INDEX CONCENTRATION RISK FROM A MACRO PERSPECTIVE

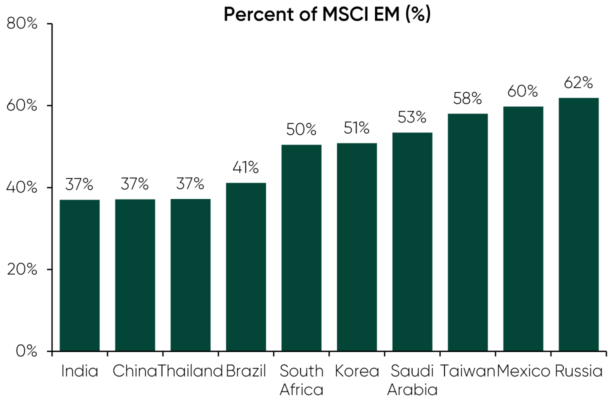
KEY POINTS

- The rise in the level of concentration within indices has investors concerned about the potential associated risks such as low active share, reconstitution risk, performance reversal and regulatory risk.
- Index concentration ebbs and flows as market leadership changes over time.
- Focusing on cyclicality of market is critical in navigating the various periods where indexes are more or less concentrated.

A CLOSER LOOK AT INDEX CONCENTRATION

In recent years, many investors have raised concerns about the level of concentration in various indices. The MSCI EM index, in particular, is even more concentrated and dominated by a small number of very large companies. In exhibit 1, we demonstrate this by showing the largest 5 equities by country for the top 10 markets. In this paper, we will explore why investors are worried about index concentration risk as well as analyse it from a top down, macro perspective.

Exhibit 1: MSCI EM Equity Concentration



Source: FactSet, as of Dec 2020. Sum of the largest five index constituent as a percentage of total index capitalisation in respective country.

THE RISK OF BEING 'TOO' CONCENTRATED WITHIN AN INDEX

At Fisher Investments (FI), we believe understanding index composition helps us discover opportunities to manage risk and achieve excess return. One of the risks of increasing concentration within MSCI EM index is less active share across a manager's portfolio of strategies. For a highly concentrated index, it can be very difficult to achieve a high level of active share because its calculation is dependent on the index chosen as the benchmark. Exhibit 2 shows index concentration levels for a variety of indexes and the average respective active share for asset managers who have selected these benchmarks. The table shows that as index concentration increases, active share tends to fall.

Exhibit 2: Index Concentration and Active Share

Index	Concentration Level: Top 10 Equity as % of Index	Peer Group: Total # of Active Strategies	Average Active Share
Russell 2000	4%	263	89%
Russell MidCap Value	6%	110	89%
Russell 2000 Growth	7%	190	87%
MSCI ACWI ex US	12%	188	86%
MSCI ACWI	15%	346	86%
MSCI Europe	19%	116	82%
Russell 3000	23%	137	77%
S&P 500	27%	328	73%
MSCI EM	28%	294	73%
Russell 1000 Growth	44%	271	62%

Source: eVestment, as of Dec 2020.

Additionally, a concentrated index is exposed to a more pronounced impact of index reconstitution risks. For example, in the event an EM country such as South Korea graduates to a developed index, all Korean equities would need to be removed and an index rebalance is triggered. While this risk of a large[1] EM country being upgraded to developed market exists, we believe it is a low probability event at this time. It takes an immense transformation from a regulatory and structural accessibility standpoint for an EM country to qualify.

South Korea, in particular, fails the accessibility criteria. The Korean won does not have the ability to trade outside of Korean business hours and can only be done with Korean legal entities. Expensive costs and fees associated with navigating the complex use of trading accounts also contribute to why the

[1] *South Korea (13.5%) is the second largest weight in MSCI EM as of Dec 2020*

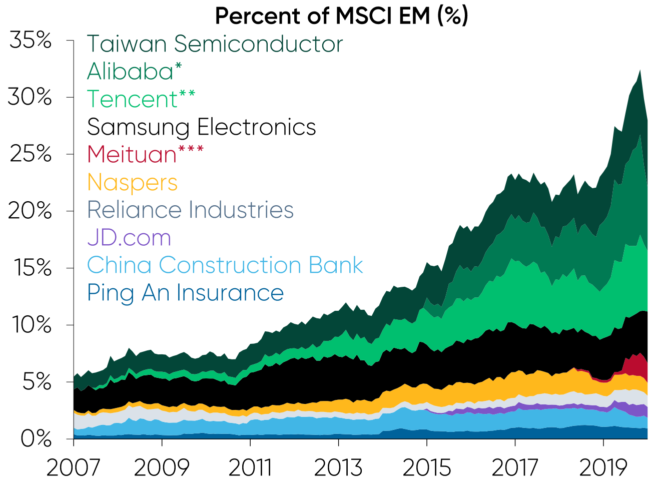
country still lacks accessibility. Some of these trading mediums that institutional investors utilize to manage their client accounts are even prohibited or difficult to access. Moreover, poor regulatory and governance issues related to the chaebol structure is still very much prevalent. South Korea's family controlled conglomerates, also known as chaebols, have severely limited minority shareholder rights, strangled competition and have frequently led to mismanagement.

Even if South Korea or other EM countries managed to make the necessary progressive and economic reforms to qualify for an index reconstitution, its impact would be short-lived. Countries upgraded typically outperform in the period leading up to the transition, but then find it hard to meet elevated expectations and subsequently underperform. Fundamentally, this generally occurs because markets price in future events, moving on the gap between reality and expectations. Early announcements of an index promotion elevate sentiment initially. However, as time passes and expectations move higher, positive surprise becomes increasingly difficult. This dynamic perhaps explains why it is so hard to leverage the optimism for index reconstitution for an extended period of time.

Furthermore, there is also the risk of a potential performance reversal should the leading category go on to underperform. Strong performance of a group of securities naturally leads to an increase in market capitalisation. Exhibit 3 shows the largest MSCI EM constituents' performance since 2007 (the year 2007 represents the previous late stage bull).

Exhibit 3: Largest MSCI EM Constituents

Security	Weight (%) Dec 2007	Weight (%) Dec 2020	Performance Growth
Taiwan Semiconductor	1.1%	5.9%	+985%
Alibaba*	1.2%	5.6%	+104%
Tencent**	0.2%	5.3%	+4588%
Samsung Electronics	1.8%	4.5%	+557%
Meituan***	0.0%	1.7%	+436%
Naspers	0.3%	1.1%	+1260%
Reliance Industries	1.3%	1.0%	+13%
JD.com	0.2%	1.0%	+90%
China Construction Bank	0.6%	0.9%	+11%
Ping An Insurance	0.4%	0.9%	+113%



Source: FactSet, USD, data from Dec 2007 to Dec 2020.
**Alibaba Group Holding was added to the index on Dec 2015.*
***Tencent Holdings was added to the index on Jun 2008.*
****Meituan was added to the index on Mar 2019.*

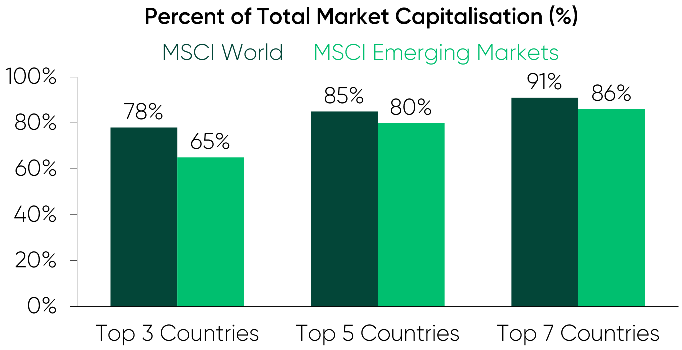
Naturally, leading categories that are too successful invariably will likely also receive regulatory attention. For example, in China, innovative technology companies have flourished via a largely unencumbered path. They have expanded in areas where regulations have not caught up. As a result, efforts such as anti-trust laws are some examples of regulators stepping in.

While regulatory risk exists, China's tech giants are still favoured as their "national champions" and represent China's successful modernization and growing global competitiveness. Also, the vast majority of the Chinese population depend on the services offered and are essential for daily living. However, the regulatory situation in China can change and become unfavourable so managers must frequently monitor the legal environment to help ensure that there is a balance between the risk and reward of investing in the leading categories within the index.

TOP-DOWN MARKET CYCLE ANALYSIS OF INDEX CONCENTRATION

With all of these concerns surrounding index concentration risks, is this really just an EM phenomenon? In analysing the MSCI World and MSCI EM index, we find that a few countries make up the majority of the market demonstrating that such concentration is relatively typical across both the developed and developing world. (Exhibit 4)

Exhibit 4: MSCI World & EM Country Concentration



Source: FactSet, as of Dec 2020.

Typically in the late stages of a bull market, market breadth decreases. Exhibit 5 demonstrates how index concentration as a measure of market breadth is usually low at the end of past bull cycles.

Exhibit 5: Market Breadth

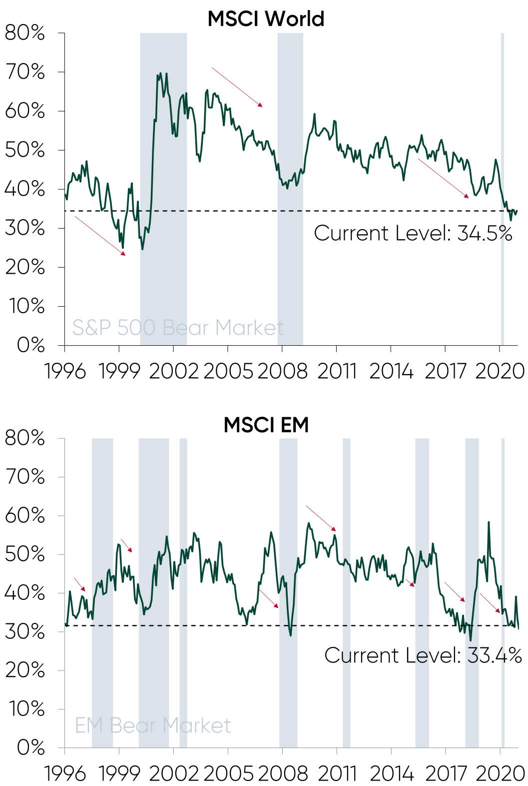
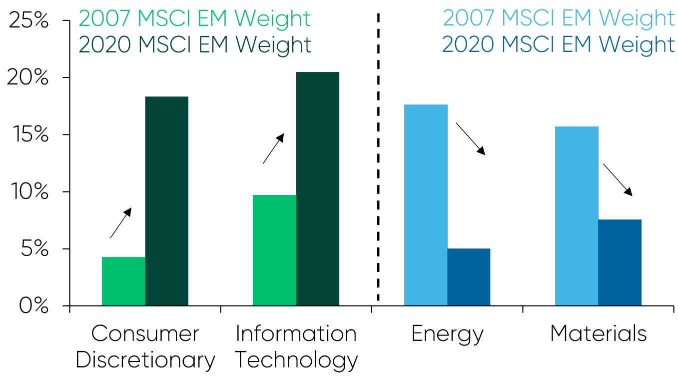


Exhibit 5 disclosures: see page 4

However, we do want to note that the most recent 2020 bear market is an exception. We have seen a strong recovery without a meaningful increase in market breadth nor the shift in leadership typical in nascent bull markets. Instead, market breadth has remained narrow, which supports our view that while the 2020 downturn is quantifiably measured as a bear, the market is behaving more consistent with a late-cycle environment. As such, the current level of index concentration is not uncommon when viewed from a top-down macro perspective.

Finally, if we compare the current market environment to the previous late stage bull experienced in 2007, we see some other similarities. Both late cycle periods saw significant sector concentration. Then, the concentrated sectors were commodity-oriented Energy and Materials, whereas now the concentrated sectors are more growth-oriented like Consumer Discretionary and Information Technology. (Exhibit 6) Rising sector concentration is typical in late stage bull markets, and the current environment appears to be no exception.

Exhibit 6: EM Sectors Over Time



Source: FactSet, USD, data as of Dec 2007 and Dec 2020.

CONCLUSION

As we have illustrated, index concentration is cyclical similar to capital markets. While this is not generally a concern, there are potential associated risks such as low active share, reconstitution risk, performance reversal and regulatory risk. As such, we would encourage investors to consider taking a top-down approach to better understand the drivers of index concentration.

DISCLOSURES

Source for Exhibit 5: Clarifi. MSCI World & MSCI EM constituent and headline index prices (monthly) using IDC price data from Jan 1996 to Dec 2020. Index constituents on a given date are from twelve months prior. Forward twelve month returns are then calculated and lagged to show them on a trailing twelve month basis.

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