Japan's Microcap Market

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I. Japan's stock exchanges are teeming with microcaps

Figure 1 shows the market cap distribution of companies traded on stock exchanges in Japan, the US, and the UK^1 . As shown in panel (1), Japan has under 200 companies with a market cap of at least \$500 billion, but the number of companies increases sharply as the market cap gets smaller, and there are nearly 1,500 listed companies with a market cap below \$10 billion.

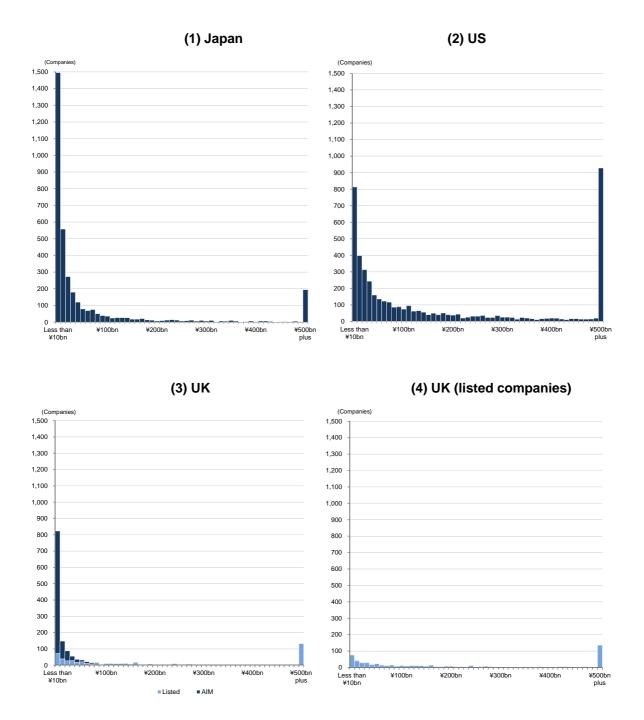
Panels (2) and (3) show this same pattern of the number of companies rising as the market cap gets smaller in the US and UK. In the US, however, there are more companies with a market cap of at least \pm 500 billion, over 900 of them, than there are companies with a market cap below \pm 10 billion. In fact, the number of US companies with a market cap below \pm 10 billion is only about half that number of Japanese companies. In the UK, AIM stocks are not considered listed companies², and when excluding these and looking only at listed companies, the UK also has more companies with a market cap of at least \pm 500 billion than companies with a market cap below \pm 10 billion (panel (4) of Figure 1).

Figure 2 shows the distribution of companies with a market cap below \$10 billion. In Japan, the trend of the number of companies increasing as market cap gets smaller applies down to a market cap of \$2 billion. The number of companies with a market cap of at least \$1 billion and less than \$2 billion is slightly less, while the number of companies with a market cap below \$10 billion declines to about 60. In a Japan-US comparison of the distributions of companies with a market cap below \$10 billion, Japan is more heavily weighted toward smaller firms. In the UK, meanwhile, the trend of the number of companies with a market cap below \$10 billion, the largest number of which have a market cap below \$110 billion. Looking only at listed companies, however, the limited number of companies with a market cap below \$10 billion makes it difficult to detect a trend in the distribution.

¹ A full description of the companies in the universe is provided in the notes of Figure 1.

² In the EU, listed securities are those on the official list compiled by the listing authority, and meet the listing rules and disclosure requirements. Because of the demutualization of the London Stock Exchange, the listing authority in the UK was the Financial Services Authority from April 2000 until April 2013, at which point it became the Financial Conduct Authority. AIM stocks are not considered listed securities but rather are stocks approved for trading on an exchange.





- Note: Universe in Japan excludes stocks in the TSE foreign company section and in the TOKYO PRO Market; in the US includes stocks listed on the New York Stock Exchange, NASDAQ, and NYSE MKT; in the UK, listed companies include premium and standard stocks on the main market. For all three countries, non-common shares, REITs, ETFs, and other fund-like issues are excluded. Market caps in the US and UK are converted into yen at the exchange rate at the end of 2013, ¥105.30/\$1 and ¥170.95/£1.
- Source: Nomura Institute of Capital Markets Research, based on data from the stock exchanges

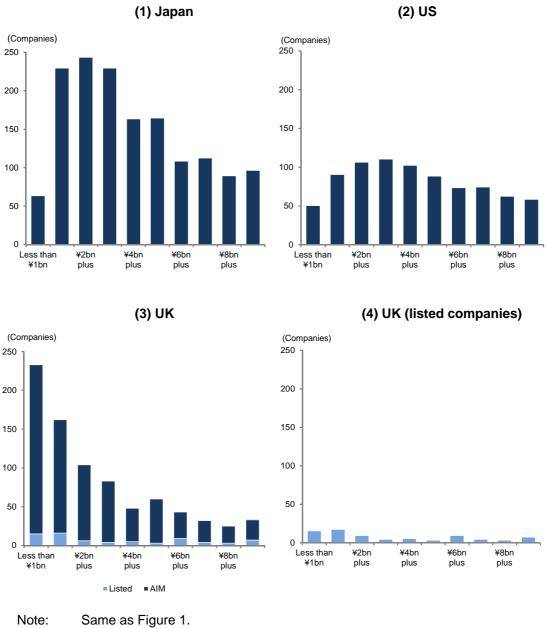


Figure 2: Distribution of companies based on market cap (below ¥10 billion)

Source: Same as Figure 1

Figure 3 looks at the distribution of companies with a market cap of at least ¥500 billion. The number of US companies exceeds the number of Japanese companies in every market cap category. In all three countries, the largest number of companies is in the category of market caps of at least ¥500 billion and less than 1 trillion, while the second-most populated category in the US and UK comprises companies with market caps of at least ¥5 trillion, indicating those markets have more very large companies than does the Japanese market.

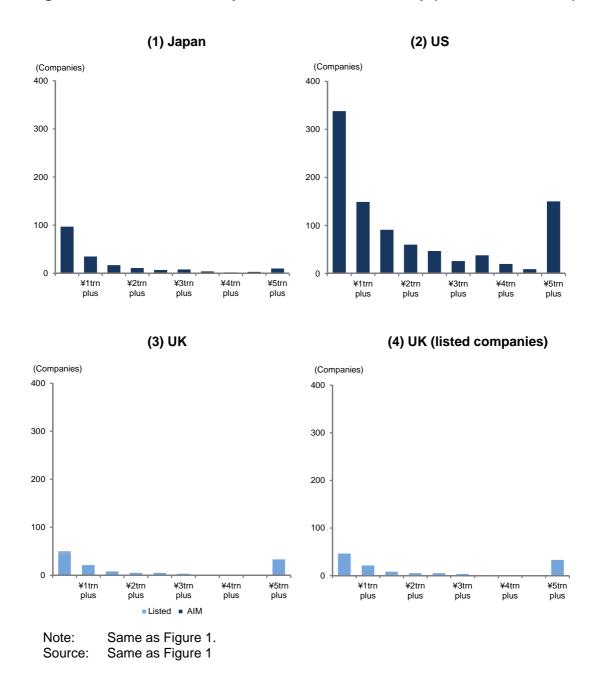


Figure 3: Distribution of companies based on market cap (at least ¥500 billion)

Figure 4 reaffirms these observations, showing that Japan's listed companies include a much larger number of small caps than US listed stocks, and a smaller number of large caps. When including AIM stocks, the stocks traded on the UK and Japanese stock exchanges have similar company size distributions, but when only looking at listed stocks, Japan has a higher percentage of small caps and a lower number of very large caps.

The SEC, the US regulator, defines microcaps as companies with a market cap of less than 250-300 million³. Based on this definition, roughly 2/3 of Japan's listed

³ See http://www.sec.gov/investor/pubs/microcapstock.htm.

companies are microcaps. Additionally, over 40% have market capitalizations of less than \$10 billion. Generally, stocks with market caps this small are unlikely to be bought by institutional investors and unlikely to be covered by analysts.

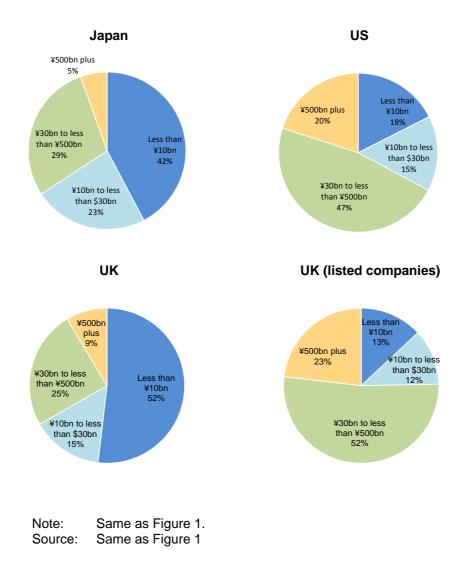


Figure 4: Breakdown of companies based on market cap (all stocks)

II. The characteristics of microcaps

If the fact that Japan's stock markets have a larger number of microcaps than do markets in the US and the UK meant that a large number of promising startups and sound smaller firms are being provided access to capital markets, it would be a positive.

As shown in Figure 5, however, firms with a market cap below \$10 billion are not necessarily young companies in a growth stage. In fact, the distribution of companies based on their number of years in business is nearly the same for all three markets. Specifically, firms that are no more than five years old account for 2% of the total and

those no more than 10 years old only account for 5%, while over 80% of those companies were established at least 20 years ago.

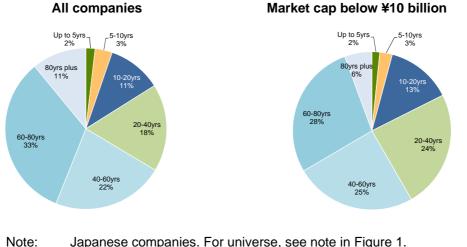
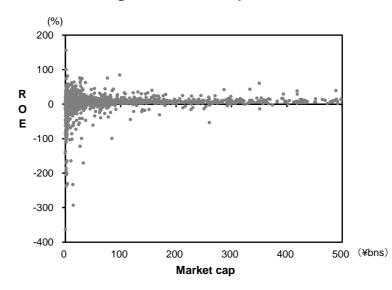


Figure 5: Breakdown of companies based on years since establishment



In addition, microcaps obviously entail considerable investment risk. As shown in Figure 6, the smaller the market cap, the greater the variance in ROE, and the greater the number of firms reporting large losses.





Note: Market caps for Japanese companies are as of end-2013. ROEs are based on most recently available financial data as of end-2013. For universe, see note in Figure 1.ROE data excludes one stock (¥11 billion market cap) with negative ROE of 1,500%.

Source: Nomura Institute of Capital Markets Research, based on company data

In order to avoid running afoul of market cap or insolvency criteria that trigger a requirement for delisting, some small-cap listed firms significantly dilute their stock with third-party stock offerings and engage in other problematic equity financing arrangements. Recently, there have been some notable examples of the use of rights offerings without a backstop commitment. There are also some examples of companies unable to borrow working capital from a bank that turn to securities markets as a last resort for raising funds.

Other examples include companies being recommended for administrative action by the Securities and Exchange Surveillance Commission (SESC) based on fraudulent financing. Entities known as arrangers and consultants establish offshore funds and acquire the stock of shell companies with a dubious business through fraudulent third party stock offerings⁴. One way they do this is by spreading false rumors and manipulating the market, making it possible to sell in the secondary market at an artificially high price⁵. Microcaps that have listed on an exchange and gained access to the issuance and secondary markets are good candidates to serve as such shell companies and provide an easy tool for earning unfair profits through the securities market.

As shown in Figure 7, nearly all of the companies with a footnote in their financial filings noting doubts over their going concern assumption or a material event related to that assumption have a market cap of less than \$10 billion.

going concern as	ssumption	going concern as	n assumption		
Market cap	(Companies)	Market cap	(Companies)		
Less than ¥1bn	10	Less than ¥1bn	6		
¥1bn to under ¥2bn	10	¥1bn to under ¥2bn	18		
¥2bn to under ¥3bn	8	¥2bn to under ¥3bn	18		
¥3bn to under ¥4bn	5	¥3bn to under ¥4bn	10		
¥4bn to under ¥5bn	4	¥4bn to under ¥5bn	5		
¥5bn to under ¥10bn	1	¥5bn to under ¥10bn	11		
¥10bn to under ¥20bn	4	¥10bn to under ¥20bn	5		
¥20bn to under ¥30bn	0	¥20bn to under ¥30bn	1		
¥30bn to under ¥40bn	1	¥30bn to under ¥40bn	1		
¥40bn plus	0	¥40bn plus	2		
Total	43	Total	77		

Figure 7: Companies with going concern risks (end-2013)

(2) Mentions of material events related to

Note: Japanese companies. For universe, see note in Figure 1. Source: Nomura Institute of Capital Markets Research, based on company data

(1) Notes expressing doubts over

⁴ This includes bogus capital increases using show money and investments in overvalued cash securities.

⁵ See the Securities and Exchange Surveillance Commission, "Fukousei Fainansu no Jittai Bunseki to Shouken Torihiki Tou Kanshi linkai no Taiou" (Factual analysis of unfair financing and the SESC's response), 28 June 2013 (in Japanese).

It is one thing if investors can easily understand the risks and are investing in microcaps in acknowledgment of those risks, but there are reasons for concern over the quality of disclosures from some firms.

Figure 8 shows the changes in auditing firms that occurred in 2013. About 70% of such changes occur at companies with a market cap of less than ¥10 billion. Of these, about 40% are a change from a large auditing firm to a smaller auditing firm or individual accounting firm. Of course, this does not always imply a decline in the quality of the audit. In a number of these cases, however, when an opinion from a large auditing firm never came, putting the submission of disclosures in jeopardy of being filed late, a change was made to a smaller auditing firm and a clean opinion was quickly obtained from the newly appointed auditor.

Figure 8: Auditor changes (2013)						
Market cap	Total	Big to big	Small to big	Small to small	Big to small	
Less than ¥10bn	66	5	8	29	24	
¥10-30bn	19	7	2	6	4	
¥30bn plus	9	8	1	0	0	

Note: Japanese companies. For universe, see note in Figure 1. Japan's Big Four auditing firms are Azusa, Arata, Shinnihon, and Tohmatsu. The smaller firms category includes individual accounting firms. This does not include changes that were not intentional on the corporate client's part, including when an auditing firm is dissolved or merged with another auditing firm. Auditors include temporary auditors. A temporary auditor becoming a formal auditor is not counted as a change, however, nor is a partial change of a team of auditors. Market caps are as of end-2013. Does not include companies that were delisted during 2013 or changes in which the new auditing firm was unknown as of end-2013. Includes companies which maintain their listing under the same stock code after a merger, even when the company name and/or business format was changed.

Source: Nomura Institute of Capital Markets Research, based on company data

The primary investors in microcaps are individuals. Additionally, the trading volume for microcaps is not necessarily low, and there are some microcaps stocks with trading volumes that far outstrip those of large firms. Sometimes there is a sharp increase in the share price or trading volume brought by unproven speculation by some market participants or, in some cases, market manipulation and the spreading of rumors. Consequently, when the above-noted microcap risks materialize, there can be significant declines in the share price, resulting in many individual investors taking losses.

III. The significance of the market and section of listing

Because there are some microcaps that merit concerns in regards to investor protections, as noted above, it is desirable that conditions be made conducive for investors to become aware of this. Figure 9 shows there are only 37 companies listed on the New York Stock Exchange (NYSE) with a market cap below ¥10 billion, and most microcaps are either listed on the NASDAQ Capital Market (what used to be called the NASDAQ SmallCap Market) or the NYSE MKT (what used to be the American Stock Exchange) or are traded in the over-the-counter (OTC) market.

Figure 9: Distribution of microcaps (market cap of less than ¥10 billion) by market and section

											(Co	mpanies
Japan (TSE)			US				UK					
Market cap	1st Section	2nd Section	Mothers	JQS	JQG	NYSE	NASDAQ Global Select	NASDAQ Global Market	NASDAQ Capital Market	NYSE MKT	Listed	AIM
Under ¥1bn	0	4	2	33	5	0	2	4	32	12	15	21
¥1-2bn	1	48	25	123	14	0	1	13	55	21	16	14
¥2-3bn	6	67	23	129	7	5	8	19	47	27	6	9
¥3-4bn	8	84	21	95	5	3	8	21	55	23	4	7
¥4-5bn	22	48	15	69	1	5	2	36	40	19	5	4
¥5-6bn	23	44	12	69	2	4	12	20	34	18	3	:
¥6-7bn	21	29	6	47	2	7	8	24	24	10	9	:
¥7-8bn	35	32	6	36	1	3	10	24	26	11	4	:
¥8-9bn	24	19	6	35	1	5	12	12	22	11	3	:
¥9-10bn	34	19	5	28	2	5	11	29	9	4	7	2
Total	174	394	121	664	40	37	74	202	344	156	72	7
vg. market cap (¥bns)	6.9	4.5	4.0	4.1	3.0	6.2	6.2	5.5	4.1	4.1	3.7	2

Note: Same as Figure 1.JQS stands for JASDAQ Standard, JQG stands for JASDAQ Growth.

Source: Same as Figure 1

The London Stock Exchange (LSE) only lists 72 companies with a market cap under \$10 billion, with most microcaps not treated as formally listed stocks but rather traded on the AIM.

In contrast, the first section of the Tokyo Stock Exchange (TSE) in Japan, which is commonly understood to have Japan's blue chips, has more than 170 companies with a market cap below ¥10 billion, more than the number listed on the TSE's Mothers market, which is positioned as the section for startups.

The TSE wound up having two sections for startups, the Mothers and JASDAQ, as a result of its merger of cash-equity trading platforms with the Osaka Stock Exchange (OSE) in July 2013 (it also has the TOKYO PRO Market, explained later), but the average market cap of stocks with a market cap under \$10bn is about the same for both sections⁶.

The second section of the TSE has a distribution of stocks with a market cap of less than \$10 billion that is similar to that of the Mothers and JASDAQ, and an average market cap that is also not much different.

⁶ Nevertheless, the market cap of companies in the JASDAQ Growth market section of JASDAQ seem to be somewhat smaller.

Looking at the average market cap of listed companies with a market cap under ¥10bn on other exchanges as a point of reference, those averages for the Nagoya Stock Exchange's two sections, for the Fukuoka Stock Exchange, and for the Sapporo Stock Exchange's main market are not much different than for the TSE-2, the Mothers, and the JASDAQ (Figure 10). On the other hand, the companies being traded on the startup sections of those exchanges have a considerably smaller average market cap than do the companies being traded on their main markets or any on any of the TSE sections.

	No. of companies	Avg. market cap (¥bns)	
Nagoya Stock Exchange			
2nd Section	48	3.9	
Centrex	14	1.8	
Fukuoka Stock Exchange			
Main board	17	4.0	
Q-Board	6	0.9	
Sapporo Stock Exchange			
Main market	9	4.1	
Ambitious	4	0.9	
Note: Same as Figure	1.		

Figure 10: Stocks with below ¥10 billion market cap listed on regional stock exchanges

Note: Same as Figure 1. Source: Same as Figure 1

IV. The impact from listing standards

The number of microcaps and market cap distribution in each stock exchange and market section may be affected by the listing and delisting (listing continuation) standards of each.

Although a strict comparison is difficult, the continued listing requirement of the NASDAQ Capital Market includes an extremely low minimum market cap of \$1 million, and compared with this, the market cap-related delisting standards of Japan's startup and regional stock exchanges are not particularly low. Accordingly, we do not think Japan's stock markets having a much larger number of microcaps than US stock markets cap requirements being lower in Japan than in the US^{7} .

Next, the market cap-related standards for the TSE-1 are of course stricter than those for Japan's other startup sections and regional stock exchanges. Additionally, the standards used by the NYSE are clearly stricter than those used by the NASDAQ

⁷ The listing standards for the Sapporo Stock Exchange's Ambitious section do not include a market cap requirement, but this alone of course cannot explain the overall larger number of microcaps on Japan's stock exchanges.

Capital Market. These standards probably explain why there are virtually no stocks with a market cap less than ¥2 billion that are listed on either the TSE-1 or the NYSE.

However, we think it would be difficult to argue that the standards alone explain why the TSE-1 has a large number of microcaps with a market cap between 4 billion and 10 billion, but the NYSE has very few.

In the UK, it does not appear that market cap-related listing standards lead to differences in the companies traded on a market, given that the minimum market cap for listing in the UK is only $\pounds700,000$ (¥120 million). Despite this, nearly all of the small caps traded on the LSE are traded on the AIM rather than a listed market.

It may be that the difference between Japan and the US/UK markets is that the TSE-1 is a high-status market, making it natural that even companies with a small market cap will try for a TSE-1 listing if they think they can meet the standards.

In the US, a listing on the NYSE is not necessarily thought to be the best for a microcap, and there are other options, including listing on the NASDAQ or trading in an unlisted market.

There is also the OTC market, which provides several thousand microcaps a certain degree of liquidity. Likewise, small caps in the UK are not always bent on a listing, and consider the AIM an attractive option.

It may be that because Japan does not have a market that effectively functions like the OTC market or AIM, even microcaps seek the status of a listing, particularly a listing on the TSE-1, and place a priority on maintaining that status.

V. The TOKYO PRO Market and Green Sheet issues

Japan also tried to launch a market equivalent to the AIM or OTC market, but did not achieve the results that it had hoped for. The TOKYO PRO Market is a carryover from this concept of launching a market akin to the AIM, while the Green Sheet market was established as a market equivalent to the OTC Pink Marketplace, i.e., the old Pink Sheet market.

The TOKYO PRO Market is the market section of the TSE meant for professional investors. Modeled after the LSE's AIM, it began operation in 2009 as the Tokyo-AIM, a joint venture between the LSE and TSE.

Because it is meant for professional investors, the traded stocks are subject to minimal disclosures requirements, and like the AIM, instead of the exchange prevetting the company, the selection of the companies that are traded on the exchange is outsourced to a private-sector specialist, known as a J-Adviser⁸. The idea is to provide a new forum for raising funds to companies in Japan and elsewhere in Asia that have growth potential.

⁸ This refers to brokerage firms and other suitable corporate finance advisers.

Overseas companies never seemed to get listed, however, and only one domestic startup company wound up getting listed⁹. Consequently, the joint venture with the LSE was dissolved and it was reincarnated as a market section within the TSE under the name TOKYO PRO Market. Since then, two companies were listed in 2012¹⁰ and four companies were listed in 2013, bringing the total number of listed companies to six as of January 2014.

As shown in Figure 11, the market cap of these companies is under \$1 billion for all but one company with a market cap of \$2 billion, and thus a more accurate name for these companies than microcap would probably be nanocap. Additionally, the stocks have traded very little since their listing. This low level of liquidity stands in sharp contrast with the extremely high levels of liquidity for the TSE's other sections¹¹. As nanocaps, they are unlikely to be of interest to institutional investors, but ironically it is only professional investors who participate in this market, and this probably goes a long way in explaining the low liquidity.

	Date listed	Sales (¥mns)	Net profit (¥mns)	Market cap (¥bns)	Days traded since listing	Cumulative trading volume (shares)
Company A	2012/5/28	1187	-154	0.47	6	3900
Company B	2012/9/25	3096	99	2.00	14	5200
Company C	2013/6/4	914	73	0.71	9	9100
Company D	2013/7/31	513	-5	0.56	1	100
Company E	2013/9/4	19	-16	0.32	5	17500
Company F	2013/10/31	1374	64	0.86	1	100

Figure 11: Stocks listed on the TOKYO PRO Market

Source: Nomura Institute of Capital Markets Research, based on Tokyo Stock Exchange data

Japan differs from both the US and UK in that it has set up a specific section for trading nanocaps as listed companies but has almost no actual trading activity.

The UK's AIM, which was the model for the TOKYO PRO, does not treat the stocks it trades as listed companies, does not limit participation to professional investors, and has a large number of actively traded stocks.

Many microcaps in the US are OTC rather than exchange-listed stocks, but the OTC market offers a fair amount of liquidity, with each stock on average being traded on over 40% of the trading days¹².

⁹ That company delisted in 2013 per its own request.

¹⁰ Of these, one had been approved for listing when the exchange was still operating as the Tokyo AIM.

¹¹ Only about 6% of the stocks had no trading activity on five or more days in October– December 2013.

 ¹² Brüggemann, Ulf, Aditya Kaul, Christian Leuz and Ingrid M. Werner, "The Twilight Zone: OTC Regulatory Regimes and Market Quality," ECGI Working Paper Series in Law, No. 224/2013, August 2013.

Japan's Green Sheet market, modeled after the Pink Sheet market in the US, was established in 1997 as a venue for trading unlisted companies. There were 96 stocks designated as Green Sheet issues at end-2004, but that number started declining as a result of a tightening of regulations in 2004, including of insider rules, timely disclosure obligations, and the addition of disclosure requirements similar to those of listed companies, and was down to 36 stocks by end-2013¹³. No new stocks have been designated since 2012, and there has not been much trading of note. The opening of several new exchanges with relaxed listing standards for start-ups has also contributed to the demise of the Green Sheets market.

A report by a working group on supplying risk capital to emerging and growth companies (EGCs) established by the Financial System Council proposed reforming the Green Sheet market by building it into a new regime with fewer market regulations and access limited to only those investors groups, such as local institutions and trade partners, deemed to have enough information on the issuing company. This should provide a useful venue for accommodating the occasional need to trade or redeem the stock of regional unlisted companies.

There is one company that was a Green Sheet issue and listed on the TOKYO PRO Market, but even though it did gain listed status and was traded for several days in the month it was listed and in the following month, after that it was completely bereft of any market pricing activity and lacked liquidity, basically the same situation the company was in when it was a Green Sheet issue. This is why the debate over reforming the Green Sheet market is of relevance to the TOKYO PRO Market.

Period	Days traded
[Green sheets period]	
2006	3
2007	7
2008	0
2009	9
2010	2
2011	2
2012	3
2013 (until February)	3
[After listing on Tokyo PRO market]	
2013 June	7
July	2
August-December	0

Figure 12: Trading in company C's stock

Source: Japan Security Dealers Association, Tokyo Stock Exchange

¹³ It was announced in January 2014 that two of the companies had their designation removed.

VI. A few things to consider

Recently implemented capital market measures have been aimed primarily at the large companies that institutional investors invest in, including a Japanese approach to stewardship, which encourages institutional investors to engage with corporations, as well as the launch of the JPX Nikkei index 400. Since Japan has fewer giant listed companies than the US or the UK, raising the value of large companies is important.

There are also various measures being implemented to encourage the supply of risk capital to startups. Modeled on the JOBS Act in the US, these measures support the creation and nurturing of startup firms and aim to get many companies to list their stock for the first time.

Apart from some large-scale IPOs, however, most startups are likely to wind up as microcaps, even if they do list their shares. Eying the opportunity to profit from an IPO, there are numerous parties, beginning with venture capitalists, who are actively involved in raising the enterprise value of startups. Once the company lists its shares, however, these professionals become less involved, and the stock winds up being primarily traded by individual investors.

This highlights the need to also consider measures that target microcaps, which account for the majority of listed Japanese companies that occupy that ground between the large companies invested in by institutional investors and pre-IPO startups. There is a risk that failing to implement such measures and just focusing on fostering startups will wind up increasing the number of companies with an IPO as their goal.

In light of the conditions prevailing in the TOKYO PRO Market and with Green Sheet issues, and given that it is conceivable that Japan's microcaps, which outnumber their counterparts in the US or UK, will continue to want to become listed companies subject to normal trading on an exchange, it is essential that this market be revitalized.

Regulators and exchanges play an important role here because it is primarily individual investors who trade in microcaps. Their most important task is to build an environment that enables individual investors to participate in the market with a full understanding of the characteristics of microcaps.

One possible way they could do this is to create an index comprised of selected microcap stocks. Not all microcaps are high-risk companies; many are firms that have strong future potential and/or are financially sound with a stable earnings track record. An index like the JPX Nikkei Index 400 comprised of stock selected for certain desirable characteristics would make it easier for individual investors who do a lot of trading in microcaps, and may also help to nurture the development of outstanding microcaps.

The TSE currently publishes a number of share price indices comprised primarily of smaller stocks, and the Tokyo Stock Exchange Second Section Stock Price Index, TSE Mothers Index, and JASDAQ Standard and JASDAQ Growth indices include all stocks in their respective sections. The TOPIX Small index includes all of the TOPIX stocks excluded from the TOPIX 500, which comprises the 500 TOPIX stocks with the highest market capitalization and liquidity. The J-Stock Index is a selection of 100 stocks listed on the JASDAQ based on their market capitalization and liquidity. The TSE Mothers Core Index is a selection of 15 stocks based on their liquidity, free float-adjusted market capitalization, profits, and dividends. The JASDAQ-Top 20 comprises 20 stocks selected based on a comprehensive set of criteria, including liquidity and market capitalization.

Because stocks with relatively large capitalization are listed on the Mothers and JASDAQ, these indices are not considered microcap indices. The TSE Mothers Core index only includes four companies with a market cap less than \$10 billion, and has three companies with a market cap over \$100 billion. Only two of the 20 stocks in the JASDAQ-Top 20 have a market cap below \$10 billion, and eight have a market cap over \$100 billion (one of which has a market cap of \$2 trillion). Although the specifics of the "comprehensive set of criteria" used to select stocks in the JASDAQ-Top 20 are unknown, the other indices basically select constituents automatically based on market data¹⁴.

In addition to considering new indices, another option for the future is to revise the startup sections that currently exist in parallel following integration of the TSE and OSE's cash stock markets, in part as a way to gain further benefits from the integration.

¹⁴ In many cases, however, when a company's stock is added to J-Stock, that company sends out a press release noting that it has been named one of the stocks that are representative of the JASDAQ market. In fact, there have been times in the past when J-Stock had included stocks that later ended up being delisted based on the discovery of fraudulent financial statements since before their listing. There are also examples of stocks being added immediately after notes expressing doubt over their going concern assumption were removed from their financial statements.