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Asia-Pacific Portfolio Strategy

Korea: What if? Strong upside from potential MSCI DM reclassification and narrowing of valuation discount

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Korea's potential reclassification as a developed market is gaining traction. The Finance Minister and Korea Exchange Chairman have publicly advocated changes that specifically address impediments to MSCI upgrading Korea to developed market (DM) status. Also, there appears to be broad political consensus for the upgrade initiative given the election platforms of the major presidential candidates.

A potential MSCI upgrade to DM status would likely occur in 2024 at the earliest. For reclassification, a market needs to be on a watchlist for at least one year, following which MSCI gives investors lead time to prepare for changes in their benchmarks. If Korea addresses MSCI market accessibility concerns, it could be placed on the annual review watchlist this June.

A DM upgrade could prompt over $44bn potential incremental foreign investor portfolio flows. Large caps would likely benefit and the market's valuation discount could also moderate. Within the EM index, China, Taiwan and India would have weights increase most, with smaller markets having greater liquidity inflow effects.

Korea's persistent valuation discount may narrow. Korea's average discount vs. EM and DM is 16% and 36%, and is currently even wider at 21% and 47%. The discount can be explained by earnings volatility, medium-term growth and corporate governance, all of which are improving and argue for a higher rating.

Significant potential KOSPI upside if a DM upgrade occurs and the valuation discount narrows. Assuming foreign inflows of $40bn (2.3% of market cap) and a narrower DM discount of 30%, KOSPI could be 3760, 35% higher than the current level. This is a spot change: if this happens in two years' time and earnings grow 10% per year, KOSPI could reach 4500.

Korea's potential reclassification as a developed market is gaining traction

The long-standing issue of MSCI reclassifying Korea as a developed market is gaining prominence, in part because it is a feature in the upcoming 20th presidential election on March 9. The incumbent Democratic Party of Korea, whose presidential candidate is Mr . Lee Jae-myung, has a stated capital market policy of seeking inclusion of the Korean equity market in the MSCI Developed Market index. The opposition People Power Party, whose candidate is Mr. Yoon Seok-youl, has not formally stated this as a policy goal but has embraced various policies aimed at deregulation and private sector-driven growth. More concretely, Finance Minister Hong Nam-ki has announced proposed changes to Korea's foreign exchange regime that would address one of MSCI's principal concerns. Newsflow covering this topic has been intensifying, with the Korea Times, Korea Economic Daily, Reuters and Bloomberg all running stories on this topic in recent weeks.

These developments prompt a reassessment of the implications of a change in Korea's MSCI classification as well as the potential for a narrowing of the Korean equity market's persistent valuation discount to regional peers. In this report, we first set out the facts of the market's MSCI classification and then examine the possible benefits of a change to developed market status. We broaden the discussion to drivers of the valuation discount and examine developments in Japan that could serve as a guide to improving Korea's rating. **Although an MSCI upgrade and/or valuation discount narrowing are not likely in the near term, the likelihood of positive developments in the medium-to-longer run is increasing which in turn could have a significant positive impact on market returns.**

We quantify the potential impact of both increased foreign portfolio flows associated with a reclassification of Korea to developed market status and a narrowing of the market's valuation discount due to more stable earnings growth and improving corporate governance. **The combined effect, along with underlying earnings growth, could lead to upside potential of 30-60% on a 2+ year horizon.**

First, the facts

MSCI is a global leader in equity indexes, with $16.3tr in assets under management benchmarked to MSCI indexes and daily calculation of over 225k equity indexes. Each June, MSCI reviews its classification of roughly 80 markets following consultation with international institutional investors. In June 2021, 23 markets were classified as DM, 25 markets as EM, 21 markets as frontier, and 11 markets as standalone. Given the large amount of assets benchmarked to these categories, a shift in a market's classification can have a meaningful impact on portfolio flows into it.

For reclassification, a market needs to be on a watchlist for at least one year. Following consultation with institutional investors and appropriate response to areas of concern, MSCI may change the designation of a market, with lead time given to investors to prepare for the change in their benchmarks. Korea was first categorized as EM in 1992 and was on the watchlist for an upgrade to DM from EM status in 2008, but its status was not changed. It has been excluded from the watchlist since 2014 despite subsequent attempts in 2015 and 2019 to lobby for DM status. Of note, Korea is classified as a developed market in Dow Jones (1999), S&P (2008) and FTSE (2009) indices. If Korea is placed on the watchlist this June, it would likely not be included in the DM index until some time in 2024.

MSCI has 3 broad topics for considering a change in a market's status: economic development, the size and liquidity of the equity market, and market accessibility for foreign investors. For market accessibility, there are 5 criteria with 18 specific areas of focus. The criteria are openness to foreign ownership, ease of capital inflows/outflows, efficiency of the operational framework, availability of investment instruments, and stability of the institutional framework.

Korea clearly meets the requirements for developed market status in the first two criteria of economic development, and size and liquidity of its equity market. In 2020, its GDP/capita was $31,489 according to the World Bank, ranking 26th globally. By absolute GDP, Korea is the 10th largest economy at $1.8tr. Korea's equity exchange market capitalization is $2.3tr, the 12th largest globally, and average daily turnover is $22.7bn, the 5th largest.

However, Korea falls short on several key measures relating to market accessibility for foreign investors. The principal issues are a) no offshore trading of the Korean won; b) lack of English information disclosure and concerns over corporate governance; c) complex identification-related regulations for foreign investors, d) lack of omnibus trading accounts and limited ability to carry out in-kind transfers, and e) partial restrictions on short-selling.

Finance Minister Hong Nam-ki recently announced that Korean authorities may revise the Foreign Exchange Transactions Act for the first time since 1999 to allow easier foreign trade in the Korean won. The proposed changes to Korea's forex regime include lengthening FX trading hours from 9am-3pm to 9am-1am (Seoul time) and introducing an FX API (application programming interface) that would enable foreign institutions to trade KRW directly as opposed to effecting currency exchange through domestic banks. This change in policy is specifically aimed at addressing one of the long-standing impediments to Korea's DM reclassification by MSCI and signals policymakers' renewed focus on this issue.

In another sign of policymakers' focus on the domestic equity market attaining DM status, **Korea Exchange Chairman and CEO Sohn Byung-doo recently held a press conference to emphasize the need for full resumption of short-selling, which is one of the areas specifically cited in MSCI's June 2021 review of Korea**.

Exhibit 1: $16.3tr assets under management are benchmarked to MSCI indices

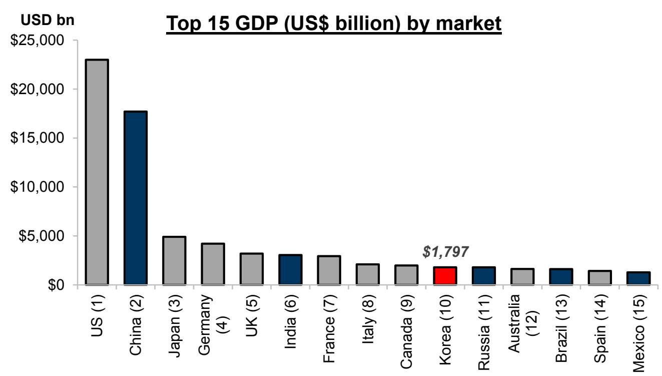
Fund AUM benchmarked to MSCI index

$ billion	Active	Indexed	Total
TOTAL	$11,762	$4,569	$16,331
ACWI	$4,458	$205	$4,663
EAFE	$1,395	$362	$1,757
EM	$1,444	$369	$1,813
World	$2,850	$643	$3,493
USA	$168	$464	$632
Europe	$602	$185	$787
Asia	$398	$504	$902
Other / Unclassified (incl. F&O)	$447	$1,837	$2,284

Source: MSCI, compiled by Goldman Sachs Global Investment Research

Exhibit 2: Korea meets the developed market standard on economic development...

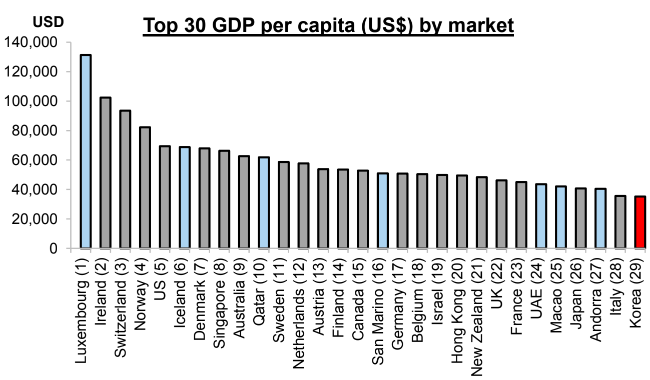
Grey highlights are MSCI Developed Markets



Source: Goldman Sachs Global Investment Research

Exhibit 3: ... by GDP per capita standard as well being ranked within top 30 countries

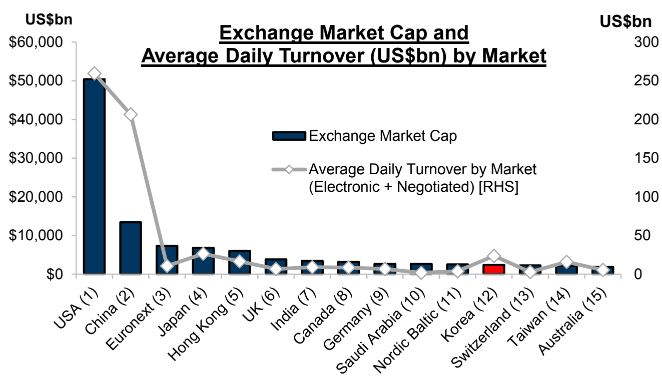
Grey highlights are MSCI Developed Markets



Source: IMF, compiled by Goldman Sachs Global Investment Research

Exhibit 4: Korea's equity market size and liquidity meet DM standards

Number in parentheses is ranking by exchange market size



Source: WFE, compiled by Goldman Sachs Global Investment Research

Exhibit 5: Korea falls short on several assessments relating to market accessibility for foreign investors

	Asia Pacific Emerging Markets									
Assessments	**China**	**China A**	**India**	**Indonesia**	**Korea**	**Malaysia**	**Pakistan**	**Philippines**	**Taiwan**	**Thailand**
Openness to foreign ownership										
Investor qualification requirement	**	-/?	*	**	**	**	**	**	*	**
Foreign ownership limit (FOL) level	-/?	-/?	-/?	**	**	*	**	-/?	*	-/?
Foreign room level	**	-/?	-/?	**	**	**	**	-/?	**	-/?
Equal rights to foreign investors	*	*	*	*	*	*	**	*	*	-/?
Ease of capital inflows/outflows										
Capital flows restriction level	**	-/?	**	**	**	**	**	**	**	**
Foreign exchange market liberalization level	**	*	-/?	-/?	-/?	*	*	-/?	-/?	*
Efficiency of the operational framework										
Market entry										
Investor registration & account set up	**	*	-/?	**	-/?	**	*	**	-/?	**
Market organization										
Market regulations	*	*	*	**	**	**	*	**	**	**
Information flow	**	*	**	*	-/?	**	**	**	*	**
Market Infrastructure										
Clearing and Settlement	**	-/?	-/?	*	-/?	**	-/?	*	-/?	*
Custody	**	**	**	**	**	**	**	**	**	**
Registry/Depository	**	**	**	**	**	**	**	**	**	**
Trading	**	**	**	**	**	**	**	**	**	**
Transferability	**	-/?	-/?	*	-/?	*	**	**	*	**
Stock lending	**	-/?	**	*	**	**	-/?	-/?	*	*
Short selling	**	-/?	*	*	*	*	-/?	-/?	*	*
Availability of Investment instrument	**	-/?	-/?	**	-/?	**	**	**	**	**
Stability of institutional framework	*	*	*	*	*	*	-/?	*	*	*

++: no issues; +: no major issues, improvements possible; -/?: improvements needed / extent to be assessed

Source: MSCI, compiled by Goldman Sachs Global Investment Research

Exhibit 6: Specific issues for Korea highlighted in MSCI's June 2021 market accessibility review

Comments on Korea from MSCI Global Market Accessibility Review	
Assessments	**Details**
Equal rights to foreign investors	- English information disclosure not always readily available; - Corporate governance standards of Korean companies often questioned by international institutional investors
Foreign exchange market liberalization level	- No offshore currency market
Investor registration and account set-up	- Mandatory registration and cumbersome paperwork
Information flow	- Korean companies disclose dividend amounts after ex-dividend date
Clearing and settlement	- Settlements on a per investor ID basis vs. omnibus account that enables consolidated trading orders
Transferability	- Limited ability to carry out in-kind transfers and off-exchange transactions
Availability of investment instruments	- Restrictions on the use of stock market data limit availability of investment instruments
Improvement	- Foreign Room Level: only KT Corporation has foreign room issues
Deterioration	- Partial restriction on short selling remains; no timeline for resumption

Note: Adopted from the MSCI publication as of June 2021

Source: MSCI, compiled by Goldman Sachs Global Investment Research

Implications of Korea's potential designation as a developed market

Korea's potential reclassification as a developed market has several noteworthy implications in light of the significant and differing amounts of assets benchmarked against DM and EM equity indexes. The most significant ones are a) additional foreign investor inflows; b) differential impact on Korean stocks (large caps likely to benefit); c) a narrowing of Korea's persistent valuation discount versus DM and EM equities; and d) weighting shifts within the emerging market index which could benefit other markets.

Over $44bn incremental foreign investor portfolio flows

Incremental inflows based on the quantum of assets benchmarked against the MSCI indexes could amount to $44bn, equivalent to 6 days of trading based on trailing 6m activity. Korea accounts for 12.0% of the MSCI Emerging Market index, so EM-focused investors would be forced to sell Korean equities. Based on $960bn assets benchmarked against this and related indexes, the outflows would be about $93bn. For developed market indexes, Korea's new DM weighting would be 1.6% in the World index, 4.9% in the World ex-US index and 5.4% in the EAFE index. Although the index weights are lower, the larger amount of DM-benchmarked assets (roughly $3.6tr) should drive $139bn inflows, leaving a net inflow balance of about $44bn. This figure could be larger to the extent that asset pools that are not directly benchmarked to MSCI indexes decide to purchase additional Korean equities.

Exhibit 7: Korea's potential reclassification as a developed market could result in $44bn incremental foreign portfolio inflows

MSCI regional index	Weight		MSCI flows (US$bn)			Days of buying/selling (flows/6-mo ADVT)		
	Current	Proforma	Passive	Active	Total	Passive	Active	Total
EM	12.0%	0.0%	-34	-55	-89	-5	-8	-14
EM Asia	15.3%	0.0%	-1	-1	-2	0	0	0
World	0.0%	1.5%	5	19	24	1	3	4
World ex US	0.0%	4.8%	1	7	8	0	1	1
World ex AU	0.0%	1.7%	0	0	1	0	0	0
World ex JP	0.0%	1.6%	1	0	1	0	0	0
Pacific	0.0%	14.2%	1	1	2	0	0	0
Pacific ex JP	0.0%	33.3%	6	0	6	1	0	1
EAFE	0.0%	5.3%	19	74	93	3	11	14
		Net flows:	**-2**	**46**	**44**	**0**	**7**	**7**

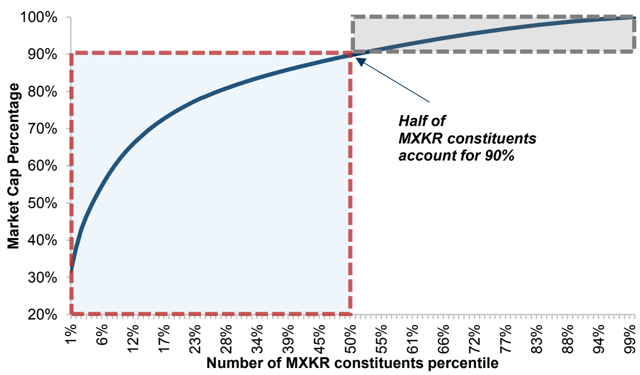
Note: Based on current MSCI constituents and pricing data as of 2/4/2022.

Source: MSCI, EPFR, Goldman Sachs Global Investment Research

Large caps likely to benefit at the expense of smaller caps

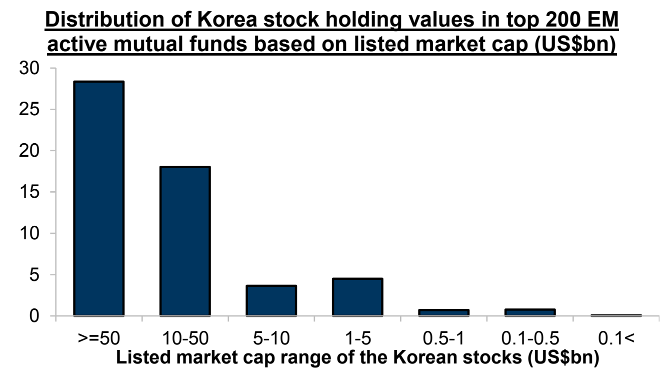
Portfolio flows related to Korea's potential upgrade to DM status are likely to favor large cap stocks. The simple reason is that Korea would have a small weight in the DM indexes, so portfolio managers may choose to fill their benchmark positions with large caps and be less inclined to venture down the cap spectrum. This may be encouraged by the concentration of market cap in larger companies: the top 20 stocks currently make up over 70% of the MSCI Korea index, and half the 110 index constituents comprise 90% of the index market cap. In contrast, EM-benchmarked investors likely have more exposure in smaller caps given Korea's larger weight in the EM index. Their selling may put additional pressure on smaller cap share prices.

Exhibit 8: Large caps may benefit at the expense of smaller caps if Korea is upgraded to DM status



Source: FactSet, MSCI, compiled by Goldman Sachs Global Investment Research

Exhibit 9: Smaller cap Korean stocks could come under pressure given distribution of active mutual funds holdings



Source: FactSet, MSCI, compiled by Goldman Sachs Global Investment Research

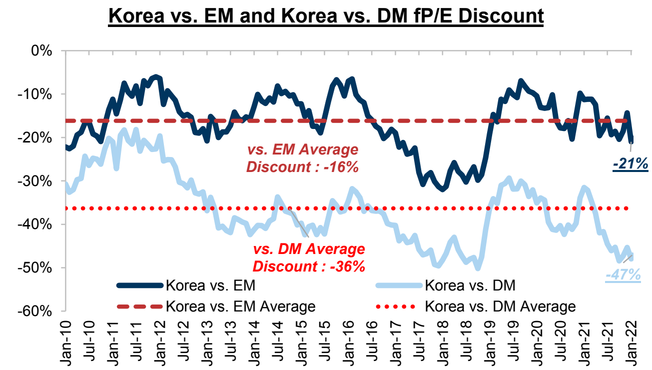
Moderation of Korea's valuation discount

Korea has traded at a persistent valuation discount relative to both the EM and DM universe. Over the past decade, Korean equities have traded at an average 16% forward P/E discount to the overall EM index and a 36% forward P/E discount to the DM index. The current valuation discounts are even wider: 21% for EM and 47% for DM.

We find it helpful to think of the Korea discount in 'alpha' and 'beta' terms. There is likely to be a generic benefit to market valuation from moving to the DM category given the higher valuation that DM tends to trade on compared to EM given its lower volatility and the larger pool of funds that tracks the DM universe. Moreover, the changes that MSCI requires in order to be considered for an upgrade to DM status will themselves likely reduce some investor concerns and prompt a virtuous feedback loop that could reduce the valuation discount. Over the past decade, the DM index has traded at a 15.9x average forward P/E while the EM index has traded at 11.6x (and Korea has traded at 9.7x). Changing Korea's status from EM to DM could therefore prompt an improvement in its rating.

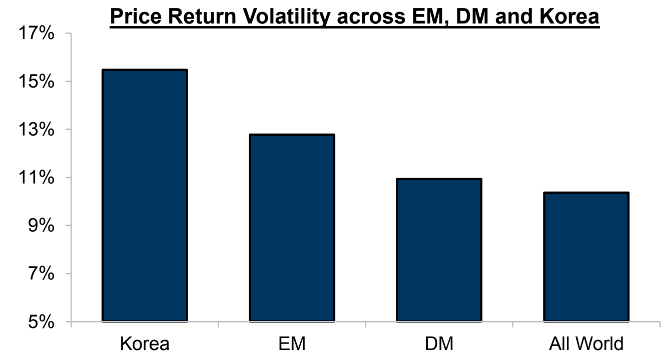
We assess the Korea-specific aspects of its valuation discount (the 'beta' aspect), how this might change and the potential impact on market returns in the next section.

Exhibit 10: Korea has traded at a persistent discount to both EM and DM indexes and currently trades below the average discount



Source: MSCI, FactSet, Goldman Sachs Global Investment Research

Exhibit 11: Korea's higher price return volatility than EM and DM indexes may help explain its valuation discount



Source: FactSet, MSCI, compiled by Goldman Sachs Global Investment Research

Other EM effects: China, Taiwan and India may benefit if Korea moves to DM status

Since Korea accounts for 12% of the MSCI EM index, its potential shift to DM status would impact the weights of the remaining EM markets and result in reallocation flows which could have a short-term positive trading impact. The most significant weighting changes would be for China (+4.4pp to 36.7%), Taiwan (+2.2pp to 18.1%) and India (+1.7pp to 14.2%). In terms of flows, the notable changes in terms of days of net buying would be in many smaller, less liquid markets, notably Philippines (9.4 days), Malaysia (7.2 days), Mexico (6.7 days), Saudia Arabia (5.7 days) and Indonesia (5.6 days).

In our recent global strategy paper *EM ex-China as a separate equity asset class*, we argued that investors should split their emerging market allocations into separate China and EM ex-China strategies. First, China has become so large and dominant that it merits its own distinct focus. Second, the case for a separate EM ex-China focus is strong, given its size and distinct exposure from Chinese equities. Third, investors may benefit from better risk management and a more efficient global portfolio if China and the rest of the emerging market complex are treated separately. This argument appears to be gaining traction, based on ensuing investor interaction.

For the EM ex-China markets, removing Korea would have an even more pronounced impact on weightings. The 3 largest impacts would be Taiwan (+5.0pp to 28.6%), India (+4.0pp to 22.4%) and Brazil (+1.4pp to 8.2%). We cannot accurately project flows given EM ex-China is not yet a widely adopted benchmark.

On a related note, **some investors have asked whether Taiwan might also soon follow suit if Korea moves to DM status. We view this as unlikely for several reasons.** First, MSCI removed Taiwan from consideration for inclusion in the DM index in 2014 and there has been no further discussion to review the market to DM status, due to the absence of any significant improvements in foreign investors' access to Taiwan's equity market. Second, the latest Taiwan assessment by MSCI highlights many impediments to DM status including the absence of offshore trading of the TWD and some lack of company-related information in English. Unlike Korea, there has been no sign from Taiwan authorities to address these issues. Last, Taiwan continues to be an emerging market under FTSE classification, so there is no indication that other index providers consider it in the DM category.

Exhibit 12: If Korea moves to DM status, China, Taiwan, and India may benefit from higher EM weightings and reallocation flows

MSCI Markets	Current weight		Proforma weight		Proforma weight chg		Potential flows from EM/EM Asia funds (US$bn)	Days of buying/ selling (Total flows/ 6-mo ADVT)
	EM	EM Asia	EM	EM Asia	EM	EM Asia		
EM Asia markets								
Korea	**12.0%**	**15.3%**	**0.0%**	**0.0%**	**-12.0%**	**-15.3%**	**-91.4**	**-13.5**
China	32.3%	41.4%	36.7%	48.9%	4.4%	7.5%	33.8	0.4
Taiwan	15.9%	20.4%	18.1%	24.1%	2.2%	3.7%	16.7	3.3
India	12.5%	16.0%	14.2%	18.9%	1.7%	2.9%	13.1	2.5
Thailand	1.7%	2.2%	2.0%	2.6%	0.2%	0.4%	1.8	1.8
Indonesia	1.5%	1.9%	1.7%	2.2%	0.2%	0.3%	1.6	5.6
Malaysia	1.4%	1.7%	1.5%	2.1%	0.2%	0.3%	1.4	7.2
Philippines	0.8%	1.0%	0.9%	1.1%	0.1%	0.2%	0.8	9.4
Other major EM markets								
Brazil	4.6%	-	5.2%	-	0.6%	-	4.6	1.5
Saudi Arabia	3.6%	-	4.1%	-	0.5%	-	3.7	5.7
South Africa	3.4%	-	3.9%	-	0.5%	-	3.5	4.2
Russia	3.3%	-	3.7%	-	0.4%	-	3.3	2.3
Mexico	1.9%	-	2.2%	-	0.3%	-	2.0	6.7

Note: Based on current MSCI constituents and pricing data as of 2/4/2022.

Source: FactSet, MSCI, EPFR, Goldman Sachs Global Investment Research

Exhibit 13: For the EM ex-China universe, weighting changes would be even greater if Korea moves to DM

MSCI EM ex China Markets	EM ex China	EM ex China & Korea	
	Current weight	Proforma weight	Proforma wgt chg
Korea	**17.7%**	**0.0%**	**-17.7%**
Taiwan	23.5%	28.6%	5.0%
India	18.4%	22.4%	4.0%
Brazil	6.7%	8.2%	1.4%
Saudi Arabia	5.4%	6.5%	1.2%
South Africa	5.0%	6.1%	1.1%
Russia	4.9%	5.9%	1.0%
Mexico	2.9%	3.5%	0.6%
Thailand	2.6%	3.1%	0.6%
Indonesia	2.2%	2.7%	0.5%
Malaysia	2.0%	2.4%	0.4%
United Arab Emirates	1.7%	2.1%	0.4%
Qatar	1.3%	1.5%	0.3%
Poland	1.1%	1.4%	0.2%
Philippines	1.1%	1.3%	0.2%
Kuwait	1.0%	1.2%	0.2%
Chile	0.6%	0.7%	0.1%
Hungary	0.4%	0.5%	0.1%
Turkey	0.3%	0.4%	0.1%
Greece	0.3%	0.4%	0.1%
Peru	0.3%	0.4%	0.1%
Colombia	0.3%	0.3%	0.1%
Czech Republic	0.2%	0.3%	0.0%
Egypt	0.1%	0.2%	0.0%

Note: Based on current MSCI constituents and pricing data as of 2/4/2022.

Source: FactSet, MSCI, EPFR, Goldman Sachs Global Investment Research

Assessing Korea's valuation discount

We consider a variety of factors that may help explain Korea's persistent valuation discount with the aim of identifying the changes that may help improve the market's valuation and quantifying the extent to which this might occur. To do so, we estimate a cross-sectional regression across 11 Asia-Pacific ex-Japan regional markets using earnings, corporate governance, political risk, shareholder return metrics and MSCI EM/DM status. The simplest result, which has both a high adjusted r-squared and intuitively correct signs for independent variables, includes EPS volatility, medium-term earnings growth and corporate governance. Simply put, **high earnings volatility (due to the Korean market's deep cyclicality), low medium-term earnings growth (nominal GDP with adjustment) and lower-than-regional average level of corporate governance explain about 85% of the equity market's valuation discount**.

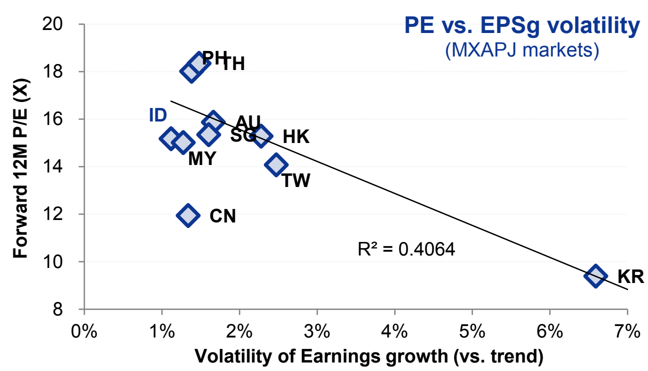
Exhibit 14: Medium-term EPS growth, EPS growth volatility and corporate governance explain Korea's valuation discount with statistical significance

Multi-factor Regression Statistics on APJ market P/E ratios

	Coefficients	*Standard Error*	*t Stat*	*P-value*
Intercept	-1.7396	3.7529	-0.4635	0.6570
Corporate Governance	18.3199	4.2174	4.3439	0.0034
Mid-term EPS Growth	1.0024	0.1825	5.4933	0.0009
EPS Growth Volatility	-0.6596	0.2932	-2.2499	0.0592
			R Square	89.3%
			Adjusted R Square	84.7%

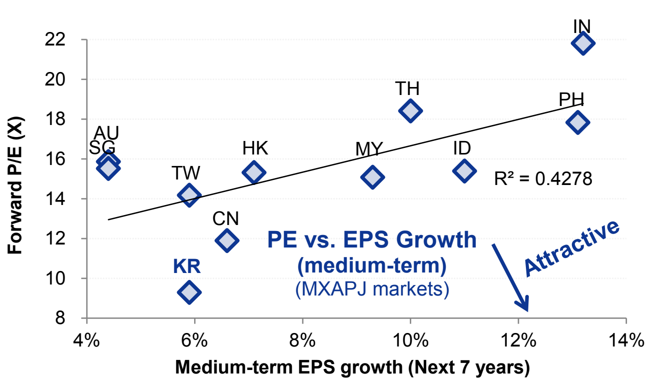
Source: Goldman Sachs Global Investment Research

Exhibit 15: Korea's earnings cyclicality helps explain its valuation discount



Source: FactSet, I/B/E/S, MSCI, Goldman Sachs Global Investment Research

Exhibit 16: Korea's lower medium-term earnings growth expectation partly explains its valuation discount



Source: FactSet, I/B/E/S, MSCI, Goldman Sachs Global Investment Research

Exhibit 17: Korea's corporate governance score is still relatively low among regional markets

Market	Score	Key Highlights
Australia	74.7	Banking commission spurs enforcement
Hong Kong	63.5	New audit regulator, enforcement remains strong
Singapore	63.2	Enforcement firming, rules improve
Taiwan	62.2	Big CG reform push but rules still complicated
Malaysia	59.5	Political turmoil erodes government scores, other areas hold steady
India	58.2	New audit regulator, civil society surges, public governance disappoints
Thailand	56.6	Political turmoil erodes government scores, rules strong
Korea	52.9	Public governance strengthens, CG disclosure improves, regulatory opacity
China	43	Forging its own governance path, still waiting for ESG reporting guidelines
Philippines	39	Investors and civil society disappoint
Indonesia	33	CG reform continues to struggle, some stronger rules, new e-voting system

Source: ACGA, compiled by Goldman Sachs Global Investment Research

How might Korea's valuation discount narrow?

Having identified the key variables that explain the market's valuation discount, we believe there are sound arguments- and prescriptions- for how the discount may narrow.

First, Korea has historically had high earnings volatility because its sector composition was weighted towards deep cyclicals including steel, shipbuilding and construction as well the omnipresent semiconductor sector (via Samsung Electronics). However, as we have previously discussed, Korea's listed equity composition continues to shift towards 4th industrial revolution sectors that have higher levels of secular growth and are less driven by short-term business cycles. For example, 6 of the top 10 index stocks were not in the top 10 (and some not even listed) in 2012. Moreover, the remaining ones have oriented their businesses towards higher growth areas, such as LG Chem (advanced materials) and Hyundai Motor and Kia Motors (EVs). **Taken together, this suggests that Korea's medium-term earnings growth may be both higher and less volatile than it has been in the past. As the market recognizes this, the valuation discount should narrow**.

Exhibit 18: The top 10 KOSPI index stocks have evolved toward the new economy from the old economy

(1) Grey highlights are not in the latest top 10 while skyblue highlights are newly added top 10 constituents; (2) The numbers in parentheses are weights from the total index cap

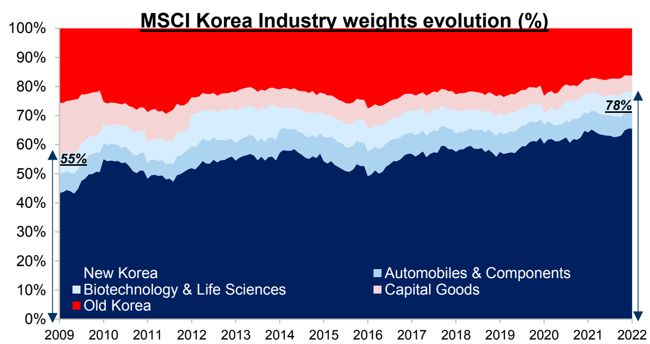
Top 10 KOSPI Index Stocks in history

2002	2012	2022
Samsung Electronics (18)	Samsung Electronics (15)	Samsung Electronics (21)
SK Telecom (8)	Hyundai Motor (4)	LG Energy Solution (6)
Kookmin Bank (6)	POSCO (3)	SK Hynix (4)
KT Corporation (5)	Hyundai Mobis (3)	NAVER (3)
Korea Electric Power Corporation (5)	KIA Motors (2)	Samsung Biologics (2)
POSCO (4)	LG Chem (2)	LG Chem (2)
Hyundai Motor (2)	KOREA SHIPBUILDING & OFFSHORE ENGINEERING (2)	Hyundai Motor (2)
Shinhan Financial Group (2)	Shinhan Financial Group (2)	Kakao (2)
LG Electronics Investment (2)	Korea Electric Power Corporation (2)	Samsung SDI (2)
Samsung Electro-Mech (1)	Samsung Life Insurance (2)	KIA Motors (2)
54%*	37%*	46%*

** The last row with black highlight is total weight for the top 10 stocks*

Source: Bloomberg, KRX, compiled by Goldman Sachs Global Investment Research

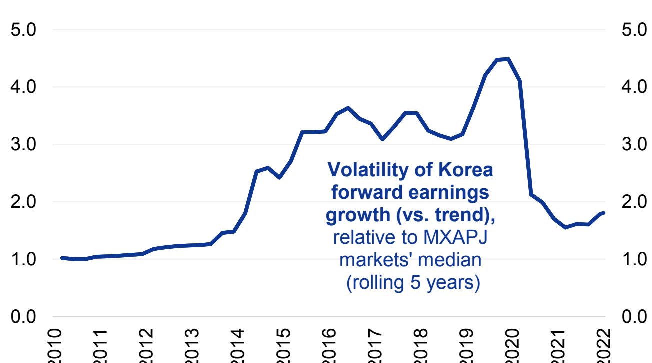
Exhibit 19: Korea's sector composition is now heavily skewed towards the 4th industrial revolution and New Korea activities



Note : 1) New Korea includes tech,semi, materials, software and media&entertainment
2) Old Korea includes the rest of industry groups except Auto, Bio and Capital Goods

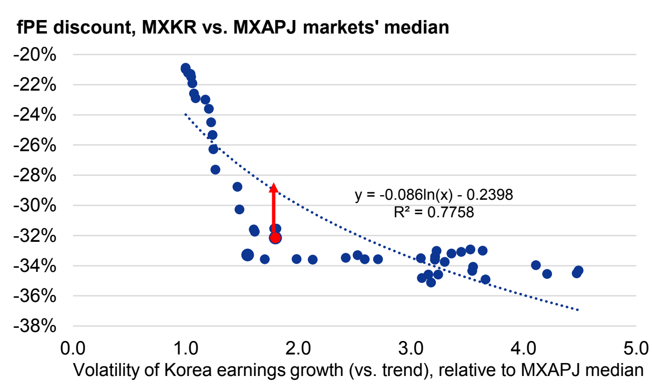
Source: FactSet, MSCI, compiled by Goldman Sachs Global Investment Research

Exhibit 20: Korea's earnings cyclicality relative to the region is moderating, reflecting the compositional shift towards higher and more stable growing sectors



Source: DataStream, MSCI, I/B/E/S, Goldman Sachs Global Investment Research

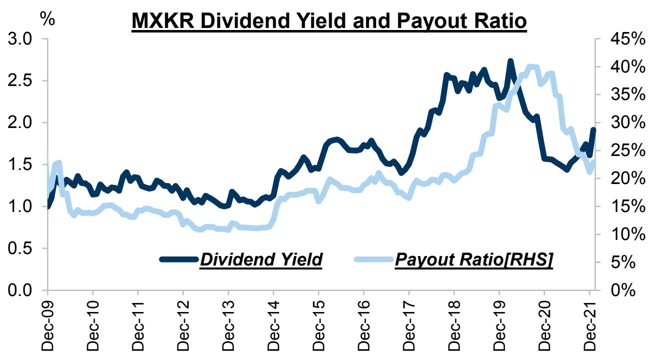
Exhibit 21: Lower volatility of Korean earnings indicates a 3pp narrowing of the P/E discount to the region



Source: DataStream, MSCI, I/B/E/S, Goldman Sachs Global Investment Research

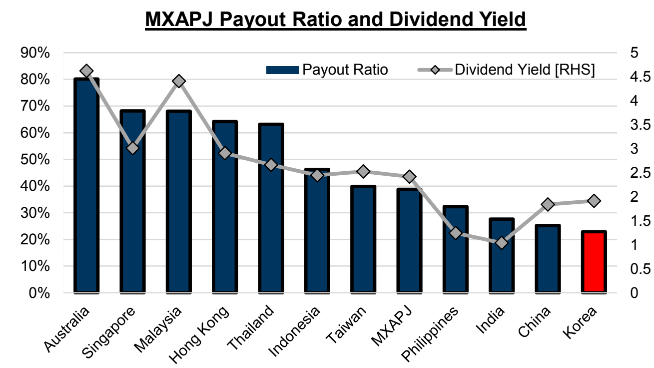
Second, **Korea's corporate governance- although at the low end of the regional range- has improved and may continue to do so**. In the Asia Corporate Governance Association biannual review, Korea's total market score improved nearly 7 percentage points from 46.2% in 2018 to 52.9% in 2020, although it remained in 9th place out of 12 markets. At the company level, the payout ratio has increased from about 10% in 2014 to the mid-20s currently and the dividend yield has risen from 1% to 2%. The payout ratio is still the region's lowest but the direction of change is encouraging and shows a greater focus on shareholder return, which may support valuations.

Exhibit 22: Korea has increased its payout ratio and dividend yield, but...



Source: FactSet, MSCI, compiled by Goldman Sachs Global Investment Research

Exhibit 23: ... the market still trails regional peers



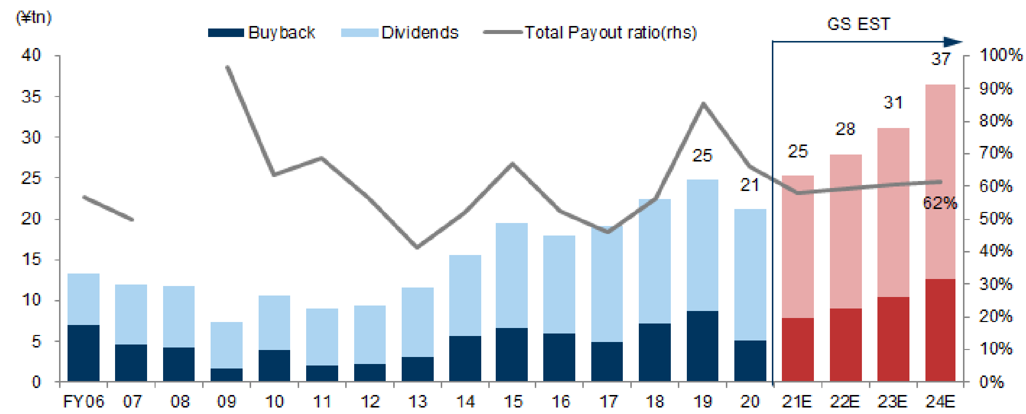
Source: FactSet, MSCI, compiled by Goldman Sachs Global Investment Research

Japan case study

Japan may serve as a helpful case study of how corporate governance can improve and shareholder returns increase. In the forthcoming Tokyo Stock Exchange revamp which takes effect 4 April this year, the exchange will transition to three separate markets: Prime, Standard, and Growth. The requirements for listing on the Prime Market will be more stringent than the ones for the current TSE first section, with a focus on corporate governance. This includes complying with a revised Corporate Governance Code that has 83 principles and sets standards for independent directors, diversity and English disclosure materials, and also calls for companies to indicate the policy underlying their business portfolio, with a focus on ROE and profitability at business units.

Japan's listed company focus on shareholder returns has also improved. Total returns via dividend and buybacks have increased from an average of roughly JPY11tr between FY2006-2014 to an estimated JPY25tr in FY2022 and a further improvement to JPY 37tr in the next 3 years. The total payout ratio has risen from below 50% to over 60% and return on equity has also gradually improved from persistently low single digits to the 8-10% range in recent years. **This fact pattern may serve as a useful template for how Korea can improve its shareholder focus and thereby improve its valuation**.

Exhibit 24: Japan's listed companies have increased their total returns to shareholders through both dividends and buybacks



Source: Company data, Goldman Sachs Global Investment Research

To quantify the potential impact on the Korean equity market's valuation, our model suggests that 10% improvements in medium-term earnings growth, earnings volatility, and corporate governance score could lead to a 2.9 P/E point increase (from 9.6x to 12.5x) or a 30% valuation increase. We emphasize that this is not a forecast but an indication of the potential improvement in the equity market's rating if improvements in these important fundamental factors occur.

Exhibit 25: Our model suggests that 10% improvements in medium-term earnings growth, earnings volatility and corporate governance score could lead to a 2.9 P/E point increase

Multi-factor Regression Statistics on APJ market P/E ratios

	Coefficients	Standard Error	t Stat	P-value	Improvements	Multiple Contribution
Intercept	-1.7396	3.7529	-0.4635	0.6570	-	-
Corporate Governance	18.3199	4.2174	4.3439	0.0034	+10%	1.8x
Mid-term EPS Growth	1.0024	0.1825	5.4933	0.0009	+10% of Mid EPS Growth	0.6x
EPS Growth Volatility	-0.6596	0.2932	-2.2499	0.0592	-10% decline of EPS vol	0.5x
			R Square	89.3%	Additional Multiple	+2.9x
			Adjusted R Square	84.7%	Potential Multiple	12.5x

Source: Goldman Sachs Global Investment Research

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Reg AC

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