

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²At the time of the case, the exchange rate was approximately 100 yen = 1 U.S. dollar. To check today's rate visit the XE.com Universal Currency Converter at <http://www.xe.com/ucc/>.

³Casewriter interview, November 16, 2000.

Exchange's (OSE's) best chance to become a world market. We should seize it by whatever means possible.

Goro Tatsumi, President and CEO, Osaka Securities Exchange⁴

Now Japanese companies and investors can benefit from the strength and success of the Nasdaq brand. By creating an efficient market that links investors and entrepreneurs directly and easily, Nasdaq Japan has created more opportunities for the growth and success of emerging Japanese companies—especially high-tech, growth-oriented companies.

Masayoshi Son, President and CEO, Softbank⁵

Our vision is one of a global exchange. The Nasdaq market is a network of markets influenced by network effects. Liquidity seeks liquidity—first nationally, then regionally, then globally. There is no longer a need to stop at the borders of a country. Our approach is to establish a position in the three major capital markets in the world. The United States, Japan, and Europe control 80% of the world's financial transactions. Once we build a successful market in each region, we will connect those markets to enable 24-hour global trading. Around the world the Nasdaq brand will mean jobs, a strong economy, and innovation.

John Hilley, Chairman and CEO, Nasdaq International⁶

⁴Casewriter interview, February 22, 2001.

⁵Nasdaq Japan press release, June 19, 2000.

⁶Casewriter interview, January 8, 2001.

On June 19, 2001, the four Nasdaq Japan, Inc. (NJI), founders quoted above and employees in their respective organizations gathered with members of the Japanese and world financial communities at the NJI headquarters in Tokyo to celebrate the first birthday of the Nasdaq Japan Market (NJM).⁷ For the past two years, these visionaries had worked together to create and launch a new securities exchange in Japan. The ultimate goal was to establish a global securities market. To further this goal, on November 21, 2000, Nasdaq U.S. announced a joint venture with the Montreal Stock Exchange to create Nasdaq Canada. In March 2001, Nasdaq and the London International Financial Futures and Options Exchange (LIFFE) partnered to create the Nasdaq Liffe Markets.⁸ On March 27, 2001, Nasdaq U.S. acquired a 58 percent stake in Easdaq, a major pan-European over-the-counter securities exchange headquartered in Brussels, and changed its name to Nasdaq Europe.⁹ "I am more convinced than ever that the stock market in the new millennium must be available to anyone, anywhere in the world, twenty-four hours a day, seven days a week," stated Frank Zarb, chairman and CEO of Nasdaq Inc.¹⁰

⁷Visit the Nasdaq Japan company website at www.nasdaq-japan.com.

⁸Established in 1982, LIFFE was one of the world's leading markets for exchange-traded derivatives.

⁹With the joint venture, the Easdaq securities exchange was renamed Nasdaq Europe. On June 8, 2001, new trading technology was launched and a new "Rule Book" was approved by the Belgian finance minister to enable consolidation of order flow, trading of U.S. listings during European trading hours, and the development of a robust market for European initial public offerings (IPOs). These changes enabled Nasdaq Europe to offer functionality similar to Nasdaq U.S. while also responding to the regional needs of the European market. See www.nasdaq.com press releases for information on the Nasdaq globalization strategy.

¹⁰F. Zarb, "The Challenges of Building a Global Stock Market." Prepared remarks delivered at the Financial Executives Institute, November 6, 2000.

When I started in this business, it was really a business of rich men selling stocks to each other. That is obviously no longer the case . . . The use of the Internet by investors is shattering geographic boundaries and swelling the ranks of equity investors worldwide . . . [For example,] in Japan alone it is estimated that the number of Internet users will be about 120 million in only four years. That is up from about twenty million in 1999 . . . Currently only 9% of Japanese investors hold securities. However, that is poised to change. It is estimated that online accounts will triple from year-end 1999, and there are currently fifty brokerages offering online trading.

See Exhibit 1 for Japanese investment community demographics.

The realization of this far-reaching vision would depend on establishing successful markets in Japan and Europe during a global downturn that threatened the most established capital markets. "The Japanese economy was bad before we launched, and now it's worse," said Lee Congdon, senior vice president, Nasdaq U.S. *The Economist* summarized the situation in early 2001:¹¹

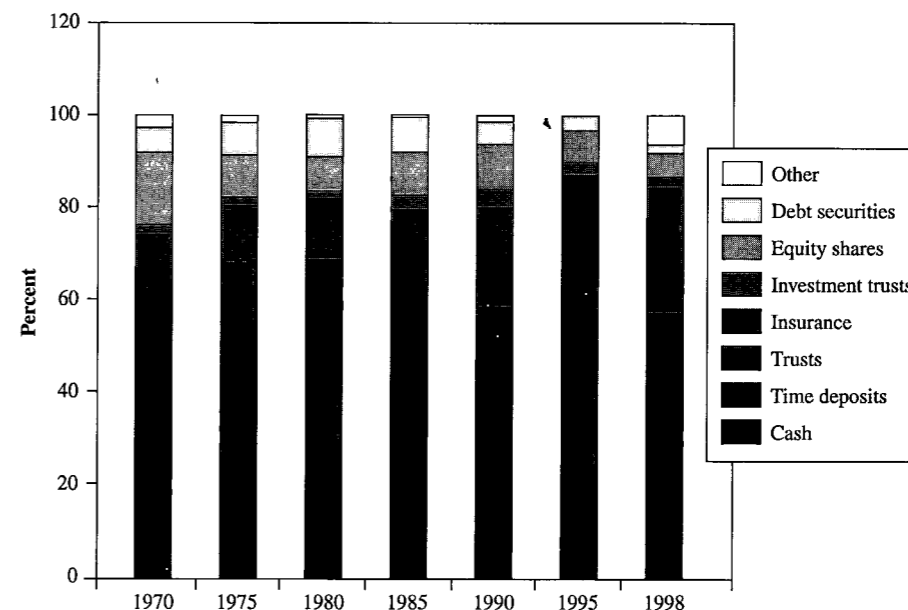
Last year, the world economy enjoyed spectacular growth. This year, America and Japan, the two biggest economies, accounting for 46% of the world output, are both teetering on the brink of recession. Stock markets almost everywhere are tumbling: over the past year nearly \$10 trillion has been wiped off global share values. Is the world heading into recession?

Larry Stein, senior vice president of strategic planning for Nasdaq, believed that over time, the NJM would be very successful. "Even though we are in a downturn," he said, "the market forces that created the economic boom of the late 1990s are still there. There is a huge pent-up demand in Japan right now. Japanese entrepreneurs and high-growth companies require capital to bring new technologies to market, and

¹¹"Can the World Escape Recession?" *Economist.com* (www.economist.com), March 22, 2001.

EXHIBIT 1A
Percentage
Composition of
Household
Assets in
Japan,
1970-1998

Source: Adapted from *Securities Market in Japan 2001*, Tokyo, Japanese Securities Research Institute.



Year	Total (¥ trillion)	Cash	Time deposits	Trusts	Insurance	Investment trusts	Equity shares	Debt securities	Other
1970	78.3	15.4%	41.9%	5.2%	12.2%	1.6%	15.6%	5.4%	2.7%
1975	183.9	15.5%	47.5%	5.6%	12.3%	1.3%	9.2%	7.0%	1.5%
1980	353.1	11.4%	51.4%	6.0%	13.3%	1.5%	7.4%	8.3%	0.8%
1985	587.8	8.9%	48.1%	6.9%	15.7%	3.1%	9.4%	7.5%	0.5%
1990	945.5	8.8%	43.5%	6.8%	20.9%	3.9%	9.9%	4.8%	1.4%
1995	1,183.0	10.0%	45.1%	6.6%	25.4%	2.7%	7.0%	3.1%	0.0%
1998	1,316.2	10.4%	44.4%	2.5%	27.6%	1.9%	5.1%	1.8%	6.3%

Japanese investors are hungry for information about these companies."

Indeed, despite the gloomy economic picture, the NJM had outperformed other Japanese stock markets. (See Exhibit 2 for a summary of the key securities exchange markets in Japan and Exhibit 3 for a comparison of market performance.) "Within four months of launch, 32 companies had listed on the Nasdaq Japan market; 29 of them were profitable, and 26 of the companies met our standard listing criteria," explained Rich Bartolotta, CFO of Nasdaq Japan. By the end of 2000, the number of companies listed on the NJM had risen to 40, and by summer 2001 to over 60. The Tokyo Stock Exchange's (TSE) Mothers market had 33 listings at the same time,

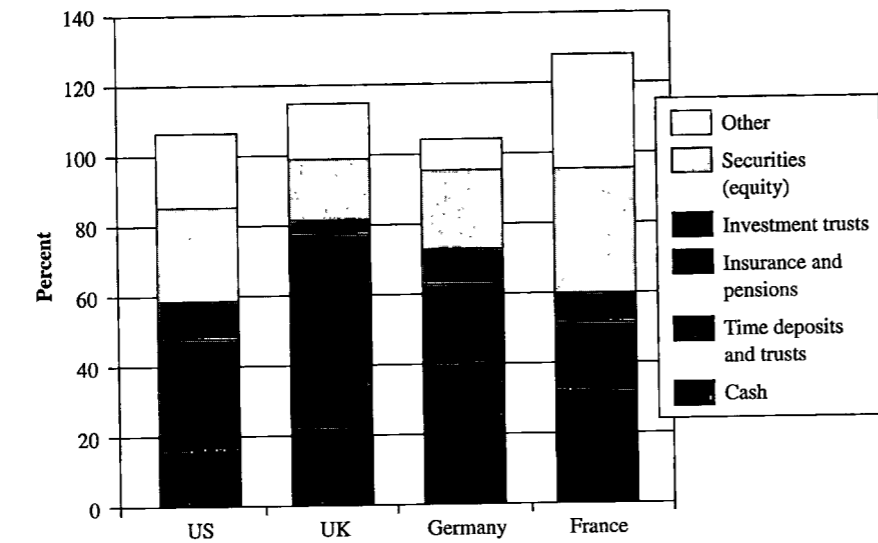
despite the fact that Mothers opened in December 1999 (see Exhibit 4).¹² Bartolotta continued:

During 2000 there were 203 IPOs on all Japanese markets. Of this, the Nasdaq Japan

¹²As discussed in Exhibit 3, the Tokyo Stock Exchange housed three markets: TSE Section 1 traded securities from large, established firms; TSE Section 2 traded securities of midsize firms; and TSE Mothers traded securities of small, young firms. The ultimate goal of the NJM was to enable trading of securities from firms of all sizes. As such, it would compete with all three sections of TSE. In practice, however, during the first year of launch, the NJM had attracted primarily newer and younger firms and thus competed most directly with Mothers. Visit the Tokyo Stock Exchange and Mothers at <http://www.tse.or.jp/English/mothers/index.html>.

EXHIBIT 1B
Percentage
Composition of
Household
Financial
Assets in
Selected
Advanced
Economies,
1998

Source: Adapted from *Securities Market in Japan 2001*, Tokyo, Japanese Securities Research Institute.



	US	UK	Germany	France
Total (billion)	\$ 30,265	£ 2,701	DM 5,683	FF 16,260
(¥ trillion)	3,486	516	395	351

Cash	1.5%	21.1%	8.8%	17.1%
Time deposits and trusts	14.0%	14.0%	30.5%	14.3%
Insurance and pensions	31.2%	54.7%	22.2%	19.0%
Investment trusts	10.7%	4.2%	10.0%	8.3%
Securities	26.3%	17.1%	22.1%	35.0%
Other	20.8%	15.6%	8.7%	32.0%

- Note: 1. French figures are as of year end 1997.
 2. Except for the United States and Germany, household sector includes unincorporated enterprises.
 3. Except for Germany, which is based on book value, equity shares are based on market value.

market captured 33 IPOs, which is 16 percent market share overall. As of February 19 2001, there were 26 IPOs approved for listing in 1Q. NJM listed 8 IPOs, which is 31 percent share. So we are gaining share, which is critical to our success.

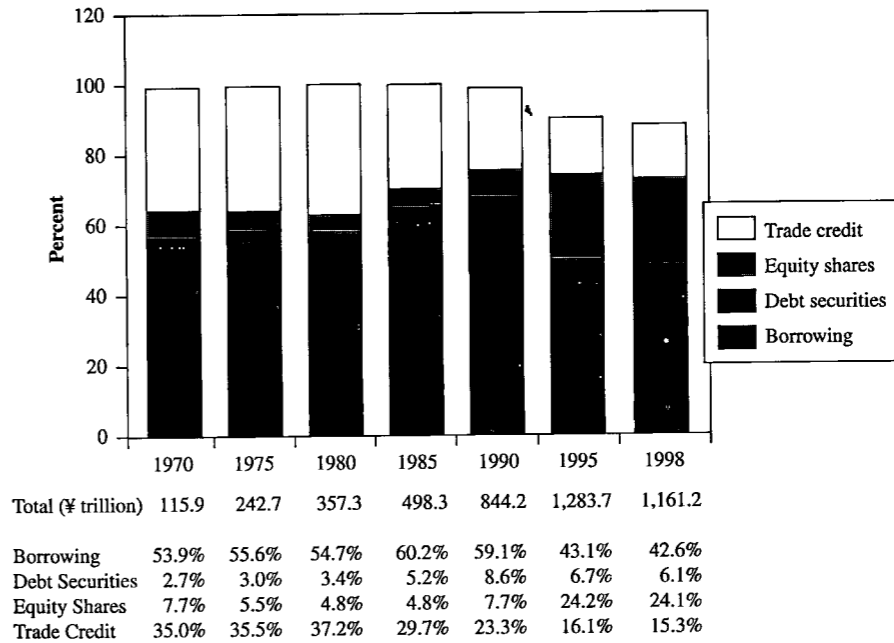
During the first-year birthday celebration, Zarb praised employees and guests for helping to make Nasdaq Japan a success:

When we started together a year ago, I said to Ted Saeki: "Ted, go slow. We are in no hurry.

We are changing the world, and when you do that, you've got to be careful. You've got to take it one day at a time and make sure that you [stress quality and proceed] with judgment." Now, the Japanese economy helped us go slow, so it became a little easier to follow my instructions than I had originally thought . . . [But despite going slow,] we have a 30 percent market share in IPOs. We have grown the organization in an orderly way, and we just [received word] from Japanese regulators that our new hybrid market structure was

EXHIBIT 1C
Selected
Sources of
Corporate
Capital in
Japan,
1970-1998

Source: Adapted from *Securities Market in Japan 2001*, Tokyo, Japanese Securities Research Institute.



Total (¥ trillion)	1970	1975	1980	1985	1990	1995	1998
Total (¥ trillion)	115.9	242.7	357.3	498.3	844.2	1,283.7	1,161.2
Borrowing	53.9%	55.6%	54.7%	60.2%	59.1%	43.1%	42.6%
Debt Securities	2.7%	3.0%	3.4%	5.2%	8.6%	6.7%	6.1%
Equity Shares	7.7%	5.5%	4.8%	4.8%	7.7%	24.2%	24.1%
Trade Credit	35.0%	35.5%	37.2%	29.7%	23.3%	16.1%	15.3%

approved.¹³ I asked the press: "Where in the world have you ever seen any company that went across borders to start a new business and had a 30 percent market share in the first 12 months? If you can point one out to me, I'd like to see it." So I think you can all share in the pride. You've all made a contribution to this success, and it is only the beginning.

But attracting new listings was only the first step in building a successful market. Trading value, market activity, and liquidity were other important measures of performance (refer to Exhibit 3). Yoshiro Katsuya, executive vice president and chief market operations officer, explained:

Since our market has been in operation for less than one year, we don't have the data needed to calculate formal liquidity measures. [As a result], I calculate [a surrogate for]

¹³The hybrid market model is discussed in more detail later in the case.

market liquidity by dividing the trading value—the amount traded per day in yen—by the total market capitalization in yen. I call the result market turnover. When you compare the turnover of the NJM to other Japanese markets, our performance is very good. In general, the turnover of Japanese markets is low. This is, in part, due to the type of market—a pure auction market—that has traditionally been used in Japan.

While performance exceeded expectations—especially considering Japan's, and the world's, overall economic performance—the founders knew that it was too early to celebrate victory. The NJM had yet to prove it could sustain—and even accelerate—the growth of listings, attract individual and institutional investors, and achieve market liquidity. NJM executives and employees also recognized that the organization they had created had to successfully manage the transition from a start-up to an established company. To accomplish the founders' goals, a new market model would need to

EXHIBIT 1D
Japanese Economic Data (1960–1998)

Year	Interest Rate (%)				GDP (Real)				Wholesale Price Index (y/y, %)	Trade Balance (US\$ bil)	Yen/\$ Exchange Rate	Nikkei 225 Index ^d	Land Prices (major cities, 1990 = 100)	Oil Price (per barrel, US\$) ^e
	ODR ^a	10-year Government Bond ^b	Over-night Rate ^c	Savings Rate	Growth Rate	Per Capita (US\$)	Money Supply (y/y, %)							
1960	6.9	—	8.4	2.6	12.2	474.9	—	—	—	360.0	1357	4.6	2.9	
1970	6.0	—	8.3	2.3	8.2	1,965.4	17.9	2.1	—	360.0	1987	22.8	3.2	
1980	7.3	8.2	10.9	2.8	2.6	10,128.7	8.4	12.8	2.1	217.3	7116	52.8	21.6	
1990	6.0	6.8	7.2	2.1	5.5	25,912.7	10.2	1.1	69.3	141.3	23848	100.0	20.0	
1991	4.5	5.8	5.5	1.5	2.9	29,530.0	2.6	-1.2	96.1	133.2	22983	110.4	16.5	
1992	3.3	4.8	3.8	0.4	0.7	30,349.3	0.1	-1.5	124.8	124.8	16924	108.4	16.0	
1993	1.8	3.5	2.4	0.2	0.3	34,047.6	1.5	-3.3	139.4	107.8	17417	102.4	14.3	
1994	1.8	4.6	2.2	0.3	0.6	38,385.5	2.5	-1.4	144.2	99.4	19723	97.7	13.2	
1995	0.5	2.9	0.4	0.1	2.5	37,452.9	2.9	-0.9	131.8	96.4	19868	94.1	14.6	
1996	0.5	2.8	0.4	0.1	3.3	34,264.8	3.2	0.4	83.6	112.6	19361	90.9	18.5	
1997	0.5	2.0	0.4	0.1	-0.3	30,945.7	3.5	1.2	101.6	122.7	15259	86.3	17.2	
1998	0.5	1.0	0.3	0.1	-1.9	34,025.7	3.7	-2.5	122.4	128.0	13842	83.3	10.9	

^aODR = official discount rate.

^bNewly issued 10-year bond.

^cUncollateralized call rate.

^dEnd of December closing price.

^eAnnual average wellhead price of crude oil in current \$.

Source of data: International Monetary Fund, *International Financial Statistics Yearbook 1998*; American Petroleum Institute, *Basic Petroleum Data Book*, July 1999; Bank of Japan, *Chosa Geppo*, various issues; Japan Economic Planning Agency, *Keizai Hakusho*, various issues.

EXHIBIT 2 Comparison of Japanese Securities Exchanges

During 2000, Japan had five major stock exchanges. The bulk of trading was concentrated on the Tokyo (TSE), Osaka (OSE), and Nagoya (NSE) stock exchanges. Of these, TSE accounted for more than 70% of shares listed, 80% of trading value, and 90% of trading volume. The OSE held 8.5% of national trading volume at the end of 2000, and the NSE, 3%. A brief description of the TSE, OSE, and Over-the-Counter JASDAQ markets is provided below.

Tokyo Stock Exchange (TSE Section 1, 2, and Mothers) In 2001, TSE was organized as a self-regulated, nonprofit association. Established under a provision of the Securities and Exchange Law, TSE was managed and maintained by its members (securities companies). TSE operated three different markets: Section 1, Section 2, and Mothers (Market of the High-Growth Emerging Stocks). Until the Mothers market was opened in November 1999, it often took 20 years or more for a company to meet the criteria to go public, often listing initially on Section 2. A company moved to Section 1 once it had achieved certain goals concerning profits (e.g., ¥1 billion or more), shares listed, number of shareholders, and trading volume. The Tokyo Stock Exchange established the Mothers market to trade stocks of high-growth and emerging companies, to provide venture companies access to funds at an early stage of their development, and to provide investors with more diversified investment products.

Osaka Securities Exchange (OSE Section 1, 2, and the Nasdaq Japan Market) In 2001, OSE was in the process of shifting from a membership firm to a private company. The OSE market for domestic stocks was composed of two primary sections: the First Section and the Second Section. Like TSE, newly listed stocks were first assigned to the Second Section, and then transferred to the First Section when they met specific criteria. In June 2000, OSE partnered with Nasdaq Japan to open the Nasdaq Japan Market. Unlike the Mothers market, the NIM hoped to attract high-growth companies at all stages of development.

JASDAQ Over-the-Counter (OTC) Market Japanese OTC securities trading was launched in 1963. In 1983, as part of a sweeping reform, the OTC market adopted trading rules similar to the Nasdaq U.S. market. In 1991, the JASDAQ automated trading system was launched.

* A third OSE market, the New Markets section, was opened in 1998 to provide capital to entrepreneurial ventures.

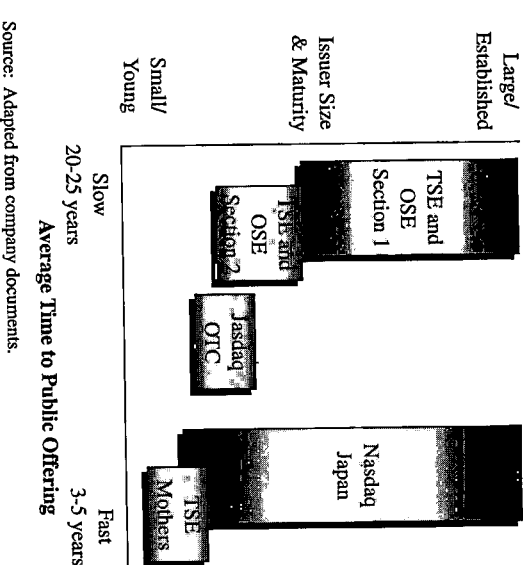


EXHIBIT 3 Market Performance Statistics for Japanese and U.S. Securities Exchanges
Measuring Market Performance

Measures of Market Liquidity	
Trade volume	Average number of shares traded per day
Turnover	Volume of shares traded as a percentage of total shares listed on an exchange during a period, usually a day or a year
Measures of Market Growth	
No. of listings	Listed securities are stocks or bonds that trade on one of the organized and registered securities exchanges
No. of IPOs	An initial public offering (IPO) is a company's first offering of stock to the public; the number of IPOs on exchange is a metric of the potential growth of that exchange
Measures of Market Value	
Market value	Total value of all securities listed on a particular securities exchange
Average price/share	Average per share price of a listed security

EXHIBIT 3 Market Performance Statistics for Japanese and U.S. Securities Exchanges (continued)
Market Performance Comparisons

Securities Exchange	Average Daily Trade Volume (millions) (as of 12/31)			Turnover (%) (as of 12/31)			No. of Listings (as of 12/31)			No. of IPOs (as of 12/31)			Market Value (trillion US\$) (as of 12/31)			Average Price/Share (as of 12/31)		
	98	99	00	98	99	00	98	99	00	98	99	00	98	99	00	98	99	00
Japanese Securities Exchanges																		
TSE	492.3	617.1	692.6*	35	44 (1)	18	1340	1364	1447	12	20	38	2.3	4.3	3.1	4.62	6.79	4.57
Section 1				(1)														
Section 2	6.5	16.2	NA	NA	NA	20	498	526	579	NA	NA	92	.06	.13	.06	NA	NA	NA
Mothers	NA	NA	NA	NA	NA	20	NA	2	29	NA	NA	26	NA	.008	.006	NA	NA	NA
OSE	48.9	56.2	69.8 (1)	9.5	9.6	9.9	1272	1293	1282	NA	NA	NA	1.9	2.9	2.3	NA	NA	NA
Section 1				(1)	(1)	(1)	(1)	(1)	(1)				(1)	(1)	(1)			
Section 2	2.9	4.9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
NJM	NA	NA	NA	NA	NA	43	NA	NA	40	NA	NA	33	NA	NA	NA	NA	NA	NA
OTC (Jasdaq)	5.3	17.5	NA	NA	NA	18	NA	NA	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
U.S. Securities Exchanges																		
NYSE	673.6	808.9	1041.6	76	78	88	3114	3025	2862	68	49	48	10.9	12.3	12.4	46.38	43.77	42.14
Nasdaq U.S.	801.8	1152.4	1761.4	NA	NA	NA	5068	4829	4734	273	485	397	2.6	5.2	3.6	31.30	46.35	31.64
AMEX	28.9	32.7	53.0	NA	NA	NA	770	769	765	21	11	6	.15	.14	.12	37.19	68.71	55.83

*Reflects both Sections 1 & 2

IPOs = initial public offerings; TSE = Tokyo Securities Exchange; OTC = over the counter; OSE = Osaka Securities Exchange; NJM = Nasdaq Japan Market (offered through the Osaka Securities Exchange); NYSE = New York Stock Exchange; AMEX = American Stock Exchange.

Source: Company websites; Bloomberg Online Information Service; Nasdaq-Japan Market data. All collected during the first half of 2001.