

A Thought on the 30% Cap Rule in KOSPI 200

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Recently, there have been concerns over the potential impacts of Samsung Electronics being the first stock subject to the 30% cap rule on index weighting. This allegedly could trigger a massive sell-off and have an adverse impact on the overall stock market. However, as shown in the Finnish case of Nokia whose proportion once reached as high as 70% of the total index market capitalization, a market index's over-dependence on a single stock can never be desirable. From the perspectives of the market index's representativeness and international compatibility it seems rather inappropriate to use short-term price swings as a reason to delay or ease the 30% cap rule that was announced a year earlier.

Korea Exchange (KRX, hereinafter) unveiled an index cap rule on KOSPI 200 on November 21, 2018, that would limit the proportion of a certain stock in the KOSPI 200 index to 30% from June 2019. With the continued rally in Samsung Electronics, the proportion of Korea's largest stock by market cap first reached 30% in the KOSPI 200 index at the close on October 16, 2019 and exceeded sporadically since then. This has raised the possibility that Samsung Electronics would be the first stock that is subject to the 30% cap rule as of the end of November 2019. Under the circumstances, there were some media reports speculating that under the 30% rule a selling binge would weigh down the Samsung Electronics stock to affect adversely the overall KOSPI 200 index.¹⁾ At this juncture, this article tries to revisit the background behind the 30% cap rule, and explore the implications.

* All opinions expressed in this paper represent the author's personal views and thus should not be interpreted as Korea Capital Market Institute's official position.

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1) "A Cap Rule on Samsung Electronics Triggering a Sell-off", October 30, 2019, Chosun Daily; "KOSPI 200 Cap Rule on Samsung Electronics? Concerns about Massive Selling from ETFs", November 7, Korea Economic Daily.



Background behind the 30% cap rule

According to KRX, the KOSPI 200 index operator, the rationale behind the 30% cap rule was “the purpose of enhancing the index’s investability as well as attenuating the adverse effects from a certain stock’s proportion in an index being excessively high, for example, undermined risk distribution, supply and demand herding towards a particular stock, difficulties in investment management, etc”. In other words, the continuous rise of Samsung Electronics, the largest stock by market cap, is concerning as it would deepen the synchronization between the stock and the KOSPI 200 index. Arguably, such a rationale could be in line with the aspect of portfolio diversification that views one third the investment in a single stock as undesirable.

On another front, the 30% cap rule stems from operational and practical reasons. Under the current laws and regulations, exchange-traded funds (ETFs) can invest up to 30% in a single stock,²⁾ and any index an ETF tracks cannot hold a particular stock whose weight exceeds 30%.³⁾ Despite possibilities of a regulatory reform,⁴⁾ if a single stock exceeds the 30% weight in the KOSPI 200 index, any ETF benchmarking it should change the benchmark. Otherwise, it is against the current regulations.

Another reason is international compatibility. Most stock indexes in developed countries set the cap on the proportion of a single stock in an index at 10% to 20% levels. Some indexes, such as S&P 500 and FTSE 100, are without the cap because the market cap of the largest stock makes up only a fraction of the index, for example, Apple accounting for 4.2% of S&P 500, and Royal Dutch Shell for 8.7% of FTSE 100. Given the nature of international blue chip indexes, it’s structurally hard for a single stock’s market cap to be overwhelmingly larger than other stocks.

2) Article 252(1)-1, Enforcement Decree of the Financial Investment Services and Capital Markets Act.

3) Article 7-26(3)1(b), Regulation on Financial Investment Business.

4) In its plans for practice-based innovation in the asset management industry on March 8, 2019, the Financial Services Commission said that it could relax the cap rule on major market indexes tracked by ETFs.



Table 1. Index cap rules in major stock indexes

Country	Index	Index Cap	Maximum Limit
US	S&P 500	No	The largest stock takes up 4.2%
	NASDAQ 100	Yes	20%
UK	FTSE 100	No	The largest stock takes up 8.7%
Germany	DAX	Yes	10%
Europe	STOXX 50	Yes	10%
France	CAC 40	Yes	15%
Sweden	OMX Stockholm 30	Yes	10%
Finland	OMX Helsinki25	Yes	10%
Hong Kong	Hang Seng	Yes	15%

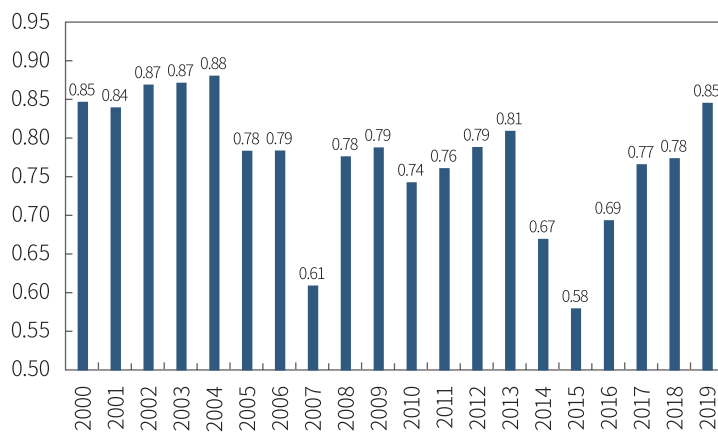
Source: Operators of each index. The stock with the largest market cap calculated based on the market close on November 11, 2019.

Short-term price trends can't be a reason for abandoning the cap rule

Although KRX has already fixed the 30% cap rule, some market participants are concerned that it could dampen the long-awaited rally in Korea's stock market. But the impact of a leading stock price trend on moving the overall index is not limited to the upward phase. When a leading stock begins to slide faster than other stocks do, the overall index is likely to plunge.

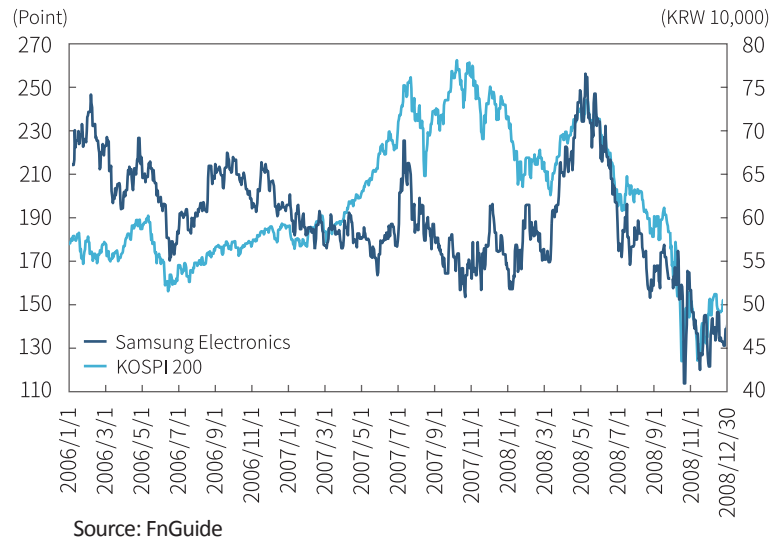
Indeed, the correlation between returns on Samsung Electronics and the KOSPI 200 index over the past two decades recorded over 0.8 for seven years (the highest at 0.88) and is recently rising (refer to Figure 1). On the contrary, when the correlation was low at 0.61 in 2007, the KOSPI 200 was less affected by the underperforming Samsung Electronics stock (refer to Figure 2).

Figure 1. Correlations between returns on Samsung Electronics and KOSPI 200



Source: FnGuide. The 2019 data are year-to-date as of November 14, 2019.

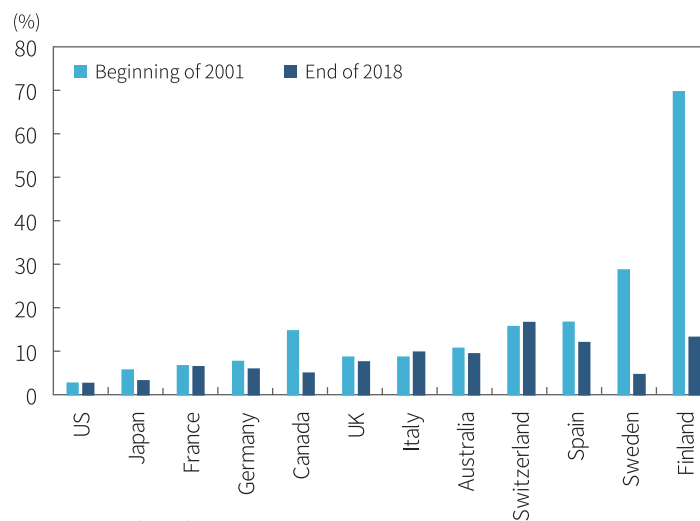
Figure 2. Samsung Electronics (RHS) and KOSPI 200 (LHS) (2006~2008)



Implications of Nokia in Finland

A single stock’s excessive weight often has an impact on the overall index even in developed markets. A case in point is seen in Finland in 2001 when the largest stock Nokia took up an overwhelming proportion (70%) of the overall market cap (Figure 3). This made the OMX Helsinki25 index fall when the Nokia stock plunged (Figure 4).⁵⁾ This illustrates that doing nothing on the proportion of a single stock could feeble an index’s representativeness and make the index overly swayed by the particular stock.

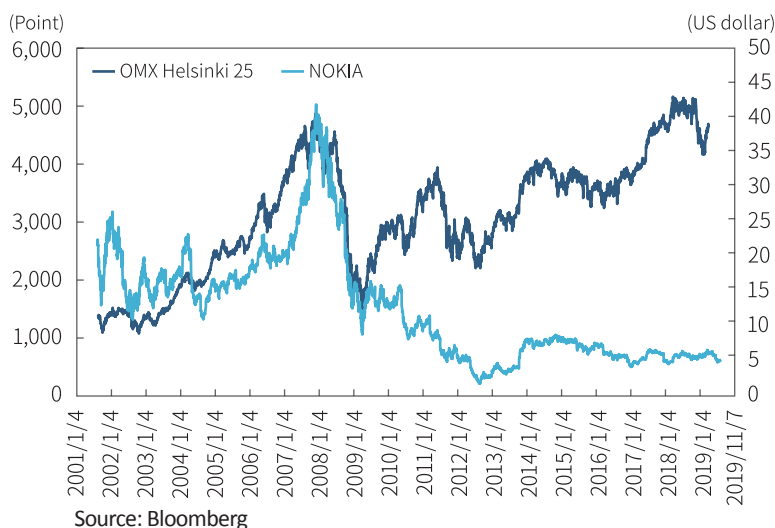
Figure 3. Proportions of the largest stock in 2001 vs. 2018



5) Since then, Finland has applied the 10% cap rule on major market indexes.



Figure 4. Nokia (RHS) and OMX Helsinki25 (LHS)



What the CFTC stock index criteria mean

The 30% cap rule of the KOSPI 200 index is somewhat consistent with the stock index derivatives regulation governed by the US Commodity Futures Trading Commission (CFTC). The CFTC governs derivatives on the broad-based stock indexes that meet certain conditions including the 30% cap on the proportion of the largest stock in an index. Although this is a criterion to determine oversight jurisdiction between the CFTC and SEC,⁶⁾ it’s worth noting that the 30% cap rule is used as a basic criterion for a stock index that qualifies for an underlying assets for derivatives.

Ever-rising importance of index business and operation

In conclusion, the adoption of the 30% cap rule of the KOSPI 200 index is convincing enough to satisfy the stock index’s representativeness and international compatibility. Rather, if excessive concerns over short-term price swings either push up or do away with the cap, this could give rise to a problematic situation shown in the Nokia case at worst.

Also worth mentioning is the ever-rising importance of index business with the recent

6) The US has two financial oversight bodies, the SEC and CFTC to govern the securities and derivatives markets, respectively. Each body’s jurisdiction wasn’t that clear before the 1982 Shad-Johnson Agreement. Since then, the CFTC has regulated derivatives on stock indexes that meet certain conditions including the proportion of the largest stock being less than 30%, whereas the SEC has governed derivatives on stock indexes that consist of less than 10 stocks, or that the largest stock takes up over 30% of the index’s market cap.



surge in issuance and trading of derivatives on stock indexes as well as ETFs. For Korea's capital markets to take another leap forward, it's desirable for the recent controversies over the 30% cap rule to facilitate more debates on how to improve the way indexes are operated, and what strategies an index business should take.