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Japan Macro and Strategy | Japan

A Revitalised Japan

Japan is moving towards a new equilibrium of sustained, moderate inflation and stronger nominal GDP growth. A more capital efficient and dynamic corporate sector is emerging and will propel the economy forward. Its transformative efforts will continue to uplift sustainable ROE and valuations.



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Preface

The transformation of Japan's macro and markets provides global investors with a unique opportunity on a global scale. We see a generational shift towards a stronger economy and a healthier corporate sector. These self-reinforcing cycles bring positive benefits all around – for companies, consumers, governments, and investors.

There are multiple paradigms that are shifting in Japan simultaneously. These shifts have come through in macroeconomic policy, corporate governance, technology, industrial structure, labor markets, financial markets and global supply chains.

At a macro level, the most visible change has been the Bank of Japan's exit from negative interest rates and its underpinnings in the form of a positive wage-price cycle that has emerged for the first time in 30 years. But it is also visible in how policy makers are combining monetary, fiscal, trade, and industrial policy together to lift economic productivity and enhance sustainability.

There has already been a remarkable turnaround story in corporate return on equity, and we believe this will keep on rising. Corporates are casting aside what used to be well-established practices of no wage hikes and no price increases, and what is emerging is a vibrant and dynamic corporate sector. Firms are proactively addressing diversity, non-financial disclosures, and sustainability. Supply chains are shifting in response to geopolitical, technological and climate changes. This portends new and complex disruptions but presents opportunities.

Financial markets are entering a new era. As inflation rises, the need for higher returns is self-evident, which will continue to support demand for risk assets. Moreover, as consumers enjoy longer life expectancy, they are demanding better and cheaper financial services. New Nippon Individual Savings Account (NISA) is emerging as a key policy tool in helping to shift investment preferences away from cash. Asset management is likely to become a key growth area in financial services, with broader growth and funding impact for the economy in future.

At Morgan Stanley-MUFG Securities, we will continue to bolster the exchange of people, capital, and ideas between Japan and the world. This report is a reflection of that collaboration – how we make sense of the paradigm shifts, what they mean for the global investor and, more importantly, where Japan is headed next. We hope this report can help investors everywhere navigate the next phase of Japan's resurgence.

Magdalena Stoklosa

Director of Asia Research

May, 2024

Executive Summary

A paradigm shift, a stronger equilibrium

A generational shift in Japan's macro and markets is underway: Nominal GDP growth and equity indices have reached multi-decade highs, while ROE and productivity have been consistently improving. This has been achieved by a confluence of favourable domestic policy setup and conducive global backdrop, where real rates remain well below GDP growth, and micro reforms will continue to drive ROE higher. Corporates are casting aside what used to be well-established practices of no wage hikes and no price increases. The shackles are off and what is emerging is a vibrant and dynamic corporate sector. We are entering a new phase of the journey, and as this new, stronger equilibrium is sustained, it will be key to convince the wider investor community to engage even more with Japan's macro and markets. That is the crux of this collaborative report between macro, strategy and analyst teams, and in many ways continues our work on Japan's reflationary journey since our 2018 report, [Japan's Journey from Laggard to Leader](#).

This cycle is indeed different: Every 10 years or so, a wave of excitement starts to build around Japan, touting the many virtues and positives that Japanese markets offer. This time around, with a bigger run-up in asset markets and arguably even more excitement around Japan than in past cycles, some skeptics are still arguing that this run, just like others before it, will fade. We have been bullish on Japan for some time now, and while there are fewer skeptics, there is still a debate about whether this strong performance can be sustained.

This run can be sustained: We conclude that the current setup marks a clear departure from the low nominal growth, deflationary macro environment that has prevailed for much of the past three decades. Yes, we have had bouts of inflation before in previous cycles but nothing quite like this. As of Mar-24, headline CPI inflation has been at or above 2% for the past 24 months. In the preceding 30 years (1992-2022), headline inflation was at or above 2% for just 27 months. At an average of 4.5%, 2023 and 2024 will be the best two years of nominal GDP growth since 1991.

A paradigm shift towards a stronger equilibrium: There are many key elements which contribute to why we have been bullish and why Japan is moving towards a new, stronger equilibrium. Inflation is sustaining at a moderate level, wage growth is at a 30-year high, the wage-price pass-through is picking up to healthy levels, and nominal GDP growth has been at a 32-year high. Nominal GDP growth will be sustained at around 2.5% over the medium term, in our view. We project that real wages will grow at 1.2% annually over the medium term, instead of stagnating as they used to. The return on equity has been improving, and a better domestic macro environment and continued corporate governance reforms mean ROE will likely keep rising.

Japan remains best-in-class opportunity – staying with our overweight Japan equities stance: Five years ago, we surmised that Japanese equities were the most under-appreciated turnaround story in global equities [[Japan Macro and Strategy: Japan's Journey from Laggard to Leader \(11 Sep. 2018\)](#)]. Our thesis on Japan equities is now more widely accepted, but we continue to have Japan equities as the top pick market across our

coverage in Asia / EM and **have raised our TOPIX target from 2,800 to 3,200 (+17% versus spot)** now for mid 2025. Earnings revisions and EPS growth are likely to remain robust with our new base case forecast for TOPIX EPS growth above consensus at +15% (in Yen) in calendar year 2024, followed by two further years of double digit percentage growth. This is likely to drive ROE to our target of 12% by end 2025, or 3x the level in 2012 when the Abenomics reforms began.

Exhibit 1: A revitalised Japan: Our key takeaways and forecasts

We expect **nominal GDP growth** to sustain at **2.5%** over the medium term, structurally higher than the 1.6% averaged in 2013-19.

Inflation will be sustainably higher at the **1.5-2% range** going forward, vs. the meagre 0.5% recorded during 2013-19.

Strengthening pass-through between wages and prices will support this new equilibrium of moderate inflation. **Wage growth** will rise to **~3%** by the Summer, a level not seen since 1992.

Japan's favorable macro backdrop, anchored by the historically wide gap of **-410bps between real rates and real GDP growth ($r-g$)**, will continue to remain accommodative.

We see the secular bull market in Japan equities continuing, with **ROE** converging with the global average at **12%** by end-2025, vs. 9.7% currently.

We continue to strongly prefer Japan to overall EM equities, with our base case **TOPIX target** suggesting another **17%** upside from hereon out, or 35% in our bull case.

We expect Japanese **bank ROEs** to improve to double-digit growth over the medium-term (from 6-7% currently), led by higher rates, overseas growth and better cost management.

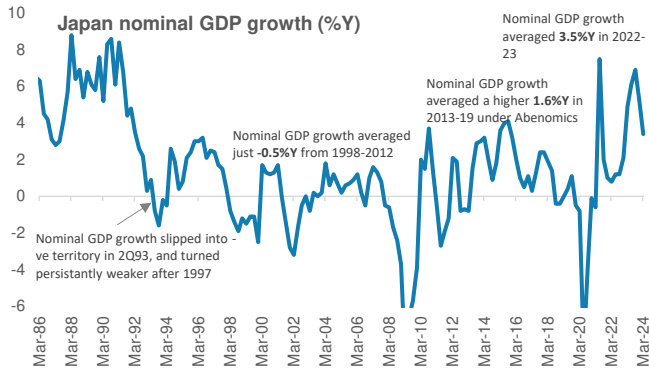
After years of stagnation, Japan's **wealth market** is expected to grow at an annual compound rate of **5%** through 2030, a pace which is in-line with the US.

We see Japan becoming a leader in areas of the **semiconductor manufacturing** supply chain. This would represent a **US\$108bn opportunity** by 2030, **3X** the current size.

Source: Morgan Stanley Research

Key Charts – Why Today's Japan is Different From The Past

Exhibit 2: Nominal GDP growth near a 32-year high



Source: Haver, Morgan Stanley Research

Exhibit 3: Nominal GDP to exceed 600 trillion yen in 2024

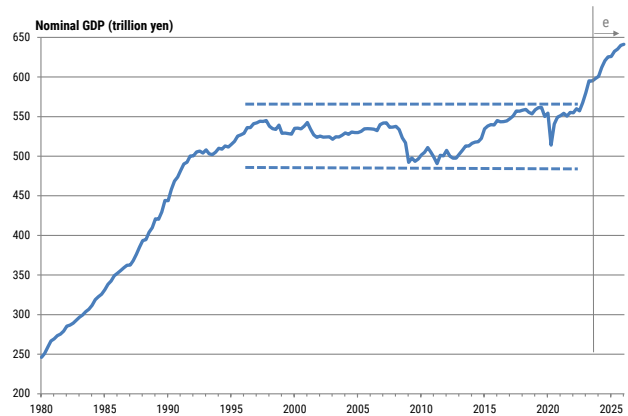
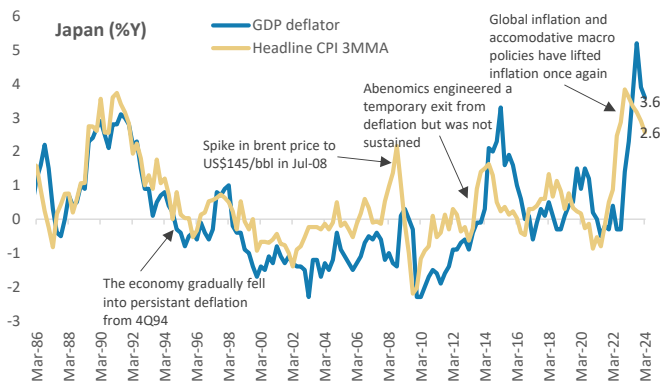
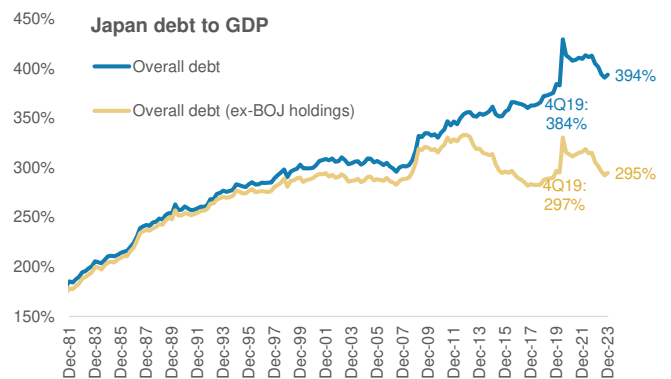


Exhibit 4: Accommodative macro policies and global reflationary environment have lifted the economy out of deflation



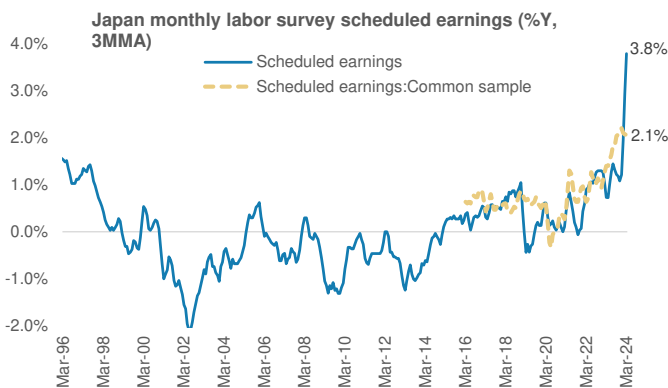
Source: Haver, Morgan Stanley Research

Exhibit 5: Overall debt to GDP excluding BOJ holdings has declined to below pre-Covid levels



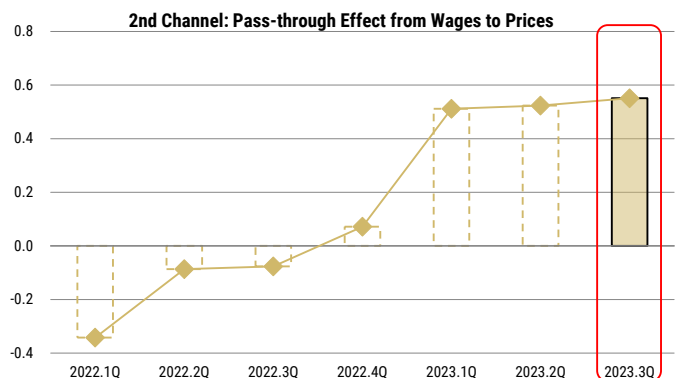
Source: Haver, Morgan Stanley Research

Exhibit 6: Pickup in wage growth to sustain the next phase of reflation



Source: Haver, Morgan Stanley Research

Exhibit 7: Signs of strengthening of pass-through from wages to prices



Note: estimated sensitivity of inflation in response to a 1% wage increase shock. With dotted bar, it is not statistically significant. Solid yellow bar shows its statistical significance. Source: Morgan Stanley Research estimates

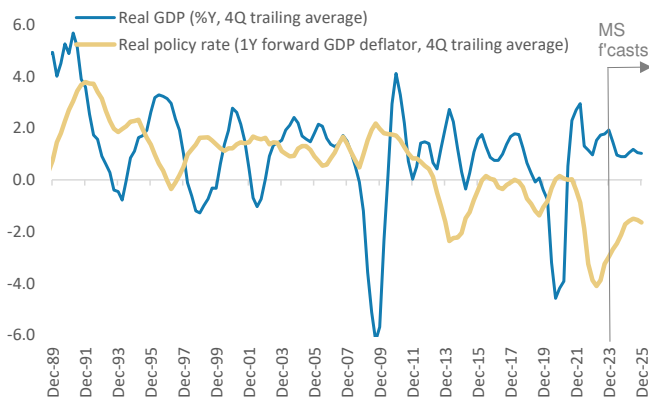
What sustains the positive narrative on Japan?

Maintaining a favourable *r-g* dynamic is key for a conducive macro backdrop: Over the years, we have been consistently highlighting our framework that in the context of a debt-deflation challenge, the critical thing is to manage real rates meaningfully lower relative to real GDP growth (*r-g*) for a sustained period. The gap between real rates and economic growth is a measure of the level of accommodation that the policy setup is providing and captures how quickly debt will grow in relation to GDP. If real rates are lower than real growth, deleveraging (i.e. debt to GDP ratios move lower) can take place even without any actual reduction in total debt outstanding. Our [previous work](#) suggests that maintaining a gap of at least 200bps has been vital in successful reflation and deleveraging of economies. In turn, this means enacting monetary and fiscal easing in a coordinated manner. But achieving this is not a straightforward endeavour, as we have seen from history in Japan and elsewhere in the world.

Accommodative domestic policy setup...: But in Japan now, the gap between real rates and real GDP growth on 4Q trailing average basis is the widest it has been in over 30 years at -490bps (i.e., real growth is above real rates). This compares with a gap of just +40bps between 1990 to 2012. In 2013, after Abenomics was introduced, the *r-g* gap moved to -360bps. But over 2014-19, the gap averaged -150bps in 2014-19. While this was an improvement compared to 1990-2012, it was nonetheless not sufficient to stimulate the economy to get inflation back up to 1.5-2%.

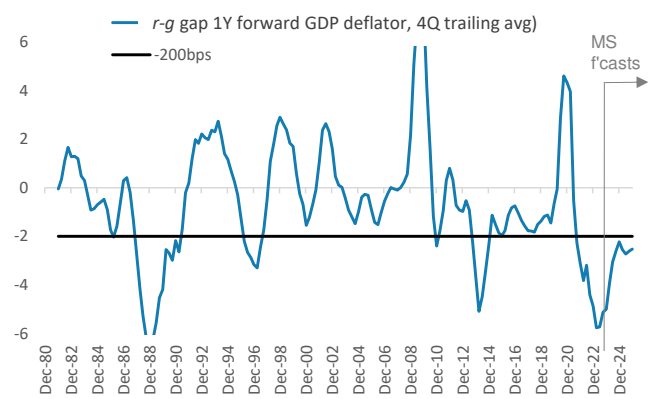
The result of the *r-g* dynamic improvement, which we are witnessing now, is a structurally stronger nominal GDP growth environment, which in turn unlocks features of a functional economy that were absent before. Corporate profits are being boosted and animal spirits are being revived. We see a renewed rise in Japan's net capital stock, which had stalled in recent years due to the Covid shock (after inflecting from 2013 with Abenomics). We believe that policy makers will continue to maintain an enabling macro environment by keeping both monetary and fiscal policies accommodative, which will be complemented by the benefits provided by micro reforms.

Exhibit 8: *r-g* dynamics have now improved...



Source: Haver, Morgan Stanley Research forecasts; Note: We expect BOJ to hike by 15bps in Jul-24 and another 25bps in Jan-25.

Exhibit 9: ...and are sustaining at accommodative levels



Source: Haver, Morgan Stanley Research forecasts

... and global factors remain supportive: The structural shift in other DM economies, particularly the US has also helped in this cycle. Since 2013, there had already been an improvement in inflation dynamics, but the global backdrop prevented a return to

moderate and sustainable levels of inflation. Then, most DM economies were stuck in low inflation and while the BOJ had embarked on an expansionary monetary policy – it was still not quite enough. This time around, the external environment is also conducive. US growth has remained robust, supporting Japanese exports and Japanese businesses with exposure to the US. More importantly, our forecasts are that the Fed is also no longer returning to a low policy rate environment, presenting a positive backdrop for Japan.

The upshot – a virtuous cycle is taking hold: A favourable $r-g$ gap at the starting point has led to an initial rise in wages, which in turn has passed through to prices. As inflationary forces take hold, they are catalysing animal spirits, revitalizing the corporate sector. We expect inflation to stay in the 1.5-2.0% range sustainably and nominal GDP growth to average 2.5% going forward compared with 0.5% and 1.6%, respectively, during 2013-2019.

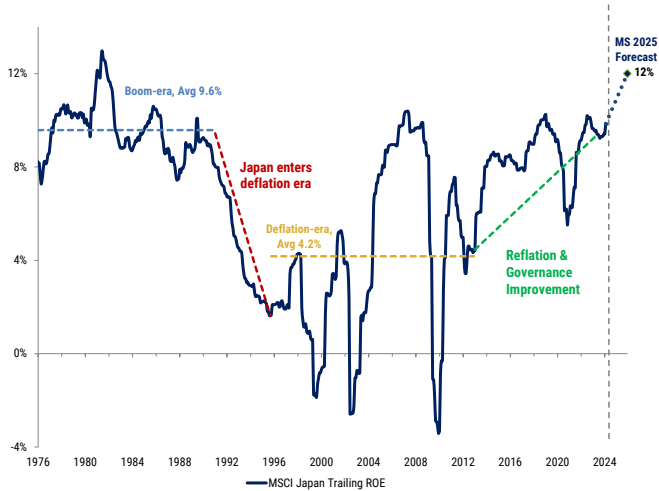
Markets – the greatest turnaround story in global equities

Secular bull market to continue: Five years ago, we surmised that Japanese equities were the most under-appreciated turnaround story in global equities [[Japan Macro and Strategy: Japan's Journey from Laggard to Leader \(11 Sep. 2018\)](#)]. After the strong run, our thesis on Japan equities is now more widely accepted. We expect the secular bull market for Japan equities to continue, underpinned by a virtuous circle of rising ROE, strong EPS growth and valuation re-rating. The exit from deflation and stronger nominal GDP growth will drive an improved top-down environment for corporations from an asset utilization perspective, whilst bottom-up the major corporate governance reforms will improve capital allocation and returns, in our view.

Japan stays as the top pick across Asia / EM: In our mid-year Outlook, we reiterated Japan equities as the top pick market across our coverage in Asia / EM and we raised our TOPIX target from 2,800 (prior forecast for year end 2024) to 3,200 (+17% versus spot) now for end June 2025. Earnings revisions and EPS growth are likely to remain robust, with our new base case forecast for TOPIX EPS around 5 ppt above consensus at Yen 185 (+15%) for calendar year end 2024, followed by two further years of double digit percentage growth. This is likely to drive ROE to our target of 12% by end 2025, or 3x the level at the launch of Abenomics in early 2013. The factors supporting this bullish view include: 1./ Higher trend growth in the US (over 20% of revenues for Japan equities), 2./ sustained domestic nominal GDP growth, 3./ a weaker profile than previously for the USDJPY (now expecting USDJPY at 146 by 4Q24 and 140 by 2Q 2025) and positive leverage to the Multipolar World and AI thematic.

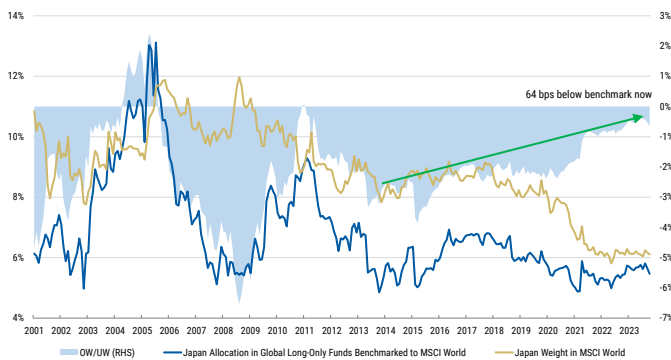
Our base case target P/E multiple remains 15.0x, driven by further up-weighting from foreign investors as well as inflows from Japan's revised Nippon Individual Savings Account (NISA) scheme, which got off to a strong start earlier this year. Whilst hedging Yen weakness (USDJPY strength) has been a winning strategy year to date, we recommend caution going forward on this front for USD-based investors. This is given the balance of risk towards lower USD/JPY from recent overbought levels and in the context of recent intervention by the Japanese authorities.

Exhibit 10: Profitability regimes for MSCI Japan - We see a new era of more ROE-focused corporate management approaches, lifting ROE to a sustainable 12% from FY2025 onwards



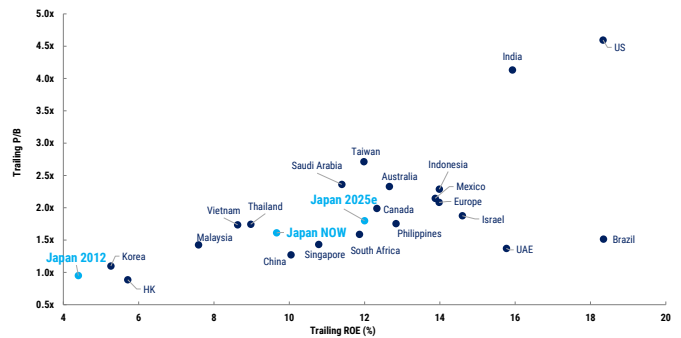
Source: FactSet, MSCI, Morgan Stanley Research; Data as of April 2024

Exhibit 12: Investor positioning for Japanese equities has risen



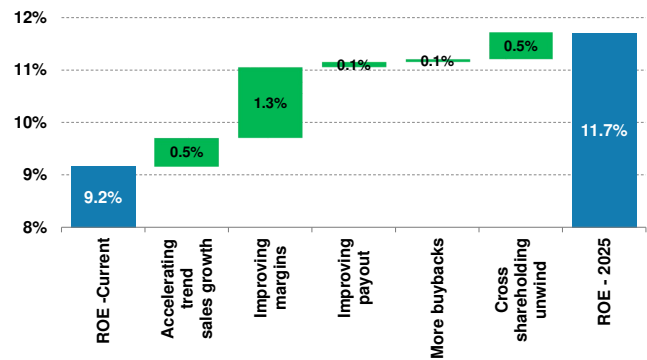
Source: EPFR country allocation, FactSet, Morgan Stanley Research. Data as of March 2024. Note: EPFR survey does not capture all funds, and total net assets for global long-only funds benchmarked to MSCI World captured by EPFR amount to US\$522bn as of end March, 2024.

Exhibit 11: Global P/B vs ROE map – We see Japanese equities justifying a further re-rating on the basis of higher sustainable profitability



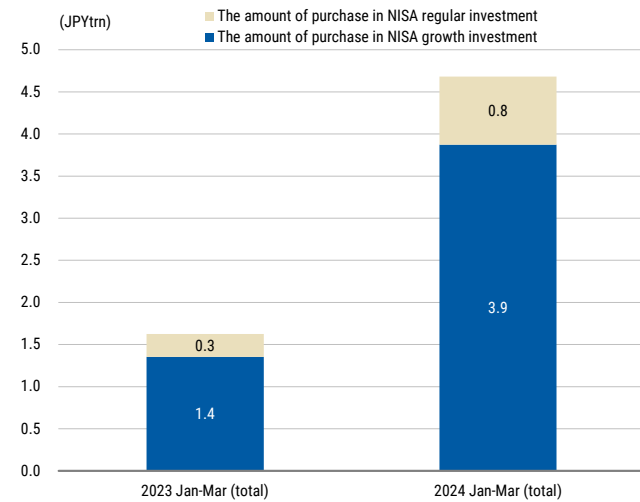
Source: FactSet, MSCI, RIMES, Morgan Stanley Research. Data as of May 16, 2024. Note, MSCI indices used for each market

Exhibit 13: Decomposition of ROE Journey – We see Japan ROE improvement supported by all five underlying drivers



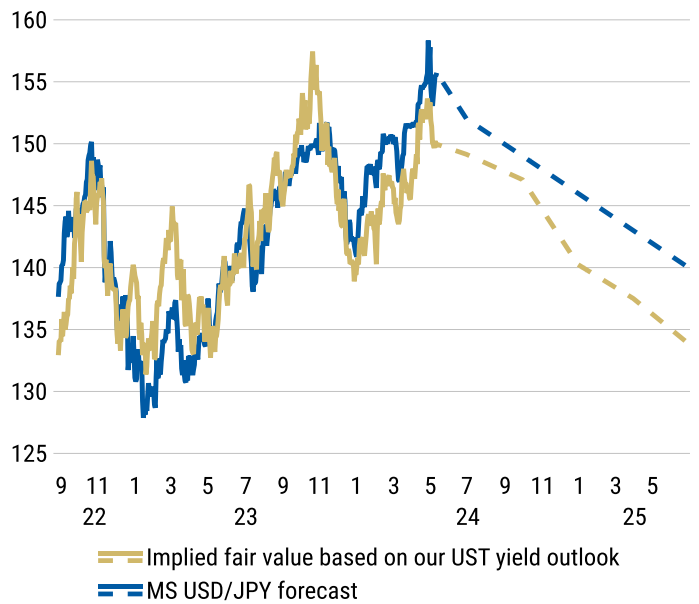
Source: MSCI, Factset, TSE, Bloomberg, Morgan Stanley Research. 2025 = March 2026 fiscal year

Exhibit 14: Recent NISA reform supportive for Japan equities



Note: Figures based on growth investment vs. regular "tsumitate" NISA investment in 2023 and regular investment vs. regular investment in 2023; %up/down based on actual values and may not match the calculation results; 2023 general NISA purchase includes amount received due to rollover. Source: Japan Securities Dealers Association, Morgan Stanley Research

Exhibit 15: We see a gradually lower USD/JPY trajectory driven by the Fed rate path



Source: Morgan Stanley Research, Bloomberg

Macro powers micro

Still much to play for: We see plenty of factors to drive the next phase. **First**, with the acceleration of nominal wage growth and normalization of inflation, we expect real wage growth to improve which will benefit several key sectors. **Second**, multipolar world dynamics and friend-shoring supply chains significantly benefit Japan in a wide range of industries. **Third**, TSE reforms are providing another boost to the corporate reform agenda by systematically targeting companies trading below book value to take steps to improve their underlying performance and equity valuation. **Fourth**, the reforms that Japan's government has taken to liberalise the Nippon Individual Savings Account (NISA) regime are showing major signs of success already in encouraging Japanese households to re-engage with equities and diversify their asset allocation.

Three key alpha generating themes:

Later in the report, we detail approaches and screens of companies that are best positioned in terms of labour productivity improvement, potential corporate reform and value improvement, and beneficiaries of NISA flows. But here we highlight our high-conviction, 15-stock Japan Focus List that reflects these structural themes as well as other structural and cyclical drivers, including AI diffusion and economic security beneficiaries in a Multipolar World transition, underpinned by analyst single-name conviction.

Exhibit 16: Morgan Stanley Japan Focus List

Company Name	Ticker	Rating	TOPIX 17 Sector	Mkt Cap (US\$bn)	Date Added	Total US\$	12M Total	Last Price	Target Price	Upside to Target Price	MS P/E (CY)		MS P/B (CY)	MS ROE (CY)		MS DY (CY)	MS P/S (CY)	Analyst
						Returns Since Added	Return Perf.				2024E	2025E	2024E	2024E	2024E	2024E		
Calbee	2229.T	OW	Foods	2.5	14-Mar-24	-10.0%	-0.6%	3,159	3,600	14.0%	20.0x	19.5x	2.2x	11.0%	1.8%	1.3x	Tsunoyama, Tomonobu	
Itochu	8001.T	OW	Commercial & Wholesale Trade	67.5	22-Jan-18	187.7%	39.3%	7,265	7,300	0.5%	12.0x	11.1x	1.8x	14.9%	2.6%	0.7x	Shirakawa, Yu	
Iwatani	8088.T	OW	Commercial & Wholesale Trade	3.3	14-Mar-24	11.8%	19.1%	8,803	12,830	45.7%	10.5x	9.4x	1.4x	13.4%	1.8%	0.5x	Ogino, Reiji	
Kajima	1812.T	OW	Construction & Materials	8.3	15-Jun-23	18.2%	18.6%	2,658	3,300	24.2%	10.3x	9.9x	1.1x	10.4%	2.8%	0.5x	Yagi, Ryo	
Mitsubishi Heavy Industries	7011.T	OW	Machinery	29.2	15-Aug-22	153.0%	123.8%	1,346	1,900	41.2%	17.5x	15.5x	2.2x	12.5%	1.3%	0.9x	Ibara, Yoshinao	
Mitsui Chemicals	4183.T	OW	Raw Materials & Chemicals	5.5	19-Sep-23	12.1%	18.5%	4,514	5,200	15.2%	10.7x	8.7x	1.0x	9.2%	3.3%	0.5x	Watabe, Takato	
OBIC Business Consultants	4733.T	OW	IT & Services, Others	3.3	6-Feb-24	-7.2%	16.1%	6,858	8,500	23.9%	33.6x	29.1x	3.3x	9.9%	1.4%	11.5x	Tanaka, Hideaki	
Recruit Holdings	6098.T	OW	IT & Services, Others	77.4	6-Feb-24	29.0%	68.1%	7,710	7,500	-2.7%	34.8x	32.5x	5.8x	16.6%	0.3%	3.4x	Tsutsuka, Tetsuro	
Renesas Electronics	6723.T	OW	Electric App. & Precision Instr.	31.1	12-Nov-23	18.7%	16.5%	2,668	3,200	20.0%	12.4x	10.6x	2.1x	17.2%	1.0%	3.3x	Yoshikawa, Kazuo	
Sumitomo Mitsui FG	8316.T	OW	Banks	81.6	19-Jan-23	52.1%	50.1%	9,400	9,740	3.6%	12.5x	11.8x	0.8x	6.6%	3.2%	3.4x	Nagasaka, Mia	
Sumitomo Realty & Dev.	8830.T	OW	Real Estate	15.9	15-Jun-23	29.0%	42.6%	5,207	6,600	26.8%	13.0x	12.5x	1.2x	9.2%	1.2%	2.4x	Aneqawa, Toshiyuki	
Suntory Beverage & Food	2587.T	OW	Foods	11.2	12-Nov-23	18.4%	-7.4%	5,632	7,000	24.3%	18.3x	16.9x	1.5x	8.2%	1.6%	1.0x	Miyake, Haruka	
T&D Holdings	8795.T	OW	Financials (Ex Banks)	8.4	14-Mar-24	-9.6%	14.4%	2,442	3,040	24.5%	11.5x	9.6x	1.0x	8.8%	3.1%	0.7x	Takemura, Atsuro	
Tokyo Electron	8035.T	OW	Electric App. & Precision Instr.	110.4	6-Feb-24	23.4%	89.6%	36,820	48,500	31.7%	39.2x	27.7x	9.1x	23.2%	1.3%	7.9x	Wadaki, Tetsuya	
UT Group	2146.T	OW	IT & Services, Others	0.8	6-Feb-24	23.9%	7.7%	3,105	4,000	28.8%	10.9x	9.2x	3.0x	28.0%	4.7%	0.6x	Arai, Katsumi	

Source: Company data, Morgan Stanley Research (E) estimates; Data as of May 16, 2024.

1) Identifying companies with labour productivity and pricing power that can pay and absorb higher real wages

We believe that strong real wages will encourage the corporate sector to look for ways to improve labor productivity. In a process with a virtuous cycle for wages and prices that appears sustainable, we identify companies which are likely to have high 'labor force leverage' because they are able to increase shareholder returns in a sustained manner, while securing outstanding human resources with attractive wages and raising labor productivity. See [Exhibit 91](#).

2) Finding the next cohort of Corporate Reform beneficiaries

From a corporate governance perspective, we remain focused on the broadening impact of the TSE's capital efficiency drive and see upcoming mid-term plans as a key catalyst. Both are aimed at disclosures of corporate earnings and management policies, and could encourage investors to price-in positive catalysts from an earlier stage, thus contributing to more effective formations of market anticipation.

Meanwhile, business portfolio restructuring, revamping operations, and other reforms to improve profitability are important from the standpoint of expanding enterprise value over the longer term. We therefore want to focus on medium-term management plans around (1) growth strategies that generate cash, (2) initiatives to lift capital efficiency (such as asset sales, utilization of interest-bearing debt, and business portfolio revisions), and (3) whether management clarifies on stable, sustainable shareholder returns. See [Exhibit 93](#).

3) Assessing who benefits from NISA inflows

The new NISA program has been received very positively. 1.7mn new NISA accounts were

opened in January-March 2024, up by 3.2 times from the 540k in January-March 2023. January-March 2024 cumulative purchase value was ¥3.9tn for growth investment and ¥0.8tn for systematic “tsumitate” investment. These figures were roughly 3 times higher for growth investment and tsumitate investment than the purchasing pace in January-March 2023.

In particular, Japanese stock purchases greatly exceeded our expectations. 95% of equity purchases via the growth investment framework were in domestic stocks, equating to nearly 50% of NISA purchasing value being in Japanese stocks. The latest annualized number should be ¥18.72trn (Jan-Mar total: ¥4.68 trn), and the domestic equity holding ratio of 47% gives a ¥8.79trn, which is nearly quadruple the bullish scenario that we had envisioned. Data at this stage indicate that we considerably underestimated the stance of households, not only towards NISA but also towards Japanese stocks themselves. See [Exhibit 105](#).

Sectors in focus

Sectors which should be of interest to the global investor: As we alluded to above, equity markets have been powered forward by a combination of the shift in the global and domestic macro backdrop, and micro reforms. The result has been a broad-based rally – with 85% of stocks in the Nikkei 225 index rising in 2023 and 84% of stocks rising on a year-to-date basis. Looking ahead, we'd highlight the following sectors which should continue to garner interest to the global investor – more on account of strong idiosyncratic, sector-specific issues.

Banks

Banks crucial for improving Japan's ROE overall: Banking is a vital industry that accounts for 7.7% of the TOPIX. However, it is one of the few that has seen ROE and ROA fall in the past 10 years or so, and there are still many bank stocks that have held below book value for an extended time.

We expect Japanese bank ROEs to improve to near double digits over the medium term, led by higher interest rates, overseas growth strategy and better cost management strategies, as banks reduce labour and non-labour costs through branch rationalisation and digitalisation. Rising earnings and ROE should lift bank valuations to 1.0x or higher P/Bs, from 0.7-0.8x currently.

Asset and Wealth Management

The wealth transition: Reflation and enhanced macro productivity leading to stronger corporate profitability and a robust equity market environment drive our bullish outlook on Japan financials sector. (see [Global Financials: Japan's Wealth Transition](#), May 16). We believe the next big opportunity in the financial sector lies in the wealth and asset management industry, which is poised for a major shift as individuals move from deposits to investment products. At the starting point, 56% of household assets are in deposits, vs 14% in the US and less than 30% globally. We believe Japan's wealth market (net financial asset) will grow with CAGR at 5% annually through 2030, in line with markets like the US after years of stagnation, with a bull case of potentially 8% CAGR. We see the new NISA's take up as a catalyst – in the same way that the introduction of tax-advantaged savings

accounts in the US in 1974 catalyzed a multi-decade trend of rising US retail engagement. Indeed, net asset inflows have reached over ¥1.0trn for 3 straight months.

Japan's wealth market is unique among developed markets and is underdeveloped. It has a high savings rate, overall heavy weighting in cash while financial institutions have only made small inroads to tapping the large mass affluent audience. Japan presents a unique opportunity globally given the underpenetration of investment products, the return of inflation and current small size of the industry. At the higher end (UHNW/HNW), we foresee demand for more sophisticated, tailored wealth management services, which will favor large, diversified institutions capable of enhancing their product offering. We estimate the TAM for the combined segment of UHNW/HNW and Upper Affluent will reach ¥906 trillion or US\$6.5 trillion by 2030, from ¥690trn or US\$4.9trn today. This would imply a revenue opportunity of ¥5.9trn or \$42bn, 31% higher than today. This rapid transformation, in our view, is already resulting in strategic shifts of megabanks, domestic brokerages, as well as international players and digital disrupters. While early, we believe that low cost will attract customer access, and the ultimate winners here will be mega banks, in our view.

Tech

A revival of its glory days: Japan is now moving towards a globally competitive semiconductor business model, aided by a confluence of factors. Policymakers are actively making policies to attract semiconductor manufacturing, the world is keen to diversify its supply chains, and the collaboration with global leaders in this space will help Japan re-emerge as a globally competitive player.

The government aims to triple the sales of domestically produced semiconductors to over 15 trillion yen (US\$108bn) by 2030. It is providing funding to attract overseas companies to set up semiconductor manufacturing facilities in Japan – we'd note the example of TSMC which has already done so. Japan continues to collaborate with allies through various economic and trade initiatives to bolster strategic supply chains. By end 2024, we expect the first plant to enter into production. At the same time, it is nurturing domestic leadership through initiatives like Rapidus, led by industry veterans in collaboration with global leaders like IBM and Europe's IMEC. Japan's focus on strengthening its position in the global semiconductor industry via advanced chips goes beyond the semiconductor industry. By around 2027, Rapidus plans to start mass production of 2nm chips. Other benefits include the diffusion of AI integration into healthcare, manufacturing, finance and carbon footprint reduction.

Autos

Hybrids are proving to be a viable transition technology, and Japanese car makers are leading players in this segment: FY23 saw the advent of EV stagnation, particularly in the US. Hybrids, on the other hand, are in high demand and are emerging as a real competitor to EVs. Given the broad deceleration in EVs along with the re-emergence of hybrids, we now expect to see legacy OEMs prioritize incremental capex on hybrids/plug-ins and fuel-efficient ICE technology relative to EVs at the margin. As of Mar-24, Toyota/Lexus/Honda had a combined market share of ~66% in the US hybrid car space. But Japanese OEMs are not standing still and are going ahead with a number of strategies to capture the upside from the eventual transition to battery EVs.

Exhibit 17: Our views vs. key debates on Japan

Topic	The Debate	Our Views
Structural outlook	Is this cycle different for Japan?	<ul style="list-style-type: none"> Some investors believe that the fundamentals have not changed – demographics are still weakening and debt levels are still very high. We see things differently – citing a better rates/growth ($r-g$) equation than before, rising wages (32-year high), changes in corporate price and wage setting behaviours, and improving wage pass-through.
Nominal GDP growth	Can Japan sustain the higher rates of nominal GDP growth?	<ul style="list-style-type: none"> Investors attribute the rise in Japan's inflation mainly to global inflationary pressures and weak JPY. As these factors fade, they see Japan returning to a low-inflation environment. Continued accommodative policies will sustain a healthy $r-g$ gap, catalysing animal spirits and rekindling capex momentum. A virtuous cycle of rising wages and prices is taking hold. Wage growth, rather than global commodity prices and currency depreciation, is the key driver for inflation now. We see nominal GDP growth sustaining at 2.5% over the medium term, up from 1.6% in 2013-19.
Japan in the multi-polar world	Is Japan benefitting from the multi-polar world dynamic?	<ul style="list-style-type: none"> Japan's market share in global FDI has risen in recent years, bucking the declining trends seen in other DM economies. Japan is emerging as a key 'friendshoring' beneficiary of supply chain diversification. As an outcome of this supply diversification, Japan is seeing a significant rise in semiconductor investment from TSMC, other global players and domestic players. Japan's industry and security policies are geared towards capitalizing on the multi-polar world trend, boosting growth and earnings as investment and defence spending ramps up.
ROE	Can the uptrend in ROE be sustained?	<ul style="list-style-type: none"> Japan has been a standout turnaround story in global equities as its ROE trends have improved. We maintain our longstanding call that we see ROE rising to 12% by 2025, up from 8.5% in 2013-19 and 9.7% currently. This continues to be driven by conducive macro top-down environment and bottom-up corporate governance and micro reforms.
Equity market themes	Given the strong run already, what else is there to play for?	<ul style="list-style-type: none"> We see the secular bull market being sustained. We highlight three alpha generating themes: (1) beneficiaries of rising real wages and corporates who can raise labour productivity, (2) beneficiaries of continued corporate reforms and (3) the effects of NISA & asset management reforms creating a bid for domestic equities.
Banks	Banking sector ROE has lagged the general market, will it improve in the coming years?	<ul style="list-style-type: none"> We expect Japanese bank ROEs to improve, led by higher interest rates, overseas growth strategy and better cost management strategies as banks reduce labour and non-labour costs through branch rationalisation & digitalisation.
Wealth and asset management	Can the wealth and asset management industry capitalize on the upside in nominal GDP growth and asset markets?	<ul style="list-style-type: none"> Investors perceive limited opportunities in this space given ageing population and structurally high savings allocated to deposits. Household are shifting their preferences away from deposits and towards investments products like mutual funds and sophisticated, tailored wealth management services – in part aided by recent positive developments. We see a 5Y CAGR growth of Japan's wealth market through 2030, with an implied fee pool of US\$42bn, 31% higher than today.
AI/tech	Can Japan regain importance in global semis manufacturing supply chain?	<ul style="list-style-type: none"> While Japan has retained significant market shares in parts of the tech supply chain, it has lost out on high end semis manufacturing. We see this changing as semis manufacturing localization efforts, led by joint venture with TSMC and Rapidus are gaining momentum.
Autos	With hybrids back in favour, Japanese OEMs are benefitting, how are they positioned for a full EV environment?	<ul style="list-style-type: none"> A rise in demand for hybrids is providing strong tailwinds to Japanese OEMs, but they are also not standing still and are going ahead with a number of strategies to capture the upside from the eventual transition to battery EVs. For instance, Toyota is working on developing solid state batteries that offer 2.4 longer driving range as compared to current lithium ion batteries.
Risks	What are the risks?	<ul style="list-style-type: none"> One risk is if the US enters into recession or if trade tensions rise significantly in a way that curtails global economic activity. While Japan is better placed today than in past cycles, it will nonetheless be a setback. Another risk to watch for is if continued FX depreciation triggers disruptive, aggressive rate hikes, leading to unfavorable $r-g$ dynamics.

Source: Morgan Stanley Research

Risks and bull-bear scenarios

Base case: Our base case is that Japan's average nominal growth will trend at around +2.5% over 2025-30. We expect Japan's real trend growth to remain at around +0.8% as productivity growth will likely exceed the negative impact from the ongoing mild decline in population. We expect hourly productivity growth to return to the pre-Covid trend of around 1% with a recovery in capex.

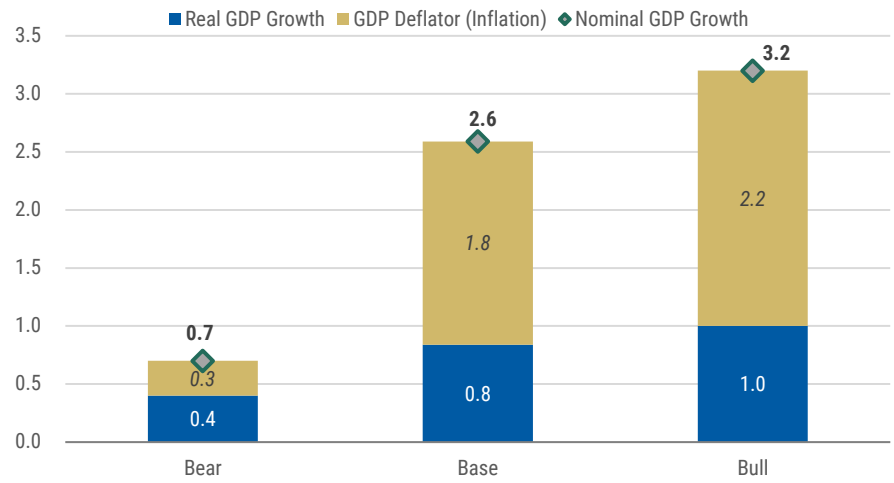
The domestic capex trend will be supported by a better outlook of solid headline nominal sales growth, accommodative financial conditions with low real interest rates, the need for labour-saving investment, supply-chain reorganization, and friend-shoring moves on the back of the government's new industrial policy. Higher mobility in the labor market among younger workers and low-productivity 'zombie' firms with deflationary business models exiting the market will also support overall productivity growth, in our view. As for the GDP deflator trend, we expect it to be around +1.8% to be sustained, consistent with nominal wage growth of nearly 2.7-3.0%.

Bull case: In our bull case, we expect nominal GDP growth of around +3.2% (real: 1%, GDP deflator 2.2%) over 2025-30 with inflation remaining slightly above the 2% inflation target and a higher real GDP growth trend with productivity growth accelerating at a faster pace.

Bear case: Externally, the risks would be if the US enters into recession or if trade tensions rise significantly in a way that curtails global economic activity. While Japan is better placed today than in past cycles, it would nonetheless be a setback. We are expecting the continuation of relatively accommodative policies. But this balance could be upset if policy makers have to hike interest rates in a disruptive manner to prevent a further sharp depreciation of the yen, especially when the domestic economic backdrop does not warrant such a tightening stance.

In our bear case, we expect nominal GDP growth to decelerate below 1% with inflation and the GDP deflator to return to sluggish growth of around +0.3%. That said, we do not expect a return to deflation or negative inflation, assuming that the BoJ will maintain the 2% inflation target. But to reflect the transformation that Japan has already achieved, we'd highlight that even in our medium-term bear case scenario (2025-2030), Japan's macro outcomes would still be better than what transpired during the past 30 years.

Exhibit 18: Bear/Base/Bull scenarios: Nominal GDP trend growth forecasts over medium term (2025-2030)



Source: Morgan Stanley Research estimates

Japan's Journey – The Road Back to Sustainable Inflation

Chetan Ahya, Takeshi Yamaguchi, Derrick Kam, Masayuki Inui, Jonathan Cheung

Japan is now transitioning to a new equilibrium of sustainable and moderate inflation, and stronger nominal GDP growth, underpinned by a favorable macro backdrop.

A Resurgent, Revitalised Japan

A new equilibrium is taking hold: Japan's economy and markets now present a compelling opportunity for global investors. Nominal GDP growth has averaged 3.5% in 2022-23, more than double the run rate of 1.6% during 2013-19 and a far cry from the -0.03% nominal GDP growth that Japan witnessed between 1993 and 2012. This is indeed a momentous shift in Japan's nominal GDP path, and we expect nominal GDP growth to be strong at 3.7% in 2024 and sustain at 2.5% over the medium term.

A dynamic Japan is rising: For us, the key that unlocks the transition to a new equilibrium has always been inflation. For almost 30 years, Japan faced the challenge of persistent lowflation. But the thawing from the deflation deep freeze is well underway. We think that Japan is transitioning towards a new equilibrium where moderate levels of inflation are sustained, and dynamism returns to the corporate sector.

While some contend that high debt and weak demographics will bring back lowflation...: Some argue that global inflationary pressures drove Japan's reflation and once they fade, Japan's inflation will revert to its old norms. Fundamentally, they view the long-term picture as unchanged – demographic trends are weakening, and debt ratios are still amongst the highest in the world. We think managing deflationary pressures right is crucial to alleviating the headwinds of debt. While demographics will still constrain potential growth, managing the debt and deflationary headwinds will allow the economy to grow closer to its underlying potential.

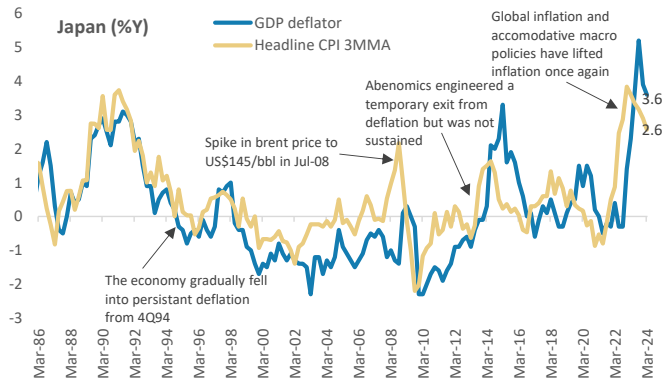
... we think inflation will be sustained at moderate levels: To be sure, the post-pandemic global reflationary environment helped to provide one round of reflation, but it was in combination with the right domestic policy choices that has given us the current backdrop. Importantly, the implementation of coordinated monetary and fiscal easing played a key role. While the post-pandemic global rise in inflation led to a sharp tightening of monetary policy by the Fed and other DM central banks, the BoJ kept its monetary policy accommodative even as interest rates in the US rose to a 23-year high. The ensuing rate differentials led to yen depreciation, which further added to imported inflationary pressures. The upshot of this backdrop was that the real interest rate and real GDP growth ($r-g$) gap reached a historically wide level, and has since been maintained at accommodative levels.

Entering the next phase of the inflation cycle: Sustaining the $r-g$ gap at these levels has rekindled animal spirits in the economy and is driving inflation. This has helped drive a significant decline in total debt to GDP. Corporates and households are responding to the

stimulatory effects and are changing their behaviours. Companies are moving away from the previous norm of no price change and not lifting wages. There has also been increased participation as well as churn in the market. Workers and unions are asking for – and getting – higher pay. We think this sets into motion the onset of a virtuous cycle.

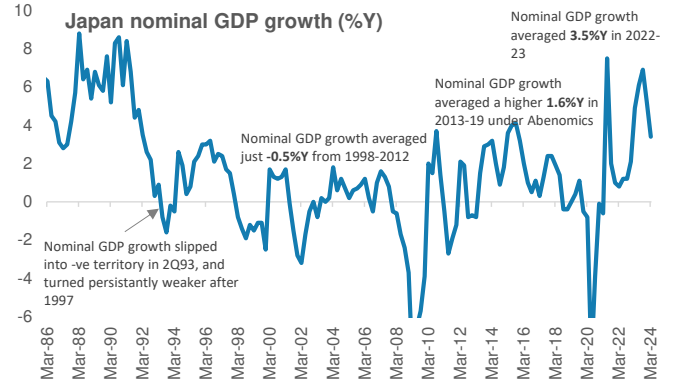
The journey ahead: We are optimistic that Japan will achieve sustained moderate levels of inflation. Re-anchoring inflation expectations sustainably, deleveraging the private sector balance sheet (where debt to GDP is still above pre-Covid levels) and ensuring an acceleration in capex momentum will require policy makers to keep policies as accommodative and, in doing so, ensure the new equilibrium of moderate inflation is entrenched. Indeed, we think policy makers will take a gradual approach to removing accommodation. We will still need to see a full-fledged revival of dynamism in the corporate sector and the labour market. For instance, corporates are showing initial signs of turning up the capex momentum, which in turn will drive productivity growth.

Exhibit 19: Global reflationary environment and accommodative macro policies have lifted the economy out of deflation



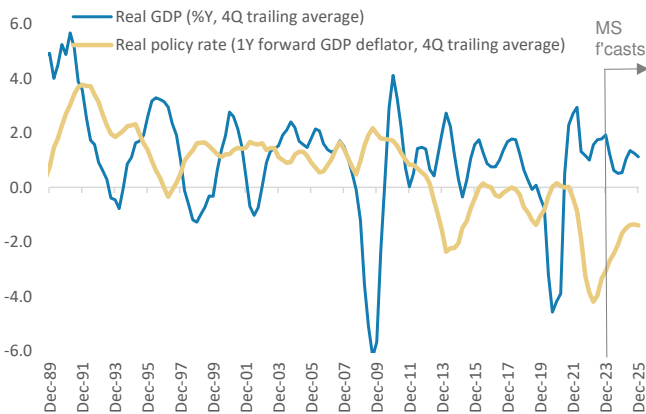
Source: Haver, Morgan Stanley Research

Exhibit 20: Nominal GDP growth has averaged higher in 2022-23



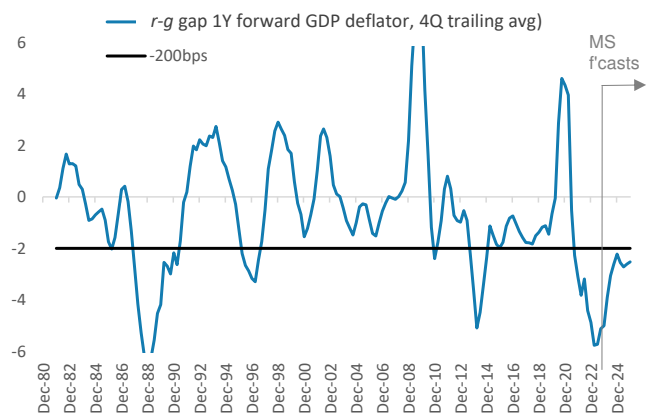
Source: Haver, Morgan Stanley Research

Exhibit 21: *r-g* dynamics have now improved...



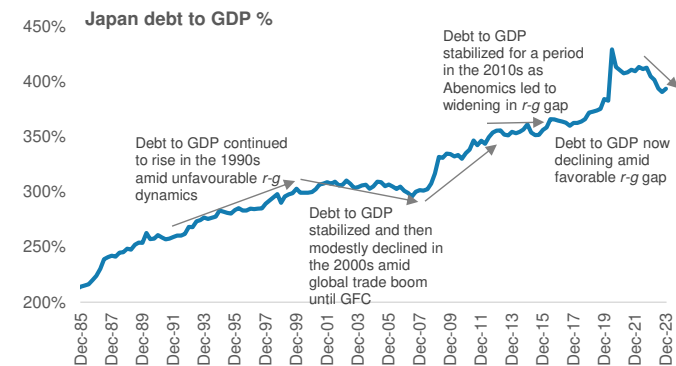
Source: Haver, Morgan Stanley Research forecasts; Note: We expect BOJ to exit NIRP and into ZIRP in March (with risk of April move) and a 25bps hike in July.

Exhibit 22: ...and are sustaining at accommodative levels



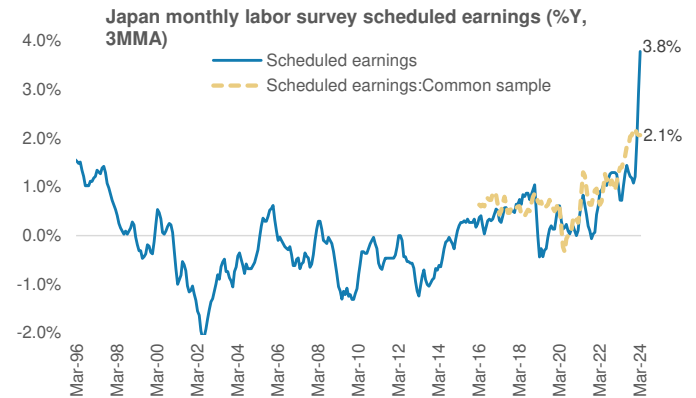
Source: Haver, Morgan Stanley Research forecasts

Exhibit 23: Favourable *r-g* dynamics are driving a decline in debt to GDP



Source: Haver, Morgan Stanley Research

Exhibit 24: Pickup in wage growth to sustain the next phase of reflation



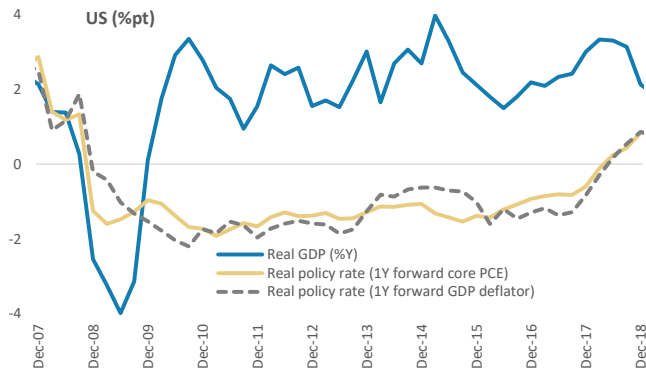
Source: Haver, Morgan Stanley Research

What Has Driven The Change?

***r-g* key to our framework:** As we have written before (see [Global and US Economics: Debt Sustainability: *r-g* Is Key](#), July 2021; [The Viewpoint: Japan's Reflation Story – What's Different This Time](#), Feb 18, 2024; & [Global Economics: Next Stop: More Fiscal Easing and de Facto Helicopter Money?](#) May 2016), we have been assessing Japan's policy setup through the lens of a real rates and real GDP (*r-g*) framework in the context of the debt-deleveraging process. The gap between real rates and economic growth is a measure of the level of accommodation that the policy setup is providing and captures how quickly debt will grow in relation to GDP. If real rates are lower than real growth, deleveraging (i.e. debt to GDP ratios move lower) can take place even without any actual reduction in total debt outstanding as the rate at which debt compounds is below the rate at which income (GDP) compounds.

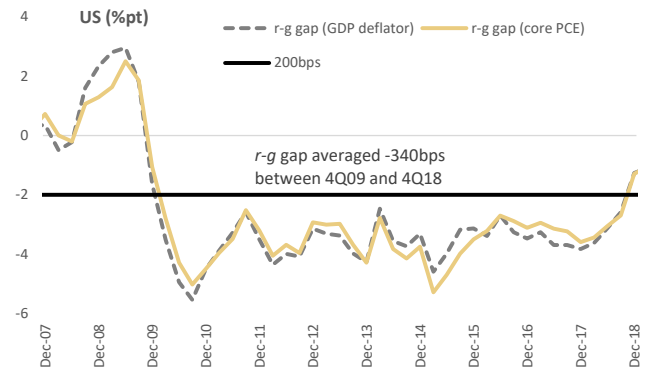
Specifically, we analyzed 100 years of historical data and found 76 instances when economies experienced a comparable build-up in public debt. The main finding from this analysis is that maintaining an adequate *r-g* gap of -200bps for 10 years has been vital in successful reflation and deleveraging of economies. Coordinated monetary and fiscal easing is required to engineer a favourable *r-g* gap. In Japan's case, considering the inflation expectations were unanchored for a prolonged period in the past and debt to GDP remains relatively high, we would argue that an even wider gap sustained over longer periods could be warranted. As an example, we would highlight that the US maintained this gap at an average of -340bps from 4Q09 to 4Q18.

Exhibit 25: In the US, the *r-g* gap...



Source: Haver, Morgan Stanley Research

Exhibit 26: ...was maintained at an average of -340bps from 4Q09 to 4Q18



Source: Haver, Morgan Stanley Research

Using this *r-g* framework, we can trace how the Japanese economy has evolved in three stages since the asset bubble burst in 1989.

Stage 1: Struggling to exit deflation (1990 – 2012)

Period averages	
GDP deflator: -0.4%	Nominal GDP growth: 0.6%

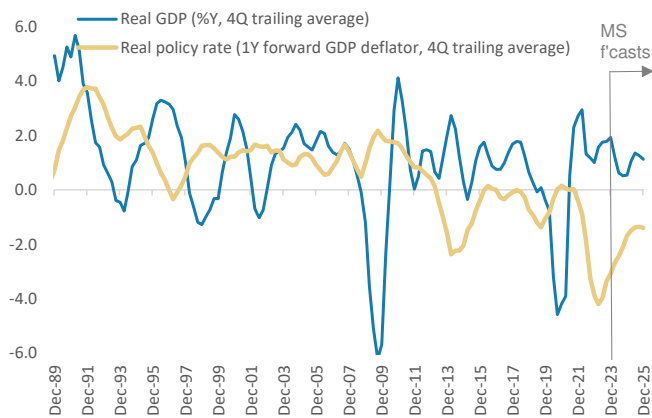
Stuck in a low growth, lowflation loop: After the bubble burst in 1990, policymakers kept the macro policy stance too restrictive as evident from real rates staying above real GDP growth from 1990-1994. Fiscal expansion effectively only materialised from 1993 onwards. This slow initial pace of easing and the lack of fiscal and monetary policy coordination thereafter eventually led the economy into deflation from 1994 onwards.

Moreover, the Japanese yen also appreciated by 89% against the US dollar from April 1990 to April 1995, further weighing on inflation. From 1990-2003, the *r-g* gap averaged just 30bps, insufficient to achieve successful debt deleveraging. As a result, the economy was weighed down by balance sheet recession dynamics and debt to GDP kept rising from 1992-2002.

Over 2004-07, there was a period of temporary reprieve as the global trade boom led to a sustained rise in Japan’s exports and economic growth. This helped to widen the *r-g* gap to -200bps, and Japan’s debt to GDP declined from a peak of 309% in 1Q05 to 296% in 2Q07. However, the GDP deflator remained weak, averaging -1.0% during that period.

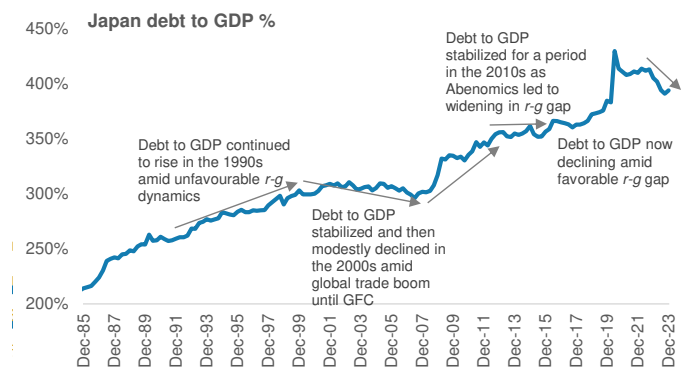
But from 2008 to 2012, the global backdrop turned unfavourable. The slowdown in DM demand post-GFC weighed on Japan’s growth prospects and global lowflation trends also weighed on Japan’s inflationary dynamics. While fiscal policy was expansionary, policy rates were at zero lower bound, and **concerns** of fiscal monetization from BOJ limited the scale of the 2010 quantitative programme. Moreover, BOJ’s forward guidance lacked visibility regarding regarding exit conditions. Taken together, lowflation remained persistent and rates at zero lower bound meant real interest rates remained too high to revive aggregate demand and engineer an exit from deflation. The *r-g* gap narrowed to an average of just +150bps, i.e., real policy rates were higher than real GDP growth.

Exhibit 27: In Japan, real rates were not kept sufficiently below real GDP growth for an extended period of time until recently



Source: Haver, Morgan Stanley Research forecasts; Note: We expect BOJ to hike by 25bps hike in July and by another 25bps in Jan-25.

Exhibit 28: Debt to GDP was on a general rising trend despite brief periods of deleveraging/stabilization

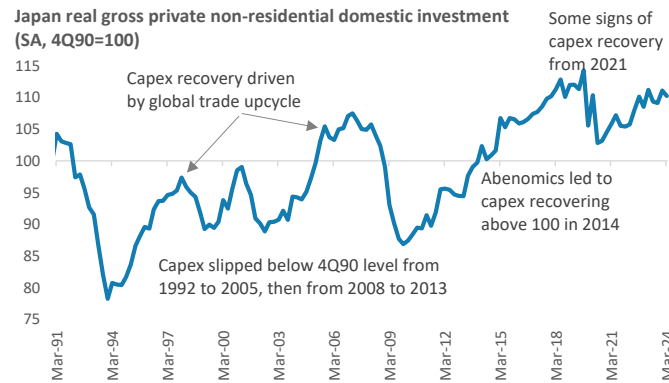


Source: Haver, Morgan Stanley Research forecasts

Corporate sector capex was curtailed...: Faced with a persistent slowdown in nominal GDP growth and deleveraging pressures, the corporate sector stayed risk averse and did not take up capex, resulting in a stagnation in capital stock accumulation. Post GFC, Japan saw a decline in net capital stock until 2013. Regulatory forbearance in the initial stages also sustained zombie entities, hampering productivity growth. Corporate returns declined and corporate sector ROE steadily declined from the 10% range in the 1980s to an average of 4.4% from 1990-2012.

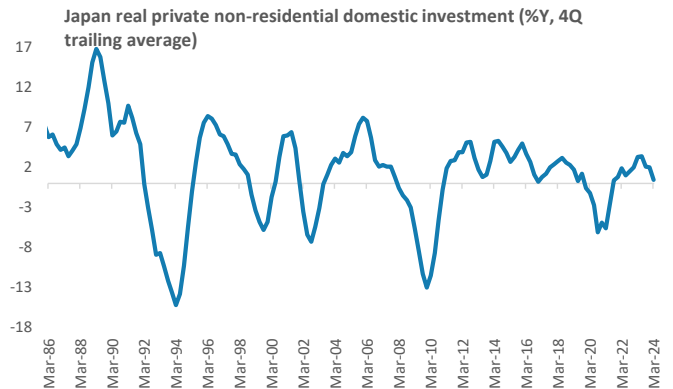
... resulting in a decline in competitiveness: These factors combined to erode the competitiveness of the Japanese corporate sector. A case in point would be how the Korean corporate sector invested in R&D to improve its competitiveness and gain a presence in emerging sectors at the expense of Japan during this period. Indeed, the gap between Japan and Korea's R&D spending as a % of GDP began narrowing more aggressively from 2005 onwards, overtaking Japan in 2010. Reflecting this, Japan's global exports share steadily declined from a peak of 10% in 1994 to 4% in 2012, largely the same as Korea's current exports share. This is despite Japan's working age population being twice as large as Korea's. While there were select industries which remained globally competitive, it has also been the case that large parts of the tech supply chain were not located in Japan, until recently.

Exhibit 29: Private sector underwent period of stagnant capex growth...



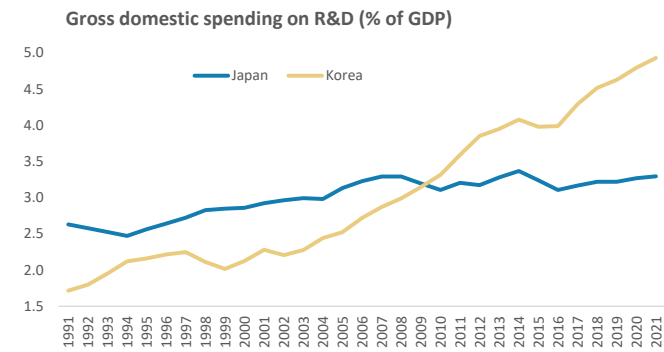
Source: Haver, Morgan Stanley Research

Exhibit 30: ...as corporates became risk averse



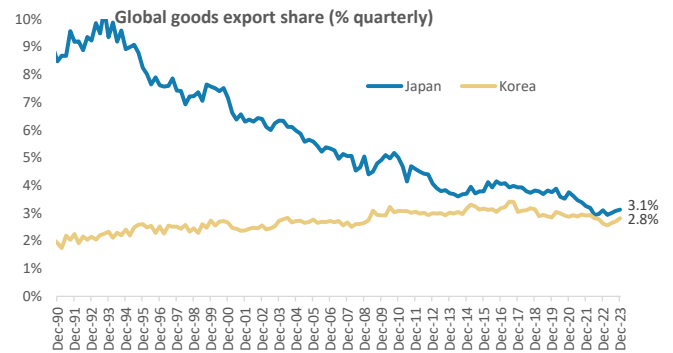
Source: Haver, Morgan Stanley Research

Exhibit 31: R&D spending in Japan stagnated



Source: Haver, Morgan Stanley Research

Exhibit 32: Japan's global exports share declined



Source: Haver, Morgan Stanley Research

Stage 2: Transition to lowflation (2013-19)

Period averages	
GDP deflator: 0.6%	Nominal GDP growth: 1.6%

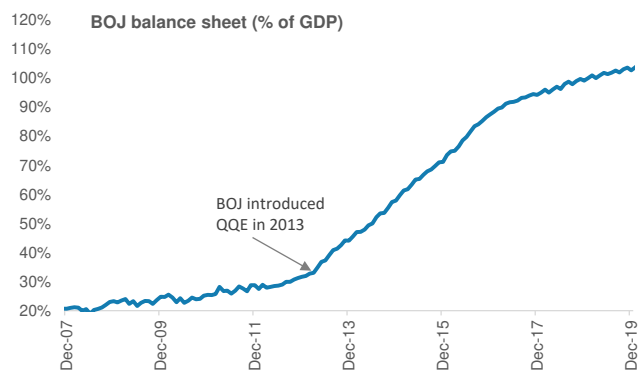
Abenomics marked a turning point: The introduction of Abenomics from 2013 onwards led to the first change in Japan's macro dynamics, albeit still not to an optimal situation. Aggressive monetary easing was employed but fiscal easing was still not always employed in tandem. BOJ implemented aggressive quantitative easing from April 2013 and adopted a strong commitment in its forward guidance to achieving a 2% price stability target at the earliest time. Monetary easing and other policy reforms did lead to Japan's headline inflation averaging 0.5% during 2013-19, marking a gradual shift away from deflation. Capex momentum saw an upshift with net capital stock bottoming in 2013 and began rising gradually in the following years. Corporate ROE also steadily climbed and averaged a higher 8.5% in the period.

But fiscal policy and global backdrop were still not conducive: While policymakers initially took up fiscal easing in 2013, this was not sustained and the government then initiated fiscal tightening with a consumption tax in April 2014 and again in 2019. Through

2013-2018, the cyclically adjusted primary balance narrowed, working against the overall objective of reflating the economy. The effectiveness of Japan’s reflationary policies also continued to be hampered by the global lowflation and deleveraging headwinds post-GFC. Moreover, until December 2016 the Fed policy rate was below 1% and its balance sheet contracted only from late 2017 onwards. Other DM central banks were also employing accommodative monetary policy for much of this time, and it meant that Japan was not able to generate additional inflationary pressures from what should have been a weaker JPY during this period. While from 2013 to 2015 JPY depreciated significantly (from 80 to 120), with the Fed deciding to taper its asset purchases and later indicating its intention to start rate hikes, by the end of 2019 JPY was back down to 110.

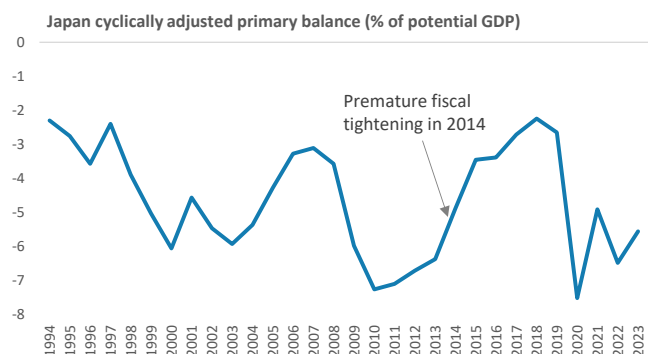
Nonetheless, monetary easing and other policy reforms did lead to Japan’s headline inflation averaging 0.5% during 2013-19, marking a gradual shift away from deflation. Corporate ROE also steadily climbed and averaged a higher 8.5% in the period.

Exhibit 33: Aggressive monetary easing was employed



Source: Haver, Morgan Stanley Research

Exhibit 34: But fiscal easing was not deployed in tandem and was prematurely withdrawn, especially in 2014



Source: IMF, Morgan Stanley Research

Stage 3: Sustainable inflation (2022-present)

Period averages	
GDP deflator: 2.0%	Nominal GDP growth: 3.5%

r-g dynamics have shifted significantly alongside the rise in inflation: Since Covid, there has been a change in the macro backdrop that is more conducive to reflation.

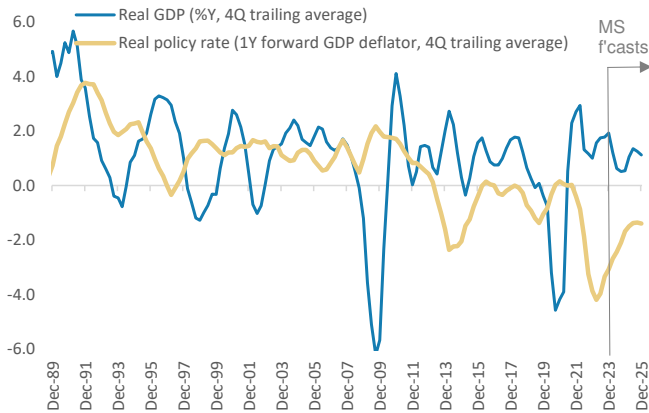
First, policy makers have kept the policy stance accommodative. In past cycles, macro policies were not sufficiently accommodative for long enough to enable further progress on the inflation front. This time around, policy makers have learnt from past lessons and so far are continuing to provide policy support to keep the r-g gap favourable for longer.

Second, Japan experienced a first round of exogenously driven price increases from the supply-side shocks first stemming from Covid-19, and then as the rise in geopolitical tensions in 2022 put upward pressure on Japan’s inflation via higher import prices.

Third, monetary policy divergence between the US and Japan and resultant rising US-Japan rate differentials have kept the Japanese yen weaker and pushed import prices even higher. Indeed, Japan's import prices peaked at close to 50%Y in Jul-22, which led to a significant pass-through of both the commodity and core goods components of consumer

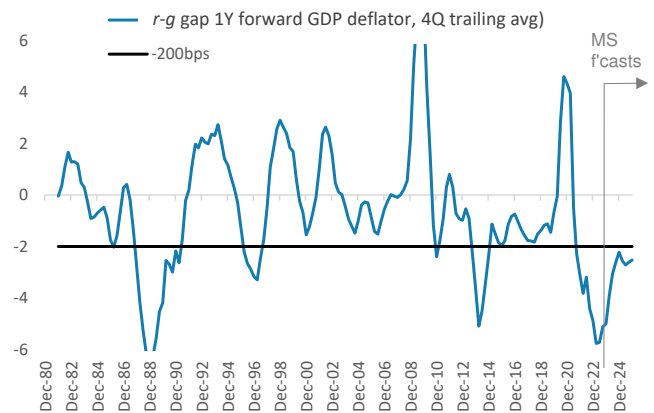
prices. With CPI exiting deflation in Sep-21 and rising well above 2% since, real rates have also turned deeply negative. Reflecting this, the r-g gap on a 4Q trailing basis widened to over -200bps in 3Q21 and has been maintained at wider than -200bps for the past 10 quarters.

Exhibit 35: Japan's r-g gap has now widened...



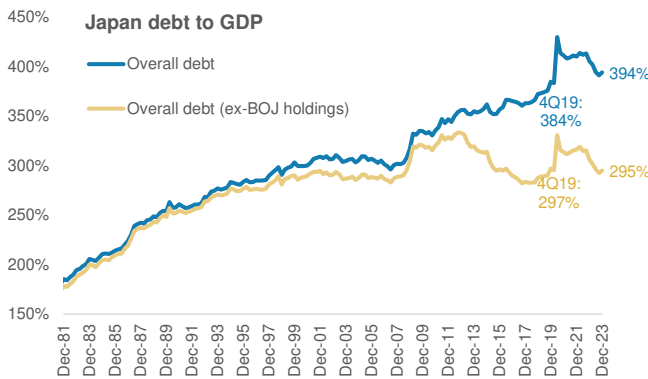
Source: Haver, Morgan Stanley Research forecasts; Note: We expect BOJ to hike by 25bps in July and another 25bps in Jan-25.

Exhibit 36: ...to beyond -200bps since 2021



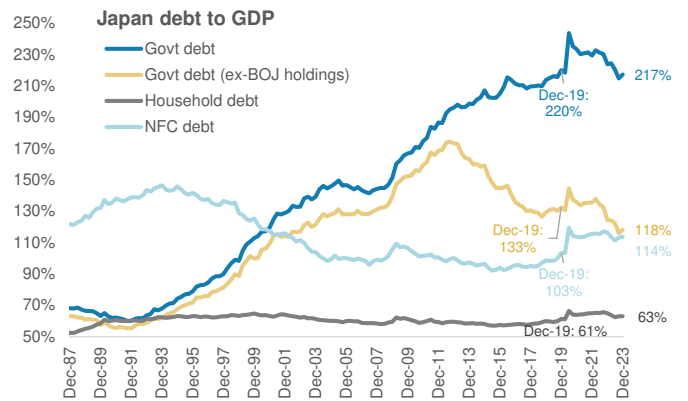
Source: Haver, Morgan Stanley Research

Exhibit 37: Overall debt to GDP excluding BOJ holdings has declined to below pre-Covid levels



Source: Haver, Morgan Stanley Research

Exhibit 38: Private debt to GDP has also moderated but remains above pre-Covid levels, signaling the need for continued policy easing



Source: Haver, Morgan Stanley Research

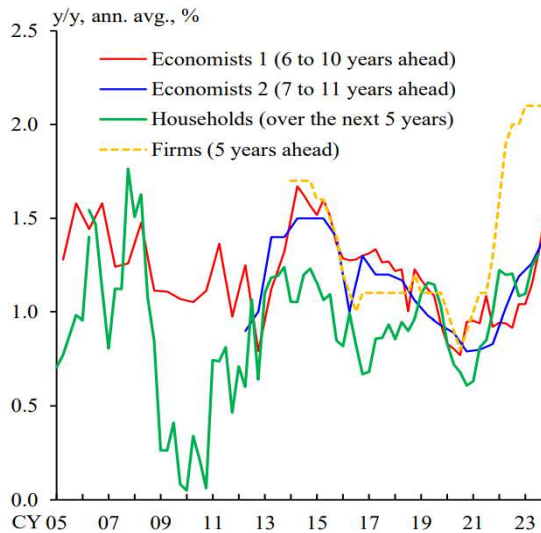
The next phase of Japan's reflation journey

Sustaining positive changes in wage and price dynamics: This is not the first time Japan has experienced a first-round price increase from higher import prices. In the past, these cost-push driven price increases did not ultimately lead to sustained second- and third-round price rises – where firms increase wages in response to higher prices and then passed on these higher labour costs in their selling prices. In the next phase, a sustained shift in how firms set wages and prices will be key to sustaining Japan's reflation journey. There are signs that this is beginning to happen, with firms shifting from the past social norm of no price increases. Our Japan economics team has discussed the initial signs of this change in behaviour in several reports (see [Has Japan's Inflation/Wage Growth Finally Become Sustainable? Revival Of Wage-Price Pass-Through](#), Mar-24; [Inflation Norms Are Changing Even in Japan](#), April 2022; and [Momentous Shift in Japan's Nominal GDP Path](#),

June 2023).

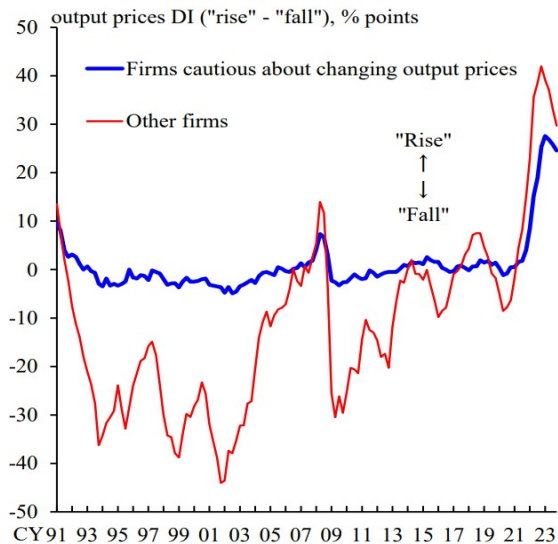
Firms are changing their price-setting behaviour: BOJ analysis indicates that in the past firms tended to avoid increasing selling prices if their competitors did not, even in the face of rising costs. Moreover, BOJ Governor Ueda has also indicated that in the past, “menu costs” in Japan – which are costs firms incur when changing prices – became larger as the lowflation environment became prolonged. This led to the further entrenchment of lowflation. However, there is more evidence that there is now a shift in firms’ price-setting behaviour. An analysis by BOJ of Tankan survey data of output prices indicates that even firms that have been cautious on changing their selling prices in the past are becoming more willing to pass through cost increases to customers. In that sense, menu costs may be declining, and firms may raise prices more easily going forward after a first round of increase. Household long-term inflation expectations are also rising, indicating consumers are also moving to accept price changes.

Exhibit 39: Firms' inflation expectations have risen above 2%; household inflation expectations are also rising



Source: BOJ, Morgan Stanley Research

Exhibit 40: Even firms that have been cautious on changing prices are now increasing selling prices



Source: BOJ, Morgan Stanley Research

Workers are demanding higher wages too: As prices rise and inflation expectations for households also rise, workers are demanding higher wages. Analysis from our Japan economics team points to strengthened pass-through from prices to wages, with pass-through steadily rising since 2022 and turning statistically significant since 1Q23, after being almost entirely muted since the early 2010s (see below section [A Momentous Shift in Japan's Nominal GDP Growth Trend](#) for more details). Reflecting this, scheduled cash earnings growth (common sample basis) has been sustained near record-high at 2.1%Y, while on a non-common sample basis it has reached a near 32-year high. Moreover, the latest tabulations of this year’s spring wage negotiations have so far exceeded expectations and headline wage growth came in at a stronger 5.3%Y, vs. 3.7% last year. A hike in the base-up portion (excluding seniority-related pay increases) reached a robust 3.7%Y vs. 2.1%Y in 2023. Scheduled cash earnings growth reflects the trend in growth of the base-up portion.

Structural developments in labour market supportive of higher wage growth: While

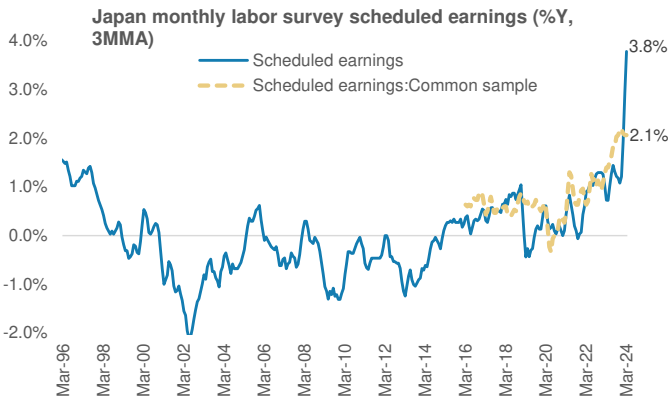
Japan's prime working age population has continued to rise, in part supported by increase participation by female workers and foreign workers, its old age participation rate – which had increased from 20% in 2012 to 26% in 2021 – has now stagnated. BOJ estimates that overall room for additional supply is expected to decrease over the medium term. Moreover, there is increasing evidence that labour mobility is rising, with the share of employed individuals who have changed jobs over the past year rising to a post-Covid high of 5.2% in 4Q23, above the long-term average of 5.0%.

Early indications that a virtuous cycle of rising wages and prices could take hold: In this next phase, firms would need to be able to pass on their increased labour costs to selling prices. On this front:

- Our Japan team highlights that the pass-through from wages to prices has been strengthening, turning positive in 4Q22 and becoming statistically significant for the first time in 3Q23 (see [Japan Economics: Has Japan's Inflation/Wage Growth Finally Become Sustainable? Revival of Wage-Price Pass-through](#), Mar 14).
- BOJ interviews with companies also indicate some initial progress has been made, though there are still firms who indicate difficulties in passing on labour costs to output prices, suggesting that this transition is not complete. Specifically, it has been noted that SMEs in particular have had higher difficulty in passing on labour costs as larger corporates tend to reject price increases stemming from wage increases. On this, policy makers have also issued guidelines for SMEs in negotiations to appropriately pass on labour costs.
- Services inflation, which is a key indicator for verifying the wage to price pass-through given its higher labor cost share, has been rising. Core services inflation has been maintained at or above 2% for the last six months. Our Japan economics team expects services inflation will gradually pick up again from April because companies will revise their service prices following this year's spring wage hikes.

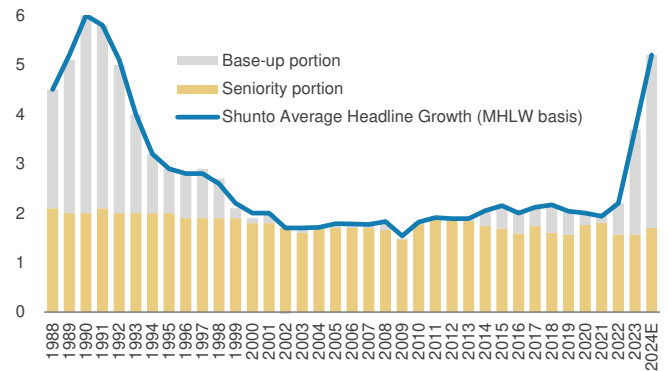
As firms increase their ability to pass on labour costs, this should generate a virtuous loop of rising wages and prices and bring about more sustainable reflation.

Exhibit 41: Scheduled earnings growth has risen to near 32-year high



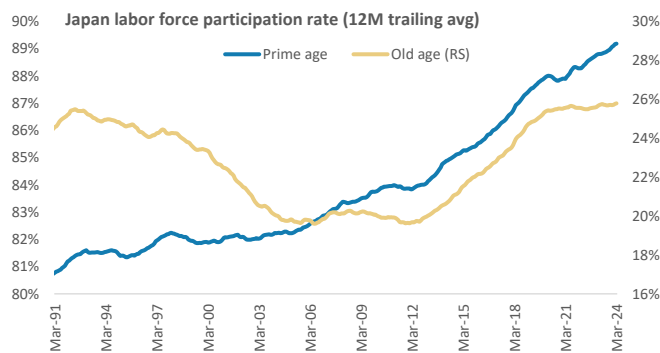
Source: Haver, Morgan Stanley Research

Exhibit 42: Spring wage hike growth has further accelerated in 2024, to the highest level since 1991



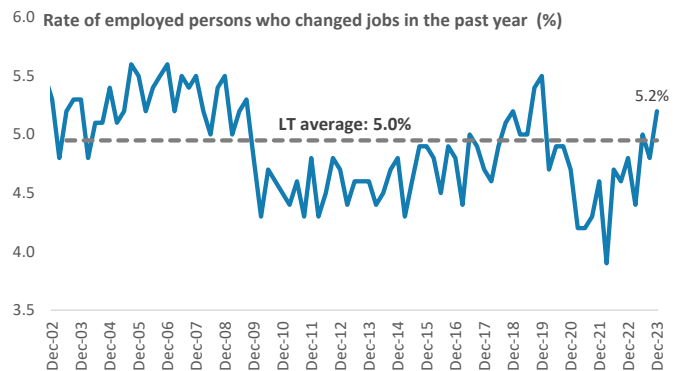
Source: MHLW, Morgan Stanley Research forecasts

Exhibit 43: Room for an additional labour supply increase is narrowing, supporting higher wage growth



Source: Haver, Morgan Stanley Research

Exhibit 44: Labour mobility is also rising



Source: Japan Statistics Bureau, Morgan Stanley Research

What Will Sustain This Change?

All about *r-g* again: Based on our forecasts, the *r-g* gap will gradually narrow but still be sustained at wider than -200bps over our forecast horizon of up to 2025. We think that the policy stance will remain accommodative enough to keep real rates negative, while the push to improve corporate governance, a revival in corporate sector dynamism, and an increase in capex will lift productivity growth to sustain overall GDP growth.

Macro policies to remain accommodative: The recent end of the negative interest rate policy, yield curve control framework and other unconventional policies should all be viewed in the context of BOJ's increased confidence of achieving its 2% inflation target in a sustainable and stable manner, enabling a return towards a more conventional monetary policy framework. Indeed, BOJ has been signaling its intent to keep monetary policy accommodative by stating that it "anticipates that accommodative financial conditions will be maintained for the time being".

External environment should remain supportive too: The external environment is also expected to remain favourable. Robust US growth is helping Japanese exporters and supporting the business operations of Japanese corporates in the US. On the rates front, we don't expect the Fed and other DM central banks to return to zero rates anytime soon.

What We are Watching

Managing Real Rates Trend

Domestic and external uncertainties warrant a very gradual approach to removing accommodation: While we are seeing signs of inflation dynamics shifting, and we don't see a return to deflation, we are mindful that there remains a need to actively manage the real rates trend. We'd highlight the following uncertainties:

1) Domestic factor – Virtuous cycle of wage and price pass-through

As we have discussed above, the wage to price pass-through has been improving, as per our estimates. In the latest outlook report, the BOJ also noted the improvement but their estimates of the pass-through were lower than ours and not statistically significant yet. We attribute the difference due to the model and estimation method settings (for instance – choice of time periods), but the general conclusion remains consistent.

Nonetheless, this suggests that we will need to see further evidence of wages strengthening with adequate pass-through effects. In particular, we would closely watch the following:

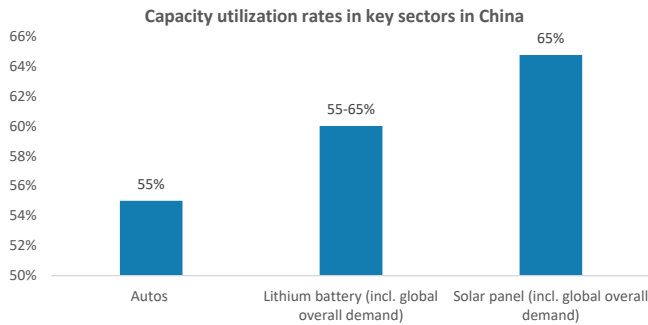
- Continued strength in latter tabulation rounds of wage increases from the spring wage negotiations, which include more SMEs.
- Continued increase in small enterprises' output prices from BOJ Tankan surveys and anecdotal information from other BOJ branch surveys would indicate more signs of wage pass-through by SMEs.
- Services inflation trend.

To be sure, BOJ will also watch these metrics as evidence of further progress in the virtuous cycle of wage and price increases. BOJ has also continued to flag “high uncertainties over firms' wage- and price-setting behavior” as key risk to prices and that there “remain uncertainties over the extent to which moves to reflect wage developments in selling prices will become widespread”. In this sense, BOJ's commitment to maintenance of accommodative financial conditions for the time being will help foster continued intensification of this virtuous cycle.

2) External factors – China's deflationary pressures and potential rise in trade tensions

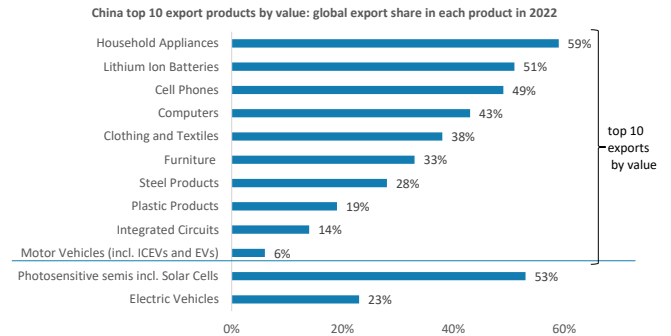
China is facing extensive deflationary pressures and is pushing its excess capacities into the rest of the world. We had also cautioned that the continuation of these trends could risk a renewed rise in trade tensions, especially on the tariff front if the Republicans win the White House in the upcoming elections. Against this backdrop, there is still a risk that the global conditions could yet turn unsupportive of Japan's reflation.

Exhibit 45: As China pushes its excess capacity elsewhere...



Source: Morgan Stanley China Autos, Chemicals and Industrials Research

Exhibit 46: ...it will export deflationary and competitive pressures across sectors, creating an unfavourable backdrop for Japan's reflation



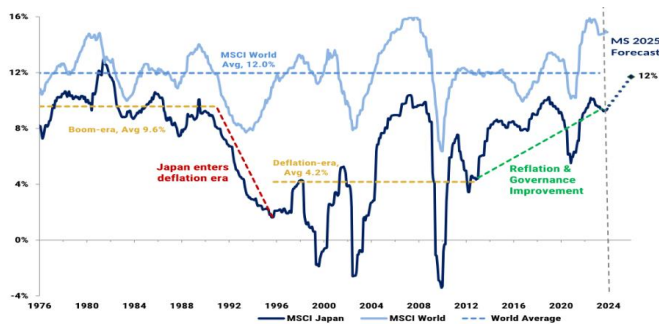
Source: CEIC, Morgan Stanley Research; Note: Motor vehicles includes both traditional vehicles and EVs.

Managing growth

Sustaining an improvement in productivity growth is key: Beyond the near-term cyclical recovery, we will need to see a sustained uplift in capex and productivity growth.

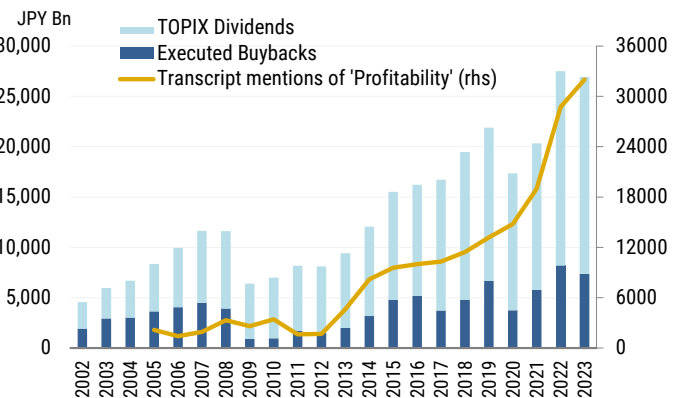
Real rates remain supportive, and there are signs that animal spirits have been rekindled. With global trade growth normalizing after a contraction in 2023 and with corporates reaping the benefits from corporate governance reforms, we expect the capex cycle to accelerate. As it is, our Japan economics and strategy teams have noted a trailing trend of rising productivity and increased corporate ROEs. At the current juncture, there is a policy push to focus the corporate sector's attention on improving returns and capital efficiency via the take-up of micro reforms. Our equity strategists are projecting a sustainable rise in Japan's ROE to 12% by 2025, up from 9% currently. The continuation of this focus on corporate reforms should bode well for an improving productivity trend, and in turn overall GDP growth. This, coupled with inflation sustaining in the range of 1.5-2%, leads to our expectation that nominal GDP growth will sustain at 2.5%.

Exhibit 47: MS equity strategy team expects a sustainable rise in Japan's ROE to 12% by 2025



Source: MSCI, Morgan Stanley Asia Equity Strategy Research

Exhibit 48: Continued focus on corporate reforms bodes well for an improving productivity trend



Source: Nikkei NEEDS, TSE, AlphaSense, Bloomberg, Factset, Morgan Stanley Asia Equity Strategy Research; Note: 2023 data annualized

Exhibit 49: Private non-residential net capital stock has been rising

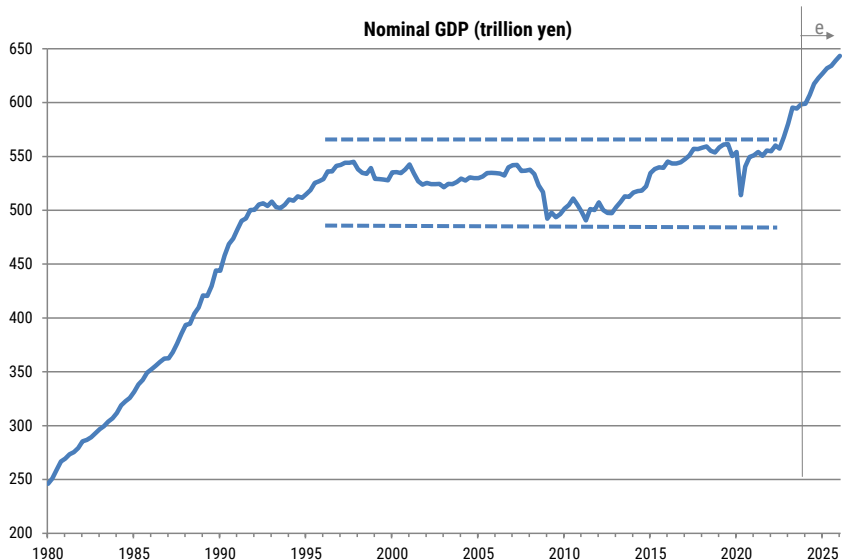


A Momentous Shift in Japan's Nominal GDP Growth Trend

Takeshi Yamaguchi, Masayuki Inui

Japan's economy is facing a historic moment of shifting toward a higher nominal GDP growth path. After an above-5%Y surge in 2023, we expect Japan's nominal GDP growth to remain solid above 3%Y in 2024 on the back of sustained domestic inflation accompanied by wage growth, and solid real growth led by domestic demand. This is a momentous change for Japan, where nominal growth had been largely flat for decades, indicating that Japan's nominal growth has structurally shifted.

Exhibit 51: Nominal GDP to exceed 600 trillion yen in 2024: Japan's nominal GDP (trillion yen)



e=Morgan Stanley Research estimates
Source: Cabinet Office, Morgan Stanley Research

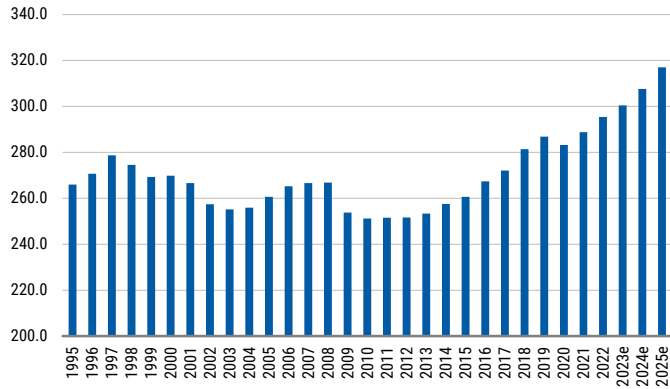
What are the implications of this new era of higher nominal GDP growth?

The higher nominal growth trend in Japan matters: The higher nominal GDP growth backdrop implies simultaneous growth for employee compensation and corporate earnings, a large increase in tax revenue, and potentially positive effects on asset prices.

- The revival of nominal growth implies simultaneous growth for employee compensation and corporate earnings on the back of a larger economic pie. That is, the economy can finally escape from a zero sum game between corporates and workers. We also expect that an upward shift in Japan's nominal growth enhances its growth sustainability, which can positively affect asset prices, including equity prices.
- Sustained nominal GDP growth improves fiscal sustainability, with a rapid increase

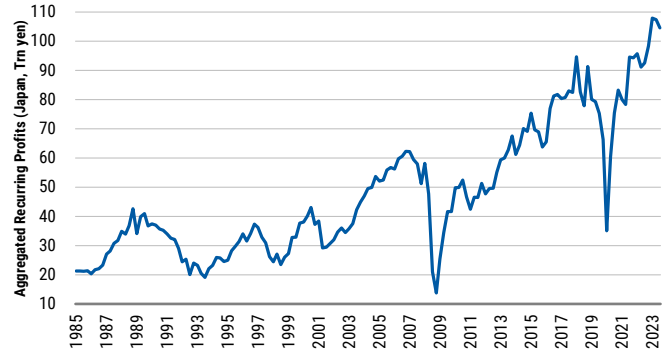
in tax revenue and a decline in the gross debt/GDP ratio. With the average JGB maturity exceeding 9 years and the BoJ owning more than half of JGBs, we expect the effective average interest cost (r) to remain far below the rate of nominal GDP growth (g).

Exhibit 52: Simultaneous growth for employee compensation and corporate earnings: compensation of employees (trillion yen)



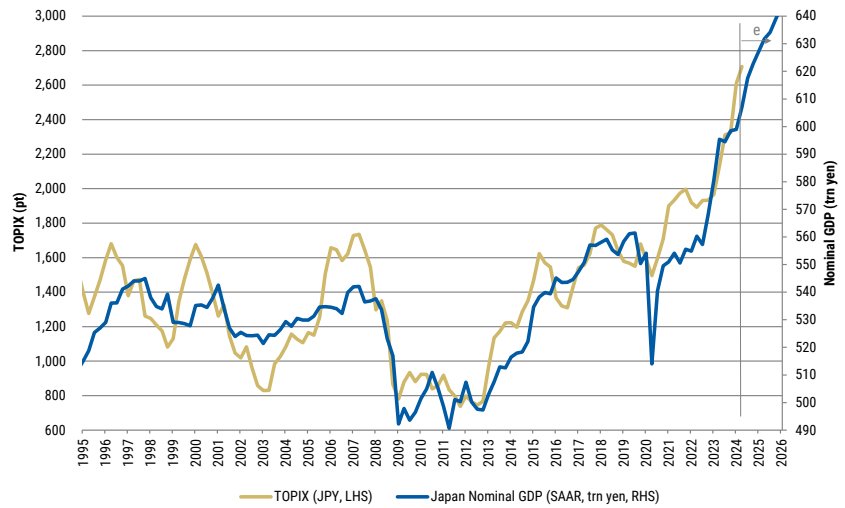
e=Morgan Stanley Research estimates
Source: Cabinet Office, Morgan Stanley Research

Exhibit 53: Simultaneous growth for employee compensation and corporate earnings: Aggregated recurring profits of Japanese firms (trillion yen; MoF Corporate Statistics)



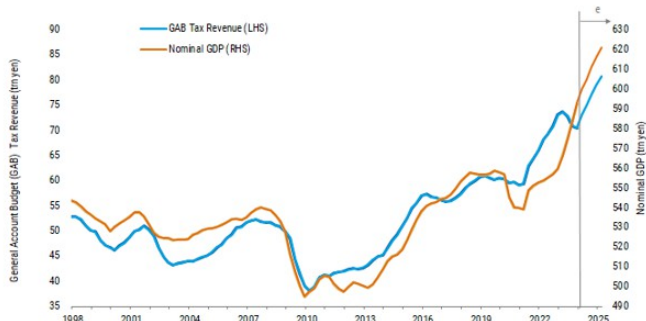
Source: MoF, Morgan Stanley Research

Exhibit 54: Higher nominal growth may have positive effects on asset prices: TOPIX (pt), Japan's nominal GDP (trillion yen)



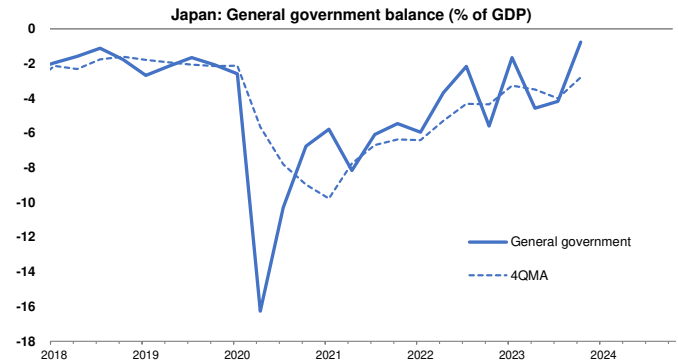
Source: FAME, Cabinet Office, Morgan Stanley Research estimates

Exhibit 55: Higher nominal growth implies a large increase in tax revenue: Forecasts on nominal GDP and the General Account Budget (GAB) tax revenue (trillion yen)



Source: MoF, Cabinet Office, Morgan Stanley Research estimates

Exhibit 56: Japan's fiscal deficit has been shrinking: Japan's general government fiscal balance (% of GDP; Flow of funds basis)



Source: BoJ, Morgan Stanley Research

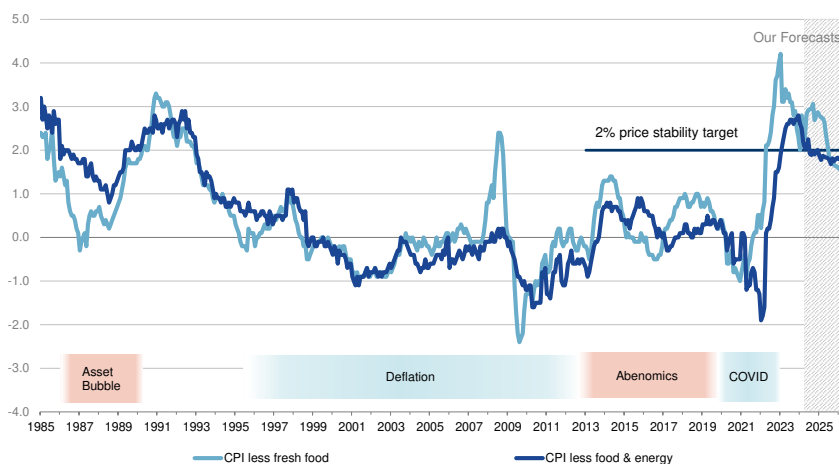
What helps sustain a higher nominal GDP?

We believe that Japan's social norm of no price and wage hikes has already started to change: Japan's households and corporations formed sticky expectations that prices and wages would no longer rise after the experience of long years of deflation and low inflation. After the 2% inflation target (the 2% price stability target) was introduced in 2013, the Bank of Japan has persistently continued unconventional large-scale monetary easing. In contrast to previous phases, the yen weakening trend continued, even when Japan faced a global economic shock such as Covid. While not to the extent of the US, Japan also temporarily implemented large-scale fiscal expansion in response to the pandemic. It was against this macro background that a recent surge in import prices triggered a structural change in Japan's social norm of no price and wage hikes.

Price to wage pass-through has risen: As household inflation expectations rose and aggregated corporate earnings reached record highs, Japanese firms have realized that they are able to pass on higher input prices in the form of higher sales prices. Higher inflation expectations from workers mean labor unions have also started to demand wage hikes to compensate for inflation. As corporates also share these higher inflation expectations, more firms are agreeing to wage increases in response to those labour union demands. Sustainable wage growth is also driven by a structural labor shortage on the back of demographics and by higher labor market mobility, mainly among young workers who are switching jobs more frequently than before.

A virtuous cycle between wage growth and inflation is the key for the economy to exit a low inflation/wage growth equilibrium sustainably, which would result in a shift in Japan's nominal GDP growth trend. Our empirical analysis has shown that the virtuous cycle has indeed started on the back of a change in Japan's social norm of no price and wage hikes. We will discuss the technical details later in this section.

Exhibit 57: Japan's inflation over the past 40 years and our forecast: Japan-style core and US-style core (% YoY)



Source: MIC, Morgan Stanley Research

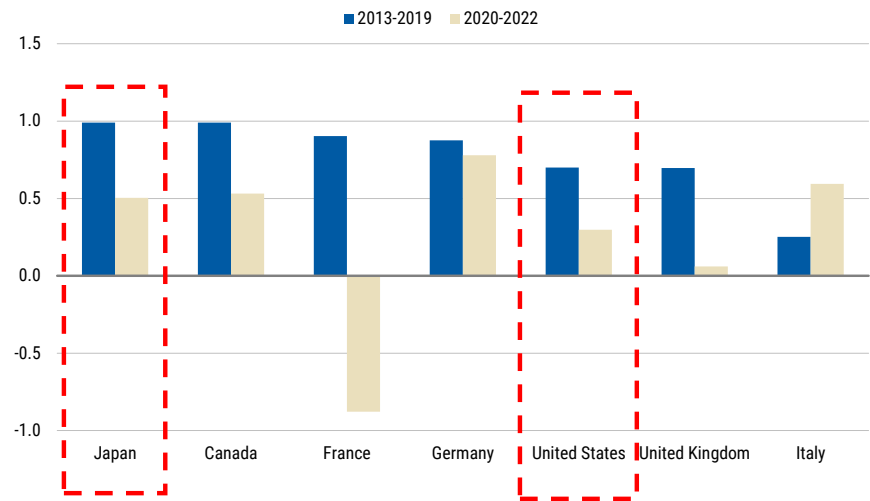
Do we expect productivity growth to improve with capex?

Solid labor productivity growth...: Growth in Japan's average labor productivity per hour (real GDP/total working hours) was one of the highest among G7 countries in 2013-2019, the period from the start of Abenomics until immediately before the Covid-19 pandemic. In 2020-22, however, Japan's productivity growth was adversely affected by pandemic-related restrictions on economic activity. Even so, the average hourly productivity growth was still higher than the US and the UK. We think international comparisons post-pandemic have to be discounted because of problems in accurate measurement of working times amid an increase in remote work and differences in the periods of restrictions on economic activity.

If we compare Japan and the US for a longer run from 2010 to 2022, the differences between the two countries stand out. Japan had already entered a phase of gradual population decline and its labor input (total working time) was on a gradual downtrend, excluding 2016-2017, when there were large increases in the female and elderly labor participation rates. In contrast, in the US, except for 2020 which was affected by the pandemic, total working time continued to grow strongly at a pace above population growth. However, growth in real GDP per hour worked, or hourly labor productivity, was higher in Japan than in the US.

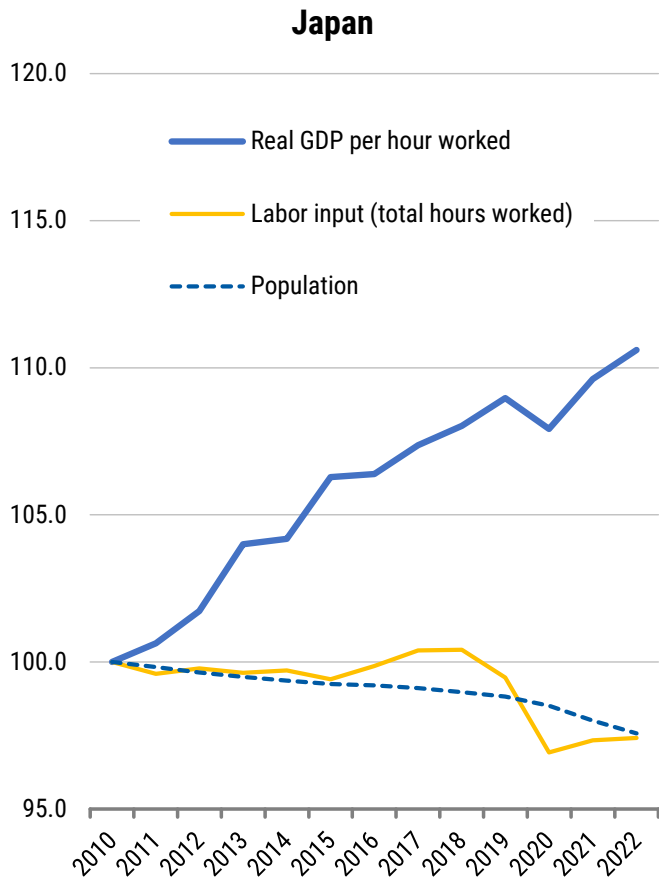
...alongside above-pre-Abenomics trend growth in private capex: We believe that continued recovery in private capex played a key role against the backdrop of this solid growth in labor productivity and digitization. From 2013, when Abenomics started, Japan's real private capex trend shifted up above the pre-Abenomics trend.

Exhibit 58: Growth in labor productivity for the G7 countries: Growth rate for real GDP per hour (% , annual average)



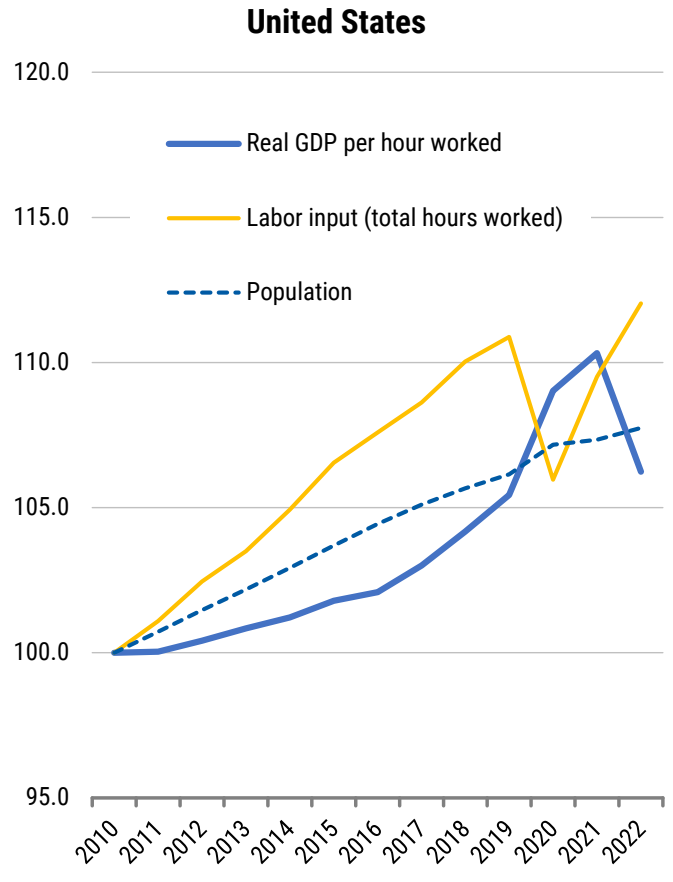
Source: OECD, Morgan Stanley Research

Exhibit 59: Japan: Solid growth for real GDP per hour – Growth rate for real GDP per hour, labor input (total hours worked), population (series are normalized to 2010=100)



Source: OECD, Morgan Stanley Research

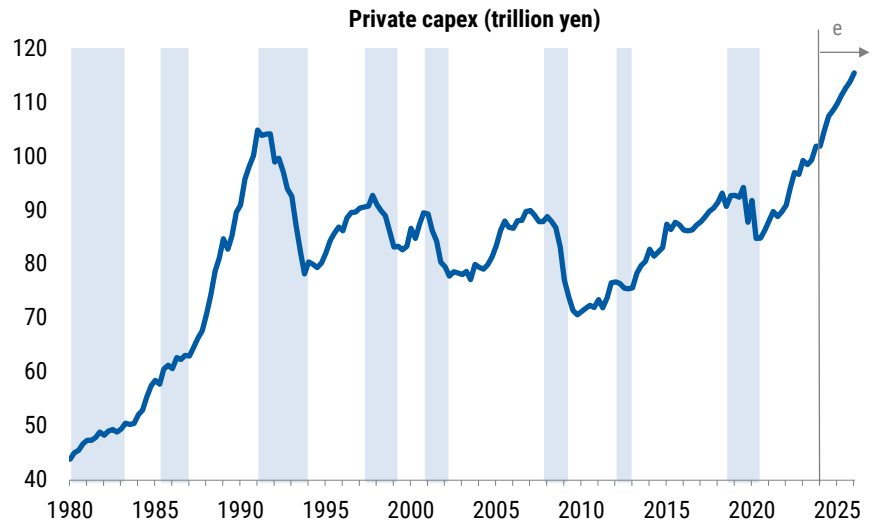
Exhibit 60: US: Growth rate for real GDP per hour, labor input (total hours worked), population (series are normalized to 2010=100)



Source: OECD, Morgan Stanley Research

Exhibit 61:

We expect private capex to exceed its bubble-period peak in 1Q91 (trillions yen)

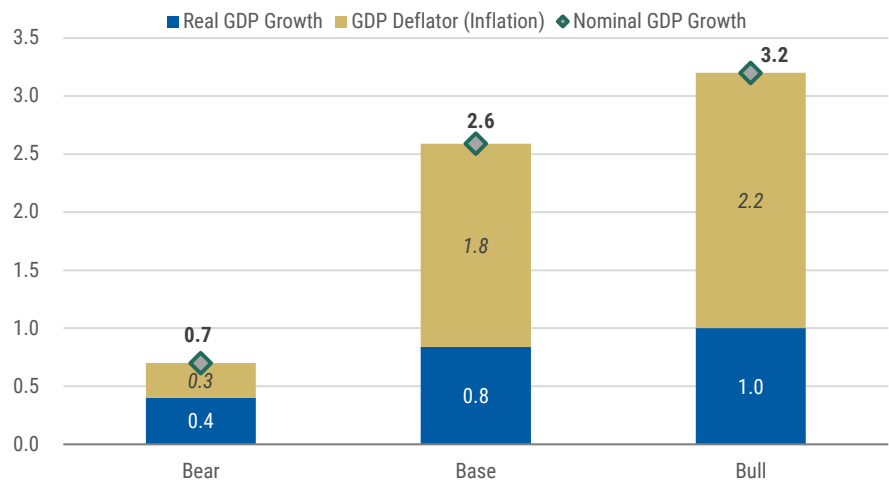


e=Morgan Stanley Research estimates
Source: Cabinet Office, Morgan Stanley Research

Our mid-term nominal growth trend forecast and risk scenarios

Our forecasts of Japan's medium-term nominal GDP growth trend in the base case with bull/bear risk scenarios are shown in [Exhibit 62](#).

Exhibit 62: Bear/Base/Bull scenarios: Nominal GDP trend growth forecasts over medium term (2025-2030)



Source: Morgan Stanley Research estimates

As our base case, we expect Japan's average nominal growth to trend at around +2.6% in 2025-30: We expect Japan's real trend growth to remain at around +0.8% as productivity growth will likely exceed the negative impact from the ongoing mild decline in population. As we discussed, we expect hourly productivity growth to return to the pre-Covid trend of around 1% with a recovery in capex. The domestic capex trend will be supported by a better outlook of solid headline nominal sales growth, accommodative

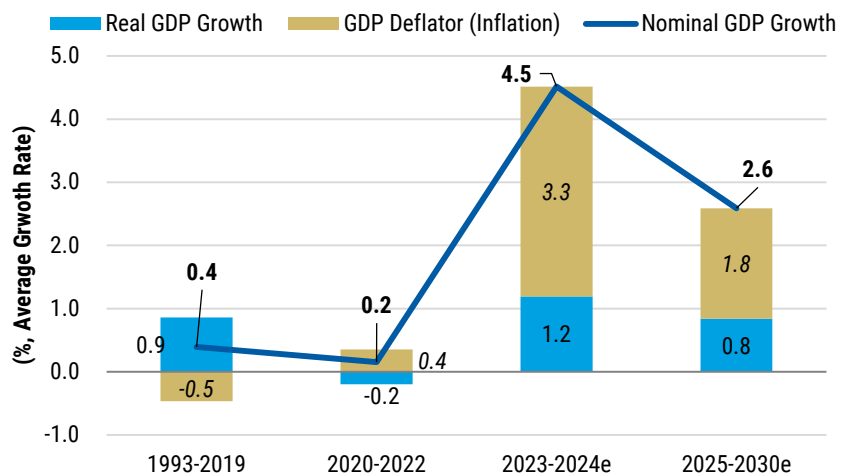
financial conditions with low real interest rates, the need for labour-saving investment, supply-chain reorganization and friend-shoring moves on the back of the government's new industrial policy. Higher mobility in the labor market among younger workers and low-productivity 'zombie' firms with deflationary business models exiting the market will also support overall productivity growth, in our view. As for inflation or the GDP deflator trend, we expect around +1.8% inflation to be sustained, consistent with nearly 2.7-3.0% for nominal wage growth.

Momentous change in Japan's nominal GDP growth: Our base-case nominal growth forecast may not look high if compared with nominal growth of various emerging economies, but this would be a momentous change for Japan, where nominal growth has been basically flat for a long period. Japan's average nominal GDP growth during 1993 and 2019, the period after the collapse of the asset bubble and before the Covid shock, was only +0.4% (Exhibit 63). Note that this period includes the pre-2013 period when the BoJ did not have an explicit 2% inflation target.

In our bull case, we expect nominal GDP growth to remain above +3% with inflation remaining slightly above the 2% inflation target and a higher real GDP growth trend, with productivity growth accelerating at a faster pace.

In our bear case, we expect nominal GDP growth to decelerate below 1% with inflation and the GDP deflator returning to sluggish growth of around +0.3%. That said, we do not expect a return to deflation or negative inflation, assuming that the BoJ will maintain the 2% inflation target.

Exhibit 63: Japan's average nominal growth and its breakdown: Actual vs. our base-case forecast (%)



Source: Cabinet Office, Morgan Stanley Research (e) estimates

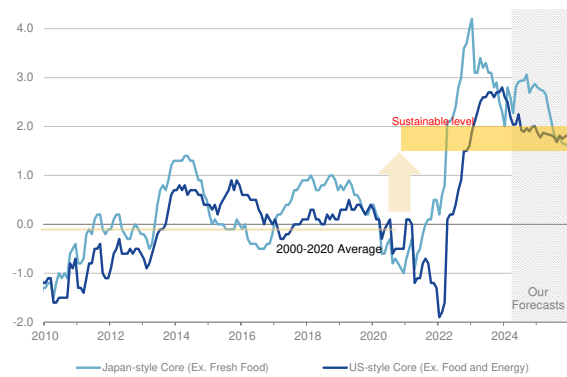
The Virtuous Cycle Between Wage Growth and Inflation

Sustainable wage growth and recovered wage pass-through will enhance inflation sustainability: A 'virtuous cycle of wages and prices' is essential for stable and sustainable inflation. Once a virtuous cycle between wages and prices is developed, wage growth becomes sustainable with sufficient wage pass-through to prices, generating the stable and sustainable achievement of the 2% inflation target. In fact, both inflation and wages

are on the verge of a momentous change, escaping from a low inflation/wage growth equilibrium.

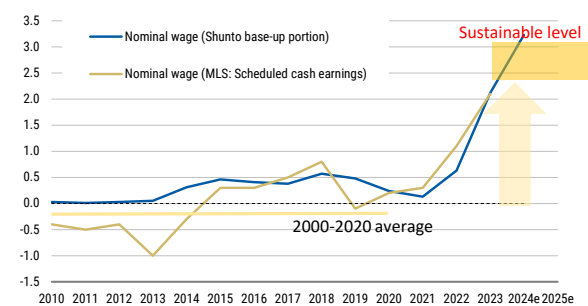
We developed empirical framework to assess structural changes in Japanese economy, which has been trapped in low-inflation/deflation equilibrium for decades. Refer to its details in our report ([Japan Economics: Has Japan's Inflation/Wage Growth Finally Become Sustainable? Revival of Wage-Price Pass-through](#) [14 Mar 2024]). We found that sustainability of inflation/wage growth has been considerably strengthening on the back of advancement in the development of a virtuous cycle between wages and prices.

Exhibit 64: Inflation trend implies a transition from low-inflation/deflation equilibrium



e= Morgan Stanley Research estimate
Source: MIC, Morgan Stanley Research

Exhibit 65: Wage growth trend also implies a transition from low-inflation/deflation equilibrium



e= Morgan Stanley Research estimate
Source: MHLW, Rengo, Morgan Stanley Research

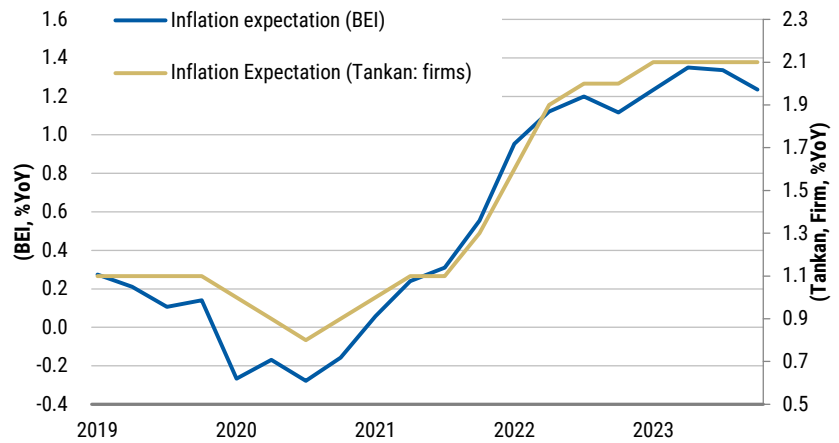
Clear trend of higher pass-through of prices to wages with higher inflation

expectations: Aggregate inflation expectations for the whole economy have continued to rise, with corporate inflation expectations anchoring at around 2%. While household inflation expectations are lagging behind corporates, its upward trend is likely to strengthen as a result of the recent record high wage growth. This is because the formation of inflation expectations for Japanese households has been shown to be very backward-looking. In addition, there has been significant progress in re-anchoring from a state where inflation expectations have been strongly anchored to deflation.

Spring wage negotiation results are key: As inflation expectations rise for both corporates and households, they will share a perception of the inflation outlook, leading to higher pass-through from prices to wages. These improvements have already been confirmed by the strong results of the spring wage negotiations. Scheduled cash earnings on a common sample basis and Shunto's base-up (in spring wage negotiations) are known to be highly correlated. Last year, base-up from Shunto was gradually reflected in scheduled cash earnings figures, on common-sample basis, from around spring, which caught up with the Shunto's base-up in July. In the final Shunto tabulation, we expect to see overall average wage growth (including seniority portion) of 4.8% and 3.2% for base-up portion, and we expect growth in scheduled cash earnings to rise to around 3% heading into summer.

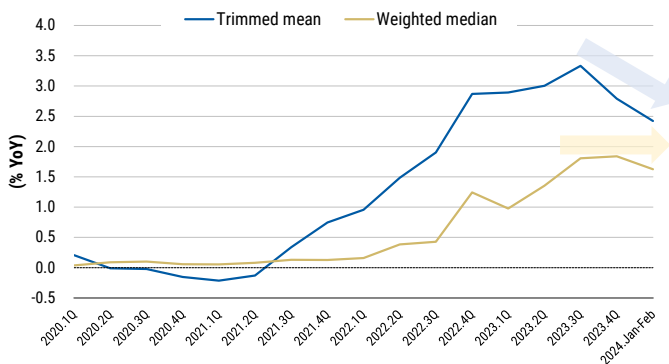
Note that labor unions start spring wage negotiations with firms in February and March. Rengo publishes the results of the 1st round tabulation in mid-March and updates tabulation results periodically. The 7th round is usually the final tabulation, which is published in July.

Exhibit 66: Upward trend in inflation expectations implies advances in re-anchoring process: BEI, BoJ Tankan Price outlook, %YoY



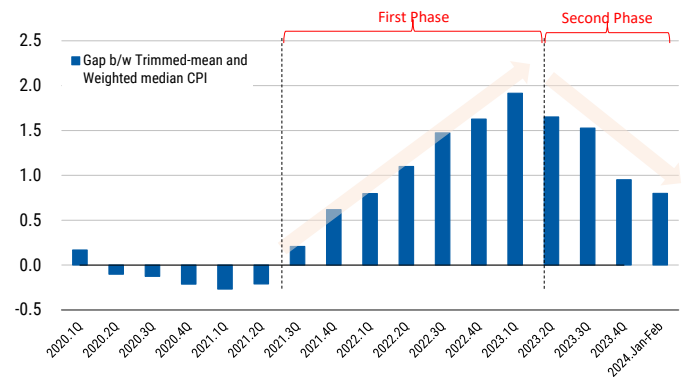
Source: Bloomberg, BoJ, Morgan Stanley Research

Exhibit 67: Measures of Underlying Inflation: (1) Weighted median CPI trending upward, (2) trimmed mean CPI outpacing upward trend of weighted median CPI, and (3) trimmed mean starting to converge toward weighted median



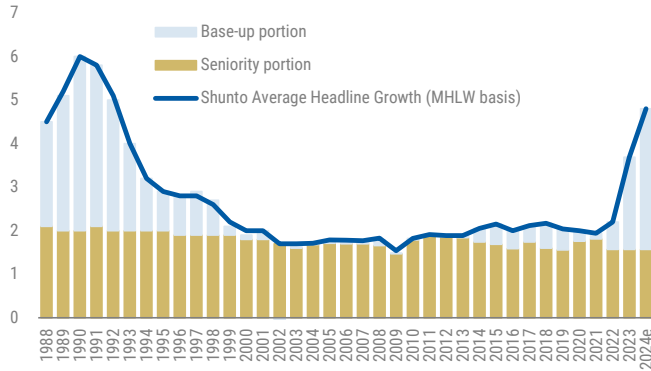
Source: BoJ, Morgan Stanley Research

Exhibit 68: Re-anchoring of inflation expectations has considerably advanced: Re-anchoring metric, %



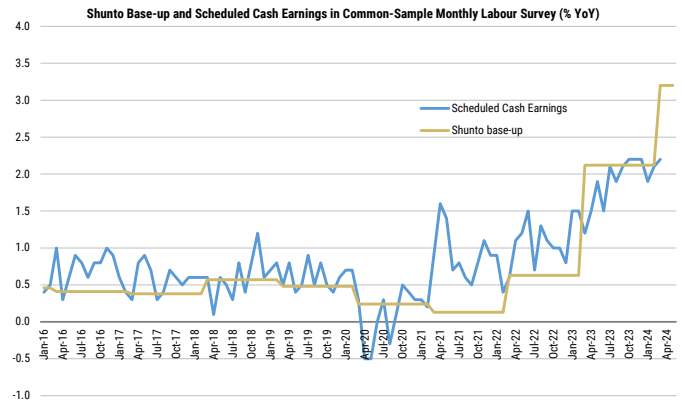
Source: BoJ, Morgan Stanley Research

Exhibit 69: Robust wage hikes, incl. SMEs, are consistent with our empirical analysis that the formation of a virtuous cycle between wages and prices has considerably advanced: Shunto outcome and its breakdown (%)



e=Morgan Stanley research estimates
Source: MHLW, Rengo, Morgan Stanley Research

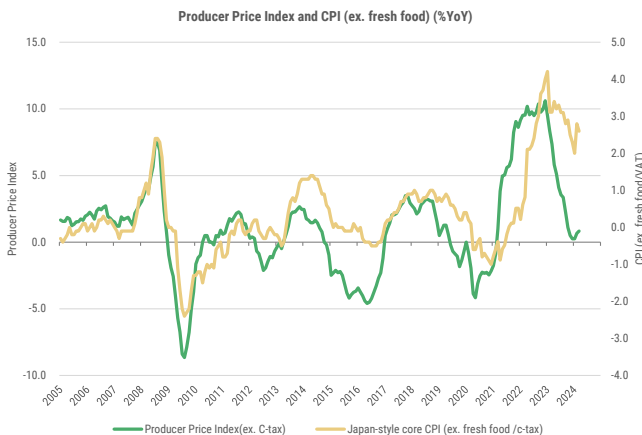
Exhibit 70: Scheduled cash earnings expected to rise further heading into mid-year, given the strong outcome of the 2024 spring wage negotiations (% YoY, common-sample basis)



Note: in the final Shunto tabulation, we expect to see overall average wage growth (including seniority portion) of 4.8% and 3.2% for base-up portion
Source: MHLW, Morgan Stanley Research

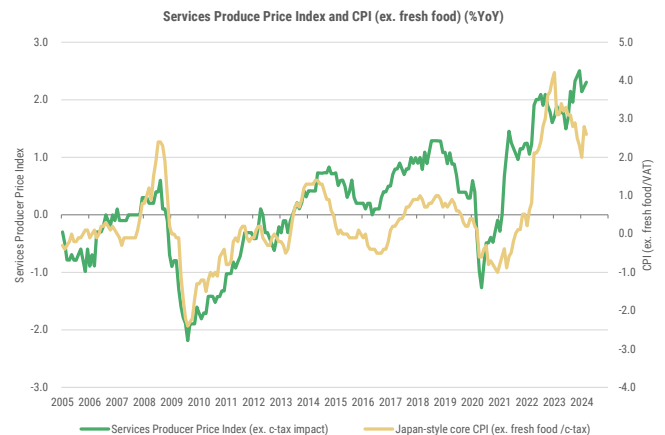
Companies are suggesting that they will still hike prices even though input costs have receded – clear sign of wage pass-through: While producer prices of goods already peaked with a decline in import prices, upward pressure on service prices remains as a result of the strong Shunto wage negotiation results. Given this background, service inflation will be a key driver for inflation outlook going ahead. In fact, in the Sakura report (the BoJ's regional economic report), improvements in wage pass-through are being clearly confirmed, indicated by corporate comments and the BoJ commented that "as wage hikes spread, there were many reports that companies that would conduct and consider passing wage hikes to prices were steadily increasing."

Exhibit 71: Producer prices of goods already peaked with a decline in import prices: PPI, CPI (%YoY)



Source: BoJ, Morgan Stanley Research

Exhibit 72: Upward pressure on service prices remains: Corporate services price index and CPI (%YoY)



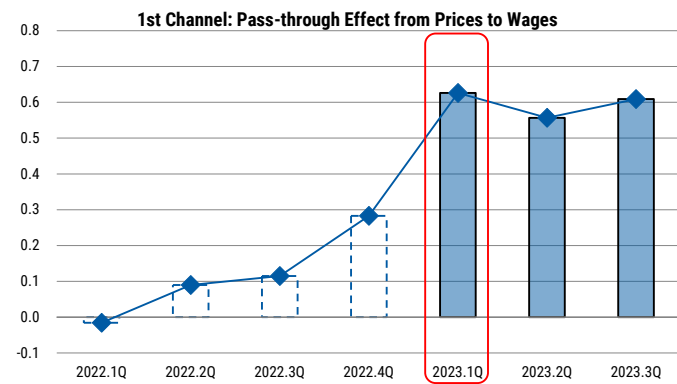
Source: MIC, Morgan Stanley Research

What is our estimate of the wage pass-through?

Our empirical analysis finds that development of a 'virtuous cycle between wages and prices' is finally coming into view via a strengthening wage pass-through channel.

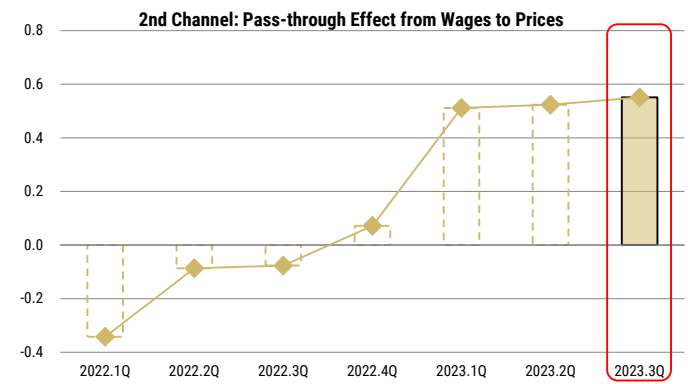
Pass-through channels (1. from prices to wages, 2. from wages to prices) was essentially muted until very recently. A key points are (1) the strengthening of pass-through from prices to wages since 1Q 2023 (red-framed portion in Exhibit 73) and (2) the wage-to-price pass-through channel was reinforced in a statistically significant manner for the first time in 3Q 2023 (Exhibit 74). These pass-through channels had been weakening since the mid-1990s, and was almost entirely muted in the early 2010s until recently. Thus our finding is a major advancement for Japan, as the country, having struggled with a social norm of no price/wage hikes, is beginning to accept the transfer of wage-hikes to prices. We think the current recovery is likely to be a structural change rather than a temporary change.

Exhibit 73: 1st channel: Strengthened pass-through from prices to wages, which had been muted



Note: estimated sensitivity of nominal wage growth in response to a 1% price increase shock. Solid blue bar indicates its statistical significance. With dotted bar, it is not statistically significant.
Source: Morgan Stanley Research estimates

Exhibit 74: 2nd channel: Signs of strengthening of pass-through from wages to prices for the first time

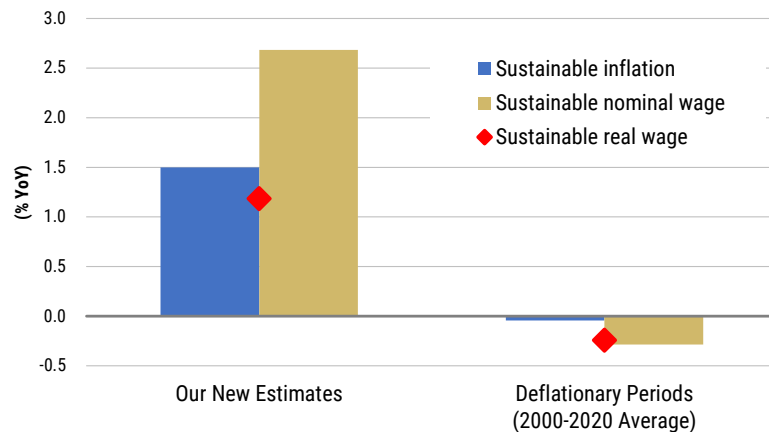


Note: estimated sensitivity of inflation in response to a 1% wage increase shock. Solid yellow bar shows its statistical significance. With dotted bar, it is not statistically significant.
Source: Morgan Stanley Research estimates

Wage growth trend suggests sustainable inflation of 1.5% to 2% is achievable: Based on our estimates wage-price pass-through channel, our estimated levels of sustainable wage growth/inflation are about 1.5-2.0% for inflation and nearly 2.7-3.0% for nominal wage growth. This means sustainable real wage growth at roughly 1.2% (Exhibit 75). As labor productivity growth remains at about 1%, we confirm that real wage growth is functioning as a sustainable source of inflation pressure.

We think the most important point is how to capture non-linearity arising when the economy arrives at an inflection point. The non-linearity cited here refers to more moderate non-linearity than the non-linearity of the 'price and wage spiral'. Based on the above-mentioned macro model, our estimation results show a trend of nominal wage growth modestly exceeding the increase in inflation rate when inflation expectations anchor to around the 2% level.

Exhibit 75: Structural shift in sustainable inflation/wage growth: Our new estimates vs deflationary periods



Source: MIC, MHLW, Morgan Stanley Research estimates

Our BoJ Outlook

Our base case: We retain our existing outlook for the BoJ to raise the interest rate on excess reserves from 0.1% to 0.25% in July 2024 and raise it again from 0.25% to 0.5% in January 2025 as our base case. We do not expect additional rate hikes beyond 0.5% in 2025, given our outlook for Japan's underlying inflation rate to gradually stabilize to levels slightly below 2% in 2025. Our end-2025 policy rate forecast is currently 0.5%.

Expected timing to reduce JGB purchases: We expect that the BoJ is likely to gradually scale back the gross JGB purchase pace of roughly ¥6trn a month from October 2024. We expect a moderate adjustment of the monthly JGB purchase pace to about half of the current level over the period of a year. Below we list our current outlook expectations.

July 2024: A rate hike from 0.1% to 0.25% (June 2024 will be our risk scenario)

Oct. 2024: JGB purchasing pace reduction from 6 trillion yen/month to ¥5trn/m

Jan. 2025: Additional rate hike from 0.25% to 0.50%. The timing will likely be earlier than the market consensus. Given our inflation forecast, our end-2025 rate forecast is 0.50%.

April 2025: JGB purchasing pace reduction from ¥5trn yen/m to ¥4trn/m

Oct. 2025: JGB purchasing pace reduction from ¥4trn/m to ¥3trn/m

As for the JGB purchasing reduction schedule, we characterize it as a very moderate pace of reduction to avoid a sharp increase in long-term yields.

What are the risks around the base case considering the US rates and FX path? If inflation turns out to exceed our forecast in 2025, we believe there is a risk of the Bank raising the policy rate again from 0.5% to 0.75% in around July 2025, though this is not our base case. Conversely, if an economic recession becomes more likely due to slowdown

of the overseas economy and Japan's inflation trend substantially weakens, the Bank might have to lower the policy rate in 2025. In the next recession phase, we expect the BoJ to implement quantitative easing by increasing its JGB purchases, rather than returning to a negative interest rate policy (NIRP).

Exhibit 76: Scheduled Dates of Monetary Policy Meetings in 2024

Date of MPM	Release Schedule		
	Outlook Report (The Bank's View)	Summary of Opinions	MPM Minutes
Jan. 22 (Mon.), 23 (Tues.)	Jan. 23 (Tues.)	Jan. 31 (Wed.)	Mar. 25 (Mon.)
Mar. 18 (Mon.), 19 (Tues.)	--	Mar. 28 (Thurs.)	May 2 (Thurs.)
Apr. 25 (Thurs.), 26 (Fri.)	Apr. 26 (Fri.)	May 9 (Thurs.)	June 19 (Wed.)
June 13 (Thurs.), 14 (Fri.)	--	June 24 (Mon.)	Aug. 5 (Mon.)
July 30 (Tues.), 31 (Wed.)	July 31 (Wed.)	Aug. 8 (Thurs.)	Sept. 26 (Thurs.)
Sept. 19 (Thurs.), 20 (Fri.)	--	Oct. 1 (Tues.)	Nov. 6 (Wed.)
Oct. 30 (Wed.), 31 (Thurs.)	Oct. 31 (Thurs.)	Nov. 11 (Mon.)	Dec. 24 (Tues.)
Dec. 18 (Wed.), 19 (Thurs.)	--	Dec. 27 (Fri.)	To be announced

Source: BoJ, Morgan Stanley Research

Equity Strategy - Japan is the Greatest Turnaround Story in Global Equities Today

Jonathan Garner, Sho Nakazawa, Daniel Blake, Makoto Furukawa

Our long-standing bullish thesis on Japan since 2018 is now more widely accepted by investors. In our view, the macro and structural policy reform agenda mean Japan's ROE journey still has more room to play out. We expect Japan equities to continue to benefit from a virtuous circle of rising ROE, strong growth in EPS and valuation re-rating. We see the secular bull market continuing, with ROE reaching 12% by end 2025.

In our mid-year Outlook for 2024 we reiterate Japan equities as the top pick market across our coverage in Asia / EM and we have raised our TOPIX target from 2,800 to 3,200 (+17% versus spot). Earnings revisions and EPS growth are likely to remain robust with our new base case forecast for TOPIX EPS about 5 ppt above consensus at Yen 185 (+15%) in calendar year 2024, followed by two further years of double digit percentage growth. This is likely to drive ROE to our target of 12% by end 2025, or 3x the level at the launch of Abenomics in early 2013. The factors supporting this bullish view include: 1./ Higher trend growth in the US (over 20% of revenues for Japan equities), 2./ sustained domestic nominal GDP growth, and 3./ a weaker profile than previously for the USDJPY (now expecting GGG for 4Q 2025), and positive leverage to the Multipolar World and AI thematics.

Our base case target P/E multiple remains 15.0x, driven by further up-weighting from foreign investors as well as inflows from Japan's revised Nippon Individual Savings Account (NISA) scheme, which has got off to a strong start earlier this year. Whilst hedging Yen weakness (USDJPY strength) has been a winning strategy year to date, we recommend caution going forward on this front for USD-based investors. This is given the balance of risk towards lower USD/JPY from recent overbought levels and in the context of recent intervention by the Japanese authorities.

The Greatest Turnaround Story in Global Equities Today

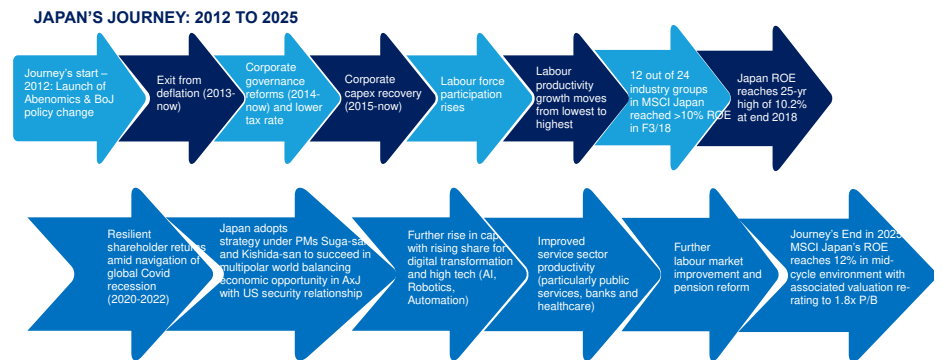
Back in 2018, we highlighted that Japan equities were the most under-appreciated turnaround story in global equities: At the heart of our thesis was the idea that monetary and fiscal policy dials were now set to exit deflation driving an improved top-down environment for corporations from an asset utilization perspective, whilst bottom-up the major corporate governance reforms in Japan were also going to improve capital allocation. We argued that the net effect would be a sea-change in corporate profitability both in absolute terms and relative to global peers. For details see our original Blue Paper, [Japan Macro and Strategy: Japan's Journey from Laggard to Leader](#) (11 Sep. 2018).

Japan equities have come a long way: Just how far Japan has come on its journey is shown in [Exhibit 77](#) and [Exhibit 78](#). Major steps along the journey are shown in the

timeline in [Exhibit 77](#). The pay-off to sustained reform at the macro level has been a transformed nominal GDP growth environment and recovery in private capex and corporate productivity. This is now allowing a virtuous cycle to appear where wages are rising, delivering increased purchasing power, whilst corporate ROE can also expand: a win-win versus the lose-lose of the deflation era. At the micro level investment themes such as corporate restructuring, dividend payout increases and stock buyback programs have been alpha-generative as a result.

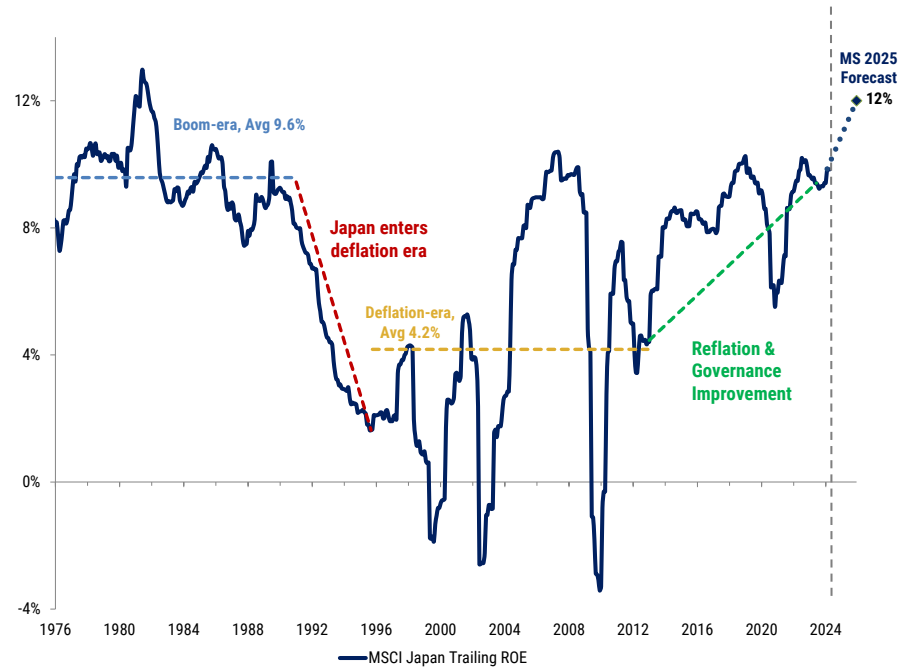
During the deflation era Japan-listed equities ROE averaged just 4.2% for two decades, by far the lowest in global markets. Since the launch of Abenomics in 2013 there has been a systematic improvement over the cycle. Moreover Japan equities have indeed been converging with global averages at the same time as other major markets – in particular China – have shown the opposite trajectory.

Exhibit 77: Japan’s ROE Journey – Broad macro and structural policy reform agenda has more room to play out



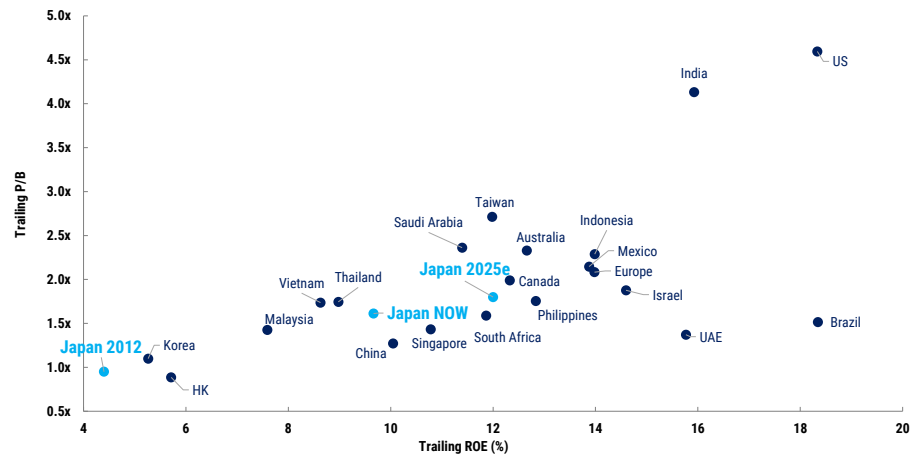
Source: Morgan Stanley Research

Exhibit 78: Profitability regimes for MSCI Japan – We see a new era of more ROE-focused corporate management approaches, lifting ROE to a sustainable 12% from FY2025 onwards



Source: FactSet, MSCI, Morgan Stanley Research; Data as of April 2024

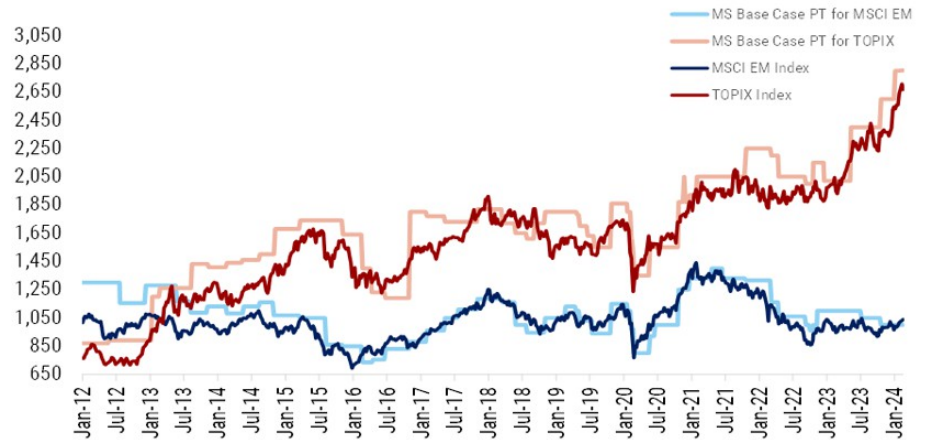
Exhibit 79: Global P/B vs ROE map – We see Japanese equities justifying a further re-rating on the basis of higher sustainable profitability



Source: FactSet, MSCI, RIMES, Morgan Stanley Research. Data as of May 16, 2024. Note MSCI indices used for each market

Japan still preferred to overall EM: We continue to strongly prefer Japan to overall EM as we have done consistently for over a decade (see [Exhibit 80](#) for index performance and target price history). Japan equities are currently a major OW in our global cross asset framework. Typically we have recommended hedging the Yen back to US dollars for a US dollar-based investor, but we changed this aspect of our call late last year to unhedge their Japanese equity allocations. Our base case TOPIX Target for June 2025 is at 3,200 (+17% upside from spot). For details see [Exhibit 81](#).

Exhibit 80: Morgan Stanley Target Price History for TOPIX and MSCI EM – We have held a long standing structural preference for Japan equities, generally in FX-hedged terms



Source: RIMES, MSCI, FactSet, Morgan Stanley Research.

Exhibit 81: Morgan Stanley Asia/EM Bear/Base/Bull Case Targets – We see solid EPS growth and multiple support for TOPIX, with less downside skew to returns vs. EM/China

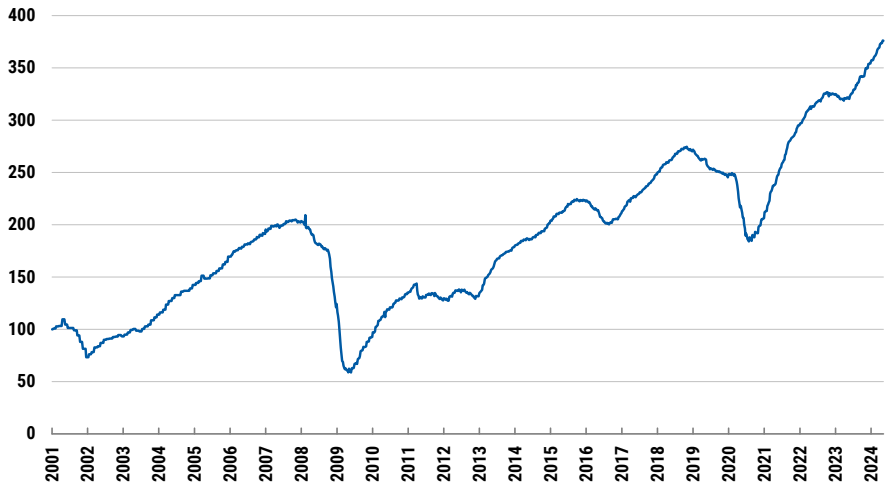
	Index	Current Price	MS Target Price (Jun-25)	Prior MS Target (Dec-24)	MS Top-Down EPS YoY %			Consensus EPS Forecast YoY %			MS Target Fwd P/E Jun -25	Prior MS Target Fwd P/E Dec -24	Consensus 12m Fwd P/E Current
					Dec-24	Dec-25	Dec-26	Dec-24	Dec-25	Dec-26			
Base Case	TOPIX	2,738	3,200 17%	2,800 3%	185 15%	205 11%	225 10%	178 9%	194 9%	210 8%	15.0x	15.0x	14.8x
	MSCI EM	1,099	1,090 -1%	1,000 -6%	80 21%	90 13%	100 11%	82 20%	95 16%	107 12%	11.5x	11.0x	12.6x
	MSCI APxJ	570	560 -2%	520 -5%	37 19%	42 14%	47 12%	39 20%	44 14%	49 11%	12.5x	12.0x	14.0x
	Hang Seng	19,377	19,150 -1%	16,000 -13%	1,900 7%	2,030 7%	2,250 11%	2,002 9%	2,167 8%	2,291 6%	9.0x	8.0x	9.4x
	HSCEI	6,871	6,800 -1%	5,450 -17%	735 5%	769 5%	840 9%	794 6%	837 5%	892 7%	8.5x	7.3x	8.4x
	MSCI China	63	61 -3%	53 -13%	5.2 9%	5.7 9%	6.4 13%	5.8 14%	6.6 13%	7.3 11%	10.0x	9.5x	10.4x
	CSI300	3,640	3,900 7%	3,500 -3%	314 8%	339 8%	377 11%	339 12%	376 11%	413 10%	11.0x	10.5x	10.3x
Bull Case	TOPIX	2,738	3,700 35%	3,100 14%	200 23%	221 11%	243 10%	178 9%	194 9%	210 8%	16.0x	16.0x	14.8x
	MSCI EM	1,099	1,280 17%	1,140 7%	85 25%	97 15%	108 11%	82 20%	95 16%	107 12%	12.5x	12.0x	12.6x
	MSCI APxJ	570	650 14%	590 8%	40 28%	45 14%	51 12%	39 20%	44 14%	49 11%	13.5x	13.2x	14.0x
	Hang Seng	19,377	22,500 16%	18,500 0%	1,957 6%	2,132 9%	2,363 11%	2,002 9%	2,167 6%	2,291 6%	10.0x	8.8x	9.4x
	HSCEI	6,871	8,100 18%	6,200 -5%	764 7%	815 7%	899 10%	794 5%	837 5%	892 7%	9.5x	7.8x	8.4x
	MSCI China	63	75 18%	60 0%	5.4 12%	6.1 13%	7.0 15%	5.8 14%	6.6 13%	7.3 11%	11.4x	10.5x	10.4x
	CSI300	3,640	4,400 21%	4,000 11%	319 9%	349 10%	392 12%	339 12%	376 11%	413 10%	12.0x	11.9x	10.3x
Bear Case	TOPIX	2,738	2,430 -11%	2,020 -26%	163 4%	176 8%	198 12%	178 9%	194 9%	210 8%	13.0x	12.5x	14.8x
	MSCI EM	1,099	780 -29%	750 -29%	66 3%	74 11%	82 11%	82 20%	95 16%	107 12%	10.0x	10.0x	12.6x
	MSCI APxJ	570	410 -28%	380 -31%	32 6%	35 10%	39 12%	39 20%	44 14%	49 11%	11.0x	10.3x	14.0x
	Hang Seng	19,377	12,200 -37%	11,000 -40%	1,729 1%	1,726 0%	1,755 2%	2,002 9%	2,167 6%	2,291 6%	7.0x	7.0x	9.4x
	HSCEI	6,871	4,600 -33%	3,600 -45%	698 0%	700 0%	714 2%	794 5%	837 5%	892 7%	6.5x	6.1x	8.4x
	MSCI China	63	42 -33%	35 -42%	4.7 3%	4.9 4%	5.0 3%	5.8 14%	6.6 13%	7.3 11%	8.5x	7.6x	10.4x
	CSI300	3,640	2,750 -24%	2,400 -33%	283 4%	295 4%	309 5%	339 12%	376 11%	413 10%	9.0x	8.8x	10.3x

Source: RIMES, MSCI, FactSet, Morgan Stanley Research; Data as of May 16, 2024.

Broad-based improvement in ROE: The improvement in ROE is broad based across both domestic and internationally facing sectors. with 15 of 21 industries showing operating margin improvement – see [Exhibit 84](#) – including major improvements in sectors such as Semiconductors, Technology Hardware and Equipment, and Healthcare Equipment and Services. Our work indicates that only around 30% of the ROE improvement is due to structural weakening in the Yen over the last decade with 70% due to other factors.

Hence, whilst Japan's ROE and corporate EPS remain cyclical – impacted by global and domestic growth and currency fluctuations – the secular bull market in Japan has been underpinned by an earnings trajectory, which shows a strong underlying EPS CAGR over the cycle in Yen terms since 2012 - see [Exhibit 82](#)).

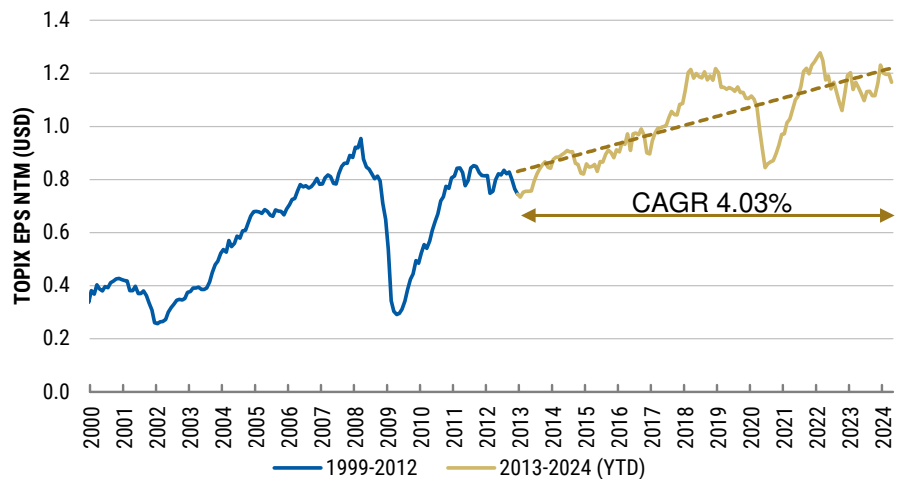
Exhibit 82: TOPIX 12mf EPS (indexed to January 2001=100) in Yen - Rising over the cycle since the launch of Abenomics



Source: IBES, Datastream, Morgan Stanley Research Weekly data as of May 9, 2024

As we are often asked about underlying EPS growth in US\$ terms, given the trend to a weaker Yen in the post Abenomics era – we also show +12mf EPS converted at the month-end spot exchange rates for USDJPY. This shows a trend US dollar CAGR of around 4.0% per annum compared with a little over 7.0% for the S&P 500 and around zero for MSCI EM.

Exhibit 83: TOPIX EPS 12mf EPS (USD) - TOPIX earnings grew by 4.03% CAGR after Abenomics in USD terms



Source: Factset, Morgan Stanley Research; Data as of April 2024.

Exhibit 84: Operating margins now versus 10 years ago by industry group – 15 out of 21 industry groups have managed to improve their operating margins over the last decade

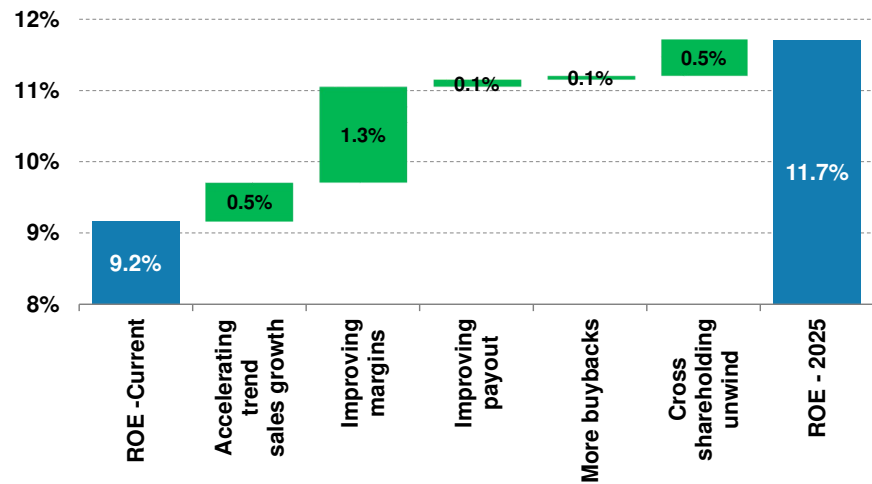
Operating Profit Margin Change (by industry group)	Mar-95 to Mar-01	Mar-01 to Mar-08	Mar-08 to Mar-13	Mar-13 to Mar-23
Energy	(2.2%)	3.1%	(1.0%)	2.4%
Materials	2.4%	2.8%	(5.2%)	4.8%
Capital Goods	0.7%	3.7%	(1.3%)	1.2%
Commercial & Professional Services	(0.4%)	(2.4%)	(0.9%)	3.4%
Transportation	4.2%	1.5%	(1.0%)	(1.0%)
Automobiles & Components	3.8%	1.2%	(1.4%)	0.3%
Consumer Durables & Apparel	0.1%	1.6%	(3.9%)	5.8%
Consumer Services	0.2%	3.3%	2.2%	4.4%
Media	0.7%	(2.9%)	1.2%	11.3%
Retailing	(0.2%)	2.2%	1.7%	(1.4%)
Food & Staples Retailing	N/A	N/A	0.8%	(1.7%)
Food Beverage & Tobacco	(0.6%)	2.0%	2.3%	3.5%
Household & Personal Products	4.8%	(0.1%)	(0.1%)	(1.5%)
Health Care Equipment & Services	5.8%	(8.7%)	(1.3%)	21.3%
Pharmaceuticals Biotechnology & Life Sciences	3.1%	3.3%	(7.6%)	4.8%
Software & Services	15.4%	10.8%	(4.0%)	(5.7%)
Technology Hardware & Equipment	1.3%	0.2%	(1.9%)	6.3%
Semiconductors & Semiconductor Equipment	N/A	N/A	(10.9%)	26.4%
Telecommunication Services	N/A	3.7%	4.0%	(2.5%)
Utilities	(1.0%)	(7.3%)	(8.9%)	5.0%
Real Estate	3.0%	11.2%	(7.7%)	4.5%

Source: RIMES, Morgan Stanley Research

Secular Bull Market to Continue – Maintain Overweight on Japan Equities

We expect Japan equities to continue to benefit from a virtuous circle of rising ROE, strong growth in EPS and valuation re-rating to continue: On 15 October 2023, in a Blue Paper revisit we argued that Japan was just arriving at a Secular Bull Market (see [Japan Equity Strategy: Japan Secular Bull Market Arrives: Here is How to Play It](#), 15 Oct. 2023), subsequently underpinning a broader secular shift in Asia-Pacific equity market leadership (see [2024 Asia EM Equity Outlook: New era for Asia/EM equities, led by Japan and India](#), 12 Nov. 2023). On our DuPont modeling, we think the combination of nominal GDP reflation and corporate reform, such as cross-shareholding unwinds and buybacks will take Japan to a sustainable 12% ROE, justifying a further re-rating.

Exhibit 85: Decomposition of ROE Journey – We see Japan ROE improvement supported by all five underlying drivers

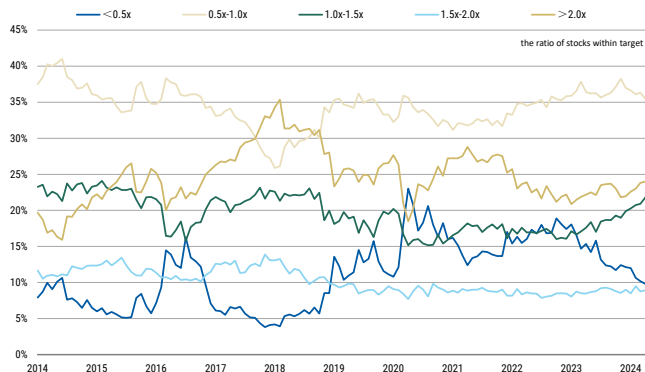


Source: MSCI, Factset, TSE, Bloomberg, Morgan Stanley Research. 2025 = March 2026 fiscal year

2023 a breakout year for recognition of the turnaround thesis – signposts for 2024 and beyond

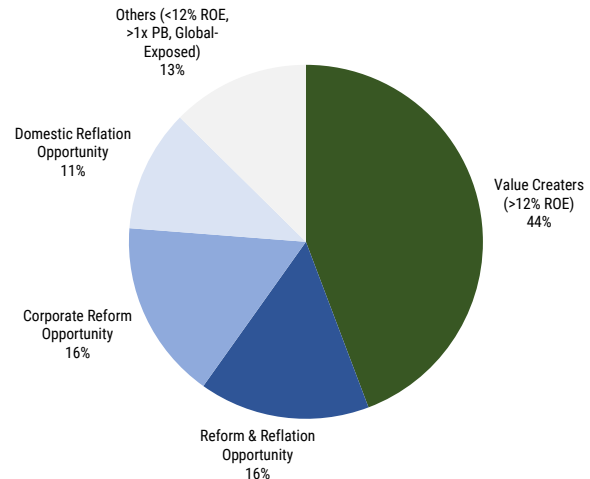
Still plenty to play for in Japan: After the 2023 breakout year for TOPIX performance and this year's new all-time high for the Nikkei index, our thesis on Japan equities is more widely accepted than in the past. There is still plenty to play for in a number of dimensions. Firstly, multipolar world dynamics and friend-shoring supply chains significantly benefit Japan in a wide range of industries given it has the largest economy and industrial based of any US ally in the Asia-Pacific region. Secondly, TSE reforms are providing another boost to the corporate reform agenda by systematically targeting companies trading below book value to take steps to improve their underlying performance and equity valuation. Thirdly, the reforms that Japan's government has taken to liberalise the NISA regime are showing major signs of success already in encouraging Japanese households to re-engage with equities and diversify their asset allocation.

Exhibit 86: TOPIX breakdown by P/B valuation band – more companies moving >1x P/B but still 10% <0.5x P/B and another 35% trading between 0.5 and 1.0x P/B



Source: Bloomberg, Morgan Stanley Research.

Exhibit 87: MSCI Japan ROE Journey opportunities set – Corporate Reform and Domestic Reflation make up >40% of constituents



Source: FactSet, Morgan Stanley Research; Opportunities are trading <1x P/B and exposed to Corporate Reform (<8% ROE), Domestic Reflation (by Industry) or Both

Three Themes for Finding Alpha in Japanese Equities Currently

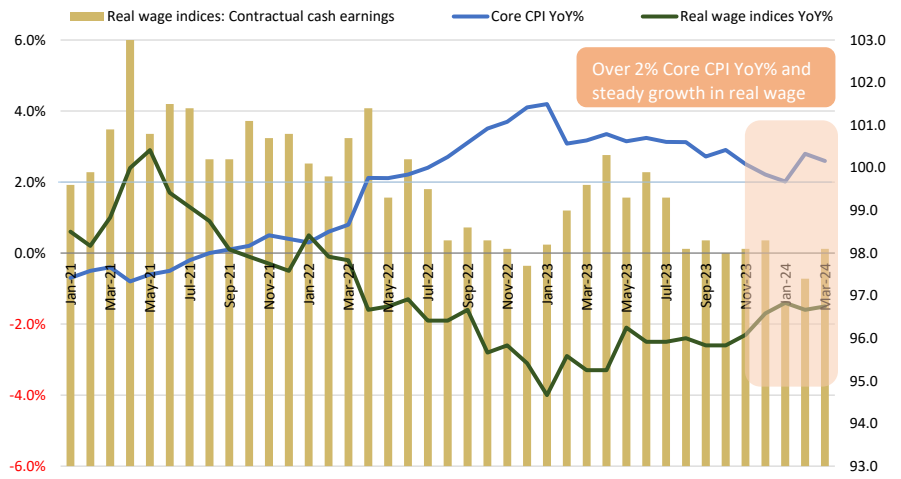
In terms of alpha generation, we explore three key themes within the Japanese equity landscape: 1) Identifying companies with labour productivity and pricing power that can pay and absorb higher real wages; 2) Finding the next cohort of Corporate Reform beneficiaries; 3) Assessing the impact of NISA inflows.

Theme 1 - Real Wages Rising, Making Productivity and Pricing Power More Crucial

As Japan has ended its negative interest-rate policy and Japan’s economy is entering a new phase, the trends in the labor market will be important in determining whether Japan has structurally entered a bull market. Since 1995, Japan had been in a chronic state of deflation, where the consumer price index (CPI) had trended at nearly zero. But as we [discussed earlier](#), since around the spring of 2022, import prices increased and the Core CPI growth rate hovered above the 2% price target. Higher cost-of-living added impetus for wage hikes, and a favorable cycle of wages and goods prices is now underway, which we see as a positive catalyst for Japan’s secular bull market.

Real wages have major implications on two fronts: First, wage hikes will make a further increase in prices possible, and second, they will encourage the corporate sector to look for ways to improve labor productivity. A rise in inflation expectations will suppress real interest rates and thus we can anticipate stronger easing effects even as the BoJ has moved up to zero rates and may adjust further. This could be important for the medium-to long-term cycle, but the improvement in labor productivity will likely have a more direct and stronger impact on the equity market. In the sections below we highlight stocks for which we anticipate growth from the perspective of labor productivity.

Exhibit 88: Core CPI achieved 2% inflation target in Oct-22, and real wage indices YoY% marked its peak in Jan-24. Real wages have just started to grow on YoY basis

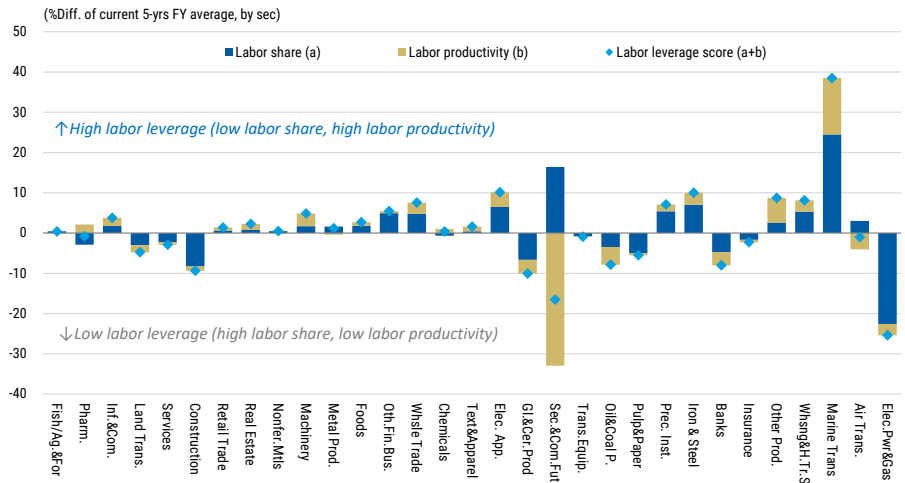


Note: MHLW adjusted the number of population (employees) from January 2024 based on the latest release of the Economic Census Survey from Statistics Bureau of Japan. We list the newly adjusted numbers from January 2023 and YoY% is retrieved from the MHLW release. Source: Ministry of Health, Labour and Welfare, Statistics Bureau, Ministry of Internal Affairs and Communications, Morgan Stanley Research

Competition via labor productivity emerging from long-term structural labor

shortages to become an important theme: From a somewhat longer-term perspective, we are interested in companies likely to have high 'labor force leverage'. The table below shows industry averages for rates of change in labor share and labor productivity over the last five fiscal years using the TOPIX 500 as universe. We deem companies that have a high score as having high 'labor force leverage'. In terms of industry characteristics, various characteristics are present, such as labor-intensive industries, industries that profit from productivity, and industries that profit from prices.

Exhibit 89: Labor leverage score by industry



Note: Universe based on TOPIX500; TSE33-sectors; % diff. of current 5-yr FY-average for labor share and labor productivity; % labor share based on personnel cost/value added; personnel costs calculated by multiplying the average employee salary (annual rate) in the securities report by the number of employees at the end of the period. Added value is based on the sum of OP, personnel expenses, and depreciation expenses; labor productivity based on added value/no. of employee at end-FY Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

While taking these industry averages into account, below we show companies that look to have relatively high labor force leverage from the perspective of labor share and labor productivity and companies with relatively low labor force leverage. Of which, the companies have in common labor-saving initiatives and repeated efforts to raise the value-added of labor.

In a process with a virtuous cycle for wages and prices that appears sustainable, from a somewhat longer-term perspective, we are interested in companies likely to have high labor force leverage because they are able to increase shareholder returns in a sustained manner while securing outstanding human resources with attractive wages and raising labor productivity.

Exhibit90: List considered to have relatively low labor leverage

Code	Name	TSE-33 sec	Price (JPY: 2/29)	Market Cap (JPYbn: 2/29)	P/E (X)	P/B (X)	Exp.Div_Yld (%)
1801	TAISEI	Construction	4,707	888.5	19.3	1.0	2.8
1802	OBAYASHI	Construction	1,450	1,045.8	18.9	1.0	2.9
1803	SHIMIZU	Construction	869	646.1	62.6	0.8	2.3
1820	NISHIMATSU CONSTRUCTION	Construction	4,541	252.4	14.9	1.1	3.8
1860	TODA	Construction	926	298.8	20.8	0.9	3.0
1893	PENTA-OCEAN CONSTRUCTION	Construction	776	221.8	10.0	1.3	3.1
2229	CALBEE	Foods	3,206	429.4	20.3	2.1	1.7
2282	NH FOODS	Foods	5,246	540.1	19.9	1.0	2.1
2371	KAKAKU.COM	Services	1,718	340.4	19.4	7.1	2.7
2432	DENA	Services	1,465	178.9	0.0	0.8	1.4
2768	SOJITZ	Whsle Trade	3,799	854.8	8.4	0.9	3.6
3291	IIDA GROUP HOLDINGS	Real Estate	1,932	541.6	11.3	0.6	4.7
3401	TEIJIN	Text&Apparel	1,270	251.4	30.6	0.6	2.4
3407	ASAHI KASEI	Chemicals	1,042	1,451.8	18.0	0.8	3.5
3880	DAIO PAPER	Pulp&Paper	1,110	187.6	184.7	0.7	1.4
4005	SUMITOMO CHEMICAL	Chemicals	304	503.2	0.0	0.4	3.0
4042	TOSOH	Chemicals	2,039	662.8	11.0	0.8	3.9
4043	TOKUYAMA	Chemicals	2,428	175.0	9.7	0.7	2.9
4182	mitsubishi gas chemical	Chemicals	2,440	530.1	10.4	0.8	3.3
4205	ZEON	Chemicals	1,270	291.5	10.1	0.8	3.1
4208	UBE	Chemicals	2,511	266.6	11.1	0.6	4.0
4521	KAKEN PHARMACEUTICAL	Pharm.	3,551	163.1	20.1	1.0	4.2
4523	EISAI	Pharm.	6,254	1,854.7	43.3	2.2	2.6
4530	HISAMITSU PHARMACEUTICAL	Pharm.	3,874	329.9	20.1	1.1	2.2
4536	SANTEN PHARMACEUTICAL	Pharm.	1,487	558.9	18.3	1.8	2.2
4581	TAISHO PHARMACEUTICAL HOLDINGS	Pharm.	8,580	730.5	41.4	0.8	0.6
4587	PEPTIDREAM	Pharm.	1,577	205.0	34.1	5.1	0.0
4751	CYBERAGENT	Services	1,051	531.8	66.5	3.9	1.4
4902	KONICA MINOLTA	Elec. App.	494	248.3	61.1	0.5	1.0
5020	ENEOS HOLDINGS	Oil&Coal P.	646	1,960.1	8.1	0.6	3.4
5232	SUMITOMO OSAKA CEMENT	Gl.&Cer.Prod	3,560	122.2	10.3	0.6	3.4
5301	TOKAI CARBON	Gl.&Cer.Prod	987	222.0	14.0	0.6	3.0
5706	mitsui mining & smelting	Nonfer.MtIs	4,412	253.1	14.0	1.0	3.2
5901	TOYO SEIKAN GROUP HOLDINGS	Metal Prod.	2,518	442.8	17.8	0.7	3.6
6457	GLORY	Machinery	2,920	172.1	5.8	0.8	3.4
6471	NSK	Machinery	820	410.0	28.6	0.6	3.7
6586	MAKITA	Machinery	3,907	1,094.0	26.6	1.3	1.0
6728	ULVAC	Elec. App.	9,210	454.6	28.4	2.3	1.2
6753	SHARP	Elec. App.	816	530.4	0.0	2.1	0.0
6954	FANUC	Elec. App.	4,372	4,385.4	33.8	2.5	2.2
7011	mitsubishi heavy industries	Machinery	11,825	3,989.3	20.6	2.1	1.4
7012	KAWASAKI HEAVY INDUSTRIES	Trans.Equip.	4,133	694.0	57.7	1.2	1.0
7167	MEBUIKI FINANCIAL GROUP	Banks	468	475.8	11.8	0.5	2.6
7181	JAPAN POST INSURANCE	Insurance	2,762	1,058.4	14.7	0.4	3.4
7182	JAPAN POST BANK	Banks	1,598	5,779.1	17.2	0.6	3.1
7201	NISSAN MOTOR	Trans.Equip.	589	2,360.9	5.6	0.4	2.5
7205	HINO MOTORS	Trans.Equip.	498	286.1	0.0	0.8	0.0
7259	AISIN	Trans.Equip.	5,647	1,664.0	16.9	0.8	3.0
7276	KOITO MFG.	Elec. App.	1,895	583.2	11.9	0.9	2.6
7313	TS TECH	Trans.Equip.	1,937	263.4	20.1	0.8	3.8
7458	DAIICHIKOSHO	Whsle Trade	1,936	211.9	16.3	2.0	2.9
7867	TOMY	Other Prod.	2,668	249.7	24.3	2.5	1.6
8304	AOZORA BANK	Banks	2,749	325.1	0.0	0.8	2.8
8316	SUMITOMO MITSUI FINANCIAL GROU	Banks	8,344	11,160.3	12.0	0.8	3.2
8354	FUKUOKA FINANCIAL GROUP	Banks	3,884	742.4	11.9	0.8	3.0
8410	SEVEN BANK	Banks	299	352.8	9.1	1.3	3.7
8424	FUYO GENERAL LEASE	Oth.Fin.Bus.	13,675	414.2	9.1	1.0	2.9
9003	SOTETSU HOLDINGS	Land Trans.	2,715	266.5	15.6	1.7	1.8
9006	KEIKYU	Land Trans.	1,331	366.9	16.6	1.3	1.1
9008	KEIO	Land Trans.	4,203	540.3	18.7	1.3	1.2
9009	KEISEI ELECTRIC RAILWAY	Land Trans.	6,995	1,206.0	31.0	2.7	0.4
9020	EAST JAPAN RAILWAY	Land Trans.	8,865	3,352.2	19.7	1.3	1.4
9022	CENTRAL JAPAN RAILWAY	Land Trans.	3,769	3,882.1	11.1	0.9	0.7
9404	NIPPON TELEVISION HOLDINGS	Inf.&Com.	2,120	559.3	12.8	0.6	1.9
9434	SOFTBANK	Inf.&Com.	1,973	9,520.5	20.1	4.0	4.4
9501	TOKYO ELECTRIC POWER COMPANY H	Elec.Pwr&Gas	810	2,873.1	4.3	0.4	0.0
9504	CHUGOKU ELECTRIC POWER	Elec.Pwr&Gas	1,011	391.2	3.0	0.6	3.0
9505	HOKURIKU ELECTRIC POWER	Elec.Pwr&Gas	724	152.3	15.1	0.5	1.0
9506	TOHOKU ELECTRIC POWER	Elec.Pwr&Gas	1,015	510.4	2.5	0.7	1.5
9601	SHOCHIKU	Inf.&Com.	10,075	140.4	47.7	1.5	0.3
9706	JAPAN AIRPORT TERMINAL	Real Estate	5,894	549.0	32.9	3.4	0.8
9984	SOFTBANK GROUP	Inf.&Com.	8,790	12,921.3	0.0	1.3	0.5

Note: Universe based on TOPIX500; screening by Top 50% of labor share and productivity growth in current 5yrs FY among stocks where % decrease of labor share is lower than sector-average and % increase of labor productivity is lower than sector-average; % labor share based on personnel cost/value added; personnel costs calculated by multiplying the average employee salary (annual rate) in the securities report by the number of employees at the end of the period. Added value is based on the sum of OP, personnel expenses, and depreciation expenses; labor productivity based on added value/no. of employee at end-FY

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Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

Exhibit91: List considered to have relatively high labor leverage

Code	Name	TSE-33 sec	Price (JPY: 2/29)	Market Cap (JPYbn: 2/29)	P/E (X)	P/B (X)	Exp.Div_Yld (%)
2222	KOTOBUKI SPIRITS	Foods	2,000	311.2	31.1	9.6	1.3
2531	TAKARA HOLDINGS	Foods	1,255	247.5	16.3	1.1	2.2
2651	LAWSON	Retail Trade	10,255	1,028.6	20.5	3.7	1.1
2802	AJINOMOTO	Foods	5,503	2,869.4	28.7	3.5	1.3
2875	TOYO SUISAN	Foods	8,706	965.3	17.8	2.1	1.4
3038	KOBE BUSSAN	Whsle Trade	4,030	1,102.6	40.4	8.0	0.6
3397	TORIDOLL HOLDINGS	Retail Trade	4,296	378.5	70.7	4.8	0.2
3635	KOEI TECMO HOLDINGS	Inf.&Com.	1,873	629.3	16.4	3.8	2.7
3769	GMO PAYMENT GATEWAY	Inf.&Com.	10,085	772.1	49.3	8.8	1.0
3774	INTERNET INITIATIVE JAPAN	Inf.&Com.	2,778	508.7	24.6	4.2	1.2
4062	IBIDEN	Elec. App.	6,901	972.1	33.8	2.1	0.6
4063	SHIN-ETSU CHEMICAL	Chemicals	6,387	12,784.8	23.2	3.0	1.6
4091	NIPPON SANSO HOLDINGS	Chemicals	4,338	1,878.8	19.4	2.2	0.9
4183	mitsui chemicals	Chemicals	4,148	833.1	15.8	1.0	3.4
4403	NOF	Chemicals	6,729	544.0	16.2	2.1	1.7
4502	TAKEDA PHARMACEUTICAL	Pharm.	4,387	6,942.0	57.4	1.0	4.3
4516	NIPPON SHINYAKU	Pharm.	4,770	335.1	12.4	1.5	2.6
4519	CHUGAI PHARMACEUTICAL	Pharm.	6,000	10,074.3	28.8	6.1	1.4
4528	ONO PHARMACEUTICAL	Pharm.	2,488	1,287.4	9.3	1.5	3.2
4544	H.U. GROUP HOLDINGS	Services	2,570	147.7	0.0	1.0	4.9
4684	OBIC	Inf.&Com.	23,425	2,333.1	36.6	5.6	1.3
4980	DEXERIALS	Chemicals	6,026	368.7	17.5	4.1	1.7
5401	NIPPON STEEL	Iron & Steel	3,715	3,530.4	7.0	0.7	4.3
5444	YAMATO KOGYO	Iron & Steel	8,350	542.8	7.7	1.0	3.6
6301	KOMATSU	Machinery	4,346	4,232.2	11.6	1.4	3.3
6361	EBARA	Machinery	12,615	1,165.0	19.2	2.8	1.8
6417	SANKYO	Machinery	1,710	444.6	7.4	1.5	4.7
6758	SONY GROUP	Elec. App.	12,945	16,326.6	17.3	2.2	0.7
6806	HIROSE ELECTRIC	Elec. App.	15,915	576.9	20.7	1.5	2.8
6857	ADVANTEST	Elec. App.	6,910	5,294.0	79.1	12.7	0.5
6920	LASERTEC	Elec. App.	39,950	3,766.7	65.5	30.1	0.5
6951	JEOL	Elec. App.	6,637	342.0	18.5	3.1	1.1
6965	HAMAMATSU PHOTONICS	Elec. App.	5,372	886.8	22.7	2.6	1.4
6966	mitsui high-tec	Elec. App.	8,389	331.1	24.3	3.3	0.9
6967	SHINKO ELECTRIC INDUSTRIES	Elec. App.	5,418	732.4	22.9	2.8	0.5
7211	MITSUBISHI MOTORS	Trans.Equip.	462	688.2	4.7	0.7	2.2
7518	NET ONE SYSTEMS	Inf.&Com.	2,600	216.5	18.7	2.9	2.8
7729	TOKYO SEIMITSU	Prec. Inst.	10,225	430.2	22.9	2.8	1.7
7733	OLYMPUS	Prec. Inst.	2,132	2,590.7	10.0	3.3	0.8
7735	SCREEN HOLDINGS	Elec. App.	18,735	1,903.3	27.8	5.5	1.1
7974	NINTENDO	Other Prod.	8,400	10,909.0	21.9	3.9	2.3
8001	ITOCHU	Whsle Trade	6,516	10,327.1	11.5	1.8	2.5
8002	MARUBENI	Whsle Trade	2,472	4,143.8	9.2	1.3	3.4
8015	TOYOTA TSUSHO	Whsle Trade	9,674	3,425.1	10.3	1.5	2.6
8058	MITSUBISHI	Whsle Trade	3,205	13,393.8	13.9	1.5	2.2
8111	GOLDWIN	Text&Apparel	8,678	411.8	16.9	4.2	1.3
8136	SANRIO	Whsle Trade	8,389	714.2	38.0	9.2	0.8
8411	MIZUHO FINANCIAL GROUP	Banks	2,801	7,112.4	11.1	0.7	3.6
8570	AEON FINANCIAL SERVICE	Oth.Fin.Bus.	1,307	282.2	11.8	0.6	4.1
9107	KAWASAKI KISEN	Marine Trans	7,153	1,704.1	16.1	1.1	3.5
9301	MITSUBISHI LOGISTICS	Whsng&H.Tr.S	4,595	376.6	12.7	0.9	2.4
9531	TOKYO GAS	Elec.Pwr&Gas	3,279	1,313.1	9.3	0.8	2.1
9697	CAPCOM	Inf.&Com.	6,029	1,606.8	29.3	6.9	0.9
9983	FAST RETAILING	Retail Trade	43,260	13,766.2	42.8	7.0	0.8

Note: Universe based on TOPIX500; screening by Top 50% of labor share and productivity growth in current 5yrs FY among stocks where % decrease of labor share is higher than sector-average and % increase of labor productivity is higher than sector-average; % labor share based on personnel cost/value added; personnel costs calculated by multiplying the average employee salary (annual rate) in the securities report by the number of employees at the end of the period. Added value is based on the sum of OP, personnel expenses, and depreciation expenses; labor productivity based on added value/no. of employee at end-FY

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Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

Theme 2 – Identifying the Next Phase of Corporate Reform Beneficiaries

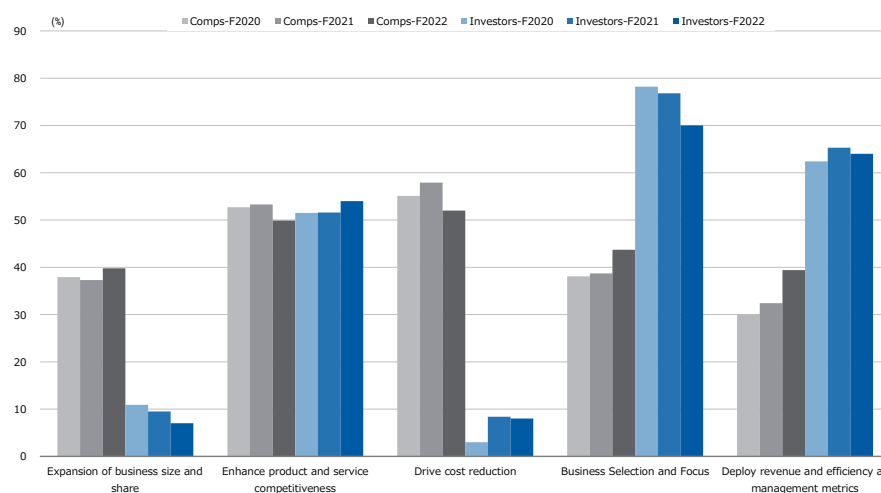
From a corporate governance perspective, we remain focused on the broadening impact of the TSE's capital efficiency drive and see upcoming mid-term plans as a key catalyst. Both are aimed at disclosures of corporate earnings and management policies, and could encourage investors to price-in positive catalysts from an earlier stage, thus contributing to more effective formations of market anticipation. Below we highlight key stocks from the perspective of medium-term plans (MTPs) and TSE's disclosure list for 'management focused on cost of equity and share price'.

What is the policy investors highly rate? The low P/B of Japanese firms has been caused

by the large scale of their internal reserves and strategic share holdings, as well as their low shareholder returns. However, the biggest problem comes from their inadequate capital efficiency to raise profits. In other words, share buybacks not accompanied by an improvement in earnings do not contribute to a sustained rise in corporate value.

The perception gap between companies and investors is found in their focus on capital efficiency initiatives. Companies generally seek to expand their scale of business and cut costs, but many investors want them to overhaul their business portfolios and establish clear capital efficiency metrics.

Exhibit 92: There is a large gap between companies and investors in their focus on capital efficiency initiatives



Note: Universe based on Company=F2022:465, F2021:475, F2020:501, Investors= F2022:100, F2021:95, F2020:101; show only items highlighted in the relevant material.

Source: Life Insurance Association of Japan's survey of "Steps taken to improve shareholder value", Morgan Stanley Research

Which stocks should catch investors' attention among new MTPs? Many investors want to focus on stocks with the prospect of enhancing shareholder return from the perspective of acquiring near-term return. We hence see high risk of a decline in stock prices if the market assesses commitment to further enhancement of shareholder return as 'not enough' in new medium-term plans disclosed at full-year results announcements in May 2024. In [Japan Equity Strategy: What Constitutes an Investor-favored Medium-term Management Plan? \(8 Mar 2024\)](#), we listed stocks expected to begin new medium-term plans in F2024. The Exhibit below extracted stocks from this category with P/B under 1 and ROE at less than 8%. We think these stocks face relatively strong pressure to improve shareholder assessments and capital efficiency. We intend to closely monitor corporate actions by these stocks from the standpoint of obtaining near-term return.

Meanwhile, business portfolio reinforcement, revamping operations, and other reforms to improve profitability are important from the standpoint of expanding enterprise value over the longer term. We therefore want to focus in medium-term management plans on (1) growth strategies that generate cash, (2) initiatives to lift capital efficiency (such as asset sales, utilization of interest-bearing debt, and business portfolio revisions), and (3) whether management clarifies the reinforcement of stable, sustainable shareholder return.

Exhibit 93: Stocks w/ Sub-1x P/B and less than 8% ROE in which F2024 is to be the start period of the new mid-term plan

Code	Stock	TSE-33 Sec	Latest Fiscal Year End (mm/yyyy)	Expected Report Date (mm/dd/yyyy)	Market Cap (3/22:JPY bn)	P/E (X)	P/B (X)	ROE (%)	Expected Div Yield (%)
1515	NITETSU MINING	Mining	03/2023	05/10/2024	85.7	8.7	0.6	7.7	3.3
1803	SHIMIZU	Construction	03/2023	05/10/2024	764.9	15.0	0.9	5.9	1.9
1815	TEKKEN	Construction	03/2023	05/10/2024	44.4	18.0	0.6	3.7	3.5
1884	NIPPON ROAD	Construction	03/2023	05/10/2024	83.9	14.7	0.9	6.0	3.1
1945	TOKYO ENERGY & SYSTEMS	Construction	03/2023	04/26/2024	42.9	19.4	0.6	3.2	3.3
2296	ITOHAM YONEKYU HOLDINGS	Foods	03/2023	05/09/2024	245.1	14.3	0.9	6.4	2.9
3291	HIDA GROUP HOLDINGS	Real Estate	03/2023	05/15/2024	567.2	7.5	0.6	8.0	4.4
4027	TAYCA	Chemicals	03/2023	05/10/2024	42.3	12.9	0.7	5.7	2.3
4028	ISHIHARA SANGYO	Chemicals	03/2023	05/10/2024	69.7	9.5	0.7	7.3	3.5
4215	C.I. TAKIRON	Chemicals	03/2023	05/09/2024	65.8	26.7	0.7	2.7	3.3
4553	TOWA PHARMACEUTICAL	Pharm.	03/2023	05/15/2024	151.7	65.8	1.0	1.6	2.0
4611	DAI NIPPON TORYO	Chemicals	03/2023	05/10/2024	35.2	9.8	0.6	6.8	2.5
4917	MANDOM	Chemicals	03/2023	05/10/2024	64.6	62.9	0.9	1.5	3.0
4997	NIHON NOHYAKU	Chemicals	03/2023	05/10/2024	61.7	13.2	0.8	6.6	2.4
5201	AGC	Gl.&Cer.Prod	12/2023	05/08/2024	1,212.0	18.0	0.8	4.6	3.8
5233	TAIHEYO CEMENT	Gl.&Cer.Prod	03/2023	05/10/2024	434.4	0.0	0.8	-6.6	2.0
5440	KYOEI STEEL	Iron & Steel	03/2023	04/26/2024	108.8	8.0	0.5	7.7	3.3
5563	NIPPON DENKO	Iron & Steel	12/2023	05/10/2024	43.8	10.0	0.6	6.2	2.2
5741	UACJ	Nonfer.MtIs	03/2023	05/10/2024	215.1	45.6	0.8	2.0	2.0
5943	NORITZ	Metal Prod.	12/2023	05/10/2024	84.0	92.0	0.7	0.7	3.9
5975	TOPRE	Metal Prod.	03/2023	05/10/2024	139.9	13.3	0.6	5.4	1.9
5991	NHK SPRING	Metal Prod.	03/2023	05/15/2024	370.4	15.8	0.9	6.4	2.6
6178	JAPAN POST HOLDINGS	Services	03/2023	05/15/2024	5,465.0	11.8	0.5	3.9	3.2
6302	SUMITOMO HEAVY INDUSTRIES	Machinery	12/2023	05/10/2024	585.9	17.8	0.9	5.5	2.6
6457	GLORY	Machinery	03/2023	05/10/2024	174.2	0.0	0.8	-4.8	3.4
6464	TSUBAKI NAKASHIMA	Machinery	12/2023	05/13/2024	33.9	0.0	0.6	-2.5	4.3
6472	NTN	Machinery	03/2023	05/10/2024	171.3	16.5	0.7	5.0	3.1
6473	JTEKT	Machinery	03/2023	04/26/2024	493.0	14.4	0.7	5.3	2.5
6517	DENYO	Elec. App.	03/2023	05/10/2024	54.2	13.5	0.7	5.7	2.2
6737	EIZO	Elec. App.	03/2023	05/10/2024	116.5	18.6	0.9	4.9	3.8
6810	MAXELL	Elec. App.	03/2023	04/26/2024	80.8	14.3	0.8	6.3	2.5
7102	NIPPON SHARYO	Trans.Equip.	03/2023	04/25/2024	35.4	11.2	0.6	6.3	0.8
7173	TOKYO KIRABOSHI FINANCIAL GROU	Banks	03/2023	05/08/2024	164.3	7.0	0.4	6.5	2.6
7201	NISSAN MOTOR	Trans.Equip.	03/2023	05/10/2024	2,576.2	10.8	0.4	4.6	2.3
7220	MUSASHI SEIMITSU INDUSTRY	Trans.Equip.	03/2023	05/10/2024	111.7	45.8	1.0	2.4	2.3
7224	SHINMAYWA INDUSTRIES	Trans.Equip.	03/2023	05/09/2024	88.5	11.4	0.8	7.6	3.6
7245	DAIDO METAL	Trans.Equip.	03/2023	05/10/2024	32.4	0.0	0.5	-3.6	1.5
7322	SAN JU SAN FINANCIAL GROUP	Banks	03/2023	05/10/2024	55.7	8.7	0.3	3.0	3.4
7327	DAISHI HOKUETSU FINANCIAL GROU	Banks	03/2023	05/10/2024	214.6	11.5	0.4	4.2	3.0
7600	JAPAN MEDICAL DYNAMIC MARKETIN	Prec. Inst.	03/2023	04/26/2024	20.0	14.0	0.8	6.4	1.9
7917	FUJIMORI KOGYO	Chemicals	03/2023	05/10/2024	82.7	16.4	0.9	6.0	2.0
7925	MAEZAWA KASEI INDUSTRIES	Chemicals	03/2023	05/15/2024	26.7	17.2	0.6	3.9	2.9
7942	JSP	Chemicals	03/2023	04/26/2024	72.8	24.0	0.6	2.8	2.2
8219	ADYAMA TRADING	Retail Trade	03/2023	05/10/2024	92.4	21.4	0.5	2.6	3.3
8242	H2O RETAILING	Retail Trade	03/2023	05/15/2024	248.9	14.0	0.9	6.7	1.4
8345	BANK OF IWATE	Banks	03/2023	05/10/2024	50.0	8.6	0.2	2.8	3.0
8381	SAN-IN GODO BANK	Banks	03/2023	05/10/2024	201.2	12.7	0.6	4.6	3.0
8392	OITA BANK	Banks	03/2023	05/10/2024	49.6	8.9	0.2	2.8	2.9
8522	BANK OF NAGOYA	Banks	03/2023	05/10/2024	113.8	13.5	0.4	3.3	2.1
8541	EHIME BANK	Banks	03/2023	05/10/2024	47.1	8.7	0.4	4.1	2.5
8714	SENSHU IKEDA HOLDINGS	Banks	03/2023	05/10/2024	115.8	12.2	0.5	4.0	3.0
9081	KANAGAWA CHUJO KOTSU	Land Trans.	03/2023	04/26/2024	41.0	34.7	0.7	2.4	1.8
9304	SHIBUSAWA WAREHOUSE	WhangH.Tr.S	03/2023	05/10/2024	46.9	12.4	0.8	6.8	3.1
9401	TBS HOLDINGS	Inf.&Com.	03/2023	05/10/2024	704.9	19.2	0.7	4.3	1.1
9532	OSAKA GAS	Elec.Pwr&Gas	03/2023	05/08/2024	1,460.0	25.1	0.9	4.3	2.1
9755	OYO	Services	12/2023	05/10/2024	58.2	13.5	0.7	5.6	2.6

Note: Screening based on interviews with our coverage analysts for stock with final FY period of MTPs for F3/24-F12/24; excerpted stocks with assumed new MTPs start date in 2024 disclosed on TDNET (term period 2018/1/1-224/1/31); note that the announcement of the new MTPs in F2024 has not been finalized; Expected report date is the next expected earnings announcement date (based on Bloomberg); P/E (Toyo Keizai est.), P/B, ROE, Expected Div.Yield as of 22 Mar. For important disclosures regarding companies that are the subject of this screen, please see the Morgan Stanley Research Disclosure Website at www.morganstanley.com/researchdisclosures. Source: Company materials, Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

How should we interpret the TSE market reform? The TSE (April 15) will update its monthly list of firms acting "to implement management conscious of cost of capital & stock price". Our analysis shows that firms have made steady progress in their disclosures. Median market cap of "disclosed" firms has fallen, but median P/B has risen, indicating analyses of ROE and market valuation by boards proceeding with relatively low market cap & high P/B. In [Japan Equity Strategy: What Constitutes an Investor-favored Medium-term Management Plan? \(8 Mar 2024\)](#), we listed the stocks that may release new MTPs this fiscal year.

The "disclosed" group includes companies that mention the phrase "measures for realizing

management focused on the cost of capital and share price" in the "disclosures under the principles of the company code" section or "reasons for not conducting the principles of the company code". The "under consideration" group includes companies that mention the phrase "measures for realizing management focused on the cost of capital and share price (under consideration)" and the "no disclosure" companies are those that do not belong to either of the above.

No significant difference is seen in cumulative performance of "disclosed" and "under consideration" groups. However, excess returns after firms move categories show growing returns across ~50 working days for "under consideration", with performance better (slightly) than the "Disclosed" group.

Closer inspection indicates 18 firms have moved from "no disclosure" to "under consideration," and 22 from "under consideration" to "disclosed. All told, 78 firms are expected to move from "no disclosure" to "disclosed." Among movers from "under consideration" to "disclosed," Koito Mfg. traded limit high the day after it announced an MTP alongside buybacks. Our focus is now on potential corporate actions by firms in the "under consideration" group (e.g., MTP announcement).

Exhibit 94: Stocks in "under consideration" category that may release new MTP this fiscal year

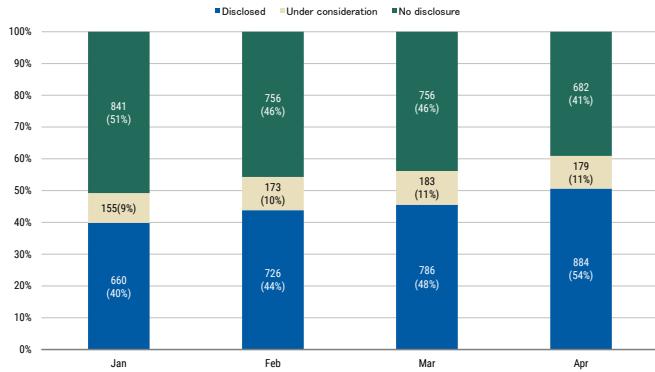
Code	Stock	TSE 33 sectors	Latest CG report release date	Share price (JPY, 4/5)	Market Cap (JPYbil, 4/5)	P/E (X)	P/B (X)	Expected Div Yld, %	Timing for disclosure (from CG report)
1515	Nittetsu Mining	Mining	2023-12-01	4,965	82.9	11.0	0.6	3.4	In the next MTP planned to be released at May 2024
1721	COMSYS Holdings	Construction	2024-02-29	3,445	458.2	14.5	1.2	3.0	May, 2024
1801	Taisei	Construction	2023-12-26	5,703	1,053.9	23.4	1.2	2.3	In the next MTP planned to be released at May 2024
1815	Tekken	Construction	2023-12-12	2,654	41.6	11.2	0.6	3.8	Spring, 2024
1888	Wakachiku	Construction	2023-12-18	3,675	47.6	10.2	1.1	3.3	In the next MTP at FY 2024
1942	Kandenko	Construction	2023-12-12	1,679	344.7	14.7	1.1	2.1	In the next MTP
1945	Tokyo Energy	Construction	2023-12-22	1,214	42.5	13.5	0.6	3.3	In the next MTP at FY 2024
2117	Wellneo sugara	Foods	2024-02-19	2,246	78.7	14.7	1.0	4.1	In the next MTP planned to be released at May 2024
2270	Megmilk Snow Brand	Foods	2023-12-08	2,635	186.4	9.3	0.8	3.0	In the next earning results at May 2024
2288	Marudai food	Foods	2024-03-25	1,611	42.7	33.4	0.6	1.2	In the next MTP planned to be released at May 2024
2296	Itoham Yonekyu	Foods	2023-12-22	4,090	235.1	14.9	0.8	3.1	In the next MTP planned to be released at May 2024
3197	Skylark	Retail Trade	2024-03-28	2,378	540.9	72.1	3.3	0.4	In the next MTP planned to be released in FY 2024
4028	Ishihara Sangyo	Chemicals	2023-12-20	1,721	69.5	8.2	0.6	3.5	In the next MTP planned to be released at May 2024
4611	Dai Nippon Toryo	Chemicals	2023-12-27	1,167	34.7	7.2	0.6	3.0	In the next MTP starting from FY 2024
4997	Nihon Nohyaku	Chemicals	2023-12-21	720	59.0	15.5	0.8	2.5	Spring, 2024
5202	Nippon Sheet Glass	Gl.&Cer.Prod	2023-12-26	514	47.0	3.1	0.4	0.0	In the next earning results at May 2024
5233	Taiheiyo cement	Gl.&Cer.Prod	2023-12-11	3,530	430.6	10.2	0.7	2.0	In the next MTP
5269	Nippon Concrete	Gl.&Cer.Prod	2023-12-27	397	22.9	17.7	0.6	3.3	In the next MTP planned to be released at May 2024
5357	Yotai Refractories	Gl.&Cer.Prod	2024-01-12	1,454	30.0	8.5	0.9	3.6	May, 2024
5471	Daido Steel	Iron & Steel	2023-12-19	1,693	367.8	11.3	0.9	2.7	In the next MTP
5631	Japan Steel	Machinery	2024-03-04	3,453	256.9	18.2	1.5	1.7	In the next earning results at June 2024
6464	Tsubaki Nakashima	Machinery	2024-03-25	850	35.4	8.5	0.6	4.1	During FY 2024
6517	Denyo	Elec. App.	2024-01-31	2,262	51.7	11.8	0.7	2.3	In the next MTP planned to be released at May 2024
8016	Onward	Text&Apparel	2023-12-25	571	90.2	11.7	1.0	4.2	In the next MTP planned to be released at April 2024
8214	AOKI HD	Retail Trade	2023-11-30	1,108	96.0	13.7	0.7	3.6	May, 2024
9024	Seibu HD	Land Trans.	2024-03-28	2,400	776.1	17.2	1.7	1.0	At the year end earning result
9081	Kanagawa Chuo Kotsu	Land Trans.	2023-11-13	3,170	39.9	13.6	0.7	1.9	April, 2024
9513	Jpower	Elec.Pwr&Gas	2024-04-01	2,515	460.3	6.9	0.4	3.6	In the next MTP planned after FY 2024
9684	SQUARE ENIX	Inf.&Com.	2024-01-30	5,489	672.6	15.3	2.0	1.8	In the next MTP planned to be released at May 2024

Note: Universe based on current CG report published by 29, Mar. 2024; if "disclosure based on each principle of code" or "reason for not implementing each principle of code" are in column of "Response to realization of management with awareness of capital cost and stock price", screening by stocks with net cash being positive, cross-share holdings to net assets being 10% or more, and Sub-1X P/B as of 5 Apr.; P/E, ROE, Expected Dividend yield as of 5 Apr.

For important disclosures regarding companies that are the subject of this screen, please see the Morgan Stanley Research Disclosure Website at www.morganstanley.com/researchdisclosures.

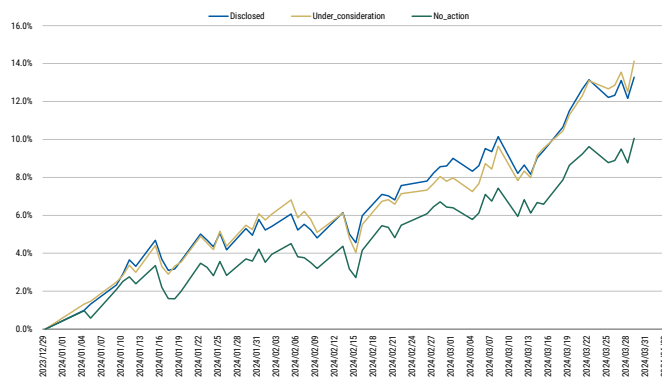
Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

Exhibit 95: Status of prime listed companies that have either disclosed capital efficiency measures or have such measures under consideration in the CG report



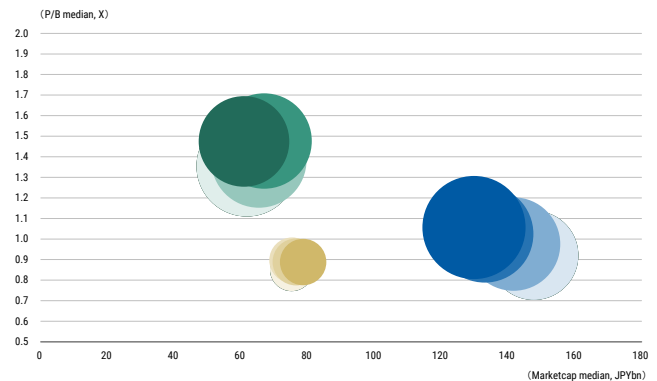
Note: Universe based on current CG report published by 29 Mar. 2024; if "disclosure based on each principle of code" or "reason for not implementing each principle of code" are in column of "Response to realization of management with awareness of capital cost and stock price", we aggregate those to under consideration and No disclosure.
Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

Exhibit 97: No significant difference is observed in 'Disclosed' and 'Under consideration': Both are maintaining expectations for initiatives to improve capital efficiency and enhance shareholder return



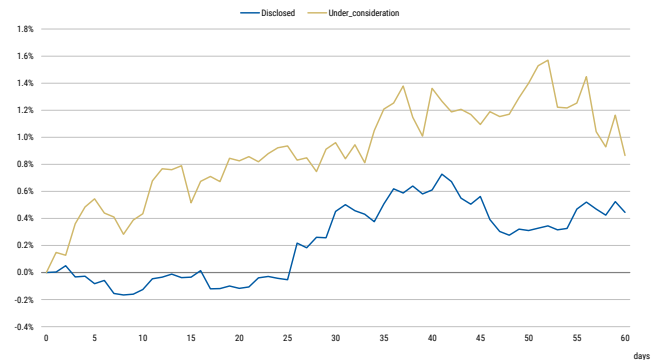
Note: Universe=TSE Prime; based on assumptions that CG reports are published and executed at the closing price when disclosure changed; return with dividend included.
Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

Exhibit 96: Median P/B and market cap of prime listed companies that have either disclosed capital efficiency measures or have such measures under consideration in the CG report



Note: Data as of 5 Apr; the size of the bubble indicates the no. of companies, the colours indicate and faint bubble indicates previous.
Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

Exhibit 98: However, stocks moving to "Under consideration" increased their excess returns over roughly 50 business days



Note: Universe=TSE Prime; Excess return = Stock return - Benchmark return. Benchmark is the equal amount portfolio in TSE prime and "days" shows numbers of operating days after the trades with changes in categories. The released day is indicated as day=-1. The execution price is denoted as day=0. Performances are measured from day=1.
Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

Theme 3 - Impact of Japan's NISA Inflows and Asset Management Reforms

NISA (Nippon Individual Savings Account) is a tax exemption program for small/ individual investment. Historically, Japanese households have shown a high propensity to save, and the level of individual investment has been relatively low. We have highlighted before that the new NISA system starting from January 2024 could be a positive catalyst for accelerating individual investment. The focus points of this year's NISA reform are 1) permanent tax exemption, 2) increased limits on the amount of annual investment, and 3) recyclable limits if stocks are sold. The revised framework will increase investment returns, and we anticipate higher propensity to purchase stocks by individual investors, leading to increased flows in the Japanese equity market.

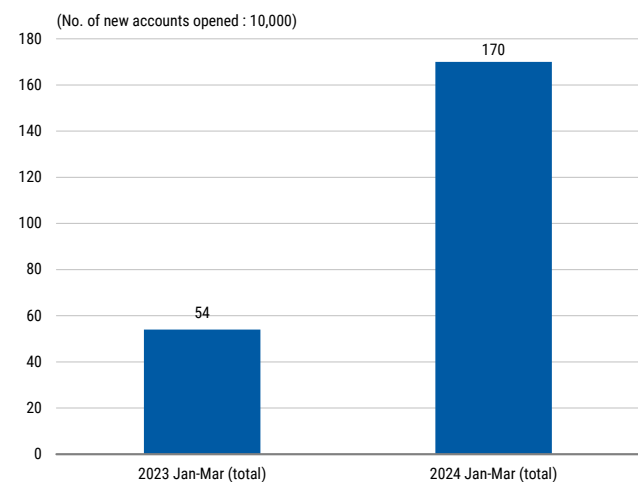
Exhibit 99: Summary of old NISA vs. new NISA, which started from January 2024

	Old NISA		New NISA	
	Tsumitate	Growth investment	Tsumitate	Growth investment
Annual investment	Up to JPY 0.4mn	Up to JPY1.2mn	Up to JPY1.2mn	Up to JPY2.4mn
Tax-exempt period *1	20 years	5 years	No period	No period
Tax-exempt amount *2	Up to JPY8.0mn	Up to JPY6.0mn	Up to JPY18mn in total (using book value balance method) *growth investment: up to JPY 12mn	
Reuse of investment frames	No	No	Yes	Yes
Acct.opening period	Until 2023	Until 2023	Permanent	Permanent
Products	Certain investment trusts suitable for long-term accumulation and diversification Limited to investment trusts that meet FSA	Listed shares, investment trusts, etc.	Certain investment trusts suitable for long-term accumulation and diversification same as current NISA	Listed shares, investment trusts, etc. *3 of which exclude: 1) under Supervision 2) Trust period of less than 20-yrs, monthly and certain investment trusts, etc., using derivative transactions
Target age	18 years or older	18 years or older	18 years or older	18 years or older

Note: *1: As with the current NISA, the user's address, etc. will be checked regularly in association with the indefinite period of tax-exempt holding. *2: The NTA manages the tax-exempt holding limit amount for each user with information provided by financial institutions using a certain cloud. *3: FSA has revised its supervisory guidelines for the solicitation by financial institutions to engage in rotating trading using [growth-frame] and conducts supervision and monitoring based on laws and regulations. *4: For products invested in Junior NISA by end-2023, tax-exempt measures will be available until 18-yrs through the prescribed procedures even after the end of the five-year tax-exempt period. However, this procedure will be omitted and the user convenience will be improved.
Source: FSA, Morgan Stanley Research

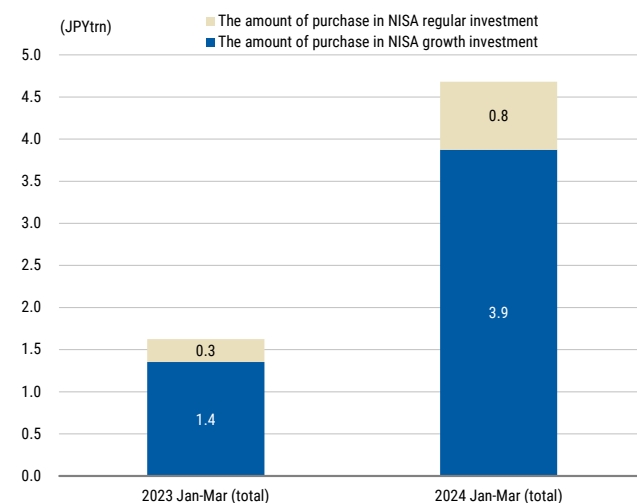
NISA purchasing amounts up 3x YoY in Jan-Mar 2024. The new NISA program has been received very positively, and the cumulative number of new NISA account openings in Jan-Mar 2024 was about 3.2x YoY (Jan-Mar 2024: 1.7mn accounts/ Jan-Mar 2023: 540,000 accounts). Jan-Mar 2024 cumulative purchase value was ¥3.9tn for growth investment and ¥0.8tn for cumulative "tsumitate" investment, both up about 3.0x.

Exhibit 100: The number of new NISA accounts was up by around 3.2x



Source: Japan Securities Dealers Association, Morgan Stanley Research

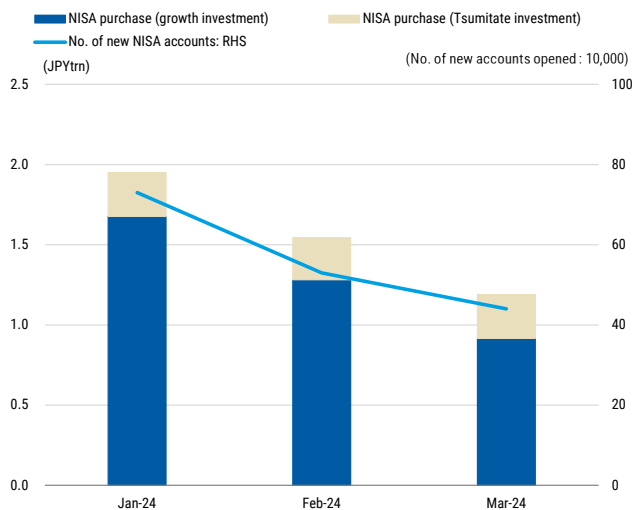
Exhibit 101: The NISA purchase amount was up by around 3.0x



Note: Figures based on growth investment vs. regular "tsumitate" NISA investment in 2023 and regular investment vs. regular investment in 2023; %up/down based on actual values and may not match the calculation results; 2023 general NISA purchase includes amount received due to rollover.
Source: Japan Securities Dealers Association, Morgan Stanley Research

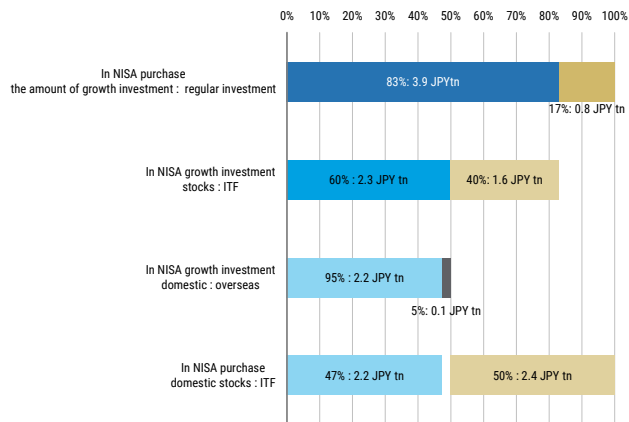
Interestingly, 95% of investment in shares via the growth investment framework were in Japanese stocks. Thus almost 50% of NISA purchasing value was in Japanese stocks. The data released by JSDA does not capture flows going through banks. It is not possible to buy individual stocks with bank NISA accounts. As such, with purchases of investment trusts via bank NISA accounts likely increasing, the proportion of investment trusts in overall NISA purchase value including banks and securities must be at least as high as the 50% shown in the JSDA data.

Exhibit 102: NISA purchase amount and no. of new accounts since 2024



Source: Japan Securities Dealers Association, Morgan Stanley Research

Exhibit 103: Breakdown of NISA purchasing (Jan-Mar 2024, Cumulative)

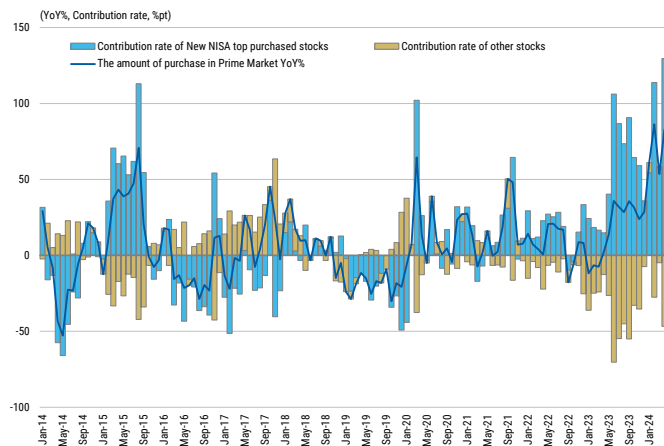


Source: Japan Securities Dealers Association, Morgan Stanley Research

Looking at the purchase rankings of domestic stocks in the NISA accounts of online securities firms, we see that there continue to be famous representative Japanese firms, firms with high dividend yields, and firms with attractive shareholder benefits, so called "Yutai" in Japan. The Nikkei Online Edition (1 April 2024) reported that trading value for the top stocks in terms of new NISA purchase value had risen greatly since mid-2023, with the situation where this explained most of the YoY increase in TSE Prime purchase.

If the inflationary expectations of households continue to rise, then over the medium-to-long term NISA could change the supply/demand structure of Japanese stocks, likely increasing the effectiveness of value and dividend yield factors.

Exhibit 104: Purchase amount of top purchased stocks in NISA is increasing dramatically and it explains most of YoY increase in TSE purchase



Note: For purchasing/buying amount YoY% in Prime Market, we use the data for the TSE 1st Section before March 2022. We calculate the contribution rate of other stocks based on the difference between the contribution rates of top acquired stocks under the new NISA and TSE Prime purchasing/buying amount YoY%.
Source: Bloomberg, FactSet, QUICK Workstation, INDB, Morgan Stanley Research

Exhibit 105: Top purchased stocks in NISA

Code	Stock	TSE-33 Sec	Stock price (JPY)	Market Cap (JPY bn)	PER (X)	PBR (X)	Expected Div Yield (%)
1605	INPEX	Mining	2,360	2,972	9.0	0.7	3.2
2914	JAPAN TOBACCO	Foods	4,308	8,616	16.8	2.0	4.5
4502	TAKEDA PHARMACEUTICAL	Pharm.	4,099	6,486	53.6	1.0	4.6
4503	ASTELLAS PHARMA	Pharm.	1,563	2,828	93.4	1.8	4.7
4661	ORIENTAL LAND	Services	4,278	7,779	58.2	7.4	0.3
5401	NIPPON STEEL	Iron & Steel	3,457	3,286	6.5	0.7	4.6
6526	SOCIONEXT	Elec. App.	4,709	841	43.2	6.4	1.1
7203	TOYOTA MOTOR	Trans.Equip.	3,599	58,718	10.7	1.5	1.7
8058	MITSUBISHI	Wholesale Trade	3,467	14,489	14.9	1.6	2.9
8306	MITSUBISHI UFJ FINANCIAL GROUP	Banks	1,559	19,234	13.2	1.0	2.6
8316	SUMITOMO MITSUI FINANCIAL GROUP	Banks	8,907	11,734	12.7	0.8	3.0
9201	JAPAN AIRLINES	Air Trans.	2,729	1,193	13.3	1.3	2.9
9432	NIPPON TELEGRAPH & TELEPHONE	Inf.&Com.	170	15,375	10.7	1.5	2.9
9433	KDDI	Inf.&Com.	4,378	10,081	14.4	1.8	3.2
9434	SOFTBANK	Inf.&Com.	1,899	9,089	19.3	3.9	4.5

Note: Nikkei (on April 1, 2024) listed the top 15 stocks purchased in NISA account by 5 internet securities from January to March 15. Stock prices, market caps, PER, PBR and dividend yield forecasts are as of May 7.
Source: Nikkei, Morgan Stanley Research

Macro Strategy: Medium-term Framework on JPY Rates / FX

Koichi Sugisaki

JPY Rates: We reiterate our view: "Don't Assume A Meaningful Rise In Yields"

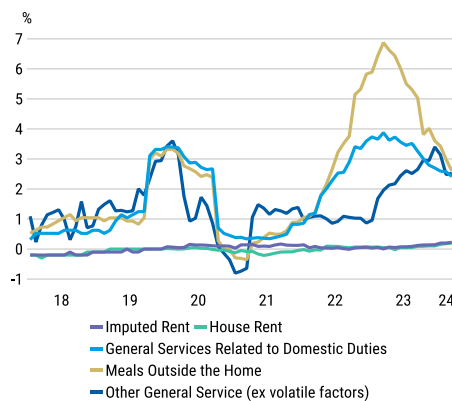
Our thought process is unchanged from what we've published earlier (see ["Rates And FX Thesis: Medium-Term JPY Rates And FX View, What's Changed From 2020 Report"](#)). Even in bringing the negative interest rate policy to an end, BoJ has signaled its intent to keep financial conditions "accommodative". In turn, we see only a modest and gradual pace of rate hikes, unlike what we had seen in the US and Europe.

Short/medium-term rates expectations should remain solidly anchored if Japan's central bank does indeed proceed with only gradual rate hikes. US and European market-based interest rates will start to face downward pressure as the rate cut cycles of the respective central banks commence, in which case the term premiums priced into JPY interest rates should narrow. Our economists expect BoJ to be poised to start running off its balance sheet from this October, but its existing holdings are so sizable that so-called "stock effects" should help to limit any upward pressure on term premiums.

Framework on JPY rates: Recent JPY rates market behavior has been basically consistent with our forecasts outlined in ["Japan | How We View The Outlook For JPY Rates"](#). The BoJ ended its negative interest rate policy in March, as it had assessed that the prospects of achieving a "virtuous cycle between wages & prices" had improved. At the same time, it also stated that financial conditions are set to remain "accommodative" for the time being.

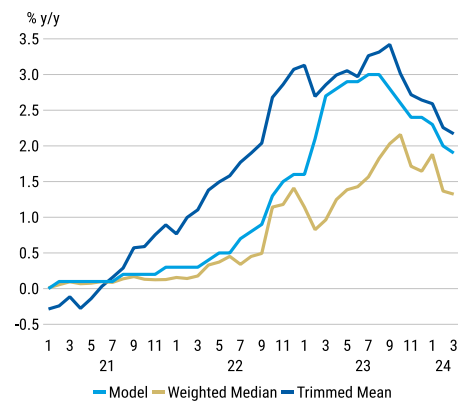
Indeed, the inflationary path supports our economists' view of a gradual pace of rate hikes. Headline CPI inflation had already peaked out, due to waning cost-push pressures. Services prices are moving only gradually higher (see [Exhibit 106](#)) and the BoJ's various measures of "underlying inflation" have been moderating. This suggests that Japan does not need to hike rates as rapidly as was the case in the US and Europe (see [Exhibit 107](#)).

Exhibit 106: Breakdown of general service inflation



Source: Morgan Stanley Research, Bloomberg, MIC

Exhibit 107: BoJ's estimated underlying inflation



Source: Morgan Stanley Research, Bloomberg, BoJ

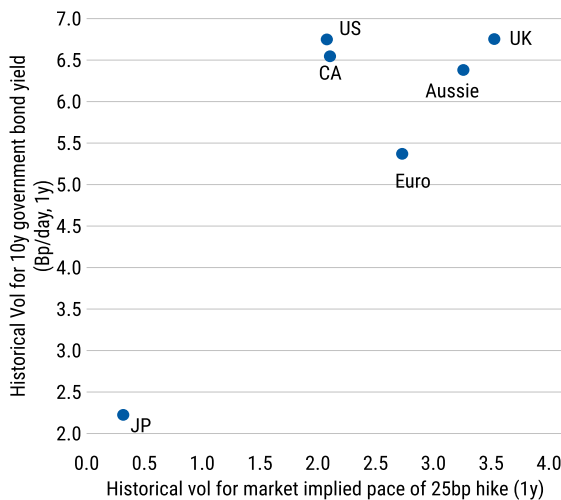
We believe the BoJ will need to see evidence to have more conviction of a “virtuous cycle between wages and prices”. We'd cite the following: (1) wage increases at small/ mid-size businesses should be comparable to those for larger firms; (2) spillovers from wages to prices; (3) real wage growth turning positive and private consumption picking up as a result; and (4) further rises in expected inflation rates towards +2%.

Our economists are forecasting the BoJ to hike its policy rate to 0.25% in July and 0.5% in January 2025, but then stop at that level. We believe that rate expectations should remain solidly anchored under such a scenario and thereby help to prevent JPY interest rates from surging sharply higher.

Interest rate markets tend to turn more volatile when participants are uncertain about the trajectory of the central bank's policy rate (see Exhibit 108). We thus expect the JPY rates market to remain comparatively calm by global standards, with rate expectations relatively anchored whereas many overseas central banks have been more explicit in signaling that much will ultimately depend on forthcoming data.

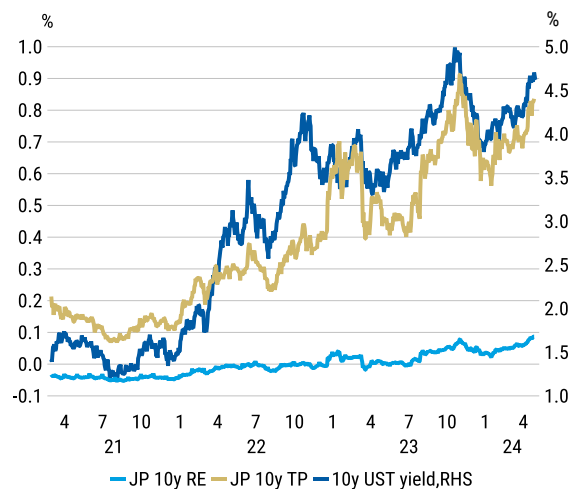
We thus expect fluctuations in the term premium to remain the dominant driver of JPY rate market action, with the JGB yield curve accordingly liable to keep either bear-steepening or bull-flattening in response to movements in UST yields as well as any changes in BoJ balance sheet policy (see Exhibit 109).

Exhibit 108: Relationship between vol of short-term rates expectations vs. vol of 10y government bonds



Source: Morgan Stanley Research, Bloomberg

Exhibit 109: Breakdown of 10y JGB nominal yields vs 10y UST yield



Source: Morgan Stanley Research, Bloomberg

The continued strength of US economic data has meant that markets have been pricing in a delayed and shallower rate cut cycle in the US. Nevertheless, our economists believe the Fed's first rate cut could come in September, as they believe the immigration-driven improvements in labor supply will ultimately support a cooling of inflation (though in a somewhat bumpy fashion). Our US rates strategists, meanwhile, envision US rates moving onto a downward trajectory ahead.

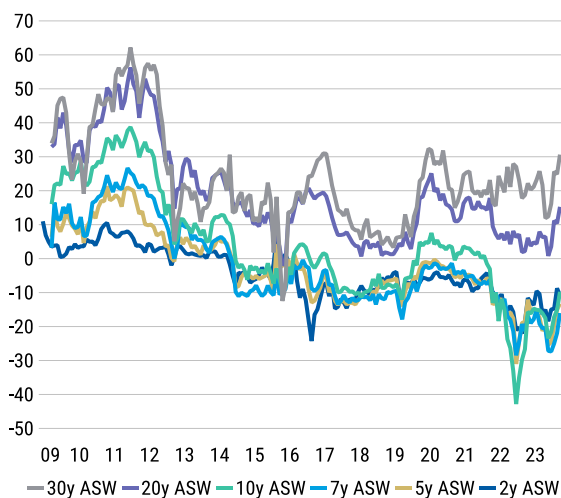
The term premium priced into JPY rates would likely tighten if US rates do end up trending lower in the next few years. But what about the potential impact of BoJ balance sheet policy? Our economists expect BoJ to start dialing back its JGB purchases from this October, but the tapering process to be only gradual and measured.

Recent cheapening of ASW suggests that markets have already priced in future BoJ tapering to at least some degree (see Exhibit 110), for which reason we would expect an actual announcement to generate only limited upward pressure on the term premium, unless the proposed pace of reduction turns out to be unexpectedly rapid.

Putting all of this together, while JPY rates may face at least some upward pressure via the higher rate expectations channel as the BoJ proceeds with further monetary policy “normalization” (see Exhibit 111), we ultimately expect the central bank to tread cautiously as to prevent a major repricing of rate expectations.

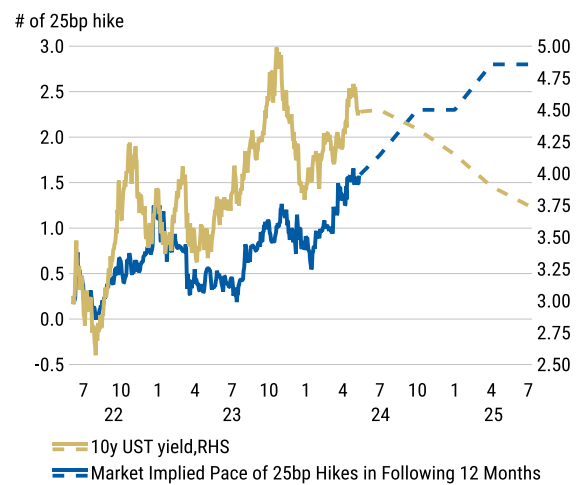
Further, the term premium priced into JPY rates, meanwhile, should be facing downward pressure due to declines in overseas interest rates, for which reason **our basic conclusion is unchanged from "Rates And FX Thesis: Medium-Term JPY Rates And FX View, What's Changed From 2020 Report", in as much as we still consider sharp rises in domestic interest rates highly unlikely.**

Exhibit 110: ASW curve development



Source: Morgan Stanley Research, Bloomberg

Exhibit 111: Our view for the market pricing of future BoJ rate hiking trajectory as well as 10y UST yield



Source: Morgan Stanley Research, Bloomberg Note: Market pricing includes the expected 25bp hikes by our economists (July-24 and Jan-25)

Exhibit 112 shows our new forecasts for JGB yields in the following 12 months.

Exhibit 112: Our JGB yield forecasts

	2y	5y	10y	30y
2Q24	0.20	0.40	0.80	1.90
4Q24	0.35	0.65	1.00	2.00
2Q25	0.50	0.80	1.10	2.05

Source: Morgan Stanley Research Forecasts

JPY FX: All Depending on Other Central Banks

Bottom line: The JPY’s real effective exchange rate could potentially rebound to some degree over the next few years. However, it is now looking as though JPY appreciation might end up being somewhat milder than we had envisioned in

"Rates And FX Thesis: Medium-Term JPY Rates And FX View, What's Changed From 2020 Report".

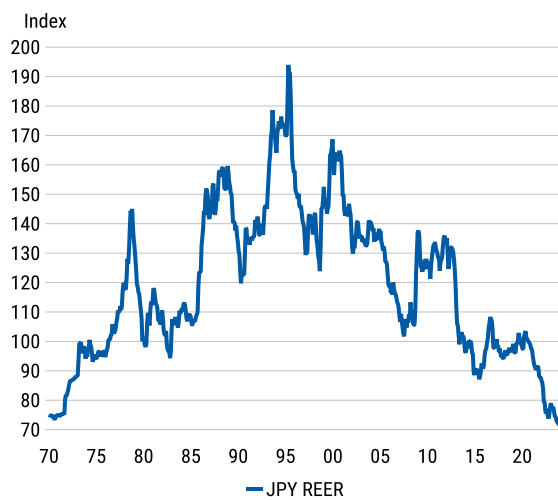
Other central banks do indeed appear set to shift into easing mode sooner or later, but many investors are probably anticipating only comparatively shallow rate cuts, especially in the US, given that economic performance has remained strong. Any RoW-BoJ policy rate convergence will thus be quite gradual, in which case continuing demand for JPY carry trades should help to limit the pace of any declines in CCY/JPY.

JPY weakness...: JPY has continued to underperform even since our "Rates And FX Thesis: Medium-Term JPY Rates And FX View, What's Changed From 2020 Report" report, with the JPY's real effective exchange rate having already dropped past 1970 levels to new all-time lows and showing no sign of stopping (see [Exhibit 113](#)).

...driven by higher-for-longer Fed path: We had previously expected JPY to strengthen once a cooling of inflation allowed for overseas central banks to start cutting, but with inflation in US and other economies remaining surprisingly sticky despite such significant monetary tightening, markets have been pricing in a shallower and more gradual pace of rate cuts for the Fed and other DM central banks. The US economic outlook in particular has been complicated by increased immigration and resultant increases in both labor supply & aggregate demand. Our US economists now expect the Fed funds rate to be at 3.625% by end 2025, as compared with 2.375% previously, as they anticipate that increased immigration is driving up the economy's short-term potential growth rate. In "JPY | What's Been Driving Movements In USD/JPY?", we used a multiple regression model for USD/JPY to show that only the market's expectation for US short-term r^* has had consistent explanatory power for movements in JPY vs. USD (see [Exhibit 114](#)).

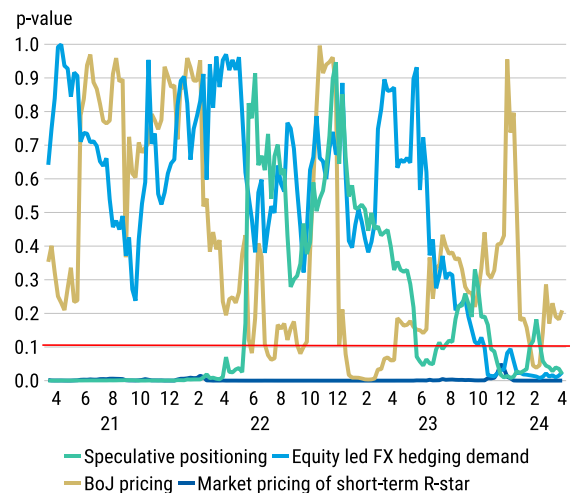
The perceived viability of JPY carry trades will ultimately depend in significant part on where investors expect the Fed's policy rate to bottom out. As of now it would appear that market participants expect neither particularly deep Fed rate cuts nor rapid BoJ rate hikes, which likely goes a long way towards explaining why the JPY has simply continued to weaken.

Exhibit 113: Japan's REER continues to weaken further



Source: Morgan Stanley Research, Bloomberg

Exhibit 114: US short-term r^* pricing consistently have had statistically significant explanatory power for USD/JPY



Source: Morgan Stanley Research, Bloomberg, Note: We conducted multi-regression analysis for 52 weeks rolling USD/JPY return by changes in each explanatory variable

BOJ rate path less relevant for JPY...: In contrast, our regression analysis showed that expectations for BoJ rate hikes tend to be almost statistically irrelevant during most of estimation periods. Moreover, the relevant correlation coefficient has turned positive of late (see [Exhibit 117](#)), suggesting that the conventional wisdom of a BoJ rate hike being negative for USD/JPY might no longer hold true. We think this might be because of market expectations that rises in USD/JPY could ultimately force the BoJ to mount some sort of monetary policy response aimed at curbing the JPY's slide.

...given market expectations for gradual normalization: BoJ Governor Kazuo Ueda has perhaps added to such debate with his recent comments to the effect that the central bank might indeed consider adjusting its settings if it assesses that the potential ramifications of JPY weakness for the “virtuous cycle between wages and prices” have become “too great to ignore”. Evidence of causality from USD/JPY to rate hike expectations being stronger than that in the opposite direction suggests that **market participants see little prospect of the JPY's slide halting even if the BoJ does proceed with further policy rate “normalization”**. This is perhaps because most expect any additional rate hikes to come at only quite a gradual pace. **We thus see little prospect of any Japan-side action proving successful in reversing the currency's direction unless the BoJ starts to hint at a much steeper rate hike trajectory.** The JPY might thus be set to keep weakening for at least the time being unless some sort of “hard landing” increases the perceived likelihood of sharper overseas rate cuts. In any case, the performance of JPY from this point forward looks to be dependent in quite significant part on the policy decisions of overseas central banks.

USDJPY to go gradually lower over coming quarters: Given our US rates strategist's lower UST yield forecast, we see market pricing of US short-term r^* to grind lower in the following 12 months. They believe that the rally in UST yields will become particularly pronounced once the Fed actually enters into a rate-cutting cycle from this September, as they see the market pricing in an additional negative term premium.

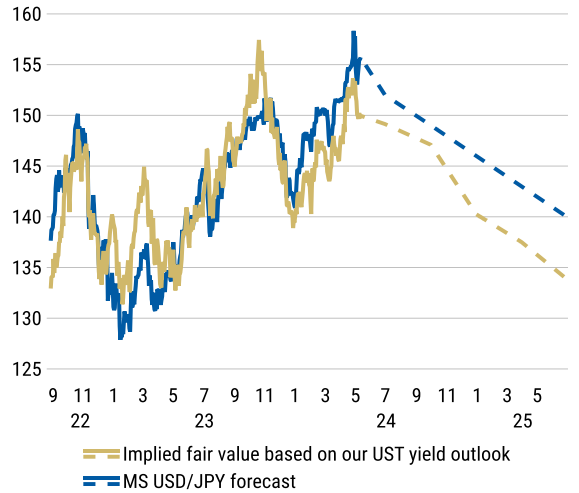
Accordingly, we think USD/JPY could go lower across the forecast horizon, but we see the actual level of USD/JPY as higher than the fair value implied by US short-term r^* pricing, given the speculative JPY short positioning as well as some technical factors (see [Exhibit 115](#), [Exhibit 116](#)).

Exhibit 115: Our USD/JPY forecast in the following 12 months

	2Q24	3Q24	4Q24	1Q25	2Q25
USD/JPY	152	149	146	143	140

Source: Morgan Stanley Research, Bloomberg

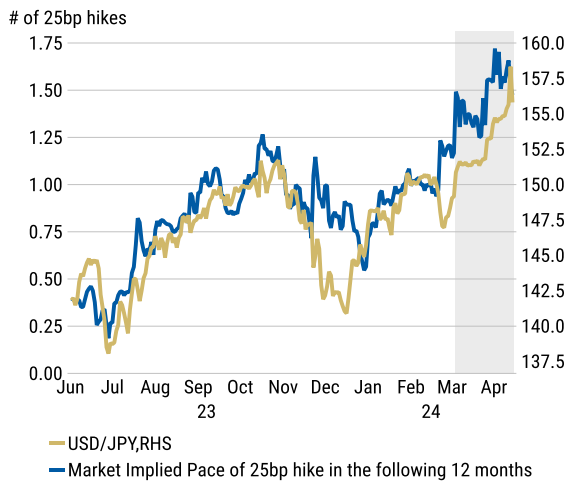
Exhibit 116: We see a higher USD/JPY trajectory relative to implied fair value



Source: Morgan Stanley Research, Bloomberg

Pure fundamentals look conducive to a further strengthening of the JPY: Japan's terms of trade are somewhat better now than in 2022 as a consequence of international commodity prices having settled back down (see [Exhibit 118](#)). Indeed, our behavioral equilibrium exchange rate (BEER) model with both the terms of trade and Japan's relative growth rate as explanatory variables points to a fair value for USD/JPY in the 120s or 130s. Current upside divergence can probably be explained in large part by the capital flows associated with JPY carry trades. But we see no obvious catalyst for this JPY "cheapness" to be corrected so long as there is no immediate prospect of the Fed-BoJ policy rate differential narrowing appreciably.

Exhibit 117: USD/JPY have had positive correlation with the market pricing of BoJ rate hike in the following 12 months



Source: Morgan Stanley Research, Bloomberg

Exhibit 118: Japan's terms of trade somewhat have improved relative to 2022



Source: Morgan Stanley Research, Bloomberg, BoJ

Japan's Grand Strategy: A Positive Sum Game

Robert Alan Feldman

Japan is further developing a new grand strategy, pressured by demographics at home and geopolitics abroad. We think that this process is self-reinforcing and is a positive sum game.

Last year, we noted that Japan has started to develop a new grand strategy¹, which we defined as matching capabilities to aspirations, as suggested by John Lewis Gaddis.²

We noted that Japan's aspirations are largely the same, peace and prosperity. However, achieving these aspirations today will require Japan to enhance some capabilities: 1) Faster technology diffusion. 2) Greater labor market liquidity. 3) Better corporate governance. 4) Better national governance. 5) Fiscal rebalancing, in particular through (a) using technology in traditional spending areas (medical, pension, welfare), (b) regulatory reform in others (raising pension receipt age), and (c) investment in new needs such as reskilling.

We also noted that implementation of this new strategy would likely create major business opportunities in five industries in particular: (1) Energy, (2) Agriculture, (3) Healthcare, (4) AI/IT, and (5) Education. However, the opportunities are not limited to these five industries, since all will need more effective transfer of funds from savers to investors, and a more vibrant corporate sector.

What Has Been Done? (A Few Examples)

Monetary Policy: Rate Hikes Will Stimulate the Five Capabilities

As noted above, the BoJ has begun to hike interest rates, after a long period of negative rates, and a long period of deflation. This rate hike was triggered by BoJ's expectation of a positive cycle of wage and price interactions. We expect this cycle to take hold, and to trigger enhancements of the five capabilities – meaning a broader positive cycle of prices, wages, productivity, and sustainability – with the background of continued low (or even lower) real interest rates. On tech diffusion, the new wage price cycle may well raise the urgency of new technology introduction, and spur investment. With more investment, labor markets may become more liquid. Why? because more investment will likely raise the marginal product of labor that is adequately trained to use the new capital. As demand for new-skilled labor rises, labor markets will likely become more flexible. On corporate governance, the prospect of a positive cycle of interest rates, prices and wages with a positive higher interest costs will add to the incentives for to corporate boards to improve corporate governance further. On national governance and fiscal reforms, the positive cycle gives policy makers the ability to emphasize the importance of fiscal

1. (See Feldman, Robert, "Japan's New Grand Strategy," June 11, 2023.)

2. See Gaddis, John Lewis, *On Grand Strategy*, Penguin Press, 2018.

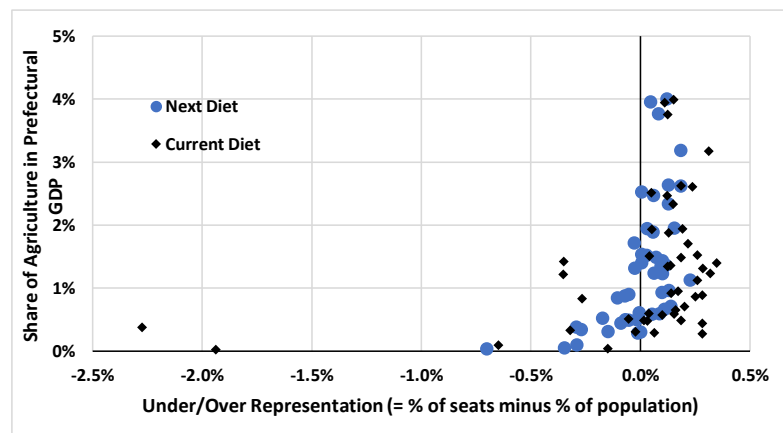
sustainability to voters.

National Governance: Diet Reform and Political Reform

A new election district system will come into effect for the House of Representatives, in the next general election (which must be held before autumn 2025). Japan has reallocated election districts among prefectures every few years, in response to Supreme Court rulings that the distribution of Diet seats is unfair. Currently, Tokyo prefecture has 2.32%-pts fewer Lower House seats than its population share would suggest. With the new electoral districts, Tokyo is still under-represented, but only by 0.83%-pts. In terms of seats, Tokyo will move from 37 total (both single-member and proportional seats) to 49. (Full equality would require 53 seats.)

The potential impact on agriculture policy from this reallocation of Diet seats is suggested in [Exhibit 119](#). In the current Diet, urban prefectures are heavily under-represented, and also have low shares of agriculture in prefectural GDP. In contrast, the rural prefectures are over-represented, and have higher shares of agriculture in prefectural GDP. When the Diet system changes, the imbalance will shrink substantially: The under-represented prefectures will be less under-represented; the over-represented prefectures will be less over-represented. In simple numbers, the under/over-representation will shrink from 6.4%-point disparity to 2.7%-pt disparity.

Exhibit 119: Under/Over Representation by Prefecture in the House of Representatives vs. Share of Agriculture in Prefectural GDP



Source: Election system data from Ministry of Internal Affairs & Communications; prefectural GDP data from Cabinet Office; calculations by Morgan Stanley Research.

A new aspect of national governance improvement has emerged in the last few months: Political funding reform. The cabinet support rate has plunged recently, due to public dissatisfaction about political funding. The public remains dissatisfied with proposals from the ruling party to change the funding rules. With elections coming relatively soon, and with Cabinet support remaining low, more reforms of political funding are likely, in particular new rules to increase transparency.

Corporate Governance: JPX Guidelines, and Corporate Code Reform

The Japan Exchange has been a key player in improving the incentives for corporate reforms. The first major reform was restructuring of the segments of the market, to clarify the types of firms in each segment. Formerly, the market has a 1st Section, a 2nd Section,

and JASDAQ (which comprised both Standard and Growth subsections). From April 2022, the market was reorganized to have only Prime, Standard, and Growth sections.³

The next stage of the JPX reforms came in March 2023, when the exchange published guidelines on improvements of capital structure, focused on PB ratio and cost of capital.⁴

The JPX also announced that the grace period for firms in the Prime Market that had not met the criteria for it would expire in 2025. Firms would have to either (1) meet the criteria by then, (2) change market section, or (3) risk being delisted. The impact was substantial: Just before the reorganization of market segments, there were 2176 firms on the 1st Section of the exchange; with the reorganization, the number of firms in the Prime market was 1839; after the announcement of the capital efficiency standards, the number of firms in the Prime market fell to 1657 at end 2023.

Separately from the moves by the JPX, the government / FSA required firms to submit sustainability info after March 2023, and required annual disclosure of activities of the nomination, remuneration, and audit committees from the same date.

Wage Acceleration: The Game Is Changing

Last year, when we wrote about Japan's new grand strategy, the idea of a virtuous cycle between prices & wages was only a hope. Today it is much closer to reality. This year's first result for the spring wage round was exceptionally high, and suggests that actual wages will accelerate over the next year. (See [Exhibit 70](#), "Scheduled cash earnings expected to rise further heading into midyear, given the strong outcome of the 2024 spring wage negotiations [% YoY, common-sample basis].) In addition, wages are more dependent on prices, and prices are more dependent on wages, as shown in [Exhibit 73](#) and [Exhibit 74](#).

Is job-changing actually on the rise? There does appear to be an uptrend of job changing among full-time workers.⁵ In addition, there is a clear uptrend in the number of people desiring job change. Several facets are interesting: First, women are more likely to change jobs than men, suggesting the incentives for reskilling may be stronger for women than men.⁶ Further, the salary increases for job changers who have reskilled is about 3x of those who haven't. The increase is particularly large for women who have reskilled, at about ¥250,000/year for those who reskill, and only ¥7,000/year for those who haven't.⁷

Grand Strategy, Longevity, and Productivity

While Japan's aspiration of prosperity has not changed, prosperity must be achieved in the

3. The JPX defines these sections as follows: Prime Market: For companies which have appropriate levels of market capitalization (liquidity) to be investment instruments for many institutional investors, keep a higher quality of corporate governance, and commit to sustainable growth and improvement of medium- to long-term corporate value, putting constructive dialogue with investors at the center. Standard Market: For companies which have appropriate levels of market capitalization (liquidity) to be investment instruments in the open market, keep the basic level of corporate governance expected of listed companies, and commit to sustainable growth and improvement of medium- to long-term corporate value. Growth Market: For companies which have a certain level of market value by disclosing business plans for realizing high growth potential and their progress towards these appropriately and in a timely manner, but at the same time pose a relatively high investment risk from the perspective of business track record.

4. For a summary of these measures, see [Summary of Discussions on Measures to Improve the Effectiveness of the Market Restructuring, January 10, 2023](#).

5. See *Chokkin no Tenshokusha Oyobi Tenshoku Kibousha no Doko ni Tsuite* (On Recent Trends in Job Changers and Desired Job Changers – Japanese only), p.9, Ministry of Internal Affairs and Communications, Statistics Bureau, Labor Force Statistics Office, Dec 18, 2023.

6. See Japan Institute for Labour Policy and Training, *Tenshokusha no Jokyō* (Current Conditions of Job Changes – Japanese only), Business Labor Trends, July 2023

7. See Career Research Lab, *Tenshoku Doko Chosa 2024 Nen ban* (2023 Nen Jisseki) (Research on Job Change Trends, 2024 (Results from 2023), March 12, 2024).

face of increased longevity. In a recent piece on longevity in Japan,⁸ we noted that dealing with longevity requires both cost control and faster productivity growth. Indeed, labor productivity must grow by at least 1%-point faster than longevity costs, in order for the government to stabilize the ratio of national debt to GDP. Indeed, the foundation of Japan's new grand strategy amid adverse demographics must be faster productivity growth. What are the different sources of productivity, and how is Japan doing?

Japan's Strengths and Weaknesses in Productivity Acceleration

In [Exhibit 120](#), we list the (many) factors that affect GDP, and group them into two categories: those that impact productivity directly; and those that impact labor supply. Note, however, that "labor" has two aspects, the number of workers and skill levels.

Exhibit 120: Where Does Productivity Come From?

Y	=	Determinants of (Y / L)	*	Determinants of L
		Capital Stock		Demographics
		Business		Age profile
		Physical		Gender Profile
		Intellectual		Immigration
		Public		Skills
		Infrastructure		Types and Levels
		Social Welfare		Mismatch
		Social		Reskilling
		Rule of Law		Participation Rates
		Social Fairness		Incentives (Tax, welfare, pensions)
		Human		Health
		Education		Family Support
		Skills		Labor Market Flexibility / Mobility
		Health		Pension portability
		Technology		Equal pay for equal work
		Scientific		Legal barriers.
		Engineering		
		Organizational		
		Regulation		
		Entry & Exit Barriers		
		Anti-monopoly policy		
		Global trade		
		Externality correction		
		Information Asymmetry		

Source: Morgan Stanley Research

The capital stock has four components. Japanese companies do need more and better physical capital stock, but are investing much more. As described above, the total amount of business investment is high and rising. However, the intellectual capital stock also needs work. Japan has a very successful education system for elementary school through high school. However, college education has two issues - quality and focus; on the latter issue, the share of STEM majors in colleges (especially in computer science) needs work. Moreover, graduate education in Japan lags other major countries, despite the dramatic success of the Okinawa Institute of Science and Technology. Opening for students only in 2012, it was ranked #9 in the world, normalized for size, by *Nature* magazine in 2019.

8. See Feldman, Robert et al, "Longevity: Lessons for the World from Japan," Morgan Stanley, January 23, 2024.

Public contributions to productivity come in part from hard infrastructure. In large urban areas, and between them, Japan's transportation infrastructure is excellent. However, connections with less dense areas of Japan are more problematic, and transportation in rural areas is becoming a serious issue as population densities and aging have combined to reduce access. Slow regulatory reform in regional areas has hindered capital investment. Telecommunications infrastructure is also quite good, but has some rural weaknesses. Water supply infrastructure has many challenges, due to aging capital stock and slow replacement of facilities nearing the end of their planned usefulness.

Nor should "soft" infrastructure be ignored. Japan's legal system is well developed, transparent, and trustworthy. Civil service is also well developed and largely free from the corruption plaguing some nations. The healthcare system is reliable, with good access to high quality care for all. The problems in the soft infrastructure concern incentives: As new challenges arise, the allocation of funding and personnel is often not flexible enough, and rule-writing tends to be siloed and plagued by poor info-flow among stakeholders.

Many factors impact supply & quality of labor. While female labor force participation is extremely high by international standards, there remains room for improvement in training of women and efficient allocation to different jobs. Another issue is the optimal use of elderly labor; many perfectly healthy people are forced out of jobs far too early, due to labor law & rules. There have been major increases of immigrant workers too, now comprising about 2 mln of the 69.5 mln labor force. Immigration rules have been relaxed greatly. There has been a major expansion of the number of industries where immigrants can get permanent residence after 5 years of work. And the criteria for permanent residence have been clarified to a "points system" for various applicant characteristics.

Skill acquisition remains a problem, because incentives for acquiring new skills under the lifetime employment system are lacking. However, labor shortage is offering powerful incentives for job change, which, as mentioned, does appear to be rising among full-time workers. A key question is who pays for reskilling. Given the culture's emphasis on group identity & loyalty, some acute observers are putting the onus for reskilling on employers.⁹

Longevity is a labor market problem too, not only due to the number of older workers, but also the need for workers to care for elderly relatives and themselves. More flexible labor rules are part of the answer, but better healthcare is maybe more crucial. Disclosure of human capital became mandatory for listed companies in 2023, and is likely to extend not only to education & demographics but also health. Indeed, corporate investment in worker health has many benefits, such as reduced sick leave and worker efficiency.

Conclusion

Japan continues to refine its new grand strategy, adjusting aspirations and enhancing capabilities. Most of the moves to enhance capabilities seem small by themselves; but added together they are creating the self-reinforcing momentum that is intriguing global investors. We expect this momentum to continue, and even increase. We see Japan more engaged in the global economy, and we see the result as likely to be a positive sum game.

9. See Kobayashi, Yuji, *Risukiringu wa Keiei Kadai* (Reskilling Is a Management Problem), Kobunsha, 2023.

Japan in a Multipolar World

Chiwoong Lee, Daniel Blake

The Multipolar World transition is driving crucial changes in Japan's industry and security policies, boosting growth and earnings over the short and medium term as investment and defence spending ramps up. Internationally, strong FDI trends show Japan is a key 'friend-shoring' beneficiary of supply chain diversification, at the higher end of the technology curve. Domestically, the Economic Security Promotion Act (2022) is working to improve supply of "specified critical products" and is likely to drive further changes in national budget allocations. On the security front, Japan's new defense strategy targets a doubling of spending, while recent changes allow the export of a broader range of equipment, including lethal systems. Longer term, Japanese companies will need to protect key industry niches and accelerate innovation pipelines, given a likely rise in global excess capacity pressures.

Japan a key technology 'Friend-shoring' beneficiary

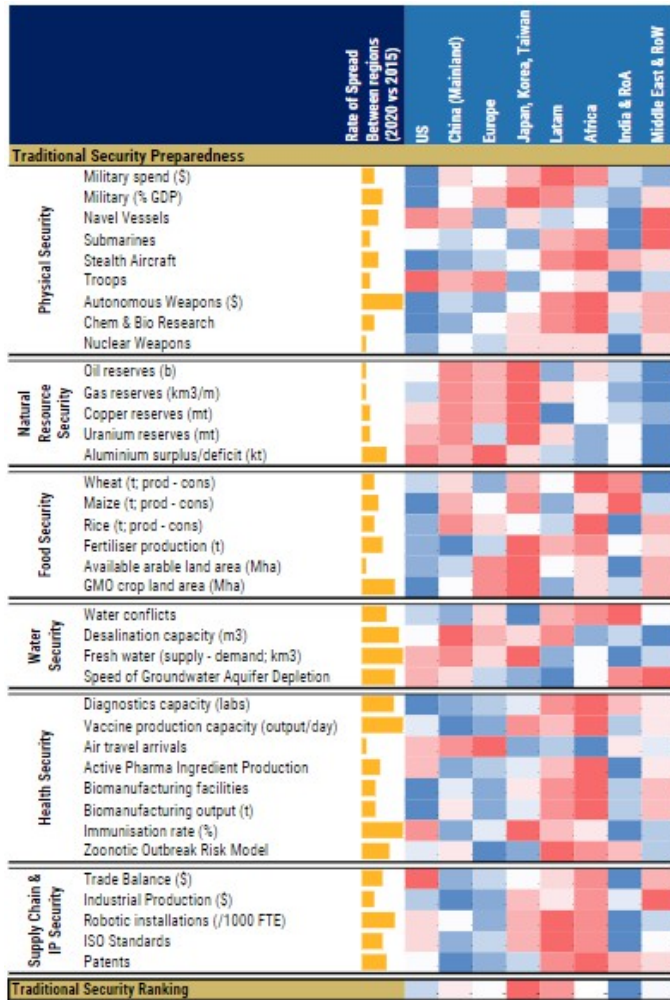
What does a Multipolar World really mean? We have been mapping the Multipolar World transition since 2019, but are now seeing the fuller implications for global trade and investment. Security is the new imperative for policy makers, given accelerating tech diffusion against the backdrop of hegemonic US-China rivalry and the reverberations of the Russia-Ukraine conflict. Multilateral institutions are struggling to prevent zero-sum competition and maintain cooperation on global challenges, while new ad-hoc groupings emerge to tackle transnational issues. Corporates and investors are reacting as governments continue to draw bright lines of sovereignty over IP, data and cross-border investment. See [Thematics: Practical Guide to a Multipolar World](#) (13 Jun 2023).

Three aspects that matter for Japan: We see three key aspects of the Multipolar World transition for Japan's economic and market outlook: 1) Global supply chain friend-shoring; 2) Japan's domestic de-risking through the Economic Security Promotion Act; and 3) National security and defense enhancements.

1) Global Friend-shoring – Japan again crucial in technology supply chains

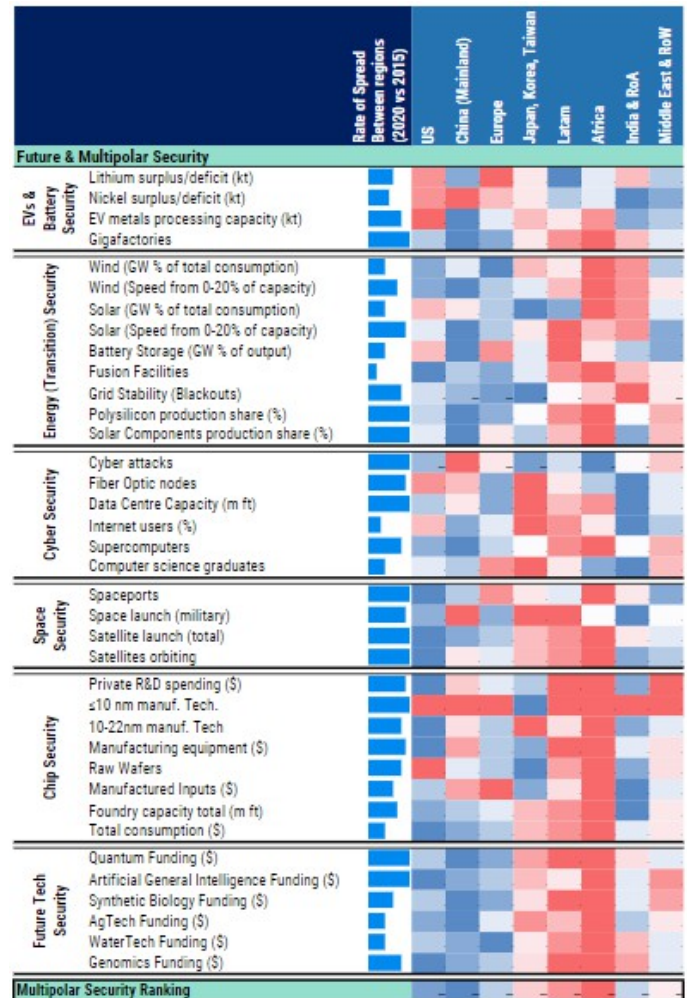
As de-risking of supply chains continues, Japan is leading in the semis space: Our base case scenario in a 'multipolar world', which we envisioned nearly four years ago, was not a sudden de-coupling but instead featured a sustained de-risking of supply chains through a mix of localization, near-shoring, and friend-shoring. While India, ASEAN and Mexico are capturing FDI into scale manufacturing industries, Japan is benefiting from a rewiring of ex-China tech supply chains. The key roles that Japan, Korea and Taiwan play in this regard were highlighted in our earlier report, [Thematics: Seeking Security in the Multipolar World](#) (23 April 2023), where we noted the leading position of this combined economic bloc in semiconductors in particular.

Exhibit 121: Traditional security technologies – Regional ranking and rate of spread between regions (Blue = Highest; Red = Lowest)



Source: UN, EIA, IEA, World Bank, WTO, Bloomberg, WIPO, ISO, Statista, IndexMundi, OurWorldInData, UNESCO, Baxtel, SubmarineCableMap, Pitchbook, VisualCapitalist, NASA, ESPAS, Nature, Morgan Stanley Research

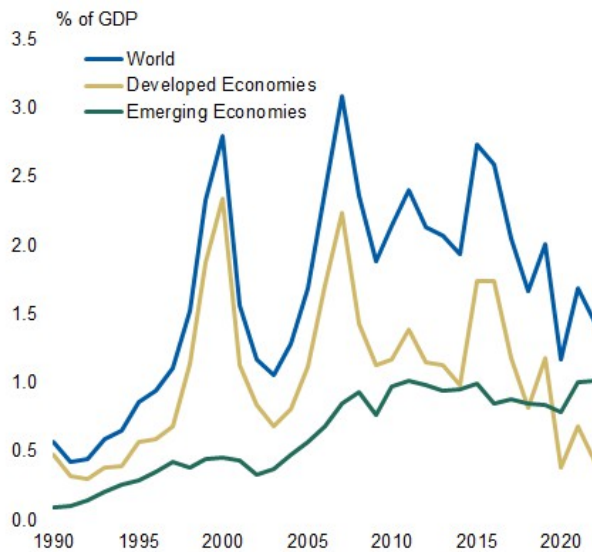
Exhibit 122: Future security technologies – Regional ranking and rate of spread between regions (Blue = Highest; Red = Lowest)



Source: UN, EIA, IEA, World Bank, WTO, Bloomberg, WIPO, ISO, Statista, IndexMundi, OurWorldInData, UNESCO, Baxtel, SubmarineCableMap, Pitchbook, VisualCapitalist, NASA, ESPAS, Nature, Morgan Stanley Research

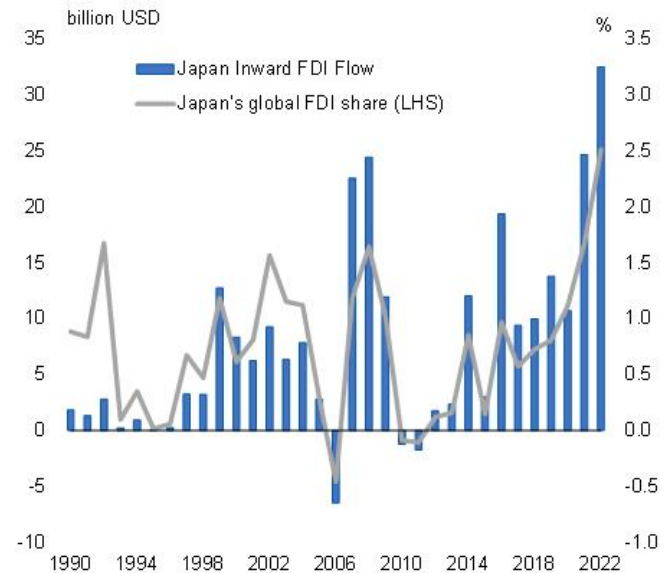
Japan's share in global FDI has jumped...: While friend-shoring changes will take years to materially impact trade flows, the leading indicator will be changes in foreign direct investment (FDI) patterns. As is well documented, the increase in US-China trade tensions around 2018 saw inbound FDI slowing sharply in China, while picking up in other emerging economies. Less well recognised is that the US and Europe have both seen a decline in inbound FDI, while Japan has bucked the trend, with its share in global FDI increasing to 2.5% in 2022 (versus an average of 0.7% of global during 1992-2021).

Exhibit 123: FDI Inflow



Source: UNCTAD, Morgan Stanley Research

Exhibit 124: FDI into Japan trending up



Source: UNCTAD, Morgan Stanley Research

... driven by two key policy changes: We believe the higher investment in Japan including FDI is attributable to two key changes in Japanese government policy: (1) promotion of domestic economic security; and (2) a reversal in postwar national security strategy. Both are linked closely to the greater awareness of the importance of national security in light of rising geopolitical risk. However, the latter deals directly with national security, while the former is economic policy aimed at ensuring that security. We explore both below.

2) Domestic de-risking via Economic Security Promotion Act

The Economic Security Promotion Act was passed in May 2022, aiming to set “a basic policy for the promotion of security through integrated implementation of economic measures related to ensuring security in order to promote economic measures to ensure security in a comprehensive and effective manner” (METI, <https://www.meti.go.jp/english/report/data/wp2023/pdf/2-1-2.pdf>).

The law set up four systems to (a) ensure stable supply of critical products, (b) ensure stable provision of essential infrastructure services, (c) enhance development of specified critical technologies, and (d) allow non-disclosure of selected patent applications. Implementation of this policy has been broadening over the past two years, especially within a list of “specified critical products” where ministries are required to provide concrete support measures (e.g., subsidies under Economic Security Promotion Act, low-interest long-term lending through special loans under Japan Finance Corporation Act, direct financing through special loans under Small and Medium-sized Enterprise Investment Business Corporation Act).

These products include antibiotics, fertilizers, permanent magnets, machine tools/ industrial robots, aircraft parts, semiconductors, storage batteries, cloud programs, flammable natural gas, critical minerals, and ship parts. More recently, advanced electronic components (condensers and high-pass filters) and uranium were added to the list in



February 2024. Foreign companies can be part of the government program if they are deemed of value in securing a stable supply of critical products, and we suspect that is one factor behind Japan's growing inward FDI.

Exhibit 125: Budget and Key Support Measures for Enhancement of Supply Chains Under Economic Security Promotion Act

		(billion yen)			Description of key support measures
		FY2024 budget	FY2023 revised budget	FY2022 Amended Budget	
Department of Control	Total amount	230	917.2	1,35.8	
Ministry of Economy, Trade and Industry	Designated supplies for 2024	-	21.2	-	
	Tip electronic components	-	21.2	-	Multi-layer ceramic capacitors (MLCC), film capacitors, SAW filters, BAW filters, manufacturing equipment, part materials • Strengthen production base, develop technology
	*Uranium (In a group of important minerals)	-	-	-	
	Designated Supplies for 2022	-	896	1,35.8	
	Semiconductor	-	437.6	368.6	Conventional semiconductors, semiconductor manufacturing equipment, semiconductor part materials, semiconductor raw materials (yellow phosphate, helium, noble gas, foliage, etc.) • Strengthen production base, strengthen raw material supply base
	Storage battery	230	265.8	331.6	Storage battery / storage battery part material • Strengthen production base, develop technology
	Cloud Program	-	116.6	20	Foundation cloud programs, advanced electronic calculators • Establishment of the usage environment necessary for program development and development
	Aircraft Parts	-	32.7	41.7	Large forged goods and raw materials (titanium alloys, nickel alloys), CMC and raw materials (SiC fiber), CFRP raw materials (carbon fiber) • Strengthen production base for large forged products • R&D and capital investment for mass production of CMC • Strengthen carbon fiber production base
	Machine tools and industrial robots	-	7.8	41.6	CNC, servo mechanism, CNC system, reducer, PLC • Strengthen production base, R&D
	Flammable natural gas	-	33	23.6	Natural gas • Secure strategic surplus liquefied natural gas
Ministry of Land, Infrastructure, Transport and Tourism	Ship Parts	-	2.5	6.3	Engine (2-stroke, 4-stroke), crankshaft, sonar, propeller • Strengthen production base
	Antibiotics	-	-	55.3	Beta-lactam antibiotics • Strengthening and stockpiling the production base of raw materials and drug substances
Ministry of Agriculture, Forestry and Fisheries	Fertilizer	-	-	16	Ammonium phosphate, potassium chloride • Stockpiling

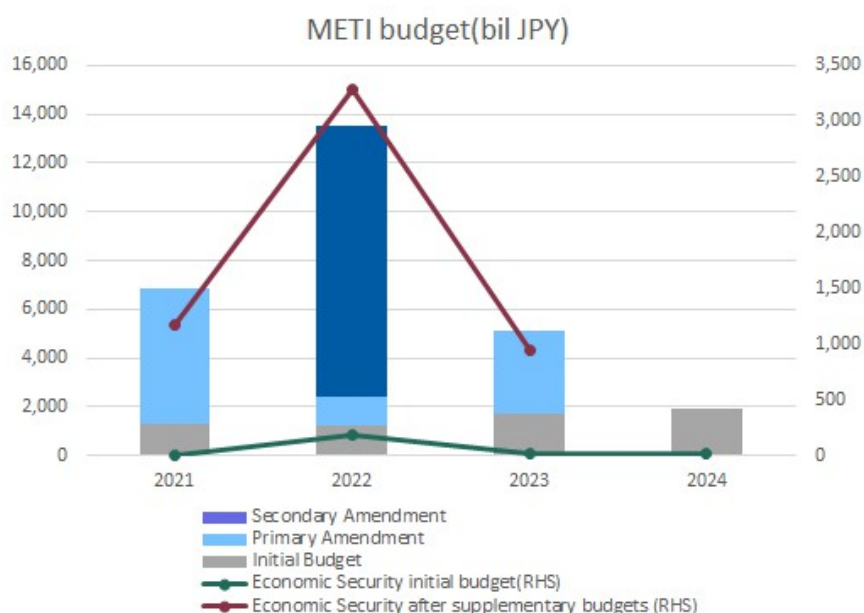
Source: https://www.cao.go.jp/keizai_anzen_hosho/doc/sc_gaiyou.pdf

Economic Security budget allocations growing quickly: The economic security-related budget under the Economic Security Promotion Act may appear small on an “initial” budget basis, but we note the amount of financing available under the “supplementary budget” process has been much more meaningful and may grow further.

In the November 2021 supplementary budget, 1.18 trillion yen was recorded for “establishment of economic security” following the announcement of Prime Minister

Kishida's drafting of a bill to promote economic security. A further total of 3.11 trillion yen and 927.2bn yen for "the realization of economic security" were recorded in the supplementary budgets for FY2022 and FY2023, respectively.

Exhibit 126: METI's Total Budget and Economic Security related Budget



Source: METI, Morgan Stanley Research

It should be noted that part of the Ministry of Economy, Trade and Industry's budget is realized through the funds of the New Energy and Industrial Technology Development Organization (NEDO) (1.94 trillion yen, 1,699.2 trillion yen, etc., of the fund for ensuring stable supply).

Exhibit 127: Activity by New Energy & Industrial Technology Development Organization (NEDO)

	billion yen
Green Innovation Fund Business	2,756.4
Stable Supply Support Fund Business	1,940.5
Specified Semiconductor Fund Business	1,699.2
Post-5G information and communication system infrastructure strengthened R&D business	1,472.3
Bio-manufacturing revolution promotion business	300
Economic Security Critical Technology Development Program	250
DeepTech Startup Support Business	100
Moonshot R&D business	50.1

Source: NEDO, Morgan Stanley Research

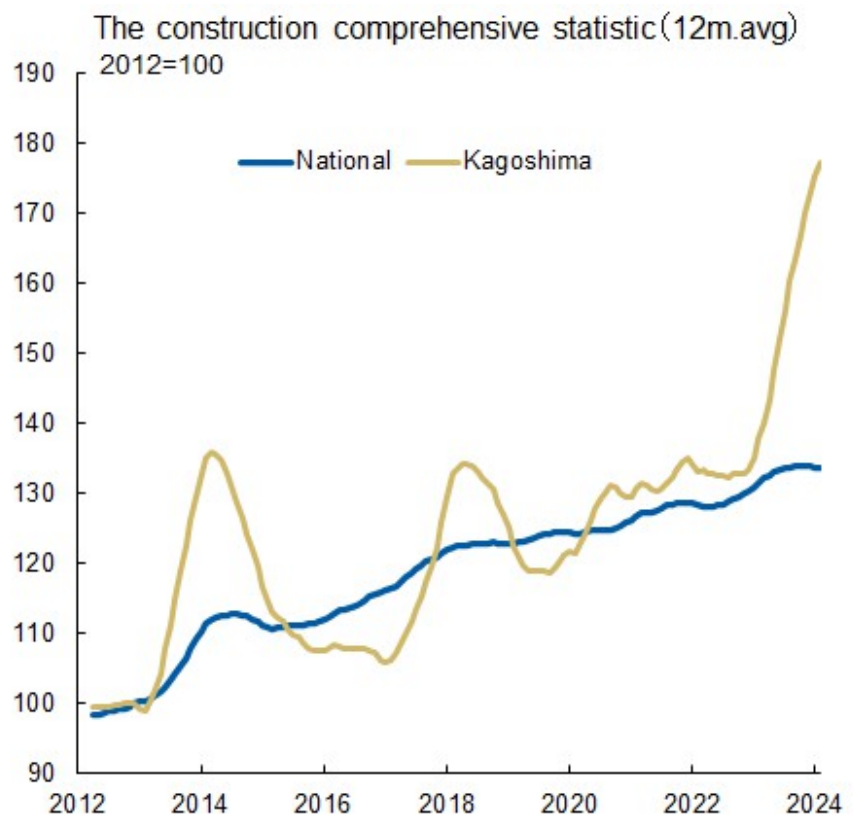
The Economic Security Promotion Act also states that the government will review the state of the act's enforcement after around three years and, if considered necessary, take necessary measures based on those results. The Act may prove even more crucial at that time; in any case, it is difficult to imagine its importance lessening barring a considerable retreat in the present uncertainty over geopolitical risk and global affairs. As such, we see a greater likelihood that the number of items deemed critical by the government will increase in the years ahead.

Economic impact

Let us turn to the economic impact. Fiscal policy will take the form of aid for designated industries, which should lead to increased capex and, over the long term, an expansion in exports. That should not only benefit sectors connected with the specified products, but local regions that have actively pursued and promoted such industries.

For example, construction statistics for Kagoshima Prefecture, which has lured a major semiconductor plant, show growth of over 32% since 2012 as of February 2024 compared to the nationwide average. In order to ensure that the benefits extend beyond the region to the Japanese economy as a whole, the government now needs to ensure that the products produced by enhanced capex attract foreign demand as a next step.

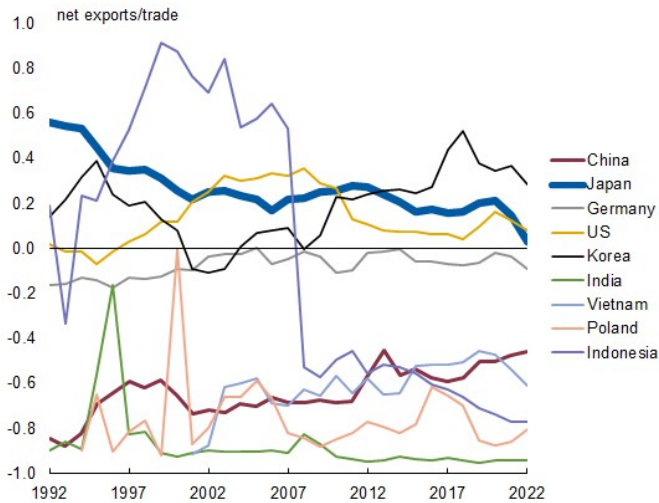
Exhibit 128: Construction Statistics: National vs. Kagoshima Prefecture



Source: Ministry of Land, Infrastructure, Transport and Tourism, Morgan Stanley Research

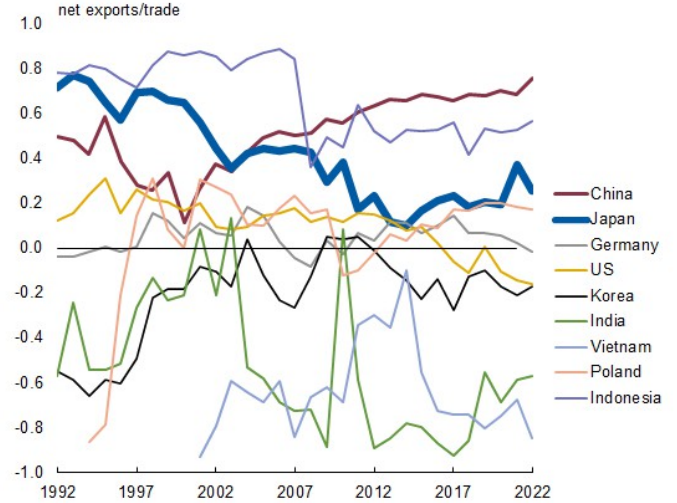
While not the only objective, the broader success of the economic security program will also be impacted by the competitiveness of these investments in export markets. Japan remains a key global supplier of machinery and equipment, particularly for semiconductor production and factory automation. However, in recent decades, Japan has seen a loss of global market share and export-orientation in key industries including batteries, permanent magnets, and semiconductors. Broader shifts in global supply chains and the extent of global de-risking vs. decoupling with Chinese vendors will be critical in this respect.

Exhibit 129: Electronic Integrated Circuits



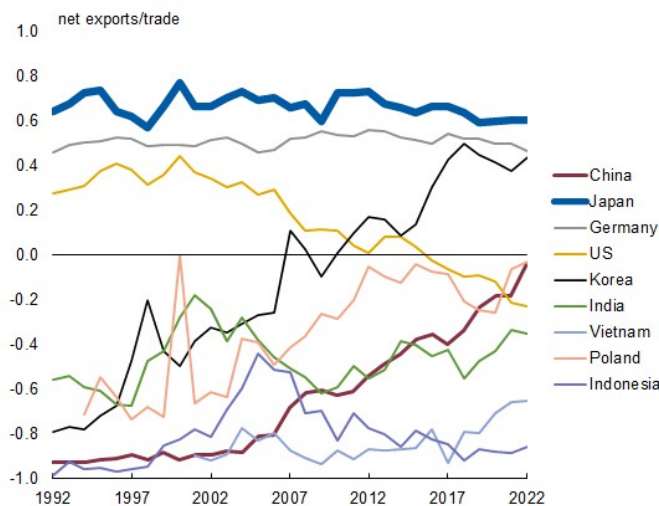
Source: UN Comtrade, Morgan Stanley Research

Exhibit 130: Cells and batteries



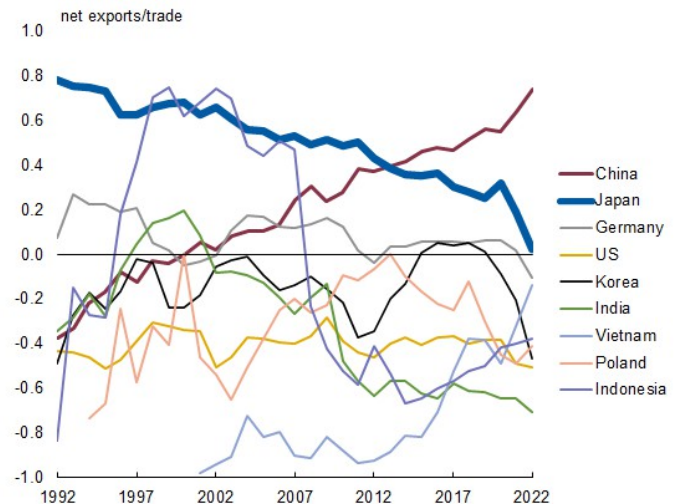
Source: UN Comtrade, Morgan Stanley Research

Exhibit 131: Machinery and mechanical appliances; having individual functions



Source: UN Comtrade, Morgan Stanley Research

Exhibit 132: Electro-magnet; permanent magnets

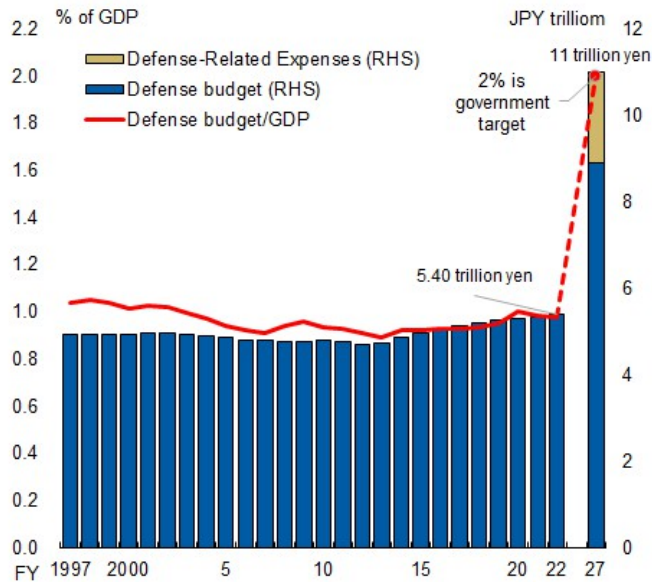


Source: UN Comtrade, Morgan Stanley Research

3) Major reversal in Japan's postwar national security policy

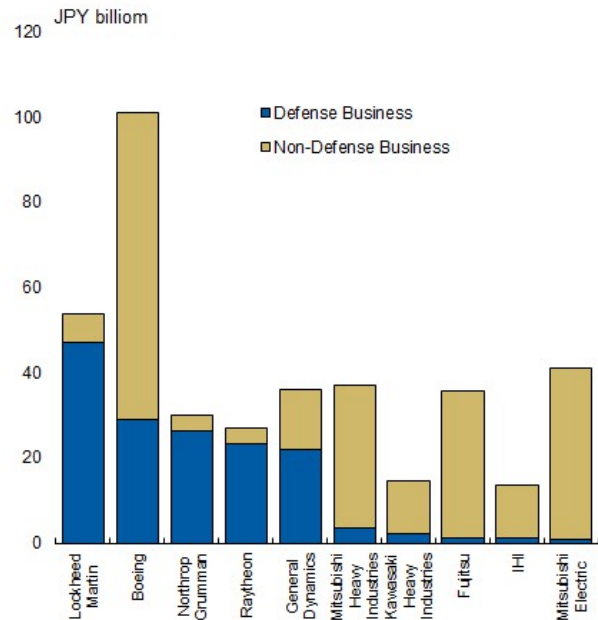
Ramping up defense spending: The rise in geopolitical risk alongside the Multipolar World transition is driving a structural change in defense postures globally, and Japan has also seen a historic reversal of its postwar national security policy. In 2022, the Cabinet approved a new National Security Strategy, which pledged to double defense spending to 2% of GDP within five years, i.e., by FY2027. This implies that defense spending will ramp up by 0.2% of GDP per year for five years.

Exhibit 133: Defense Spending vs. GDP: Japan's plan



Source: Ministry of Defense, Morgan Stanley Research

Exhibit 134: Size and percentage of defense industry within major Japanese and US companies



Source: Nikkei Business Publications, Morgan Stanley Research

Change in stance on transfer of defense equipment: In addition, the government overhauled the implementation guidelines for its Three Principles on Transfer of Defense Equipment, which set the ground rules for transfer of weapons and technology, in December 2023. The export of weapons was largely banned under the Three Principles on Arms Exports introduced in the 1970s. The Abe administration lifted the ban for certain cases under the aforementioned Three Principles on Transfer of Defense Equipment in 2014, but essentially continued to bar exports of lethal arms other than those jointly developed with other nations. That stance was revised to permit overseas transfers of weapons with lethal capacity like missiles and ammunition, such as the recently approved sale of Patriot surface-to-air missiles to the US.

The National Security Council and Cabinet Office also agreed in March this year to allow fighter jets currently under development to be transferred to third nations. Their reasoning is of great interest. Economies of scale were essential for the UK and Italy, which are jointly developing the jets, and Japan had to ease conditions on exports so that it would be accepted into the project.

Encouraging innovation and boosting competitiveness of defense manufacturing sector: While exports from Japan are not envisioned at this time, the government presumably considers this a crucial measure for achieving technological innovation and cutting costs of development. The need for pursuing wider sales channels for items other than just jet fighters is mentioned in the Defense Buildup Program, which states,

- “Transfer of defense equipment and technology overseas is not only a strategic tool of foreign and defense policy to build effective partnerships with allied and like-minded countries and to deter unilateral changes to the status quo by force or invasion of Japan, **but also effective in ensuring the growth of the defense**

industry through the expansion of defense equipment market. From this perspective, the government will take the lead in promoting appropriate overseas transfer of defense equipment and technology by further cooperation between the public and private sectors. The government will also establish a fund and provide corporate assistance as necessary.” (emphasis added) (https://www.mod.go.jp/policy/agenda/guideline/plan/pdf/program_en.pdf)

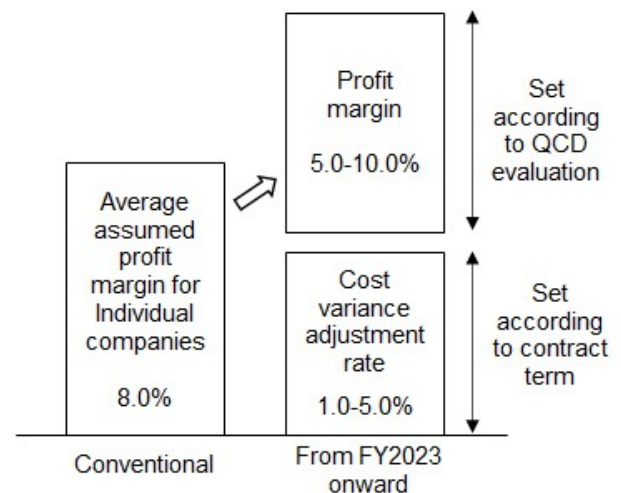
The Defense Production Infrastructure Reinforcement Act of October 2023 is especially meaningful in this regard. The act allows direct payments to suppliers that manufacture parts essential for the work of the Defense Ministry as well as subsidies for the costs of changing the usage or performance of equipment. Moreover, the revision takes steps to preserve corporate profitability, such as raising the projected operating margin from around 8% (without cost-recovery) to up to 15%. These changes should boost the competitiveness of Japanese defense equipment in export markets over the long term and could make defense-related items a key export product.

Exhibit 135: Overview of the Defense Production Base Reinforcement Act

<p>● Clarification of the position of the defense industry</p> <ul style="list-style-type: none"> Clarified that strengthening the foundation for the development and production of equipment, etc. is becoming more important 		
<p>● Supply Chain Investigations</p> <p>(Target: Companies that manufacture equipment essential to their mission)</p> <ul style="list-style-type: none"> Investigations reveal supply chain risks directly to the Department of Defense Companies are required to make efforts to respond to Department of Defense investigations 		
<p>● Measures to strengthen the foundation</p> <p>(Target: Companies that manufacture equipment essential to their mission)</p> <p>Directly pay expenses for initiatives by companies that contribute to the manufacture of defense equipment, etc., including suppliers</p>	<p>● Equipment transfer facilitation measures</p> <p>(Target: companies that transfer equipment)</p> <p>Grant for expenses to change specifications, performance, etc. of equipment, etc.</p>	<p>● Loan of funds</p> <p>(Target: Companies that manufacture equipment)</p>
<p>● Possession of manufacturing facilities, etc., by country</p> <p>(Target: Companies that manufacture equipment essential to their mission)</p> <p>Even if the above measures are taken, if there are no other means, the government will be able to maintain manufacturing facilities, etc., and allow the company to manage and operate them</p>		
<p>● Secrecy measures in equipment contracts</p> <p>→ Enhance protection of sensitive information in equipment, etc.</p>		

Source: Ministry of Defense, Morgan Stanley Research

Exhibit 136: Outline of securing profitability



- **QCD evaluation:** Assess quality management (Quality), cost management (Cost), and delivery (Delivery) in the defense business of individual companies, and reflect their efforts in profit margins.
- **Cost Variation Rate:** By accumulating total costs according to the performance period of individual contracts, the risk of rising costs such as future labor costs and rising prices that are beyond the scope of corporate efforts is absorbed.

Source: Acquisition, Technology & Logistics Agency, Morgan Stanley Research

Conclusion

Active policy action has lifted Japan's inward FDI: We believe the ongoing rise in Japan's inward FDI that runs counter to the trends in other advanced economies is attributable not only to its ongoing structural transformation, but to the revisions in its industrial policy in response to growing geopolitical risk. That includes an economic policy devoted to the stable supply of Specified Critical Products under the Economic Security Promotion Act. We expect the government to widen the range of this policy in future budgets. For

instance, elements of this could be seen in the government's policy action in the tech space, which we detail later.

A revitalised defense industry could bolster growth: Furthermore, we believe the government will continue to work to revitalize the nation's defense industry over the next decade, including a doubling of the defense budget, in the face of increasingly urgent national security needs. That should be positive for capex, public investment, and, eventually, exports to benefit the Japanese economy. Several issues may emerge over a longer horizon, such as a possible "prisoner's dilemma" and the global competitiveness of Japanese products, but the nation's active industrial policy should bolster growth in the short term thanks to reshoring and friend-shoring.

Recent history on Japan's defense budget changes and proposed constitutional law amendments

Japan has maintained defense spending at around 1% of GDP since the 1970s. The government approved a policy in 1976 ("Concerning the Upgrading of Defense Capability") that capped the nation's annual defense spending "for the time being" at 1% of GNP. See [here](#) (Japanese only).

However, amid growing geopolitical tensions and [urging from the US](#), Prime Minister Fumio Kishida ordered relevant ministers in November 2022 to lift defense spending to 2% of GDP within five years, i.e., by FY2027. This led to the adoption of the National Security Strategy last December. The increase in spending marks the first real change in policy in 56 years.

A strengthening of national security is a long-sought goal by the LDP, the present ruling party. For instance, the party has proposed a constitutional amendment that would officially recognize the Self-Defense Forces and the nation's right to defend itself. See [here](#) (Japanese only). Additionally, the LDP introduced a draft revision of the Constitution in 2012 that would establish an emergency clause under Article 9 (which renounces Japan's right to war) allowing the nation to respond to an armed external attack.

Corporate Governance: Ongoing progress fueling ROE gains

Tim Chan, Kazutaka Kuroda, Sho Nakazawa, Ehsenra Fu

Historically, corporate governance in Japan has been a key reason for investors' underweight stance. But times have changed: Japan's governance reforms of late have been significant & impactful, which should portend upside to equities. Japan is still behind the US and Europe in key governance areas, such as board independence, gender diversity on board, and cross-shareholding – but since F2017, many governance metrics have exhibited significant improvement. This section discusses the main drivers of the corporate governance journey, comparisons to US/Europe, and how the governance climate may evolve ahead.

What has driven Japan's corporate governance journey?

Regulations & policy landscape are supportive: Since the CG code revision in 2021, there have been a number of policies / regulations from TSE, METI and FSA all focusing on improving governance, most notably including the establishment of the Prime Market and guideline to improve P/B ratios. There have also been changes on rules about M&A and engagement to support the governance improvement journey (see [Exhibit 137](#) for details).

A prism of corporate responsibility: While 2023's TSE initiatives have been a key catalyst, the impact has likely been amplified by changes in domestic shareholder voting patterns to broaden support for shareholder proposals. The risk of seeing a substantial protest vote is likely motivating management teams to consider their ESG credentials more broadly, with a focus on governance and exploration of capital efficiency steps.

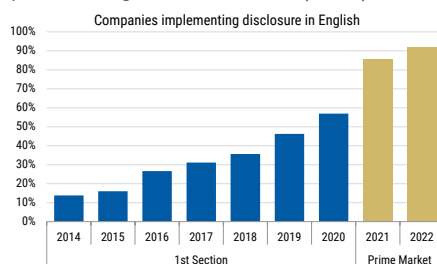
Exhibit 137: Key Policies and Regulations around Corporate Governance and Mergers and Acquisition

Tokyo Stock Exchange (TSE)	Ministry of Economy, Trade and Industry (METI)	Financial Services Agency (FSA)
<p>2021</p> <ul style="list-style-type: none"> Japan's Corporate Governance Code indicated that companies should present targets for profitability when establishing business plans Guidelines for Investor and Company Engagement <p>2023</p> <ul style="list-style-type: none"> Summary of Discussions on Measures to Improve the Effectiveness of the Market Restructuring <ul style="list-style-type: none"> Proposed that with a P/B ratio below 1 should be required to disclose specific actionable plans to improve capital efficiency and growth expectations by investors <p>Under Discussion</p> <ul style="list-style-type: none"> Minority shareholder protection at quasi-controlled listed companies <ul style="list-style-type: none"> Clearly define and reinforce the role of independent outside directors to oversee the risk of conflicts of interest between controlling shareholders and minority shareholders 	<p>2022</p> <ul style="list-style-type: none"> Practical Guidelines for Corporate Governance Systems (CGS Guidelines) <ul style="list-style-type: none"> Criteria for dismissal or non-reappointment of the president and CEO includes "the P/B ratio remaining below 1 time" <p>2023</p> <ul style="list-style-type: none"> Taxation of spin-offs <ul style="list-style-type: none"> Qualified restructuring of spin-offs Promote the use of tax incentives for partial spin-offs METI published Guidelines for Corporate Takeovers <ul style="list-style-type: none"> Present best practices regarding M&A transactions Redefined "hostile takeover" as "unsolicited takeover" Upon receipt of an acquisition proposal, management or directors are suggested report to the board of directors, which should make efforts to ensure that the acquisition will be based on shareholder interest and enhancing the company's corporate value Potential use of takeover responses policies 'should not result in hesitation of a potential acquirer to make a desirable acquisition proposal' 	<p>Under Discussion</p> <ul style="list-style-type: none"> Revision to takeover bid (TOB) rules: <ul style="list-style-type: none"> Apply 1/3 rule to market purchases Make withdrawal and price reduction rules flexible Review of large shareholding reporting system <ul style="list-style-type: none"> Clarify the scope of collaborative ownership and promote cooperation between investors Transparency of substantial shareholders <ul style="list-style-type: none"> Consideration of measures to efficiently identify actual shareholders is under discussion Mandatory disclosure regarding "material contracts" with shareholders <ul style="list-style-type: none"> Disclosure is required regarding agreements with shareholders, including business corporations, regarding the disposal or purchase of holdings and governance-related agreements. Working group established under Japan Corporate Governance Forum considering revisions to Japan's securities law 'acting in concert' to support investor engagement

Source: Morgan Stanley Research, IR Japan, Tokyo Stock Exchange (TSE), Ministry of Economy, Trade and Industry (METI), Financial Services Agency (FSA), Responsible Investor

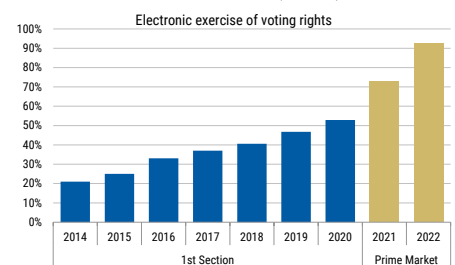
Shift in corporate mindset. The 2023 sea change in Japan corporate mindset has been widely acknowledged, but we think investors may not fully appreciate the decade of progress preceding this seemingly sudden change. While Japan specialists and global activists had on occasion tried to drive meaningful change early in the Abenomics era, the impact was not generalized, as boards still lacked diversity & independence, while management could count on the support of domestic & strategic corporate investors, and were shielded by a lack of English language disclosures and electronic voting rights access. The picture now in Japan is vastly different from the early Abenomics era, as shown below.

Exhibit 138: 92% of Prime Market firms publish English disclosures (2022)



Source: Tokyo Stock Exchange (TSE), Morgan Stanley Research; Note: In 2022, TSE restructured the stock market into 3 new market segments: Prime, Standard and Growth. Prime is "the market oriented to companies which center their business on constructive dialogue with global investors".

Exhibit 139: 93% of Prime Market firms provide electronic voting platform access to institutional investors (2022)



Source: Tokyo Stock Exchange (TSE), Morgan Stanley Research. Data for 2021 not available, hence average of 2020 and 2022 shown.

What governance factors have driven returns?

Stronger positive correlation in some key corporate governance metrics: We looked at

the valuation spread for companies in Japan, the US and Europe vs. their regional peers across 14 governance metrics. Our analysis (Exhibit 140) suggests European companies have been rewarded with a multiple premium for better governance metrics, while Japanese companies have not (yet). On governance metrics (Exhibit 28), many governance metrics only have limited linkage to excess returns on a 1-, 3-, and 5-yr basis (correlation below 10% in most cases). Just focusing on Japan and on a 3-yr basis, we found relatively stronger positive correlation in 1) % of board independence, 2) having a govt/public company or individual as a dominant shareholder, and 3) having executive retention policies.

Exhibit 140: Sector-Relative Median P/BV of Companies: Valuation Spread Between Top & Bottom Quintile by Governance Metric – European companies have been rewarded with a multiple premium for better governance metrics, Japan companies have not

Quantitative Governance Metrics	Europe	USA	Japan
	Top-Bottom Quintile Valuation Spread	Top-Bottom Quintile Valuation Spread	Top-Bottom Quintile Valuation Spread
Capex / Sales	-2.8%	7.1%	-14.9%
Cash / Assets	1.7%	21.8%	56.6%
Dividend Payout Ratio	43.9%	7.3%	17.1%
Total Payout Ratio	45.2%	2.6%	20.4%
% Board Independence	23.1%	-21.0%	-4.1%
% Females on Board	-4.2%	-17.0%	-14.3%
Free Float %	7.2%	-1.2%	-26.1%
Stock & Option as % of Compensation	14.2%	6.4%	-16.5%

Binary Governance Metrics (Yes/No)	Europe	USA	Japan
	Yes/No Relative Valuation	Yes/No Relative Valuation	Yes/No Relative Valuation
At least 1/3 of board independent	12.7%		-15.5%
CEO-Chairman Separation	-4.9%	-3.1%	-16.3%
Largest Shareholder Owns < 20% Stake	-9.8%	-4.3%	-20.4%
Performance-Oriented Compensation			-28.4%
ESG-Linked Compensation	16.8%	3.9%	-12.2%
Retention Executive Compensation Policy	16.0%		-0.3%

Source: RIMES, Factset, Refinitiv Eikon, Bloomberg, Morgan Stanley Research

Exhibit 141: Metrics with Observed Correlations between Governance Metrics and Sector-Relative Excess Returns – Limited linkage observed between governance metrics and excess returns, although there is stronger positive correlation in Japan for independence, shareholder dominance and executive retention policies on a 3Y basis

	1Y Return	3Y Return	5Y Return
MSCI Japan	<ul style="list-style-type: none"> ● Top Holder: Institutional Investor ● Total Stock & Option Awards as a % of Executive Compensation 	<ul style="list-style-type: none"> ● % Non Executive Directors on Board ● Executive Retention Policies ● Top Holder: Government / Public Company / Individuals ● % Independent Directors ● Top Holder: Owns >20% of OS ● Top Holder: % of Shares Outstanding Owned ● Board Specific Skills, Percent ● Top Holder: Institutional Investor ● Free Float % 	<ul style="list-style-type: none"> ● Total Stock & Option Awards as a % of Executive Compensation ● CEO-Chairman Separation
	MSCI USA		<ul style="list-style-type: none"> ● % Non Executive Directors on Board ● % of Female on Board ● ESG Performance-linked Compensation Policies
MSCI Europe		<ul style="list-style-type: none"> ● % of Female on Board ● ESG Performance-linked Compensation Policies 	<ul style="list-style-type: none"> ● Free Float % ● % of Female on Board ● ESG Performance-linked Compensation Policies ● % Independent Directors

Source: Morgan Stanley Research, Factset, Refinitiv, Bloomberg. Returns data as of 22 August 2023. Note: Excess returns are calculated as the excess of total shareholder returns over the total returns of their respective MSCI sector indices. Green (red) dot indicates positive (negative) performance relationship with governance metrics.

How have corporate governance reforms on these indicators progressed?

To examine Japan's potential to catch up with DM peers from a governance perspective, we compare Japan with the US and Europe in key governance pillars in three areas (Exhibit 142): 1) diversity and independence, 2) shareholder structure, and 3) activist campaigns and shareholder proposals.

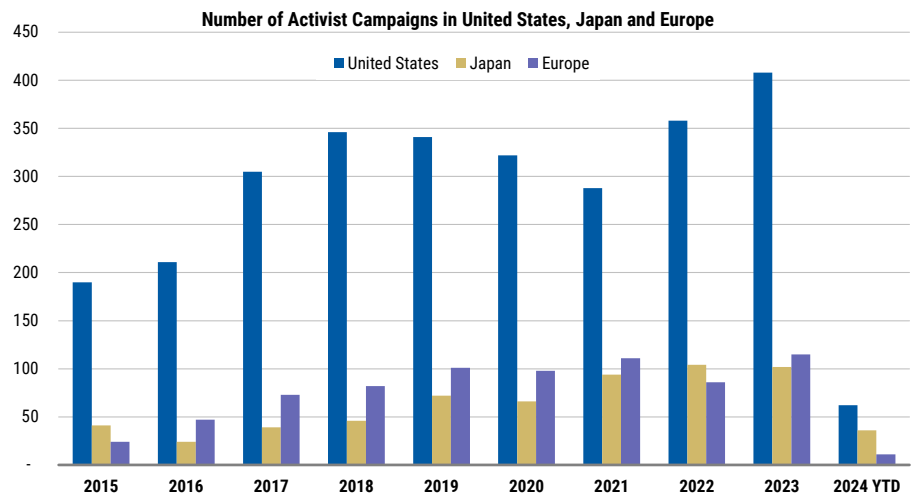
- **Independence (USA>Europe>Japan):** Independent directors comprise >80% of boards across MSCI USA constituents on average; this is followed by around >60% in Europe and >40% in Japan as of FY2022.
- **Nomination & compensation committee:** All three regions have more than 90% of constituents with nomination and compensation committees in place as of FY2022. However, we note that under Japan's unique *Kansayaku* setting (an audit and supervisory board structure unique to Japan that supervises the activities of company management), nomination and compensation committees may still have representation from internal directors.
- **Gender Diversity on Board (Europe>USA>Japan):** Female directors take up almost two-fifths of board on average in MSCI Europe constituents as of FY2022. This is followed by over 30% for MSCI USA constituents and c.13% for MSCI Japan constituents.
- **Shareholder structure – Europe has more dominant top shareholders; cross-shareholding remains common in Japan:** Top shareholders own over 20% of shares on average in MSCI Europe constituents, followed by over 10% in Japan/USA. Similarly, top holders own >20% of outstanding shares in over one-third of MSCI Europe constituents as of February 2024. This is followed by c.20% of MSCI Japan constituents and only 5% of MSCI USA as of February 2024. In Japan, we continue to observe cross-shareholding as more than 30% of the top holders in MSCI Japan constituents were public companies (compared with 10% in Europe).
- **Activist campaigns and shareholder proposals (USA > Europe = Japan):** In 2023, USA accounted for 65% of global activist campaigns, followed by Europe at 18% and Japan at 16% ([Exhibit 143](#)). Considering the market size, Japan stands out even more given it is a much smaller market (by total market cap) compared to the US and Europe.

Exhibit 142: Comparison of Key Governance Indicators - Japan, USA and Europe

		Japan	USA	Europe
Board Diversity & Independence	Average % Independent Directors	41.4%	84.7%	65.5%
	Average % Non Executive Directors on Board	48.2%	87.0%	88.4%
	% of Companies with CEO Chairman Separation	71.0%	37.4%	78.8%
	Average % Female on Board	12.9%	31.0%	38.5%
Shareholding Structure	Average Free Float %	82.8%	95.3%	76.7%
	Average % of Shares Outstanding Owned by Top Holder	13.9%	12.0%	21.2%
	% of Companies with Top Holder Owning >20% of Outstanding Shares	21.3%	5.4%	37.4%
	% of Companies with Institutional Investor as Top Holder	45.5%	90.1%	38.4%
	% of Companies with Government / Public Company / Individuals as Top Holder	42.9%	6.1%	39.1%
	% of Companies with Public Company as Top Holder	30.8%	1.6%	13.0%
Executive Compensation	Average Stock & Option Awards as a % of Executive Compensation	16.9%	64.0%	24.4%
	% of Companies with Performance-oriented Compensation Policies	88.7%	99.8%	98.6%
	% of Companies with ESG Performance-linked Compensation Policies	32.1%	59.1%	84.5%
	% of Companies with Executive Retention Policies	22.2%	99.5%	81.7%

Source: Source: Refinitiv, FactSet, Bloomberg, Morgan Stanley Research. Note: Latest available data was used where FY2022 data availability was limited.

Exhibit 143: Number of Activist Campaigns in the US, Japan and Europe (As of March 2024)

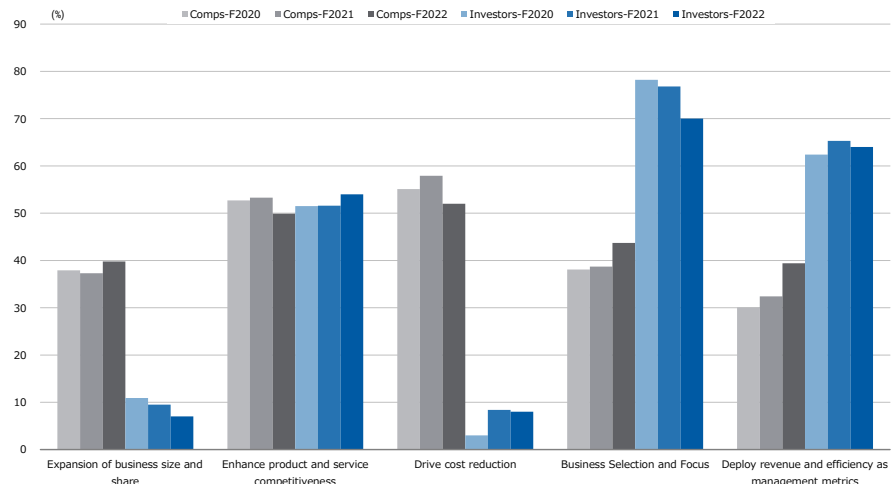


Source: Source: Bloomberg, Morgan Stanley Research. Data as of 14 March 2024. Note: 2024 numbers were YTD as of 14 March 2024.

Governance indicators have improved, but how about shareholder value?

Improvement in earnings key to sustained rise in corporate value: The low P/B of Japanese firms has been caused by the large scale of their internal reserves and strategic share holdings as well as their low shareholder returns. However, the biggest problem comes from their inadequate capital efficiency to raise profits. **In other words, share buybacks not accompanied by an improvement in earnings do not contribute to a sustained rise in corporate value.** The perception gap between companies and investors is found in their focus on capital efficiency initiatives. Companies generally seek to expand their scale of business and cut costs, but many investors want them to overhaul their business portfolios and establish clear capital efficiency metrics.

Exhibit 144: There is a large gap between companies and investors in their focus on capital efficiency initiatives



Note: Universe based on Company=F2022:465, F2021:475, F2020:501, Investors=F2022:100, F2021:95, F2020:101; show only items highlighted in relevant material; Source: Life Insurance Association of Japan's survey of "Steps taken to improve shareholder value", Morgan Stanley Research

TSE case studies a reference point for corporate reforms: The TSE examined this point in its release on February 1 of [Key points](#) and [Case Studies](#) of how corporate efforts on capital costs and share prices are seen by investors. Key among the efforts introduced in the case studies were the establishment of profit and capital efficiency metrics and an overhaul of business portfolios, areas of particular interests for investors. Case studies include Inpex (1605), which aims for a stable ROIC exceeding WACC; Sumitomo Forestry (1911), which has an ROE target well above its shareholder capital cost and will take steps to improve its market valuation; Idemitsu Kosan (5019), which seeks to raise its capital efficiency through structural reforms; Ebara (6361), which provides a clear explanation of its present view of ROIC and its target for wider spreads; and Aisin (7259), which will restructure its business portfolio with an eye toward ROIC and growth, and promoting balance sheet reforms ([Exhibit 145](#)).

Exhibit 145: Case study of “management with awareness of capital costs and stock prices”

Code	Stock	TSE33-sect	Market	Size	I_Current state-analysis, evaluation			II_Initiatives, disclosures				III_Dialogue w shs/investors			Investor evaluation points
					1	2	3	1	2	3	4	1	2	3	
					Capture cost of capital from an investor's perspective	Multifaceted analysis and initiatives based on investor's perspective	Check BS for efficient condition	Implement fundam. initiatives for prop. allocation of mgmt resources	Be conscious of lowering capital costs	Design executive compensation sys. provide incentives for mid-term firms' improvement	Explain initiatives by linking them with aims of its medium-term	Executives and Boards are proactive and engaged	Approaches based on shareholder/investor attributes	Disclose status of conduct of dialogue and lead to further dialogue and engagement	
1605	INPEX	Mining	Prime	TOPIX Mid400		●								Aiming to ensure stable ROIC over WACC	
1885	TOA	Construction	Prime	TOPIX Small								●	●	Efforts to establish a dedicated IR department and enhance information disclosure	
1911	SUMITOMO FORESTRY	Construction	Prime	TOPIX Mid400	●	●		●		●				Set ROE targets that significantly exceed the cost of equity	
4099	SHIKOKU KASEI HOLDINGS	Chemicals	Prime	TOPIX Small			●	●						A unique illustration that shows management with a BS in mind at a glance	
4183	MITSUI CHEMICALS	Chemicals	Prime	TOPIX Mid400				●				●	●	Structural reforms, such as reviewing business portfolios	
4384	RAKSUL	Inf.&Com.	Prime	TOPIX Small						●				New CEO Compensation Plan	
4704	TREND MICRO	Inf.&Com.	Prime	TOPIX Mid400	●									Investors surveyed on cost of capital	
4886	ASKA PHARMACEUTICAL HOLDINGS	Pharm.	Prime	TOPIX Small		●		●				●		The key points of [management with a focus on capital costs and stock prices] are compactly covered.	
5019	IDEMITSU KOSAN	Oil&Coal P.	Prime	TOPIX Mid400	●				●		●	●		Improve capital efficiency for ROE targets and business structure reforms, and to actively engage in dialogue with the market	
5406	KOBE STEEL	Iron & Steel	Prime	TOPIX Mid400									●	Conducting conversations with shareholders and investors	
5805	SWCC	Nonfer.Mtls	Prime	TOPIX Small		●		●						We have been promoting ROIC management since the past, and transformation has progressed steadily	
5901	TOYO SEIKAN GROUP HOLDINGS	Metal Prod.	Prime	TOPIX Mid400		●		●						The current state analysis, the target direction, and the specific initiatives are presented in a series of easy-to-understand ways	
6246	TECHNO SMART	Machinery	Standard	-	●	●	●	●						Develop future capital allocation policy	
6361	EBARA	Machinery	Prime	TOPIX Mid400		●			●		●			Explain the current situation of ROIC, the goal of spread expansion, and the measures to do so in an easy-to-understand manner	
7186	CONCORDIA FINANCIAL GROUP	Banks	Prime	TOPIX Mid400	●	●			●		●			Deep current state analysis, including multi-model cost of capital calculations and historical analysis of metrics	
7259	AISIN	Trans.Equip.	Prime	TOPIX Mid400				●						Change business portfolios with an awareness of ROIC and maturity, and promote balance sheet reform	
7537	MARUBUN	Whsle Trade	Prime	TOPIX Small					●					Clarified that the implementation of non-financial measures will reduce the cost of equity	
7646	PLANT	Retail Trade	Standard	-		●					●			Break down PBR into ROE and PER and further break down ROE into net profit margins, net asset turnover and financial leverage	
8011	SANYO SHOKAI	Text&Apparel	Prime	TOPIX Small							●		●	Strengthen IR/SR activities and expand information disclosure	
8051	YAMAZEN	Whsle Trade	Prime	TOPIX Small						●			●	Disclosure of capital profitability improvement initiatives in the equity story	
8058	MITSUBISHI	Whsle Trade	Prime	TOPIX Core30							●			Established a new position of executive responsible for managing stakeholder engagement	
8098	INABATA	Whsle Trade	Prime	TOPIX Small		●			●				●	In addition to efforts to improve capital profitability, efforts to suppress and reduce capital costs were also mentioned.	
8174	NIPPON GAS	Retail Trade	Prime	TOPIX Mid400			●	●			●			Develop a medium-term balance sheet plan and cash flow allocation policy	
8252	MARUI GROUP	Retail Trade	Prime	TOPIX Mid400		●	●	●						Proactively promote initiatives to further improve even if P/B is more than 1x	
8306	MITSUBISHI UFJ FINANCIAL GROUP	Banks	Prime	TOPIX Core30		●				●	●			Conduct a comparative analysis of the relationship between P/B and ROE and the trend of TSR with other global peers	
8337	CHIBA KOGYO BANK	Banks	Prime	TOPIX Small		●		●		●				Specific mention of profitability-conscious business portfolio review	
8360	YAMANASHI CHUO BANK	Banks	Prime	TOPIX Small		●		●		●			●	Work to improve our balance sheet aggressively, including by reducing our shareholdings	
8789	FINTECH GLOBAL	Oth.Fin.Bus.	Standard	-	●	●			●					Drive initiatives from both improving capital profitability and reducing capital costs	
9076	SEINO HOLDINGS	Land Trans.	Prime	TOPIX Mid400						●	●			Indicate the level of ROE target in 2028 with improvement for each component of ROE by calculating backwards from that level	
No. count					6	15	4	12	6	3	11	7	0	7	

Note: Investor evaluation points are extracted from the description of the casebook
 Source: TSE, Morgan Stanley Research

Medium-term company management plans in focus in context of TSE case studies: We believe the medium-term management plans set for release this year will be closely scrutinized as to how comprehensively they address investor expectations in line with the TSE’s case studies. Please see the [Appendix – Additional Stocks List](#) for the list of 145 companies in our coverage universe (as of February 28) that will reach the end of their present medium-term plans between F3/24 and F12/24 as well as those thought to be among the companies that commented on their intentions for the time period covered by

the medium-term plans in the related release on TDnet. We imagine that the upcoming plans will show further moves at companies in line with shareholder interests, such as stronger shareholder returns. However, it is important from the standpoint of a sustained uptrend in corporate value that this TSE list of Japanese firms does not become merely a passing fad. In this sense, we should keep a close eye on corporate action in Japan, including whether they follow through in bolstering their long-term profitability, such as strengthening and restructuring their business portfolios.

What are the upcoming or potential reform catalysts that could further accelerate reform progress?

Continuing along the governance journey: We believe the following aspects may evolve within the governance landscape:

- **More focus on board skills** – There is limited evidence as to alpha generation for now. However, the Japan corporate governance code has stressed that "knowledge, experience and skills" represent one form of diversity and should be considered together with other forms of diversity, such as gender. With better disclosure from companies, we expect board skills will become more important in future.
- **Compensation linked to ESG** – There is limited evidence as to alpha generation for now, but rising shareholder proposals focusing on ESG issues may make the linkage between compensation and ESG issues more important in future. We pointed out that Japan is leading globally in environmental disclosure in a [previous report](#). With good disclosure, we believe the natural next step for investor engagement is to see how environmental indicators can be tied to compensation.
- **Governance score** – Our analysis suggested that it's very difficult to define and measure governance, and we believe investors will move away from using governance scores, but instead aim to develop an alternative assessment processes through active engagement with company management.

Aside from all these, the progress of TSE reform deserves close monitoring from investors... The Financial Services Agency's (FSA) proposal for the future direction of the "Action Program for Accelerating Corporate Governance Reforms" is categorized into (1) issues related to sustainable corporate growth and longer-term enhancement of enterprise value, and (2) issues related to dialogue between companies and investors, with details in [Exhibit 197](#) and [Exhibit 198](#) of the [Appendix – Additional Stocks List](#). Among them, the FSA is planning revisions to the Stewardship Code, with a list of companies actively addressing the expectations of global investors.

...including measures for reducing cross-shareholdings. The FSA detailed good practices and expectations for enhancing purpose-of-holding disclosures on cross-shareholdings. While some might expect the FSA to broaden the scope of the demands it made of major nonlife insurers in February 2024 to sell off cross-shareholdings, we believe that its current stance is to ask companies to sell off cross-shareholdings for which there is no rational basis and to disclose rational reasons for holdings otherwise.

As for how should we interpret the TSE market reform, please see the section on Equity Strategy and [Appendix – Additional Stocks List](#) for more details.

What are the key risks to Japan's corporate governance

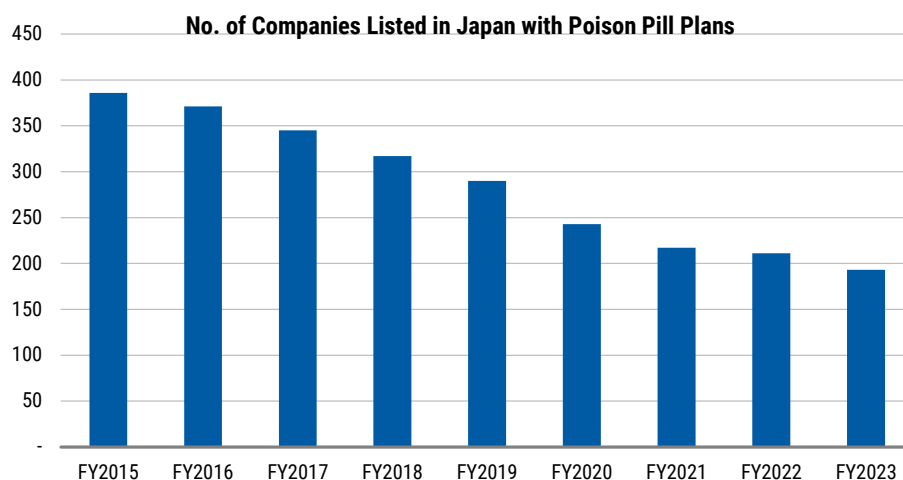
journey?

Social implications of engagement campaigns rise in importance: For example, Seven & i Holdings' announced sale of Sogo & Seibu to investment fund Fortress Investment Group prompted job security concerns, leading to a strike by labor union members at Sogo & Seibu Co. As of 31 August, Seven & i decided to work with Fortress to maintain the employment of the original workers. We believe such considerations will be even more important in future, given that more investors factor for sustainability considerations of stakeholders, and there is also a need to manage reputation risk.

Corporates' reluctance could hinder engagement campaigns and governance

improvement: A case in point is Cosmo Energy Holdings' 'poison pill' takeover defense, which was approved with a majority-of-minority vote by excluding activist Yoshiaki Murakami's 20% stake. This runs counter to the trend of a declining number of companies with anti-takeover measures in place ([Exhibit 146](#)), but again highlights some resistance to external attempts to drive fundamental changes in corporate structure or control. That said, the 'poison pill' issue should be alleviated, pursuant to METI's Guidelines for Corporate Takeovers (published in August 2023) as it indicated that takeover response policies or countermeasures could only be applied in 'exceptional and limited circumstances' where regulatory frameworks are not considered to be sufficient.

Exhibit 146: No. of Companies Listed in Japan with Poison Pill Plans – The number of Japanese companies with poison pill plans trended down during FY2015-2023



Source: Bloomberg, Morgan Stanley Research

Banks: New phase of verifying if investment feeds innovation & growth

Mia Nagasaka

We expect Japanese bank ROEs to improve to near double digits over the medium term, led by higher interest rates, overseas growth strategy and better cost management strategies, as banks reduce labour and non-labour costs through branch rationalisation and digitalisation. Rising earnings and ROE should lift bank valuations to 1.0x or higher P/Bs, from 0.7-0.8x currently.

Banks crucial for improving Japan's ROE overall

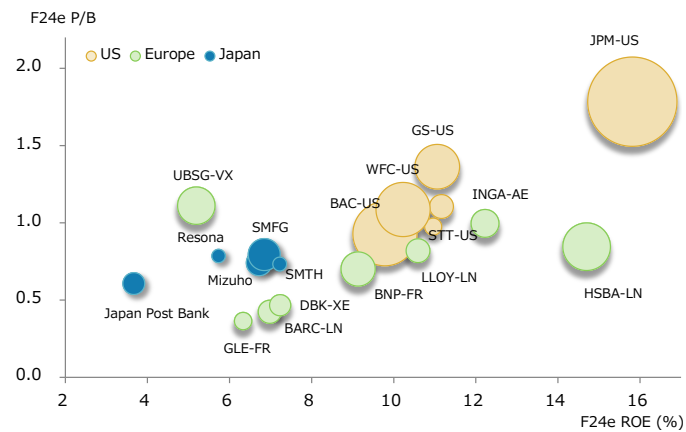
Banking is a vital industry that accounts for 7.7% of the TOPIX. However, it is one of the few that has seen ROE and ROA fall in the past 10 years or so, and there are still many bank stocks that have held below book value for an extended time. Compared with valuations of global banks, Japan's megabanks (two banks in our coverage) trade at a 20% discount to the major US banks P/E, with (1) P/Bs of 0.7-0.8x based on our F3/25 forecasts, and (2) P/Es of 12x based on our F3/25 forecasts, but with the odds increasing that Japan will join the higher interest rate world, earnings at these megabanks are projected to improve greatly.

Self-help can lift banks P/Bs to close to 1x

There are a few important changes in business dynamics that we expect over the next 10 years. These include faster digitization, changes in retail finance and how banks will capitalise on overseas growth opportunities. We believe that banks with a differentiated strategy can raise ROE by 1-2ppt from 6-7% at present and get capital cost down to the single digits from 10% now. In our base case, we expect banks' ROE to improve to double digit % over the medium term, which should lift P/B closer to 1.0 or higher.

Valuation upside should come from stronger macro conditions

In March 2024, BoJ announced the end of negative interest rates & yield curve control. In our base case, we assume interest rates are hiked this July and then in January. If additional interest rate hikes occur, we would look for bank profit expectations to rise and valuations to increase.

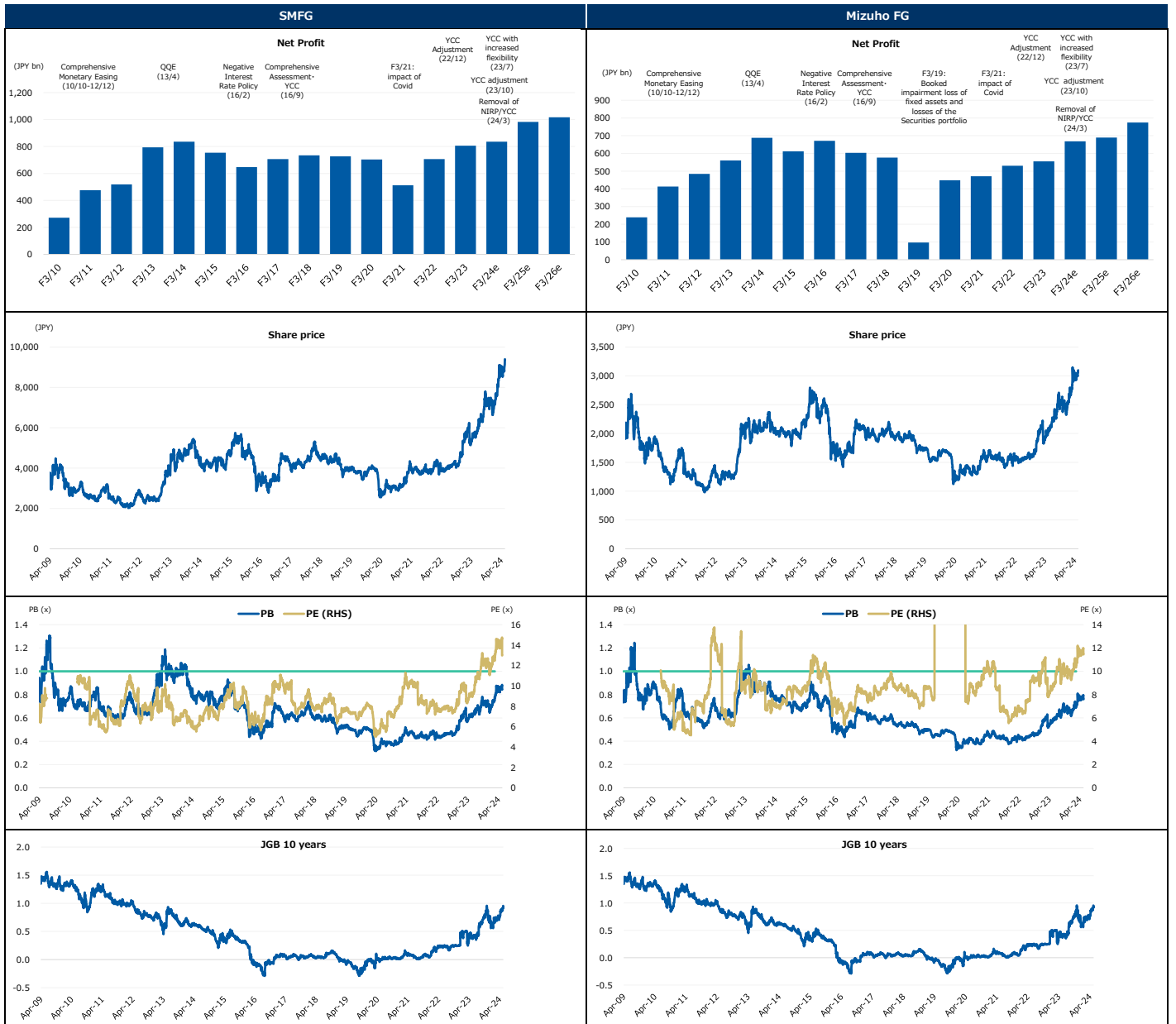
Exhibit 147: Global bank ROE-P/B correlation: Banks vital to overall improved Japan ROE

Source: Factset, Morgan Stanley Research. e=Morgan Stanley estimates; Note: GS-US: Goldman Sachs Group Inc, BAC-US: Bank of America, JPM-US: J.P.Morgan Chase & Co., WFC-US: Wells Fargo & Co., STT-US: State Street Corporation. UBSG-VX: UBS Group, HSBA-LN: HSBC, LLOY-LN: Lloyds Banking Group, INGA-AE: ING Group, GLE-FR: Societe Generale, DBK-XE: Deutsche Bank, BNP-FR: BNP Paribas, BARC-LN: Barclays Bank. US banks covered by Betsy Graseck, Europe banks by Giulia Aurora Miotto, Alvaro Serrano, Vishal Shah.

Megabanks have sustained ROE levels despite negative interest rate policy

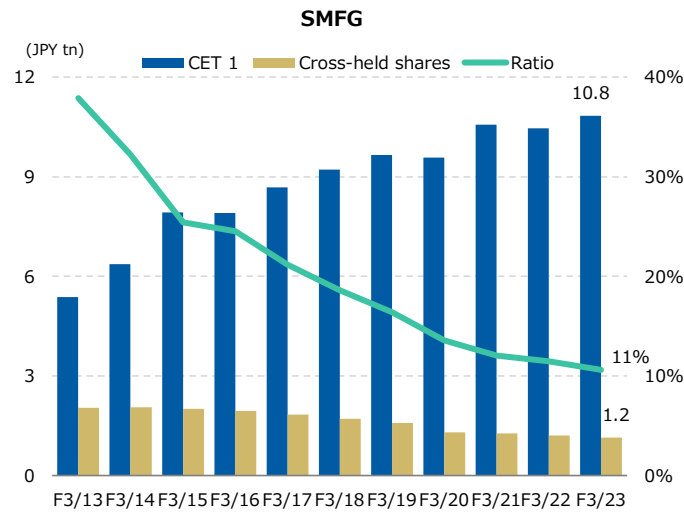
Despite the lowest rates, the pandemic, and geopolitical risk, our main coverage banks have kept steady earnings bases, helped by the following: 1) Credit cost return gains via monetary easing (or low credit cost arising). 2) Faster unwinding of cross-shareholdings along with the 2015 corporate governance code (with the posting of related gains/losses on equities, etc). 3) Cost cuts. 4) Realization of unrealized gains on JGBs in marketable security portfolios. In particular, banks carried out major restructuring to suppress costs, reducing property costs by cutting the number of branches and scrapping ATMs, and using digitalization to streamline back office operations, which paid off. Many banks also implemented aggressive investor rewards (share buybacks), and worked to improve ROE. As a result, the earnings of Japanese megabanks (NP) are likely to reach or exceed historical high levels that predate negative interest rates.

Exhibit 148: The earnings of Japanese megabanks (NP) are likely to reach or exceed historical high levels that predate negative interest rates



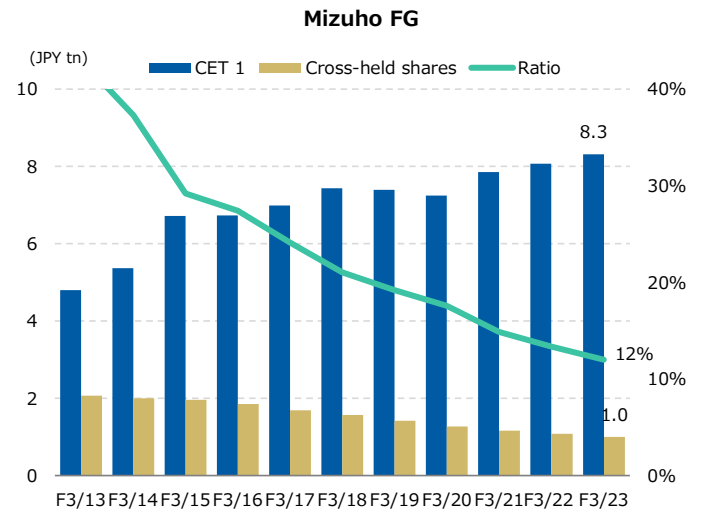
Source: Company data, Refinitiv, Morgan Stanley Research. e=Morgan Stanley Research estimates. Note: For F3/24, they are our estimates prior to F3/24 earnings release.

Exhibit 149: SMFG: Reductions in cross-shareholdings



Source: Company data, Morgan Stanley Research. Note: Company data as of May 10.

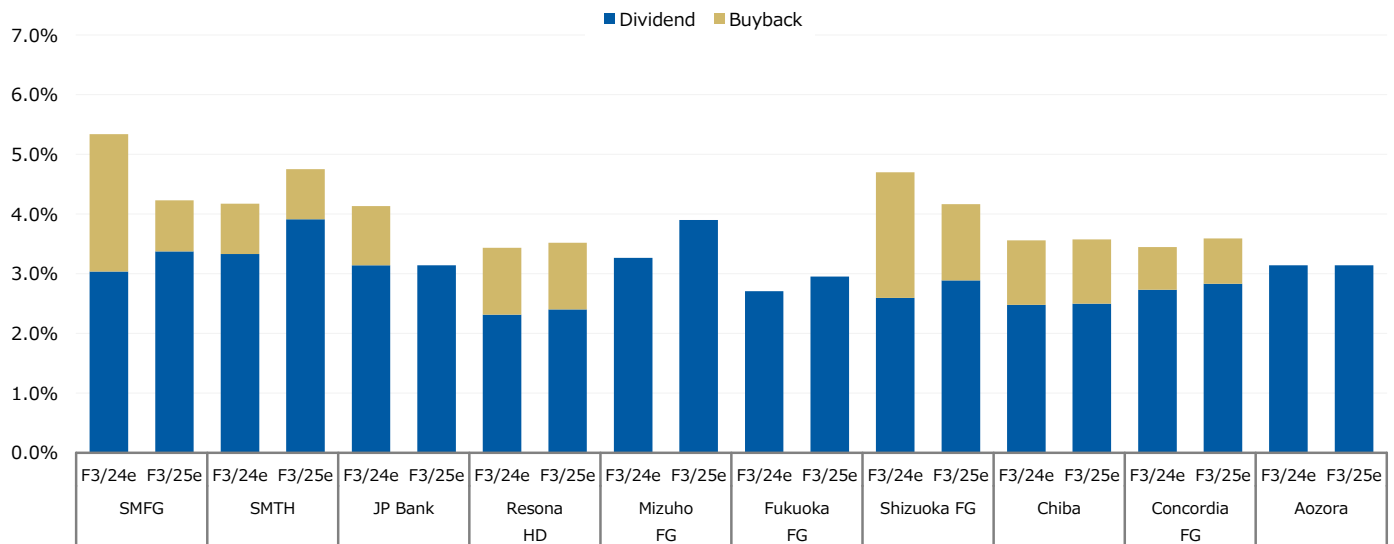
Exhibit 150: Mizuho FG: Reductions in cross-shareholdings



Source: Company data, Morgan Stanley Research. Note: Company data as of May 10.

Exhibit 151:

Total shareholder return yield

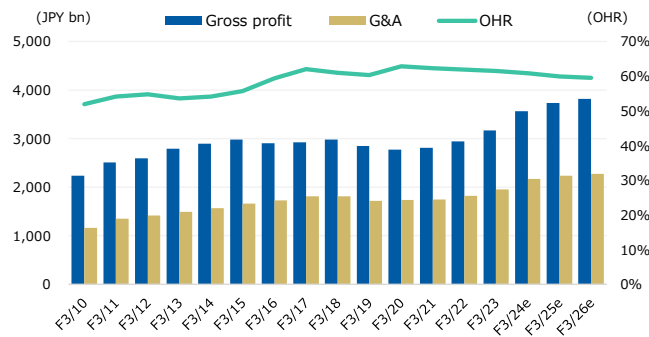


Source: Company data, FactSet, Morgan Stanley Research. e=Morgan Stanley Research estimates. Note: For F3/24, they are our estimates prior to F3/24 earnings release.

Reductions in number of branches and ATMs key: Compared globally, Japanese banks are less efficient than US banks in low interest rates and fixed cost burdens. To reach a level of efficiency close to the US banks, Japanese banks must reduce labor cost by increasing operational efficiency via digitalization and reduce property costs by cutting branches and ATMs; they have produced major results in the last five years. Historically, one reason Japanese banks were unable to slash fixed costs was due to a Japanese version of the prisoner’s dilemma. If a bank cut costs and the quality of service, it risked creating conditions where it would lose market share to competitors that maintained staffing and service levels, which meant that for banks it was important to maintain large branch networks and secure their customer bases. We believe this was a factor behind the slower branch reforms at Japanese banks compared with global peers.

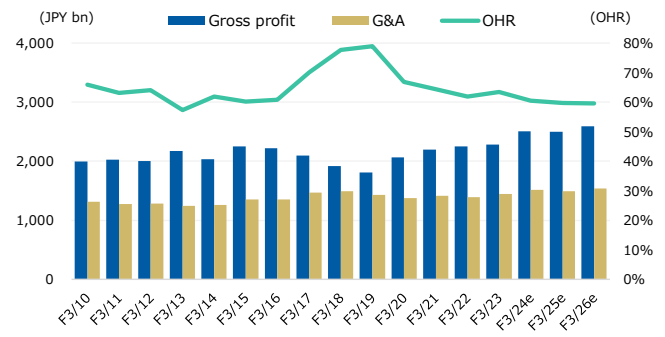
Meanwhile, particularly since the 2013 launch of negative interest rates, lower bank profitability has been a concern, causing restructuring to suddenly accelerate, and to use the megabanks in our coverage as an example, as industry firms expected, branch and ATM reforms have been producing results. A natural decline in employee numbers by holding down new hires, reassigning personal, and transferring employees hired en masse during the bubble economy years has also helped to lower base costs. Branch numbers alone may indicate a slow reduction, but actual branch operations have indeed become more efficient.

Exhibit 152: SMFG: Top-line growth and cost control have brought expense ratios to a steady 60%



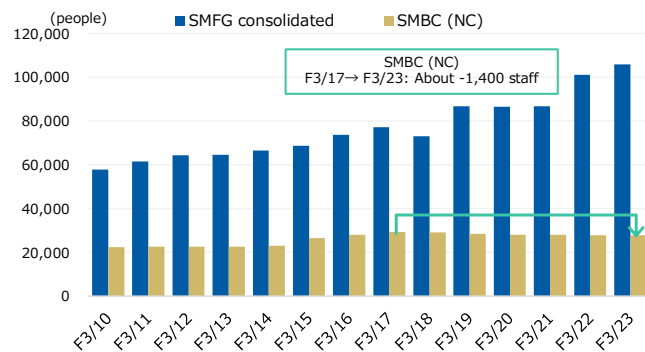
Source: Company data, Morgan Stanley Research. e=Morgan Stanley estimates; OHR=Overhead ratio. Note: For F3/24, they are our estimates prior to F3/24 earnings release.

Exhibit 153: Mizuho FG: Decline in expense ratios as a result of restructuring



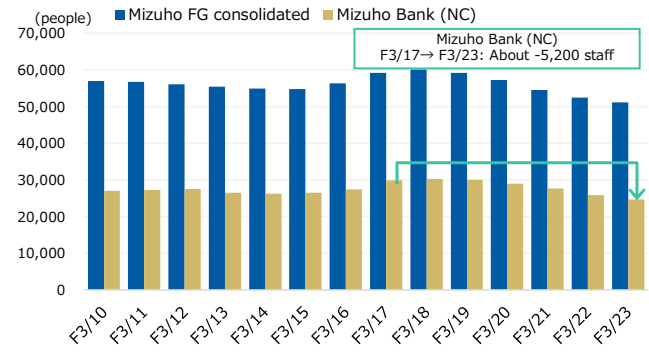
Source: Company data, Morgan Stanley Research. e=Morgan Stanley Research estimates. Note: For F3/24, they are our estimates prior to F3/24 earnings release.

Exhibit 154: SMFG: Natural staff reductions contributing to base cost reductions



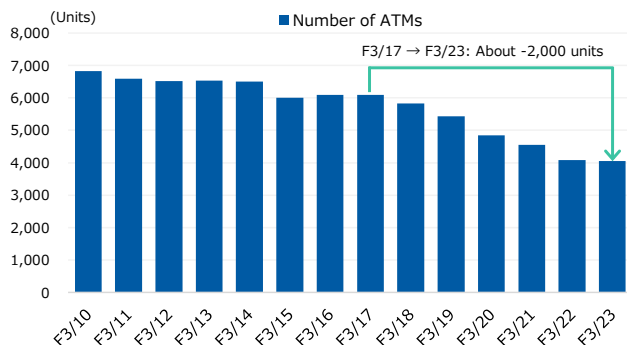
Source: Company data, Morgan Stanley Research; NC=not covered by Morgan Stanley Research

Exhibit 155: Mizuho FG: Natural staff reductions contributing to base cost reductions



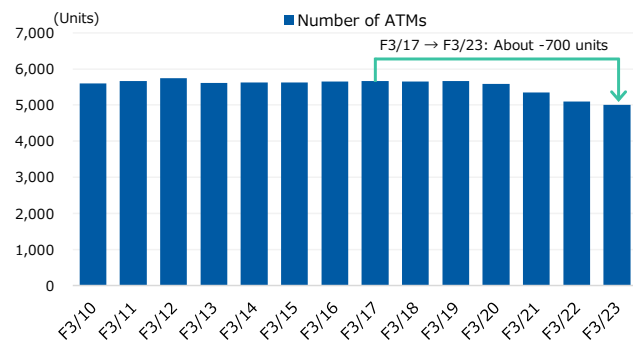
Source: Company data, Morgan Stanley Research; NC=not covered by Morgan Stanley Research

Exhibit 156: SMFG: Increases in operational efficiency have brought large ATM-related losses back to the break-even point



Source: Company data, Morgan Stanley Research

Exhibit 157: Mizuho FG: In contrast to other banks no sharp cut in ATMs, but efficient operation



Source: Company data, Morgan Stanley Research

Bull case where higher interest rates are the norm?

A 50bps policy rate scenario is presently our bull case for projected earnings for banks that we cover. We believe the upside potential for FY24E consolidated NP is 15-20% at the major banks and 30-35% at the major regionals.

In time, the markets should also come to expect a rise in the short-term prime. Megabanks have already announced an increase in deposit rates (20% tracking rate for ordinary deposits immediately after the BoJ's March monetary policy meeting). However, we estimate that this will be offset by the BoJ's interest on overall excess reserves and that any added rate hike will be a net positive for banks in our coverage universe.

Exhibit 158: DuPont analysis of major US banks & Japan megabanks (2024e): If longer-term interest rates normalize, some banks could see further earnings upside by pursuing operating efficiency & original strategic decisions on JGB reinvestment/deposit income

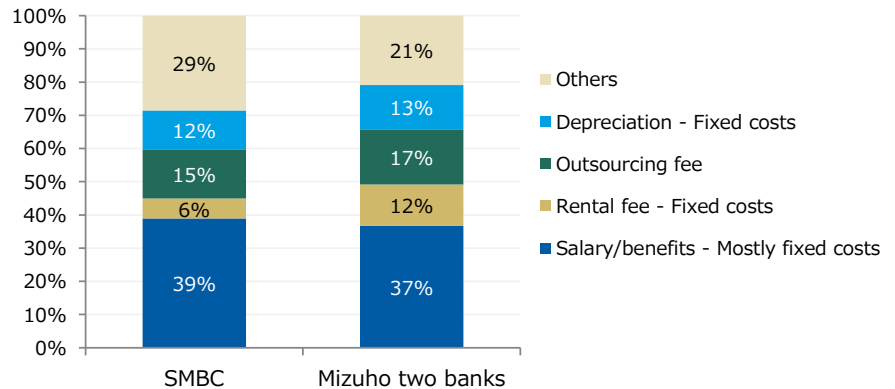
	Money Centers & Superregionals																		
	Rank	NII / Assets	Rank	Fees / Assets	Rank	Provision / Assets	Rank	Expenses / Assets	Rank	Tax Expense / Assets	Rank	Pref / Assets	Rank	ROA	Rank	Leverage	Rank	ROE	
US Banks																			
JPM	2	2.3%	1	1.9%	2	0.3%	3	2.3%	4	0.4%	1	0.0%	1	1.2%	1	13.0x	1	15.7%	
WFC	1	2.6%	2	1.7%	3	0.4%	4	2.7%	3	0.2%	4	0.1%	2	0.9%	4	11.6x	2	10.4%	
BAC	4	1.7%	3	1.4%	1	0.2%	1	1.9%	1	0.1%	3	0.1%	3	0.8%	3	12.3x	3	9.8%	
C	3	2.2%	4	1.1%	4	0.4%	2	2.2%	2	0.2%	2	0.0%	4	0.5%	2	12.9x	4	6.0%	
JP Banks																			
SMFG		0.6%		0.5%		0.1%		0.8%		0.1%		0.1%		0.3%		20.0x		6.8%	
Mizuho FG		0.3%		0.3%		0.0%		0.5%		0.1%		0.1%		0.2%		27.4x		6.7%	

Source: Company data, Morgan Stanley Research. e=Morgan Stanley Research estimates; Note: Expenses / Assets includes operating expenses, minority interests, earnings allocated to participating, and profit sharing. Leverage is calculated as average assets / average common equity

Fixed costs: What are some comparisons vs US to understand the gaps in labor/property/ATMs?

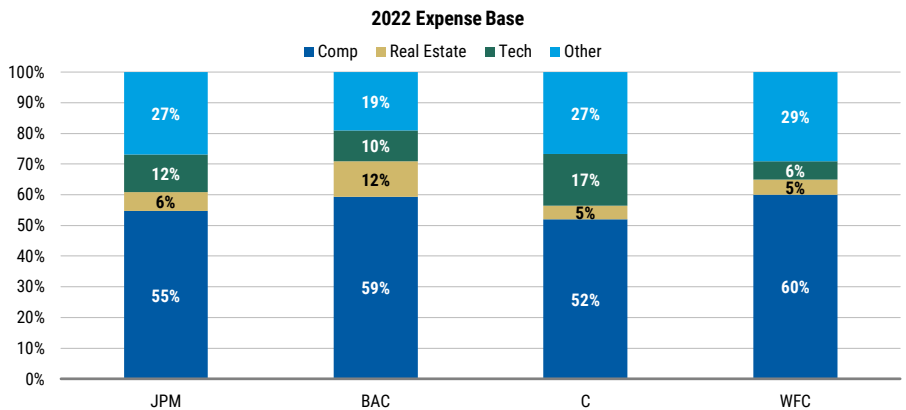
Japan megabank cost breakdowns show that fixed costs (personnel & infrastructure) make up the bulk. The 2022 expense base shows 71-81% of large US bank expenses are in comp, real estate and tech, which are relatively fixed (comp is partly variable, but for most traditional banking roles is fixed). Branch numbers at Japanese banks remain roughly flat, but a closer look reveals a shift to more productive operations. Large US bank branch count over time shows banks have reduced almost every year since 2009. Branch efficiency over time shows deposits per branch up 178-272% since 2009 across JPM, WFC, BAC and C.

Exhibit 159: Japan megabank cost breakdown (F3/23)



Source: Company data, Morgan Stanley Research

Exhibit 160: Major US Banks Expense Base



Source: Company data, Morgan Stanley Research

Japanese bank management is pursuing human capital and DX investment in a disciplined manner, and entering a phase with investment that can tie into innovation in pursuit of growth

The megabanks in our coverage are pursuing human resource management and DX strategy, and over the next three years we expect that labor cost and property cost may increase to higher levels than in the last few years (super regional bank Resona Holdings put out guidance for profit decline in F3/24 due to human resource and digital investment, but it plans to recoup its investment in three years). Securing and training digital specialist human resources and investing in tech may increase costs temporarily, but from around the 4th/5th year after investment begins, we expect banks to see greater operational efficiency and strong earnings capacity, with annual expense ratios falling at 1ppt per year.

Megabanks are implementing various differentiation initiatives in their digital strategies. Mizuho Financial Group is pursuing a digital strategy via an open and multi-faceted alliance with all kinds of partners. SMFG is also working to increase the sophistication of its corporate business and build a retail business centered around digital.

Japan's Wealth Transition

Mia Nagasaka

Reflation and enhanced macro productivity leading to stronger corporate profitability and a robust equity market environment drive our bullish outlook on Japan financials sector. We believe the next big opportunity in the financial sector lies in the wealth and asset management industry, which is poised for a major shift as individuals move from saving to investing. We believe Japan's wealth market (net financial asset) will grow with CAGR at 5% annually through 2030, in line with markets like the US after years of stagnation, with a bull case of potentially 8% CAGR.

Japan's wealth market is unique among developed markets and underdeveloped. Overall heavy weighting in cash while financial institutions have only made small inroads to tapping the large mass affluent audience. At the higher end (UHNW/HNW), we foresee demand for more sophisticated, tailored wealth management services, which will favor large, diversified institutions capable of enhancing their product offering. We estimate the TAM for the combined segment of UHNW/HNW and Upper Affluent will reach ¥906 trillion or US\$6.5 trillion by 2030, from ¥690trn or US\$4.9trn today. This would imply a revenue opportunity of ¥5.9trn or \$4.2bn, 31% higher than today.

Bubble burst and persistent deflation led to high household savings rate and low risk asset ownership: After the collapse of the asset bubble, Japan faced a sustained period of deflation and low nominal GDP growth. Equity market performance became relatively stagnant after peaking in 1989. This had a profound impact on the general behaviors of households, including their investment decisions. In a sticky deflationary equilibrium, it was rational for households to hoard cash and deposits as the real value of cash increased. In an economy with almost no nominal GDP growth where low-productivity firms with deflationary business models flourish, average households did not have an incentive to make long-term investment in domestic equities, except for short-term speculative trading. As a result, households pivoted away from risk assets in favor of cash/deposits. This conservatism is reflected in 56% of Japan's households assets being in deposits in 2023, well above the 14% in the US and the <30% globally.

But the macro backdrop is changing, driving a shift for households from savings to investment: However, Japan is now transitioning from a deflationary/low-inflationary equilibrium to an inflationary environment. The social norm of no price & wage hikes is changing, and a virtuous cycle of rising wages and prices is leading to sustained domestic inflation slightly below 2%. After an above-5%Y surge in 2023, we expect Japan's nominal GDP growth to remain solidly near 4%Y in 2024. As household inflation expectations get re-anchored higher and a stronger nominal GDP growth environment supports growth of household financial assets and corporate profitability, we should also see a shift in household investment decisions towards greater investment participation.

Micro drivers are supportive too: The government has worked to enhance the

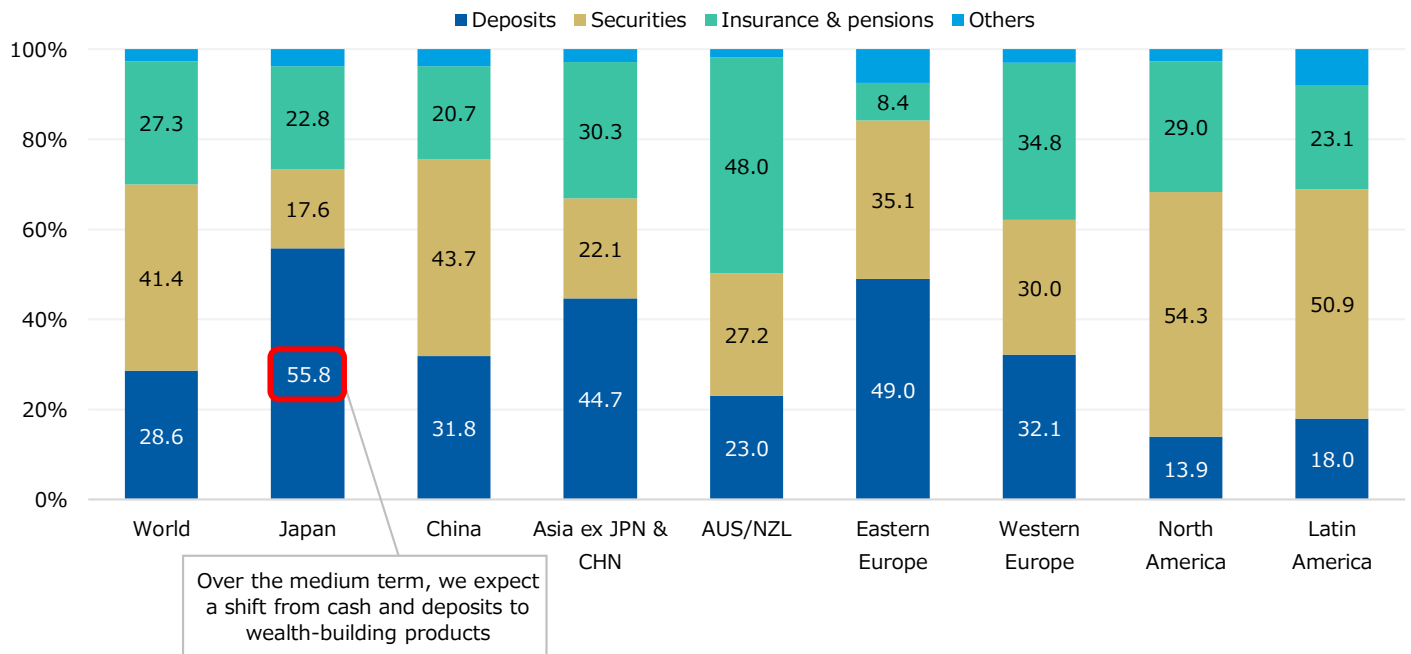
investment chain through efforts such as its Doubling Asset-based Income Plan (November 2022) and revision of the Corporate Governance Code, laying the foundation for a longer-term savings-to-investment shift. The former includes the new NISA investment plan, which was materially expanded at the start of 2024 and has seen demand far exceeding our initial expectations, with net asset inflows excluding ETFs topping ¥1trn for three consecutive months. Increased availability of commission-free trading for domestic stocks has also helped drive the shift from savings to investment. In addition, corporate governance reforms are also enhancing ROE and will help to increase stock investment with improving corporate value.

- In particular, the government also released a “**Policy Plan for Promoting Japan as a Leading Asset Management Center**” in Dec-23. The plan includes a five-point overhaul of asset management operations and asset ownership: i) reform the asset management sector, i.e. by promoting competition, rectifying Japan’s unique business practices, removing barriers to entry, and creating special financial & asset management business zones; ii) reform asset ownership with the establishment of Asset Ownership Principles, a set of common principles for asset management, governance and risk management, by summer 2024 among other measures; iii) promote growth-oriented financing and diversification of investment opportunities; iv) implement stewardship activities; and v) strengthen PR and communications.
- **For investors**, the establishment of the Asset Owner Principles and formation of special financial and asset management business zones are of immediate interest. Such zones would aim to attract new domestic and overseas asset management firms and expand the operations of existing entrants, to create an environment promoting investment in startups and other growth areas. The Prime Minister has said he will announce a package for such special zones in June. Meanwhile, the Asset Owner Principles are set to be formulated by summer 2024. Debate has been ongoing since March and the scope of asset owners included is broad, encompassing public pension funds, mutual aid unions, corporate pension funds, insurers, and university funds, among others. We would closely watch these developments as potential catalysts.



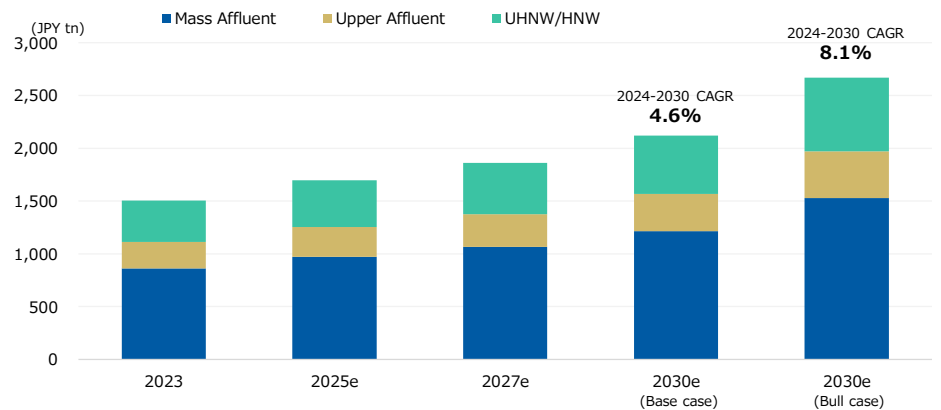
The forecasts: Japan’s wealth management net assets (excluding debt) are likely to grow at +4.6% CAGR in 2024-2030, with half of that due to inflows. In our bull case, growth could be 8.1%; we note that our global team expects US household financial wealth to grow at CAGR +5% over a similar time period (2023-27e; [see report](#)), while in recent years growth in Japan was basically flat and almost entirely influenced by market performance.

Exhibit 161: Financial assets by asset class



Source: Allianz, "Global financial assets of private household". Gross financial assets, by asset class in 2022 EUR, in % of total gross financial assets.

Exhibit 162: Trends in total asset value in Japan's wealth management market



Source: Morgan Stanley Research. e=Morgan Stanley Research estimates

Economic & equity market impact: If domestic investors are drawn to the market at a scale we expect, there is a material boost to long-term TOPIX expectations. In a bull case scenario at a P/E of 22x in 2030, the index could top 4,900 vs. its current ~2,700 level.

The opportunities: Wealth/Asset management business is globally one of financial segments with the highest returns, particularly at scale. Japan presents a unique opportunity globally given the underpenetration of investment products, the return of inflation and current small size of the industry. This rapid transformation, in our view, is already resulting in strategic shifts of megabanks, domestic brokerages, as well as international players and digital disrupters. While early, we believe that low cost will attract customers access, the ultimate winners here will be mega banks, in our view.

The risks: 1) The appeal of asset-forming products becomes diminished. 2) Financial

institutions not providing enough info to help investors gain a reasonable level of understanding of the risk/return on which to base investment decisions. 3) On the service provider side, being slow to invest in the necessary digitalization, including AI, to enable strategic allocation of resources and efficient distribution of info could hamper competitiveness.

AI/Technology: Can Japan relive its semiconductors glory days with AI?

Shawn Kim, Tetsuya Wadaki

Japan's increased investment in generative AI and semiconductor manufacturing localization represents a marked shift in industrial strategy. Policy makers are targeting to triple sales of domestically produced semiconductors to over US \$100bn by 2030. We see Japan improving on its competitive position in specific areas of the semiconductor manufacturing supply chain, leveraging existing strengths, and helped by supply chain diversification efforts and funding support. In particular, we think it is possible for small-scale domestic production of 2nm chips to begin by 2027. These efforts will also drive AI diffusion in the economy, with broad-ranging positive implications.

Japan's surge in interest and investment in generative AI among companies contrasts with its historical lag in digital transformation from analog in the early 1980's: Japan's rise to the top of the semiconductor industry in the 1980s was an economic miracle with a rich history of innovation. However, the shifts in demand for digital products (mobile phones) and semiconductor business models turning to fabless companies played a pivotal role in its decline. Despite its three-decade recession, Japan has managed to maintain its leadership in equipment, chemicals, wafers, and specific segments of the semiconductor industry (CIS, MCU, power semi). With recent programs to revive Japan's semiconductor industry, Japan has the potential to extend its leadership in specific applications to address the surging demand for future AI and data centers. Japan/US strategic support, partnership with IBM and IMEC for 2-nm process nodes, more advanced semiconductor process manufacturing (TSMC's Kumamoto foundry) along with the move towards cutting-edge nanoscale processes (Rapidus) and its development of IC design companies are notable initiatives for reviving Japan's semiconductor industry.

Exhibit 163: Japan semiconductor value chain



Source: Morgan Stanley Research

We see Japan AI semiconductor manufacturing leadership in specific areas of the supply chain: This will leverage Japan's strengths in the field of materials and manufacturing equipment, where it holds 56% and 32% global shares. The semiconductor

industry is built on a global ecosystem and no single country can take on the burden of the entire semiconductor manufacturing process, but the key to economic security is to have a smoothly functioning manufacturing ecosystem. This necessitates “knowledge integration” through collaboration among diverse countries and companies and its collective vision for the future in AI, strong ties with the US, collaboration on innovation, and geographical proximity to Taiwan. TSMC’s expansion into Japan and collaboration via joint venture with Sony and Denso aim to build Japan’s access to vital chips crucial for electronics, automotive, and defence industries, and government support can alter its position in the semiconductor industry landscape.

AI and supply chain diversification will benefit Japan: AI will benefit Japan's tools and materials suppliers essential for cutting-edge chip production as well as different types of industries and consumer segments. Foundry leaders like TSMC and Samsung rely on Japanese high-precision equipment, chemicals, gas, and wafers for their cutting edge nodes. For example, Tokyo Electron (TEL) dominates the market for lithography equipment, while Japanese firms JEOL and NuFlare command a significant share in mask-making globally. Japan also dominates critical materials such as photomasks, photoresist, and silicon wafers with >50% global share. Japan has the potential to fill the gaps and help global semiconductor companies de-risk as they try to move their operations away from China and Taiwan. The increased Japanese investment aligns well with the global need for diversification of supply chains and could bode well for the return of Japan as a technological giant.

Japan's Competitive Position in Semiconductors

Strengthening supply-chain resilience: Japan is currently trailing behind the US, China and the EU in developing large language model algorithms. This may be due to shortcomings in deep learning and more extensive software development relative to US or China 'Big Tech' companies as well as large-scale supercomputer hardware required to train AI models. There are also some differences in terms of Japan technology industry composition in the AI supply chain compared to the US, which is focused on software and computing, while Japan is more oriented toward hardware, materials and precision mechanics. TSMC's move to Japan may be explained as a means of strengthening supply-chain resilience with Apple and image sensors produced by Sony, but in the process an opportunity for Japan to build a win-win relationship in chip manufacturing.

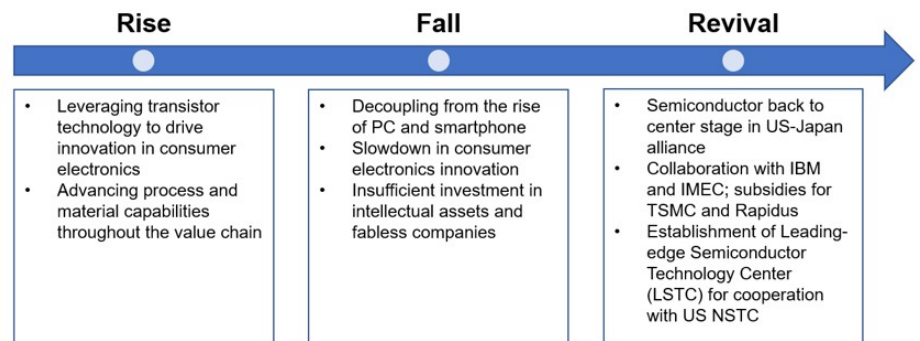
Chip-making renaissance: Japan's current semiconductor production capability is in the 4-0nm range but TSMC's Kumamoto fab brings 12-28nm process to Japan; these are in high demand in automotive and electronic products industries. TSMC's second plant is expected to mass-produce higher-performance 6nm semiconductors to produce cutting-edge semiconductors for the latest telecommunications and artificial intelligence applications. While most advanced 2-3nm chip manufacturing by Rapidus may not be in demand in Japanese industries today, they will be essential in the 2030s. Further, it will be essential for Japan to be able to design its own custom chips that form the foundation of systems and software capabilities, to differentiate itself from competitors.

Laying a strong foundation for semiconductors...: From a global perspective, it is less of an enabler of AI with technology companies such as Tokyo Electron, DISCO or Advantest, mainly supplying equipment to manufacture the AI semiconductor industry, but

harnessing generative AI's potential by integrating and reshaping entire industries and corporate strategies. TSMC's construction of a plant in Kumamoto Prefecture in order to enhance domestic semiconductor supply, and the establishment of Rapidus as a production base will boost Japan's future competitiveness.

... with ample funding and support: Maintaining and strengthening the domestic semiconductor industry is a crucial strategy for Japan's future. There is ample initial funding provided to support the development of the sector (such as the US\$1.5bn Post-5G Fund and US\$13bn Green Innovation Fund) and the private sector with nearly double semi investment this year at US\$7bn, although this is still far behind TSMC's US\$23bn. The pursuit of advanced chip leadership through AI technology necessitates collaborations and partnerships with international entities. Authorities are seemingly keen to regain Japan's position in the global chip industry and plan to overhaul its chip strategy to triple sales of domestically produced semiconductors to over ¥15 trillion (US\$108bn) by 2030.

Exhibit 164: Japan semiconductors – the rise, fall and revival



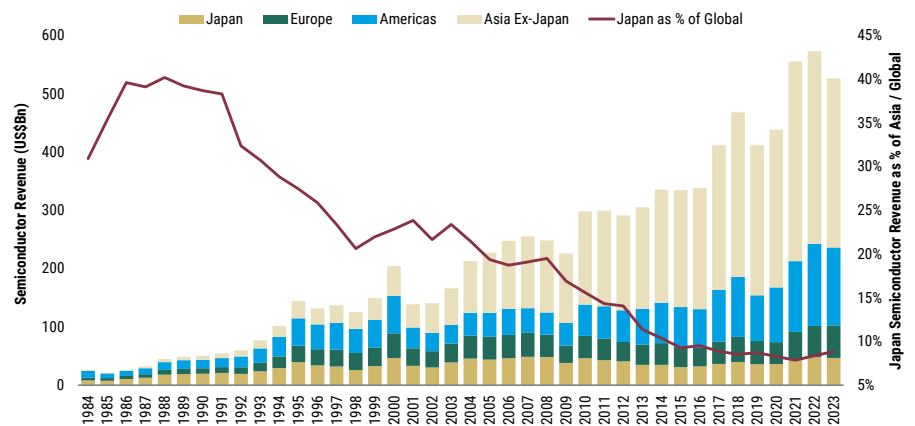
Source: Morgan Stanley Research

AI Opportunities and Challenges in Japan

*"Japan's growth strategy is driven by the semiconductor industry" Prime Minister Kishida
SEMICON Japan December 13, 2023*

Seize a US\$100bn opportunity by 2030: The global semiconductor industry is expected to more than double by 2030 to US\$1.5trn, according to SNS Insider estimates, and Japan aims to triple its sales of domestically produced semiconductors, surpassing US\$108bn by then (US\$22bn in 2023). This will be driven by new technologies in AI, next-generation automobiles, and robotics. This presents Japan with excellent opportunities where it dominates in key materials and certain processing technologies to align and benefit from trends in semiconductors. Japan has established a comprehensive strategy for AI research and development, including substantial funding for AI-related projects and initiatives. This strategy aims to boost AI capabilities and innovation in the country. It has established a comprehensive strategy for AI R&D, including substantial funding for AI-related projects, and the government is creating a regulatory framework that facilitates the safe and responsible adoption of AI technologies (ethical, legal).

Exhibit 165: Global semiconductor revenue



Source: WSTS, Morgan Stanley Research

Driving AI diffusion in the economy: Japan's focus on strengthening its position in the global semiconductor industry via advanced chips goes beyond the semiconductor industry, influencing other industries and shaping Japan's technological landscape. AI diffusion benefits include AI integrating into healthcare, manufacturing, finance and reducing carbon footprint:

- **Aging population:** Japan's aging population presents unique healthcare challenges with a diminishing workforce, and turning to AI-driven solutions in robotics, personalized treatment plans, and early disease detection are most promising. These demographic trends have profound implications for the country's economy and society.
- **Manufacturing:** Can create new business opportunities, improve productivity in robotics, autonomous vehicles, industrial automation and smart devices. In particular, Japan's success in robotics and involvement in the earlier AI booms sets up a strong potential for its success with this marriage of robots and AI that could bring leaps in productivity gains as well as enhancements in labour and global trade, which could lead to a new era of economic prowess for Japan.
- **Climate change:** AI can help optimize energy consumption, transportation, and waste management, contributing to a more sustainable future.
- **Public service:** Integrating AI into public services, such as healthcare, transportation, and disaster management, as part of the Society 5.0 vision.

Who is leading the charge in AI? Japanese companies in a variety of sectors are embracing AI and, led by SoftBank and NTT, are making first strides to develop their own generative AI platform. SoftBank's mobile unit is developing a Japanese equivalent of ChatGPT. NTT also plans to develop its own LLM this year and provide it to other businesses. Industrial conglomerate Hitachi has set up an internal body called the Generative AI Center to facilitate the use of generative AI to improve the productivity of its employees and also plans to provide consulting services on AI for other companies.

Japan Technology Shift to AI – Context in History

The history of Japan's semiconductor industry can be divided into three phases: (1) the rise of Japanese semiconductor companies from the 1970s to the 1980s, (2) their gradual

decline from the 1990s to the 2000s, and (3) a period of renewed national attention paid to Japan's semiconductor industry from the 2000s to the present.

The rise – technological superiority and world leader: Japan accounted for 51% of the global semiconductor market in 1988, coinciding with a dramatic increase in domestic demand for semiconductors used in consumer electronics. The success of the Japanese semiconductor industry spanned from chip design, materials, manufacturing equipment to finished goods. Japanese industrial policy helped fund R&D via joint research and investments in the private sector and contributed to the development of a common technology platform for companies to work and collaborate to drive innovation.

The fall...: As Japan dominated technology by the late 1980's, trade friction with the US began to intensify as policy makers saw Japan as a growing market competitor. In particular, the US concern was export-subsidized Japanese firms were "dumping" chips and consumer electronics products into its market, crowding out US domestic tech companies while denying foreign access to the Japanese domestic market. This led to trade concessions (the US Japan Semiconductor Agreement in 1986) from the Japanese concerned over the risk of being shut out from the US market entirely. This eroded Japanese competitiveness and enabled semiconductor companies in the US, South Korea, and Taiwan to gain most of the world semiconductor market share.

...and failure to adapt: By the late 1990s, the dominant business model for the semiconductor industry was shifting in most countries from vertically integrated firms which both designed and manufactured semiconductors, towards highly-specialized firms which either designed or manufactured chips. However, many Japanese semiconductor firms were unable or unwilling to adapt to these emerging outsourcing trends, and further lost their competitiveness as R&D capital eroded with digital product demand in Japan declining.

The future: Japan is now moving towards a globally competitive semiconductor business model. Large funding as part of a strategy to support domestic semiconductor manufacturing at home and Japan's collaborations with allies through various economic and trade initiatives will bolster its strategic supply chains. Japan's broader vision includes nurturing domestic leadership through initiatives like Rapidus, led by industry veterans in collaboration with global leaders like IBM and Europe's IMEC, and a revitalized hub in Kyushu dubbed "Silicon Island". This initiative aims to achieve large-scale production of cutting-edge chips in Hokkaido, commencing in 2027.

Semiconductor Manufacturing: Japan's semis localisation – The roles that TSMC and Rapidus play

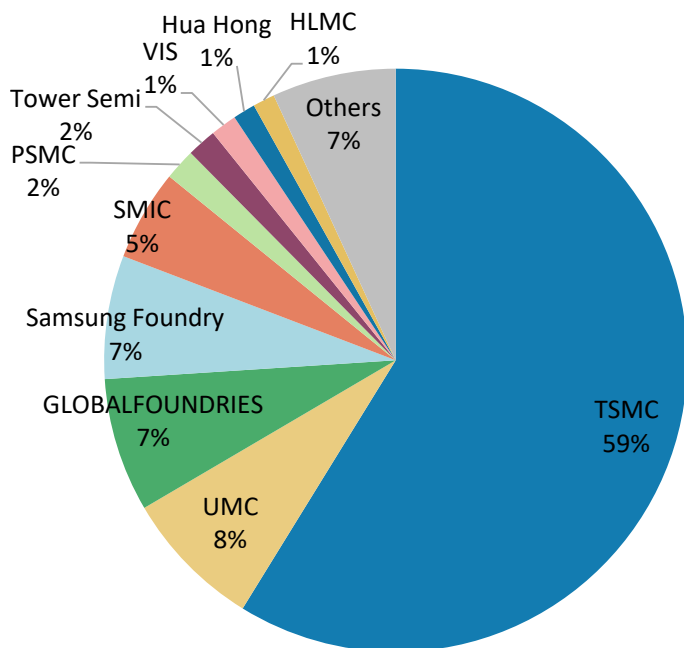
Charlie Chan

Japan has established a JV fab with foundry industry leader TSMC: TSMC has decided to build up JASM (Japan Advanced Semiconductor Manufacturing) capacity to 55kwpm. Total capex of JASM is around US\$8.6bn. However, what could be of interest to investors is that TSMC also announced it will provide 12/16nm FinFET processes at its Japan joint-venture (originally only 28/22nm processes). We think the JV fab is to address future computing power needs of Sony's image sensor & image signal processor (ISP). FinFET process can also reduce power consumption of sensors/ISP in high-end smartphones. In fact, Samsung Electronics (another major image sensor provider) has introduced "17nm FinFET" (combo of 14nm FinFET front-end of line and 28nm back-end of line) for future sensors/ISP products. As such, TSMC & Sony need to address this new trend in its Japan JV fab.

Major automotive module vendor Denso (affiliate of Toyota Group) is also a strategic investor in TSMC's Japan JV fab with a 10% stake. We believe this could help TSMC further increase its auto semi exposure to Japan (besides major customer Renesas), as well as Japan semi localization.

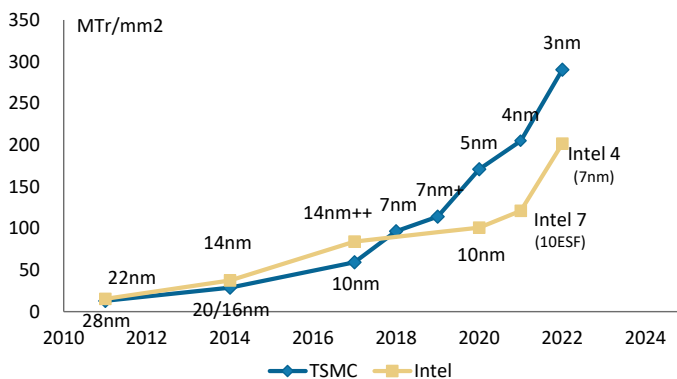
On, Feb. 24, 2024, TSMC held an opening ceremony for JASM in Kumamoto. The fab one's construction began in 2022, and production is to begin in late 2024. TSMC and minority investors Sony Semiconductor Solutions (SSS), Denso and Toyota also announced further investment into JASM to build a second fab, which is scheduled to commence construction by end-2024 and begin operation by end-2027. There is some debate about whether TSMC is considering to build a third plant in Japan for 3nm ([link](#)). However, given TSMC's 3nm customers are concentrated in the US, we don't expect TSMC to build 3nm capacity in Japan anytime soon.

Exhibit 166: TSMC's overall foundry share reached 59% in 2020



Source: Company data, Gartner, Morgan Stanley Research

Exhibit 167: TSMC's 3nm is far ahead of 'Intel 4'



Source: Company data, Morgan Stanley Research estimates

Exhibit 168:
12-inch logic semi fab global capacity size and location



Source: Company data, Gartner, Morgan Stanley Research. Note: The size of the bubble indicate the scale of wafer foundry capacity – the bigger the bubble, than greater the capacity scale.

Japan is rebuilding semiconductor supply chain with direct investment

Rapidus key to Japan's semiconductor manufacturing ambitions: Rapidus was created with the support of 8 major Japanese corporations in 2022 in a bid to reduce Japan's heavy reliance on imported chips. Rapidus is constructing a new factory in the city of Chitose in Hokkaido, northern Japan. The company plans to build a prototype production line next year and start mass-producing semiconductors in around 2027 for 2nm chip. Japan's Ministry of Economy, Trade & Industry (METI) will provide domestic semiconductor maker Rapidus with up to ¥590bn, or nearly \$3.9bn in additional funding. Tokyo has already committed over \$2bn to the project. The new aid will raise the total to about \$6bn.

METI head Ken Saito said the ministry will make all-out efforts for the success of the next-generation semiconductor project while securing the necessary budget. He added, "We recognize that the technology Rapidus is working on is important and will help determine the future of the country's industrial and economic growth."

Exhibit 169: Rapidus key to Japan's semiconductor manufacturing ambitions



Source: Company data, Gartner, Morgan Stanley Research

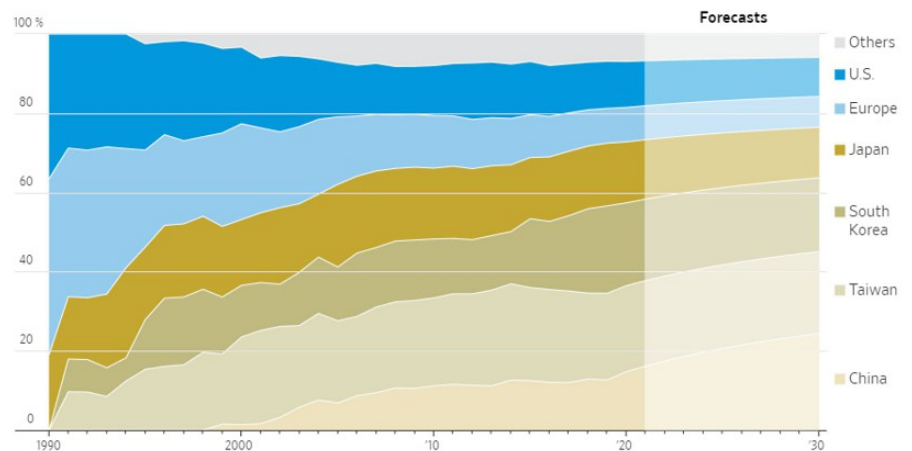
Exhibit 170: Government support for Rapidus is strong



Source: IDC, Morgan Stanley Research estimates

Exhibit 171:

Global manufacturing capacity by region – shifting to Asia



Source: VLSI Research projection, SEMI, BCG. Note: 2020 is an estimate, and 2021-2030 are forecasts.

Can Japan deliver 2nm chip production around 2027?

Can Rapidus follow TSMC's path of success? Over the years, TSMC has acquired a global foundry market share of 60%. Its OPM reached 40%, around 25ppt higher than foundry industry peers. That made the company the semiconductor stock with the biggest market cap globally since 2020. We attribute its success to:

- Billions of dollars in R&D every year to test the limits of Moore's Law; its R&D spending is 10x vs. UMC
- Consistently improving production yields, important for client tech cost structures
- Efficient supply chain in Taiwan with a cluster of fabs and supporting infrastructure
- Fusion of global cultures and technologies from the US, Japan, and Europe
- Valuing integrity, trust, and partnership when working with customers – TSMC doesn't compete with customers directly
- The corporate slogan "Everyone's foundry" – neutrality on the US/China debate.

We think it is possible Rapidus will start small production of 2nm in 2027 by using IBM platform's process and leveraging Japan's strong equipment and chemical supply chain. The scale and cost structure could be the issue for the commercialization of Japan-made 2nm chips, with most US customers likely choosing to use TSMC's US or Taiwan fabs for 2nm production instead. That said, the purpose of owning a 2nm onshore has significant importance for Japan from a national security perspective, and hence the RoI may not be the major concern.

Exhibit 172: Leading-edge foundry process roadmap

CY	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021e	2022e	2023e	2024e	2025e
Intel		22nm FinFET		14nm FinFET					10nm FinFET	10nm	Intel 7 FinFET	Intel 4 (EUV)	Intel 3		Intel 20A GAA
TSMC	28nm			20nm	16nm FinFET	16nm+ FinFET	10nm FinFET	7nm	7nm Pro	5nm	5nm Pro	3nm FinFET	N3b	N3e	2nm GAA
Samsung	32nm	28nm		14nm FinFET	10nm FinFET	10nm	8nm	7nm (EUV)	5nm		4nm		3nm GAA		
GFS					14LPP	28FDS	22FDX	12LP	28FDS-eMRAM	18FDS	12FDX				
SMIC					40nm		28nm HKC	28nm HKC+	14nm FinFET	N+1					
Hua Hong		0.13			0.11	65-	55nm								

Source: Company data, Morgan Stanley Research (e) estimates

Autos: Benefiting from hybrid tailwinds, preparing for BEV transition

Shinji Kakiuchi, Adam Jonas

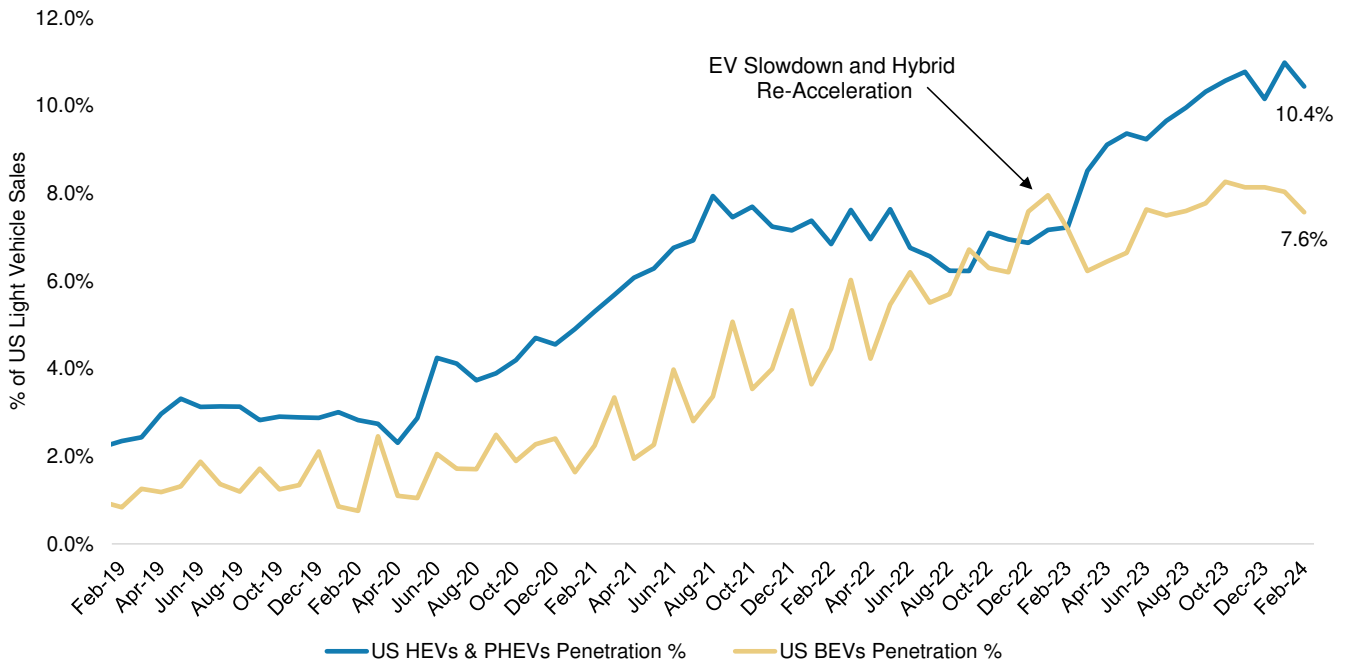
Hybrids are emerging as a viable transition technology and these tailwinds could last for years to come, benefitting Japanese OEMs. But Japanese OEMs are not standing still and are going ahead with a number of strategies to capture the upside from the eventual transition to battery EVs.

Hybrids – a viable transition technology and a benefit to Japanese OEMs

Global battery EV sales have slowed: 2023 saw the advent of EV stagnation, particularly in the US. We have since seen electric vehicle (EV) penetration forecasts revised downward (we forecast US EV penetration at 8% in FY24) and the beginning of an overdue re-calibration of legacy OEM EV targets. OEMs have been revising their BEV strategies, including Tesla's disclosure of employee cutbacks, VW's revision of BEV production operations, and Ford's announcement of scaled-back BEV business. The BEV industry has arrived at a plateau as it moves toward fuller BEV inroads, due to achievement of a certain level of progress in recruitment of early adopters, renewed awareness of expensive prices for BEVs amid cutbacks in subsidies, recognition of uncertainty about inadequate charging infrastructure other than in specific areas, and worries about decline in charging performance in colder regions and in cold weather.

Hybrids are proving to be a viable transition technology in light of the ongoing EV slowdown in the US: Hybrids, on the other hand, are in high demand and are emerging as a real competitor to EVs. For example, as of March, US battery electric vehicle (BEV) sales were up only +6% while Hybrid and plug-in hybrid sales were up +31% and 34%, respectively. Given the broad deceleration in EVs along with the re-emergence of hybrids, we now expect to see legacy original equipment manufacturers (OEMs) prioritize incremental capex on hybrids/plug-ins and fuel-efficient internal combustion engine (ICE) technology relative to EVs at the margin. This was evidenced by [Ford's recent announcement](#) that it is expanding its hybrid lineup across its Blue fleet while delaying a number of upcoming EV launches.

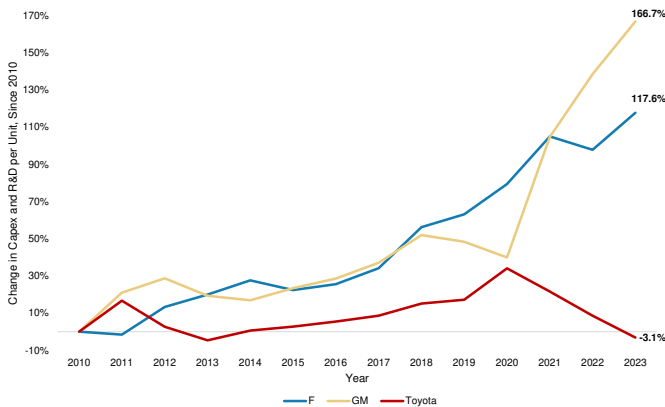
Exhibit 173: Hybrids have continued to take share of the US light vehicle market with share gains recently outpacing EVs



Source: Motor Intelligence, EV-Volumes, Morgan Stanley Research

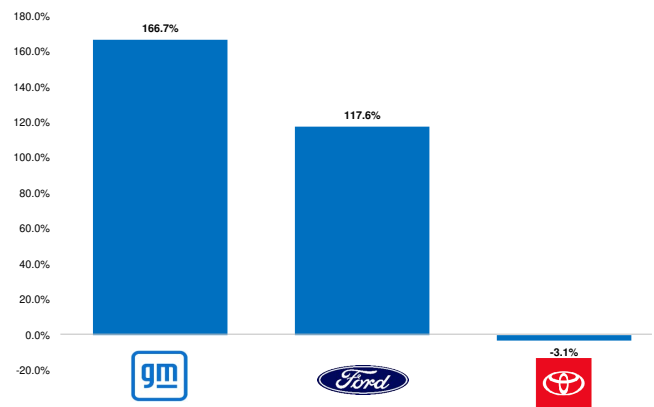
Amid the ongoing shift in the auto landscape, is there a lesson that can be learned from Toyota? Toyota should be the fastest growing major OEM in the US this year, increasing market share by 100bps to 200bps this year on our estimates while having spent remarkably less in the form of Capex + R&D relative to its legacy OEM peers. Auto analysts will know that Toyota has pursued one of the more measured (i.e. slower) investment strategies towards EVs, preferring to focus its design and engineering efforts more on hybrids and hydrogen relative to its auto peers. Below is Toyota's capex and R&D per unit from 2010 to 2023:

Exhibit 174: Ford, GM, and Toyota: Change in capex and R&D per unit, since 2010



Source: FactSet, Morgan Stanley Research
 Note: (1) GM units does not include China; (2) Toyota's expected units, capex, and R&D are used for 2023 (MSE), as Toyota reports its FY24 figures in May 2024.

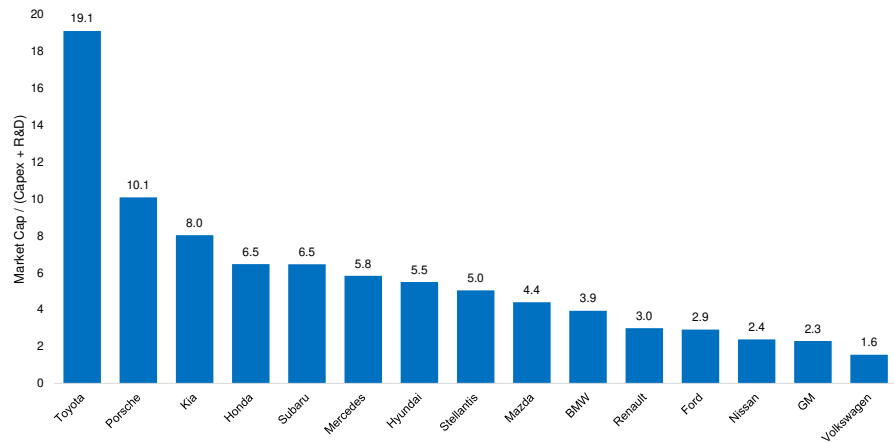
Exhibit 175: Ford, GM, and Toyota: Change in capex and R&D per unit, since 2010



Source: Morgan Stanley Research
 Note: (1) GM units does not include China; (2) Toyota's expected units, capex, and R&D are used for 2023 (MSE), as Toyota reports its FY24 figures in May 2024.

Exhibit 176:

Global legacy OEMs: Years to spend market cap on capex and R&D

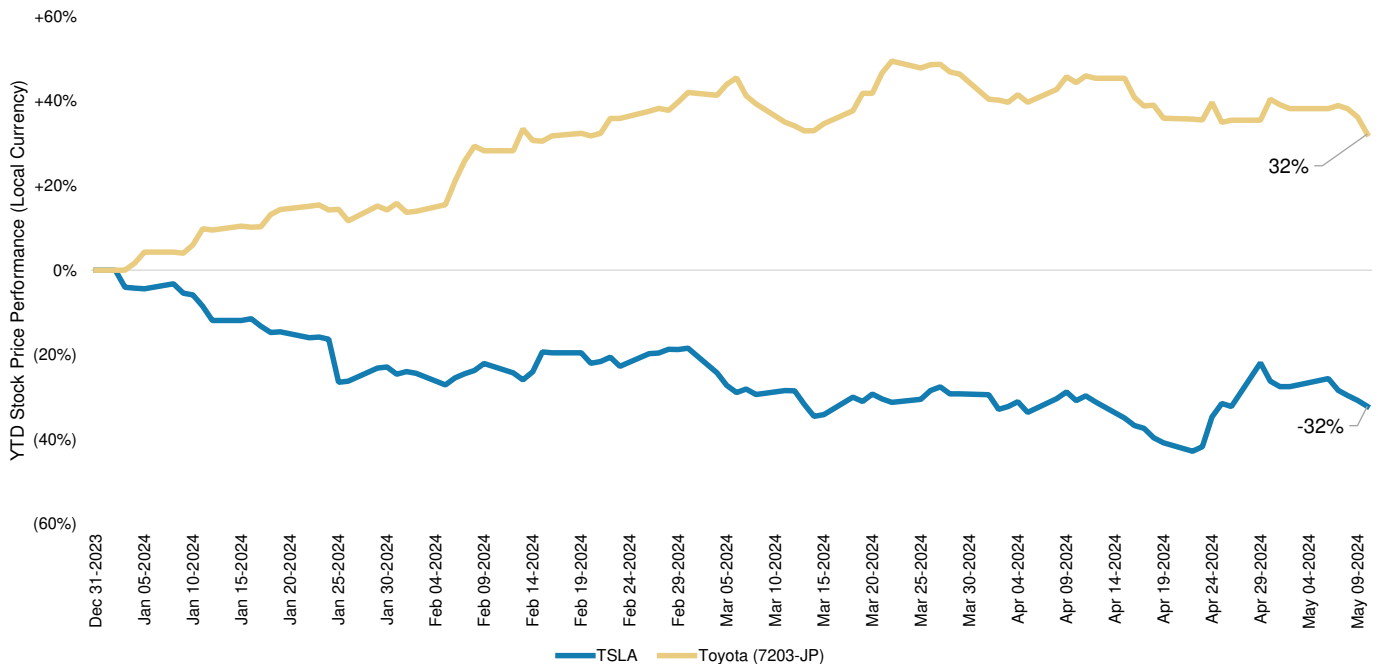


Source: FactSet, Morgan Stanley Research; Notes: 1) Reflects most recently annually reported capex and R&D; 2) Capex represents autos capex (i.e. excludes financial / finco capex); 3) Analysis in USD. Capex and R&D converted to USD using FX rates, based on FactSet as of FY end.

GM and Ford's Capex + R&D spend per unit has risen 167% and 118%, respectively, since 2010. Toyota's per unit spend over the same time period? Down 3%: Toyota also is almost entirely absent in the BEV market while controlling ~50% of US hybrid market.

In our view, this partially explains why Tesla and Toyota shares have moved in sharply opposite directions this year: Toyota's stock is up ~30% YTD, the reverse of Tesla shares which have fallen ~30% over the same period. We think the disparity between the two companies is emblematic of the changing tastes of the auto consumer away from BEVs and back towards ICE and Hybrids.

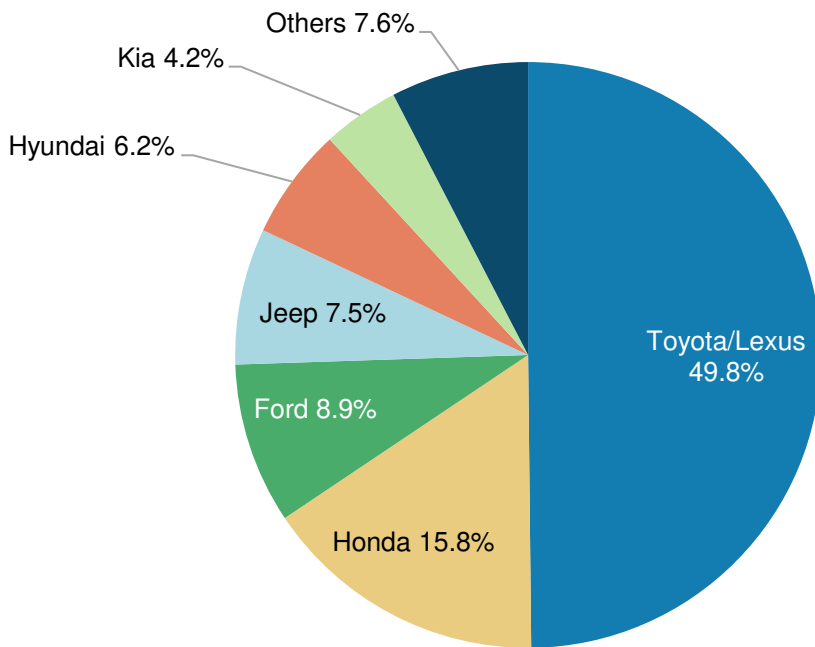
Exhibit 177: TSLA vs. Toyota YTD Performance



Note: Performance as of 5/12/2024. Excludes impacts of FX. Source: FactSet, Morgan Stanley Research

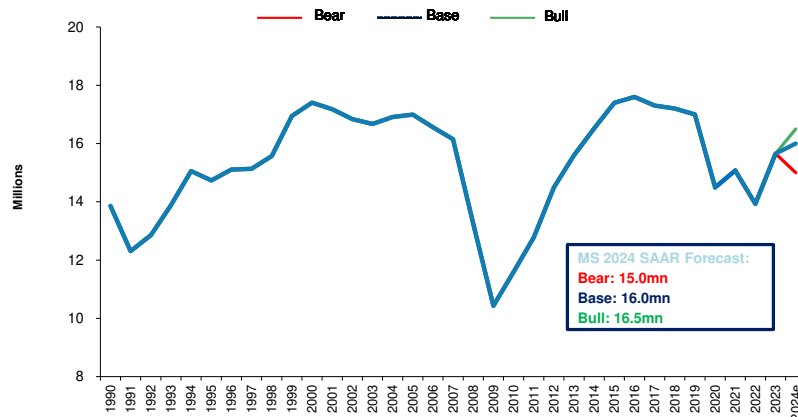
How long can hybrid tailwinds in the US last? Hybrids will likely remain a fierce competitor for the incremental EV buyer through 2024 and potentially years to come. Partly owing to recent strength in hybrids, the Japanese share of monthly US passenger vehicle sales has steadily risen from 31.2% in June 2022 to 38.8% in March 2024 (up +7.5%). In addition, we see evidence that US demand for Toyota and other hybrid-skewed OEMs should remain robust. For example, in March, Stellantis reported 79 days' supply while Ford and GM reported 78 days and 61 days, respectively. On the flip side, Toyota came in at 28 days' supply, Honda at 40, Hyundai at 39, and Kia at 30. Conversations with our dealer contacts only corroborate the elevated demand for hybrid vehicles, particularly for Japanese OEMs like Toyota & Honda – and cite additional hybrid offerings this year.

Exhibit 178: US Hybrid (HEV + PHEV) brand share as of March 2024



Note: Based on March 2024 sales data. Reflects share of # of vehicles sold; Source: Motor Intelligence, Morgan Stanley Research

Exhibit 179: US SAAR Forecast (MSe)



Source: Morgan Stanley Research (e) estimates

Exhibit 180: Japanese share of US passenger vehicle market (2019-2024)



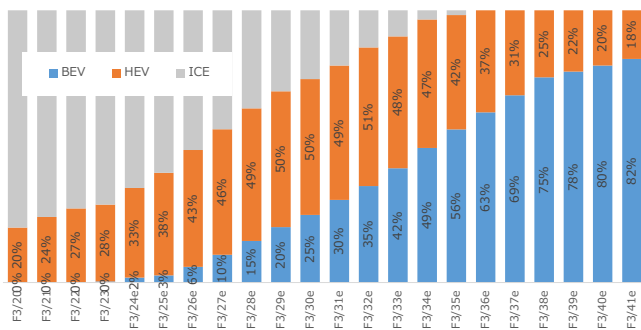
Source: Morgan Stanley Research

Japanese OEMs are going ahead with their BEV strategies to capture the upside from the eventual transition

1. BEV strategies of Japanese OEMs: Planning full-fledged expansion of BEV and battery local production in North America from 2026

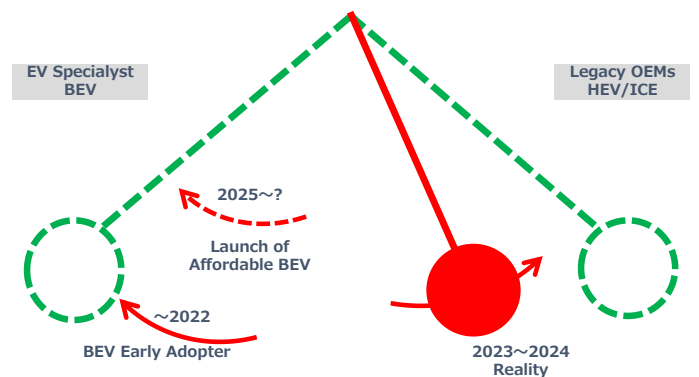
Japanese OEMs to capture growth from both hybrid and BEVs: Amid stalled conditions at OEMs leading the BEV industry, Toyota, Honda, and other Japanese OEMs are benefiting from their current hybrid strategies. However, they are also not changing their BEV strategies and are steadily advancing with BEV preparations at the same time. Toyota retains its goal of selling 3.5mn BEVs in F3/31 (roughly 30% of its global sales volume), and Honda maintains its goal of selling 2.0mn BEVs in F3/31 (40%). Nissan set a goal in its medium-term plan disclosed at end-March targeting a 20% BEV sales ratio in F3/27. In Toyota's case, while we see a possibility of revising the goal of 1.5mn BEVs in F3/27, Toyota is steadily preparing production operations for F3/31.

Exhibit 181: Toyota global auto sales by powertrain



Source: Company data, Morgan Stanley Research, e=Morgan Stanley Research estimates

Exhibit 182: BEV launch at popular price range would be 2025 or after

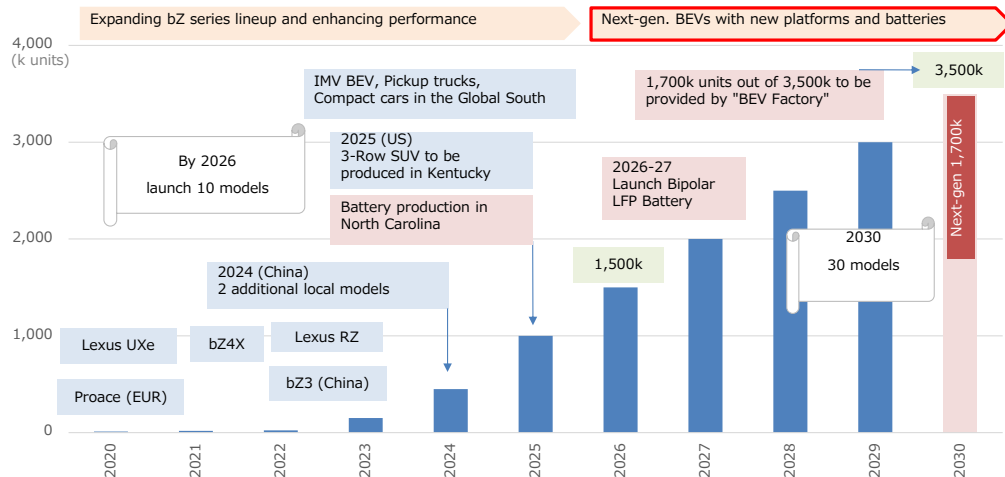


Source: Morgan Stanley Research

Building BEV capacity in the North America: Japanese OEMs are advancing toward establishment of BEV local production and battery local supply capabilities in North America, their most important market. On April 27, Toyota announced that it plans to

invest \$1.4bn at their plant in Indiana (US). According to the disclosure, the plant will newly employ up to 340 people and aim to begin production of a new 3-row SUV BEV in 2026. Toyota already plans to produce a new 3-row SUV BEV in 2025 at the Kentucky (US) plant (this is a different model than the Indiana plant model). Toyota intends to supply batteries from Toyota Battery Manufacturing North Carolina, a facility it is currently building in North Carolina (US), with a planned production start in 2025 (targeting annual output capacity of at least 30GWh in 2030).

Exhibit 183: Toyota: Launch of next-generation BEVs from 2026 is the key



Source: Company data, Marklines, Morgan Stanley Research estimates

On April 25, Honda announced that it is reviewing construction of a BEV plant (annual output of 240,000 units a year) with operations starting in 2028 and a battery plant (annual output of 36GWh) in Ontario (Canada). The total planned investment is CAD15bn. Excluding subsidies from the federal government and state and investment by joint-venture partners, Honda is likely to invest 60-70% (CAD10bn). Honda is considering ramp-ups of joint-venture plants with POSCO Future M for the battery cathode material and Asahi Kasei for the separator. It aims to lower costs through in-house production of main parts and materials. Honda is preparing volume production of BEVs and batteries (joint venture with LGES; 40GWh in annual output capacity) in Ohio.

According to its "The Arc" mid-term plan, Nissan intends to begin BEV local production at the Canton plant (Mississippi) in 2026 and Smyrna plant (Tennessee) in 2027-28. Japanese OEMs are targeting benefits from subsidies & tax incentives under the Inflation Reduction ACT (IRA) through promotion of BEV local production and battery local procurement.

Rise in HEVs a positive for Japanese OEMs: Furthermore, the recent rise in HEV demand is providing a tailwind to Japanese OEMs. We do not think that falling BEV demand is the sole driver of the upturn in HEV demand. Toyota has consistently adhered to a "multi-pathway" approach of delivering powertrains that are best suited to differing customer needs and regulations and rules of individual regions, including ICE, HEV, PHEV, hydrogen, e-Fuel, and biofuel. Toyota's fifth-generation Toyota Hybrid System (THS) deployed in 2021-22 enhanced performance of the engine, gears, and other parts and lowered costs with a more compact system and other changes. We think Toyota's well-tuned marketing and technology innovations (boosting performance and improving costs) are making HEVs a natural choice for consumers.

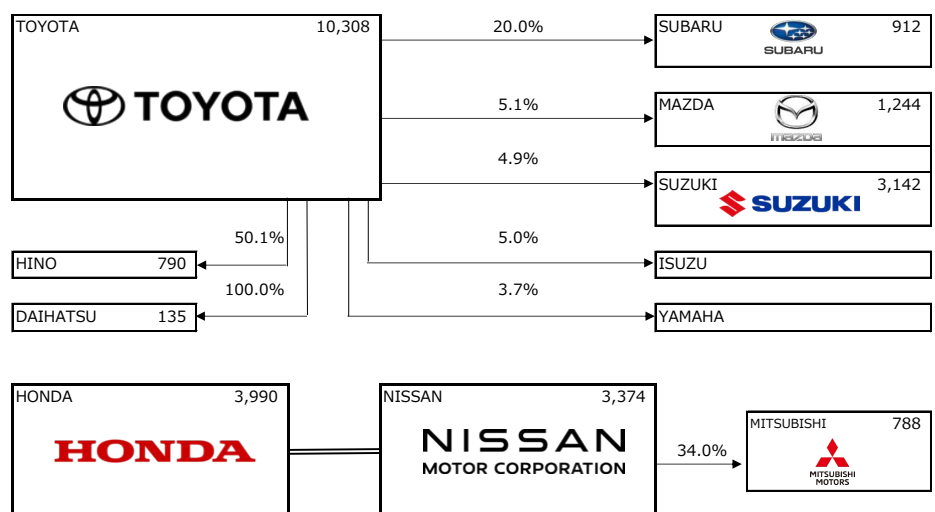
2. BEV upfront investments

Rising investments in BEVs and batteries: OEMs have been implementing upfront investments aimed at strengthening next-generation vehicles, including BEVs. Toyota raised its outlook for BEV-related cumulative investments (including R&D expenses and joint-venture investments) through 2030 from ¥4trn to ¥5trn (batteries ¥3trn, BEVs ¥2trn) in May 2023. This reflected the impacts of yen depreciation and upswing in materials costs (higher plant building costs). Honda plans to invest ¥5trn in BEVs over 10 years (capital investments ¥1.5trn, R&D expenses ¥3.5trn), including software investments. Total investments might be even higher based on the above-mentioned disclosure of the investment in Canada.

Focus on ICE investment efficiency, expanding HEV earnings and BEV vertical integration: Amid the prospect of unavoidable increase in BEV-related investments, we expect focus on whether it is possible to avoid erosion of profitability from growing inroads by BEVs through curtailment of ICE-related investments (improving efficiency and narrowing the number of models), increased cash flow from recent rise in HEV sales at Toyota and Honda, and BEV cost savings from vertical integration, such as in-house production of batteries. Regarding batteries, policies for establishment of supply capabilities, including in-house production and supplier capacity, through 2030 seek 280GWh at Toyota, 160GWh at Honda, and 135GWh at Nissan.

In BEV competitiveness, besides vehicle drive performance and battery performance, another focus of competition is development of technology as a software defined vehicle, including artificial intelligence and automated driving. While Japanese OEMs excel in developing hardware, we think they face an issue relatively in software development. In the Chinese market, Huawei and Xiaomi have launched BEVs that emphasize collaboration between the vehicle and smartphones and other devices as the differentiating technology. At the Beijing International Automotive Exhibition held in late April, Toyota announced that it is partnering with Tencent on AI, cloud capabilities, and big data. Nissan disclosed a review of working with Baidu on utilization of AI technology in the vehicle interior space design and services. Honda is adopting technologies from Huawei, HSAE, iFLYTEK, and others in the smart cockpit field for a new brand dedicated to BEVs in China.

Exhibit 184: J-OEM capital relationships



Source: Morgan Stanley Research. Note: Numbers shown are automotive sales volume (k units) for 2023.

3. Rebuilding the supplier group: Headed toward changes in relationships with suppliers through rollout of next-generation BEVs, Toyota deepening its home & away strategy

Toyota plans to offer a next-generation BEV based on a newly developed BEV-only platform under the Lexus brand in 2026. We expect enhanced vehicle driving performance, better charging performance, and cost improvements through use of innovative technologies for the first time, such as LFP batteries and gigacasting in the body structure. Toyota forecasts the next-generation BEV at 1.7mn units of the 3.5mn units targeted in the F3/31 BEV sales plan. While relationships with suppliers that functioned over many years up to now underpinned Toyota's strength in ICE-related coordination, Toyota is likely to need to rebuild ties with suppliers due to fundamental changes in BEV manufacturing.

In December 2023, Toyota lowered its ownership stake in Denso from the 24% level to about 20% (Toyota Industries and Aisin sold Denso shares too). Dissolution of cross-shareholding ties and sales of strategic stock holdings are advancing in the Japanese stock market, and movements within the Toyota Group are attracting strong interest. Toyota and Toyota Group companies have presented a stance that capital ties do not directly affect business relationships, such as product development, and we expect future progress in reworking capital relationships within the Toyota Group. While the supply chain involving the engine and transmission was a source of competitiveness in the ICE era up to now, rebuilding of the supply chain focused on batteries, semiconductors, and software in next-generation BEVs is a key point. Toyota acquired Prime Earth EV Energy (PEVE), a battery joint venture with Panasonic, as a wholly owned subsidiary in March and intends to change the company name to Toyota Battery in October. We forecast deepening of the "home & away strategy" approach in which companies with strength in semiconductors, software, and other areas hold a central role in the BEV era and progress rebuilding relationships between Toyota and related suppliers.

Exhibit 185: Change in cross-shareholdings within Toyota Group from March 2023 to March 2024

		Investor									
		Toyota (7203)	Denso (6902)	Aisin (7259)	Toyota Ind. (6201)	T. Boshoku (3116)	T. Gosei (7282)	T. Tsusho (8015)	JTEKT (6473)	Aichi Steel (5482)	T. Fudosan (--)
Investee	Toyota (7203)	--	3.3%	1.2%	8.8%		0.1%				
	Denso (6902)	24.2%→20.6%	--	1.7%→0.0%	9.3%→5.4%			0.1%			4.4%
	Aisin (7259)	24.8%	4.8%	--	7.7%			0.1%			2.4%
	T. Industries (6201)	24.7%	9.6%→8.6%	2.1%	--			4.9%	0.6%	0.2%	5.2%
	T. Boshoku (3116)	31.0%	5.9%→2.4%	0.4%	4.2%	--	0.4%	2.4%			9.8%
	T. Gosei (7282)	42.8%	0.8%→0.0%	0.5%	0.1%		--	0.4%	0.2%		
	Toyota Tsusho (8015)	21.7%	0.6%	0.2%	11.2%		0.1%	--	0.2%	0.1%	
	JTEKT (6473)	22.5%	5.5%→3.8%	0.8%	2.3%		0.1%	1.7%	--	0.2%	
	Aichi Steel (5482)	23.9%	1.0%→0.0%	0.2%	6.9%		0.2%		0.1%	--	2.3%
	Trinity Industrial (6382)	36.7%	0.7%	0.6%	1.2%		0.3%	3.6%			
	Kyowa Leather (3553)	34.7%						6.4%			
	Taiho Kogyo (6470)	33.4%	0.3%	1.0%	4.9%			3.7%	0.4%		
	Tokai Rika (6995)	32.2%→33.5%	9.7%→0.0%				0.1%	0.3%			
	Futaba Industrial (7241)	31.4%									
	Aisan Industry (7283)	28.7%	8.7%		7.6%		0.1%		0.1%		
	Chuo Spring (5992)	24.4%								7.6%	
	Fine Sinter (5994)	20.9%	4.6%	3.1%	0.5%				0.5%		
	Koito (7276)	20.0%									

Source: Company data, Morgan Stanley Research

4. Steady advances in preparing all-solid-state batteries

Building pilot lines for all-solid-state batteries with game-changer potential: Japanese companies are steadily advancing in development of all-solid-state batteries. Nissan disclosed a pilot production line for all-solid-state batteries currently under construction at the Yokohama plant in mid-April. It is modifying the existing plant that manufactures

engines, motors, and other parts and installing a clean room and related equipment. It plans to deploy production equipment and start running the pilot line in March 2025. Nissan aims commercialize a BEV that uses all-solid-state batteries in F3/29.

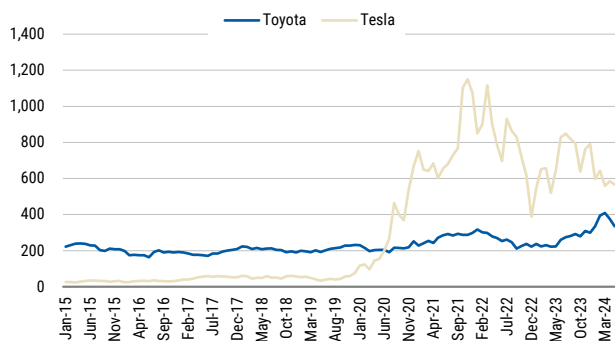
Toyota has presented a goal of commercializing all-solid-state batteries in 2027-28 and already disclosed the formation of a task force with partner Idemitsu Kosan in October 2023. It intends to develop volume-output technology, solidify production operations, and build a supply chain. It targets all-solid-state batteries with a driving range that is 2.4 times longer per volume compared to lithium ion batteries (LiB) used in current BEVs. Honda also plans to accelerate development of all-solid-state batteries that it is developing on its own and ramp up a verification line to get his technology under its control. It aims to utilize this technology in the next-generation BEV scheduled for release in the latter 2020s.

5. Japan’s BEV market: Very slow inroads due to robust HEV demand and numerous issues (including charging infrastructure), upbeat activity in minicar BEVs

Domestic BEV growth to remain slow-paced: While Japanese OEMs have not significantly altered their investment stances toward BEVs, there is less uptake of BEVs in the home Japanese market than in overseas markets. Japan’s BEV sales in F3/24 (April 2023 to March 2024) were 40,000 registered vehicles (+13% YoY) and 38,000 minicars (-6%), putting BEV ratios of new vehicle sales at just 1.6% in registered vehicles and 3.1% in minicars. Japan has already exhausted early adopter uptake, and faces hurdles to wider inroads from expensive pricing, inadequate charging infrastructure, and other issues. Meanwhile, consumers are highly supportive of HEVs, which lower fuel costs, from not only Toyota and Honda but also Nissan’s ePOWER.

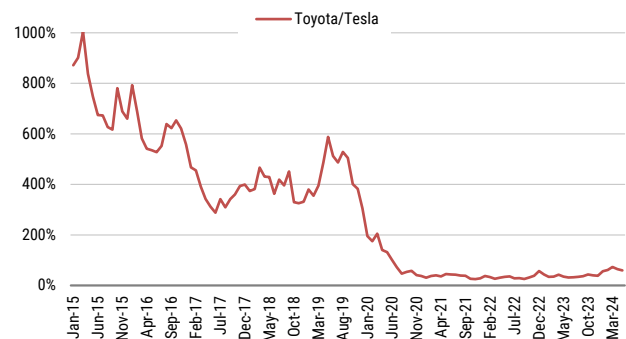
An important characteristic of Japan’s BEV market is the large number of minicar BEVs. In F3/24, minicar BEV sales were 34,000 units for the Nissan Sakura (+3% YoY) and 4,000 units for Mitsubishi Motors’ eK X EV (-42%). Sales remain upbeat since respective sales releases in May 2022 and June 2022. In commercial mini BEVs, Mitsubishi Motors recorded upbeat sales totaling about 3,000 units of the Minicab EV during F3/24. Honda plans to begin sales of commercial light BEV N-VAN e: this spring. Despite postponed sales of the commercial mini BEV being jointly developed by Daihatsu, Toyota, and Suzuki due to the problem with Daihatsu’s falsified certifications, mini BEVs have formed a unique market in Japan, and we intend to closely monitor future trends.

Exhibit 186: Toyota vs. Tesla market cap trend from Jan 2015 (\$mn)



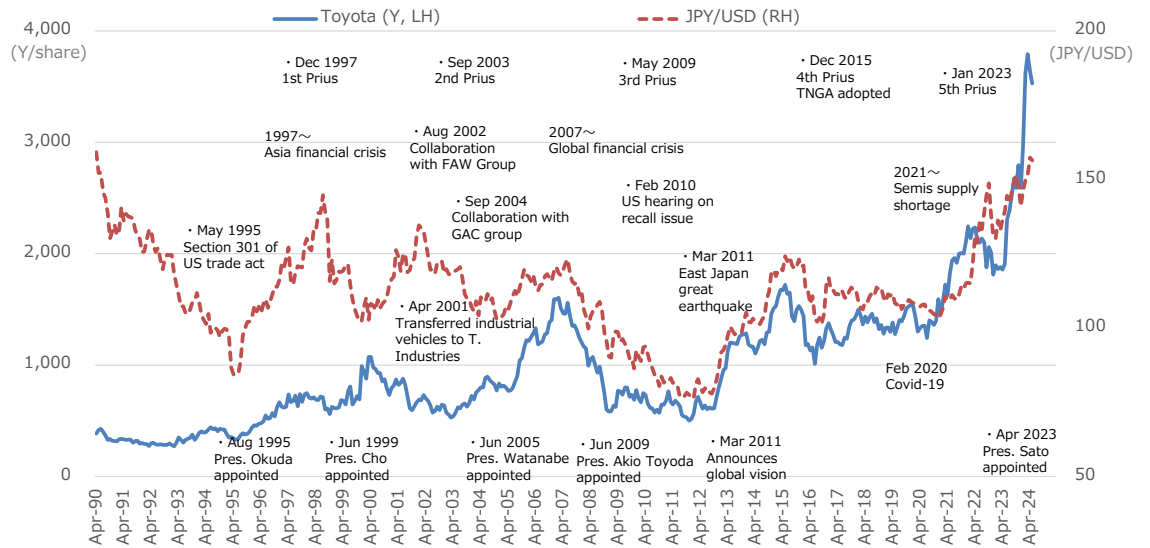
Source: Factset, Morgan Stanley Research

Exhibit 187: Toyota / Tesla market cap



Source: Factset, Morgan Stanley Research

Exhibit 188: Toyota's stock price trend: High correlation with forex changes



Source: Factset, Company data, Morgan Stanley Research

Appendix – Additional Stocks List

These exhibits include companies in our coverage universe that will reach the end of their present medium-term plans between F3/24 and F12/24, as well as those thought to be among the companies that commented on their intentions for the time period covered by the medium-term plans in the related release on TDnet. We imagine that the upcoming plans will show further moves at companies in-line with shareholder interests, such as stronger shareholder returns.

Exhibit 189: List of stocks for which F2024 is to be the start period of the new mid-term plan (1)

Code	Stock	TSE-33 Sec	Latest Fiscal Year End (mm/yyyy)	Expected Report Date (mm/dd/yyyy)	Market Cap (3/1: JPY bn)	PER (X)	PBR (X)	Expected Div Yield (%)	TSE disclosure status As of January 31	CG Score 2022	CG Score 2023
1515	NITTETSU MINING	Mining	03/2023	05/10/2024	83.9	11.1	0.6	3.4	Under consideration	4	7
1605	INPEX	Mining	12/2023	05/10/2024	2,619.6	7.9	0.6	3.7	Disclosed	4	4
1721	COMSYS HOLDINGS	Construction	03/2023	05/10/2024	453.7	14.4	1.2	3.1	Disclosed	1	1
1801	TAISEI	Construction	03/2023	05/10/2024	883.1	19.2	1.0	2.8	Under consideration	6	5
1803	SHIMIZU	Construction	03/2023	05/10/2024	642.5	62.2	0.8	2.3	Disclosed	6	10
1812	KAJIMA	Construction	03/2023	05/15/2024	1,458.6	12.4	1.2	2.5	Disclosed	4	5
1815	TEKKEN	Construction	03/2023	05/10/2024	38.1	10.5	0.5	3.3	Under consideration	3	5
1835	TOTETSU KOGYO	Construction	03/2023	05/10/2024	108.5	14.8	1.0	3.1	Disclosed	6	6
1861	KUMAGAI GUMI	Construction	03/2023	05/14/2024	167.1	16.0	1.0	3.4	Disclosed	8	9
1878	DAITO TRUST CONSTRUCTION	Real Estate	03/2023	04/26/2024	1,199.5	15.6	2.9	3.1	Disclosed	3	3
1882	TOA ROAD	Construction	03/2023	05/10/2024	67.5	15.3	1.2	3.2	Disclosed	3	3
1884	NIPPON ROAD	Construction	03/2023	05/10/2024	86.3	13.3	0.9	3.1	Disclosed	7	8
1888	WAKACHIKU CONSTRUCTION	Construction	03/2023	05/10/2024	42.2	10.1	1.0	3.1	Under consideration	3	3
1898	SEIKITOKYU KOGYO	Construction	03/2023	05/09/2024	71.8	21.5	1.8	4.7	Disclosed	5	5
1911	SUMITOMO FORESTRY	Construction	12/2023	04/26/2024	889.1	8.4	1.2	3.0	Disclosed	8	8
1942	KANDENKO	Construction	03/2023	04/26/2024	351.7	15.0	1.1	2.0	Disclosed	1	4
1945	TOKYO ENERGY & SYSTEMS	Construction	03/2023	04/26/2024	38.9	12.4	0.5	3.6	Disclosed	3	3
1976	MEISEI INDUSTRIAL	Construction	03/2023	05/10/2024	68.8	12.3	1.0	2.9	Disclosed	1	1
2220	KAMEDA SEIKA	Foods	03/2023	05/10/2024	96.2	28.0	1.4	1.3	Disclosed	8	7
2296	ITOHAM YONEKYU HOLDINGS	Foods	03/2023	05/09/2024	236.8	15.0	0.8	3.0	Under consideration	2	6
2433	HAKUHODO DY HOLDINGS	Services	03/2023	05/10/2024	534.3	21.0	1.4	2.3	Under consideration	0	1
2502	ASAHI GROUP HOLDINGS	Foods	12/2023	05/10/2024	2,598.4	13.6	1.1	2.6	Under consideration	3	1
2503	KIRIN HOLDINGS	Foods	12/2023	05/09/2024	1,882.8	12.7	1.5	3.4	Disclosed	9	15
2982	A.D.WORKS GROUP	Real Estate	12/2023	05/10/2024	11.3	6.9	0.6	3.9	Disclosed	23	17
3086	J.FRONT RETAILING	Retail Trade	02/2023	04/11/2024	410.2	14.5	1.1	2.2	Disclosed	24	24
3110	NITTO BOSEKI	Gl.&Cer.Prod	03/2023	05/10/2024	225.6	33.5	1.9	0.8	Disclosed	6	10
3291	IIDA GROUP HOLDINGS	Real Estate	03/2023	05/15/2024	541.4	11.3	0.6	4.7	Disclosed	2	2
3319	GOLF DIGEST ONLINE	Retail Trade	12/2023	05/10/2024	10.9	0.0	0.0	0.0	Disclosed	2	2
3563	FOOD & LIFE COMPANIES	Retail Trade	09/2023	05/09/2024	351.8	41.7	4.8	0.7	Disclosed	0	4
3626	TIS	Inf.&Com.	03/2023	05/09/2024	831.4	18.3	2.5	1.6	Disclosed	10	12
3687	FIXSTARS	Inf.&Com.	09/2023	05/10/2024	66.9	41.4	11.6	0.7	Disclosed	4	-
3903	GUMI	Inf.&Com.	04/2023	03/08/2024	16.1	0.0	1.0	1.2	Disclosed	4	4
4027	TAYCA	Chemicals	03/2023	05/10/2024	40.7	21.8	0.7	2.4	Disclosed	4	4
4028	ISHIHARA SANGYO	Chemicals	03/2023	05/10/2024	60.7	7.2	0.6	4.0	Under consideration	4	4
4182	MITSUBISHI GAS CHEMICAL	Chemicals	03/2023	05/10/2024	544.0	10.7	0.8	3.2	Disclosed	3	4
4215	C.I. TAKIRON	Chemicals	03/2023	05/09/2024	61.9	14.4	0.7	3.5	Disclosed	3	5
4324	DENTSU GROUP	Services	12/2023	05/15/2024	1,095.8	17.4	1.3	3.4	Disclosed	20	15
4401	ADEKA	Chemicals	03/2023	05/10/2024	327.2	15.2	1.2	2.5	Disclosed	4	14
4516	NIPPON SHINYAKU	Pharm.	03/2023	05/10/2024	336.2	12.4	1.5	2.6	Disclosed	2	3
4553	TOWA PHARMACEUTICAL	Pharm.	03/2023	05/15/2024	141.7	10.4	0.9	2.2	Disclosed	2	2
4578	OTSUKA HOLDINGS	Pharm.	12/2023	2024/04/30	3,372.1	13.1	1.4	2.0	Disclosed	3	3
4611	DAI NIPPON TORYO	Chemicals	03/2023	05/10/2024	32.8	9.2	0.6	2.7	Disclosed	4	4
4694	BML	Services	03/2023	05/10/2024	119.4	20.0	0.9	2.8	Disclosed	3	3
4743	ITFOR	Inf.&Com.	03/2023	05/10/2024	39.6	15.1	2.1	2.9	Disclosed	3	5
4901	FUJIFILM HOLDINGS	Chemicals	03/2023	05/10/2024	4,089.5	17.6	1.3	1.5	Disclosed	6	10
4917	MANDOM	Chemicals	03/2023	2024/05/10	63.1	31.0	0.9	3.1	Disclosed	4	15
4921	FANCL	Chemicals	03/2023	05/09/2024	264.7	28.9	3.1	1.7	Disclosed	4	11
4980	DEXERIALS	Chemicals	03/2023	05/10/2024	380.0	18.1	4.2	1.6	Disclosed	4	4
4997	NIHON NOHYAKU	Chemicals	03/2023	05/10/2024	56.7	14.9	0.7	2.6	Disclosed	6	6
5192	MITSUBOSHI BELTING	Rubber Prod.	03/2023	05/10/2024	149.9	20.1	1.5	5.2	Under consideration	4	6

Screening based on interviews with our coverage analysts for stock with final FY period of MTPs for F3/24-F12/24; excerpted stocks with assumed new MTPs start date in 2024 disclosed on TDNET (term period 2018/1/1-224/1/31); note that the announcement of the new MTPs in F2024 has not been finalized; Expected report date is the next expected earnings announcement date (based on Bloomberg); P/E (Toyo Keizai est.), P/B, Expected Div.Yield as of 1 Mar, TSE disclosure based on the list of disclosed companies (as of the end-Jan. 2024, published on 15 Feb, 2024) concerning "response to realize management with awareness of capital costs and stock prices"; CG Score is the sum of the following words (ROE, ROIC, PBR, PER, DOE, TSR, Equity Spread, EVA, WACC, Policy Holdings) in the Corporate Governance Report published in the relevant year. Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

Exhibit 190: List of stocks for which F2024 is to be the start period of the new mid-term plan (2)

Code	Stock	TSE-33 Sec	Latest Fiscal Year End (mm/yyyy)	Expected Report Date (mm/dd/yyyy)	Market Cap (3/1: JPY bn)	PER (X)	PBR (X)	Expected Div Yield (%)	TSE disclosure status As of January 31	CG Score 2022	CG Score 2023
5201	AGC	Gl.&Cer.Prod	12/2023	05/08/2024	1,162.8	21.4	0.8	3.9	Disclosed	8	11
5233	TAIHEYO CEMENT	Gl.&Cer.Prod	03/2023	05/10/2024	387.2	9.2	0.7	2.2	Under consideration	2	2
5332	TOTO	Gl.&Cer.Prod	03/2023	04/26/2024	759.1	19.1	1.5	2.3	Disclosed	4	4
5351	SHINAGAWA REFRACTORIES	Gl.&Cer.Prod	03/2023	05/10/2024	90.7	5.9	1.1	3.5	Disclosed	4	4
5357	YOTAI REFRACTORIES	Gl.&Cer.Prod	03/2023	05/10/2024	30.4	8.6	0.9	3.6	Disclosed	3	4
5406	KOBE STEEL	Iron & Steel	03/2023	05/10/2024	811.1	6.7	0.8	4.4	Disclosed	4	6
5440	KYOEI STEEL	Iron & Steel	03/2023	04/26/2024	108.5	8.1	0.5	3.3	Disclosed	2	5
5461	CHUBU STEEL PLATE	Iron & Steel	03/2023	04/26/2024	74.1	9.4	0.9	3.5	Disclosed	3	3
5471	DAIDO STEEL	Iron & Steel	03/2023	04/26/2024	393.9	12.1	1.0	2.5	Under consideration	5	7
5563	NIPPON DENKO	Iron & Steel	12/2023	05/10/2024	40.6	11.6	0.6	0.0	Disclosed	6	7
5702	DAIKI ALUMINIUM INDUSTRY	Nonfer.Mtls	03/2023	05/10/2024	51.8	15.0	0.7	4.2	Under consideration	2	2
5741	UACJ	Nonfer.Mtls	03/2023	05/10/2024	196.7	17.8	0.8	2.2	Disclosed	14	28
5943	NORITZ	Metal Prod.	12/2023	05/10/2024	81.6	18.6	0.6	4.0	Disclosed	5	5
5975	TOPRE	Metal Prod.	03/2023	05/10/2024	130.1	6.9	0.6	2.1	Disclosed	4	5
5991	NHK SPRING	Metal Prod.	03/2023	2024/05/15	348.5	9.2	0.8	2.8	Disclosed	2	1
6178	JAPAN POST HOLDINGS	Services	03/2023	2024/05/15	5,053.1	19.6	0.5	3.4	Disclosed	3	3
6254	NOMURA MICRO SCIENCE	Machinery	03/2023	05/15/2024	218.2	27.5	7.7	0.7	Disclosed	3	3
6268	NABTESCO	Machinery	12/2023	04/30/2024	302.4	34.1	1.2	3.2	Disclosed	19	19
6298	Y.A.C.HOLDINGS	Machinery	03/2023	05/10/2024	23.7	13.9	1.4	3.1	Disclosed	4	4
6302	SUMITOMO HEAVY INDUSTRIES	Machinery	12/2023	05/10/2024	550.7	13.4	0.9	2.8	Disclosed	3	33
6324	HARMONIC DRIVE SYSTEMS	Machinery	03/2023	05/10/2024	419.0	0.0	3.9	0.5	Disclosed	3	7
6383	DAIFUKU	Machinery	03/2023	05/10/2024	1,325.2	31.2	3.8	1.1	Disclosed	5	8
6457	GLORY	Machinery	03/2023	05/10/2024	175.6	6.0	0.8	3.4	Disclosed	7	7
6464	TSUBAKI NAKASHIMA	Machinery	12/2023	05/13/2024	31.2	7.5	0.5	4.7	Disclosed	5	5
6472	NTN	Machinery	03/2023	05/10/2024	167.0	18.5	0.7	3.2	Disclosed	5	9
6473	JTEKT	Machinery	03/2023	04/26/2024	487.8	11.3	0.7	2.5	Disclosed	6	9
6504	FUJI ELECTRIC	Elec. App.	03/2023	04/26/2024	1,377.3	19.2	2.4	1.3	Disclosed	4	4
6517	DENYO	Elec. App.	03/2023	05/10/2024	53.5	12.2	0.7	2.3	Under consideration	3	3
6622	DAIHEN	Elec. App.	03/2023	2024/05/10	212.3	12.3	1.7	2.0	Disclosed	1	2
6630	YA-MAN	Elec. App.	04/2023	03/14/2024	57.4	32.2	2.0	0.9	Disclosed	5	6
6651	NITTO KOGYO	Elec. App.	03/2023	05/15/2024	182.9	22.0	1.6	4.6	Disclosed	5	2
6707	SANKEN ELECTRIC	Elec. App.	03/2023	2024/05/10	199.3	0.0	1.5	0.4	Under consideration	5	5
6737	EIZO	Elec. App.	03/2023	05/10/2024	113.9	23.2	0.8	3.9	Disclosed	4	4
6758	SONY GROUP	Elec. App.	03/2023	04/26/2024	16,427.5	17.4	2.2	0.7	Disclosed	6	9
6762	TDK	Elec. App.	03/2023	04/26/2024	3,146.7	25.6	1.9	1.4	Disclosed	8	8
6789	ROLAND DG	Elec. App.	12/2023	05/10/2024	61.7	13.4	1.7	0.0	Disclosed	2	2
6810	MAXELL	Elec. App.	03/2023	04/26/2024	77.9	11.1	0.8	2.6	Disclosed	9	10
6817	SUMIDA	Elec. App.	12/2023	04/26/2024	38.2	6.7	0.7	4.6	Disclosed	4	4
6849	NIHON KOHDEN	Elec. App.	03/2023	05/13/2024	365.2	22.4	2.0	1.5	Disclosed	3	3
6857	ADVANTEST	Elec. App.	03/2023	04/26/2024	5,654.1	84.5	13.5	0.5	Disclosed	11	18
6908	IRISO ELECTRONICS	Elec. App.	03/2023	05/09/2024	73.5	12.8	1.0	3.0	Disclosed	3	3
7011	MITSUBISHI HEAVY INDUSTRIES	Machinery	03/2023	05/10/2024	4,024.8	20.8	2.1	1.3	Disclosed	5	4
7102	NIPPON SHARYO	Trans.Equip.	03/2023	04/25/2024	35.2	9.1	0.6	0.8	Disclosed	4	4
7173	TOKYO KIRABOSHI FINANCIAL GROU	Banks	03/2023	05/08/2024	150.1	5.6	0.4	2.9	Disclosed	8	10
7201	NISSAN MOTOR	Trans.Equip.	03/2023	2024/05/10	2,356.9	5.6	0.4	2.6	Under consideration	4	4
7202	ISUZU MOTORS	Trans.Equip.	03/2023	05/10/2024	1,652.5	9.4	1.1	4.0	Disclosed	2	3
7220	MUSASHI SEIMITSU INDUSTRY	Trans.Equip.	03/2023	05/10/2024	106.6	10.4	0.9	2.5	Disclosed	4	4
7224	SHINMAYWA INDUSTRIES	Trans.Equip.	03/2023	05/09/2024	83.9	10.8	0.8	3.8	Under consideration	6	7
7241	FUTABA INDUSTRIAL	Trans.Equip.	03/2023	04/26/2024	95.2	7.6	0.9	2.8	Disclosed	2	3
7245	DAIDO METAL	Trans.Equip.	03/2023	05/10/2024	26.7	22.1	0.4	1.8	Disclosed	2	5

Screening based on interviews with our coverage analysts for stock with final FY period of MTPs for F3/24-F12/24; excerpted stocks with assumed new MTPs start date in 2024 disclosed on TDNET (term period 2018/1/1-224/1/31); note that the announcement of the new MTPs in F2024 has not been finalized; Expected report date is the next expected earnings announcement date (based on Bloomberg); P/E (Toyo Keizai est.), P/B, Expected Div.Yield as of 1 Mar; TSE disclosure based on the list of disclosed companies (as of the end-Jan. 2024, published on 15 Feb, 2024) concerning "response to realize management with awareness of capital costs and stock prices."; CG Score is the sum of the following words (ROE, ROIC, PBR, PER, DOE, TSR, Equity Spread, EVA, WACC, Policy Holdings) in the Corporate Governance Report published in the relevant year. Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

Exhibit 191: List of stocks for which F2024 is to be the start period of the new mid-term plan (3)

Code	Stock	TSE-33 Sec	Latest Fiscal Year End (mm/yyyy)	Expected Report Date (mm/dd/yyyy)	Market Cap (3/1: JPY bn)	PER (X)	PBR (X)	Expected Div Yield (%)	TSE disclosure status As of January 31	CG Score 2022	CG Score 2023
7270	SUBARU	Trans.Equip.	03/2023	05/10/2024	2,514.3	7.4	1.1	2.9	Under consideration	12	11
7322	SAN JU SAN FINANCIAL GROUP	Banks	03/2023	05/10/2024	52.0	8.6	0.3	3.6	Under consideration	6	6
7327	DAISHI HOKUETSU FINANCIAL GROU	Banks	03/2023	05/10/2024	198.0	9.2	0.4	3.2	Under consideration	5	18
7453	RYOHIN KEIKAKU	Retail Trade	08/2023	04/12/2024	686.2	19.6	2.4	1.6	Under consideration	5	5
7596	UORIKI	Retail Trade	03/2023	05/08/2024	34.4	23.4	2.0	2.0	Under consideration	2	6
7600	JAPAN MEDICAL DYNAMIC MARKETIN	Prec. Inst.	03/2023	04/26/2024	18.4	15.9	0.8	2.0	Disclosed	4	16
7616	COLOWIDE	Retail Trade	03/2023	05/10/2024	189.5	54.0	6.4	0.2	Disclosed	4	8
7685	BUYSELL TECHNOLOGIES	Whsle Trade	12/2023	05/10/2024	40.1	20.6	4.7	0.9	Disclosed	0	0
7723	AICHI TOKEI DENKI	Prec. Inst.	03/2023	05/10/2024	37.2	10.6	0.9	2.6	Disclosed	5	5
7733	OLYMPUS	Prec. Inst.	03/2023	2024/05/10	2,662.4	10.2	3.4	0.8	Disclosed	21	19
7735	SCREEN HOLDINGS	Elec. App.	03/2023	05/10/2024	1,981.0	28.9	5.7	1.0	Disclosed	5	17
7917	FUJIMORI KOGYO	Chemicals	03/2023	2024/05/10	75.1	18.1	0.8	2.2	Disclosed	4	7
7925	MAEZAWA KASEI INDUSTRIES	Chemicals	03/2023	05/15/2024	25.9	18.8	0.6	3.0	Disclosed	8	13
7942	JSP	Chemicals	03/2023	04/26/2024	69.3	9.5	0.6	2.3	Disclosed	2	2
7972	ITOKI	Other Prod.	12/2023	05/10/2024	74.7	8.7	1.1	3.2	Disclosed	3	3
8001	ITOCHU	Whsle Trade	03/2023	05/09/2024	10,423.8	11.6	1.9	2.4	Disclosed	8	17
8053	SUMITOMO	Whsle Trade	03/2023	05/09/2024	4,333.4	8.7	1.0	3.5	Disclosed	2	2
8056	BIPROGY	Inf.&Com.	03/2023	04/26/2024	502.9	19.2	3.0	2.1	Disclosed	6	6
8097	SAN-AI OBBLI	Whsle Trade	03/2023	05/10/2024	127.6	11.4	1.1	4.1	Disclosed	1	1
8114	DESCENTE	Text&Apparel	03/2023	05/15/2024	259.6	22.2	2.3	1.3	Disclosed	11	10
8219	AOYAMA TRADING	Retail Trade	03/2023	05/10/2024	81.5	10.9	0.5	3.7	Disclosed	3	3
8227	SHIMAMURA	Retail Trade	02/2023	04/01/2024	584.3	14.7	1.3	1.7	Disclosed	4	4
8242	H2O RETAILING	Retail Trade	03/2023	05/15/2024	222.1	11.4	0.8	1.6	Disclosed	4	4
8345	BANK OF IWATE	Banks	03/2023	05/10/2024	49.4	10.6	0.2	3.0	Disclosed	3	3
8381	SAN-IN GODO BANK	Banks	03/2023	05/10/2024	182.6	11.3	0.6	3.4	Disclosed	6	8
8392	OITA BANK	Banks	03/2023	05/10/2024	45.1	8.1	0.2	3.2	Disclosed	5	5
8522	BANK OF NAGOYA	Banks	03/2023	05/10/2024	111.1	13.0	0.4	2.1	Disclosed	0	0
8541	EHIME BANK	Banks	03/2023	05/10/2024	44.3	9.3	0.3	2.7	Disclosed	2	2
8601	DAIWA SECURITIES GROUP	Sec.&Com.Fut	03/2023	04/26/2024	1,718.5	14.0	1.1	3.1	Disclosed	6	10
8630	SOMPO HOLDINGS	Insurance	03/2023	05/17/2024	2,975.4	9.2	1.2	3.3	Disclosed	12	12
8714	SENSHU IKEDA HOLDINGS	Banks	03/2023	05/10/2024	107.6	10.1	0.5	3.3	Disclosed	10	10
8766	TOKIO MARINE HOLDINGS	Insurance	03/2023	05/17/2024	8,853.1	13.0	2.0	2.7	Disclosed	6	12
8803	HEIWA REAL ESTATE	Real Estate	03/2023	04/26/2024	150.2	16.9	1.1	3.0	Disclosed	5	6
8804	TOKYO TATEMONO	Real Estate	12/2023	05/10/2024	472.2	9.8	0.9	3.5	Disclosed	4	5
8892	ES-CON JAPAN	Real Estate	12/2023	04/26/2024	100.2	12.1	1.3	3.8	Disclosed	14	14
8934	SUN FRONTIER FUDOUSAN	Real Estate	03/2023	05/10/2024	80.2	6.7	0.9	3.4	Disclosed	3	3
9001	TOBU RAILWAY	Land Trans.	03/2023	2024/04/26	812.0	17.8	1.5	1.2	Disclosed	4	4
9005	TOKYU	Land Trans.	03/2023	2024/05/10	1,196.6	19.1	1.5	0.9	Disclosed	2	3
9006	KEIKYU	Land Trans.	03/2023	2024/05/10	361.7	16.4	1.3	1.1	Disclosed	7	8
9024	SEIBU HOLDINGS	Land Trans.	03/2023	05/10/2024	693.0	15.4	1.5	1.2	Disclosed	2	2
9024	SEIBU HOLDINGS	Land Trans.	03/2023	2024/05/10	693.0	15.4	1.5	1.2	Disclosed	2	2
9048	NAGOYA RAILROAD	Land Trans.	03/2023	05/10/2024	418.5	19.0	1.0	1.2	Disclosed	1	1
9075	FUKUYAMA TRANSPORTING	Land Trans.	03/2023	05/15/2024	201.1	17.8	0.6	1.9	Disclosed	3	6
9075	FUKUYAMA TRANSPORTING	Land Trans.	03/2023	2024/05/15	201.1	17.8	0.6	1.9	Disclosed	3	6
9081	KANAGAWA CHUO KOTSU	Land Trans.	03/2023	04/26/2024	38.3	10.1	0.7	1.3	Disclosed	1	5
9110	NS UNITED KAIUN	Marine Trans	03/2023	04/26/2024	126.3	7.3	0.9	4.2	Disclosed	2	2
9119	IINO KAIUN	Marine Trans	03/2023	05/09/2024	139.9	7.6	1.1	4.0	Disclosed	2	2
9304	SHIBUSAWA WAREHOUSE	Whsng&H.Tr.S	03/2023	05/10/2024	45.7	12.6	0.8	3.2	Disclosed	1	1
9401	TBS HOLDINGS	Inf.&Com.	03/2023	05/10/2024	691.2	18.4	0.7	1.1	Under consideration	4	9
9513	ELECTRIC POWER DEVELOPMENT	Elec.Pwr&Gas	03/2023	05/10/2024	451.8	6.7	0.4	3.6	Under consideration	3	4
9532	OSAKA GAS	Elec.Pwr&Gas	03/2023	05/08/2024	1,268.8	10.7	0.8	2.1	Under consideration	3	13
9551	METAWATER	Elec.Pwr&Gas	03/2023	04/26/2024	104.6	15.6	1.5	2.0	Under consideration	4	5
9684	SQUARE ENIX HOLDINGS	Inf.&Com.	03/2023	05/10/2024	767.9	17.5	2.3	1.5	Disclosed	1	1
9755	OYO	Services	12/2023	05/10/2024	56.3	19.5	0.7	2.6	Disclosed	6	8
9765	OHBA	Services	05/2023	04/12/2024	16.8	13.3	1.4	3.5	Disclosed	6	6
9880	INNTECH	Elec. App.	03/2023	05/10/2024	28.1	19.0	1.1	3.4	Disclosed	4	4

Screening based on interviews with our coverage analysts for stock with final FY period of MTPs for F3/24-F12/24; excerpted stocks with assumed new MTPs start date in 2024 disclosed on TDNET (term period 2018/1/1-224/1/31); note that the announcement of the new MTPs in F2024 has not been finalized; Expected report date is the next expected earnings announcement date (based on Bloomberg); P/E (Toyo Keizai est.), P/B, Expected Div.Yield as of 1 Mar; TSE disclosure based on the list of disclosed companies (as of the end-Jan. 2024, published on 15 Feb, 2024) concerning "response to realize management with awareness of capital costs and stock prices."; CG Score is the sum of the following words (ROE, ROIC, PBR, PER, DOE, TSR, Equity Spread, EVA, WACC, Policy Holdings) in the Corporate Governance Report published in the relevant year. Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

Exhibit 192: Status of prime listed companies that have either disclosed capital efficiency measures or have such measures under consideration in the CG report by industry

Ranking by disclosure				TSE-33 sec	Disclosed	Under Consideration	No disclosure
Apr (a)	Mar (b)	Diff. (a-b)					
1	1	0	Banks	88.2%	11.8%	0.0%	
2	4	-2	Marine Trans	84.2%	5.3%	10.5%	
3	2	1	Insurance	80.0%	0.0%	20.0%	
4	3	1	Sec.&Com.Fut	77.8%	11.1%	11.1%	
5	8	-3	Oth.Fin.Bus.	72.7%	0.0%	27.3%	
6	5	1	Iron & Steel	70.0%	5.0%	25.0%	
7	6	1	Oil&Coal P.	68.2%	22.7%	9.1%	
8	9	-1	Rubber Prod.	66.7%	19.0%	14.3%	
8	7	1	Text&Apparel	66.7%	0.0%	33.3%	
10	11	-1	Elec.Pwr&Gas	64.0%	9.6%	26.4%	
11	19	-8	Whsle Trade	63.0%	7.4%	29.6%	
12	25	-13	Pharm.	62.2%	13.5%	24.3%	
13	16	-3	Machinery	62.1%	3.4%	34.5%	
14	21	-7	Whsng&H.Tr.S	61.9%	19.0%	19.0%	
14	9	5	Elec. App.	61.9%	28.6%	9.5%	
16	18	-2	Metal Prod.	61.0%	19.5%	19.5%	
17	26	-9	Air Trans.	60.0%	20.0%	20.0%	
18	13	5	Trans.Equip.	59.3%	11.5%	29.2%	
19	15	4	Prec. Inst.	59.2%	5.4%	35.4%	
20	22	-2	Construction	56.1%	10.6%	33.3%	
21	12	9	Nonfer.Mtls	55.9%	11.8%	32.4%	
22	23	-1	Chemicals	54.9%	3.9%	41.2%	
23	24	-1	Real Estate	53.8%	7.7%	38.5%	
23	14	9	Land Trans.	53.8%	15.4%	30.8%	
25	20	5	Other Prod.	53.3%	20.0%	26.7%	
26	17	9	Mining	50.0%	0.0%	50.0%	
27	28	-1	Pulp&Paper	48.5%	17.6%	33.8%	
28	32	-4	Foods	43.5%	30.4%	26.1%	
29	26	3	Services	40.0%	20.0%	40.0%	
30	30	0	Inf.&Com.	39.8%	8.8%	51.4%	
31	29	2	Retail Trade	39.6%	9.4%	50.9%	
32	31	1	Gl.&Cer.Prod	29.4%	6.6%	64.0%	
33	33	0	Fish/Ag.&For	16.7%	0.0%	83.3%	

Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

Exhibit 193: Stocks moving from "No disclosure" to "Under consideration"

Code	Stock	TSE 33 sectors	Latest CG report release date	Share price (JPY,4/5)	Market Cap (JPYbil, 4/5)	P/E (X)	P/B (X)	Expected Div Yld, %	MTP flag	Timing for disclosure (from CG report)
2170	Link&M	Services	2024-03-28	500	56.5	16.6	5.3	2.3	0	
2282	Nippon ham	Foods	2024-03-08	4,974	512.1	18.9	1.0	2.3	0	May, 2024
2288	Marudai Food	Foods	2024-03-25	1,611	42.7	33.4	0.6	1.2	1	In the next MTP planned to be released at May 2024
2815	Ariake	Foods	2024-03-28	5,060	166.0	23.4	1.4	2.0	0	At the earning release of F3/24
3656	Klab	Inf.&Com.	2024-03-29	313	12.9	42.2	1.1	0.0	0	
4324	Dentsu	Services	2024-03-29	4,218	1,139.6	18.1	1.3	3.3	1	In the next MTP planned to be released in 2H 2024
4849	en japan	Services	2024-03-29	2,582	128.4	31.9	3.5	2.7	0	
4919	Milbon	Chemicals	2024-03-28	3,174	105.1	22.0	2.2	2.8	0	
5288	ASIA PILE	GI.&Cer.Prod	2024-03-28	851	32.4	9.4	0.7	3.5	0	Under consideration and will be released in the next MTP
5631	Japan Steel	Machinery	2024-03-04	3,453	256.9	18.2	1.5	1.7	1	June 2024 with the next MTP
5851	Ryobi	Nonfer.Mtls	2024-03-28	2,776	90.6	10.0	0.6	2.9	0	
6167	Fuji Die	Machinery	2024-03-01	663	13.3	19.7	0.6	3.3	1	In the next MTP
6328	Ebara Jitsugyo	Machinery	2024-03-26	3,430	44.3	13.0	1.9	2.8	1	In the next MTP planned to be released in Feb 2025
6390	Kato works	Machinery	2024-03-19	1,498	17.6	8.0	0.4	3.3	0	
6464	Tsubaki Nakashima	Machinery	2024-03-25	850	35.4	8.5	0.6	4.1	1	During the fiscal year of 2024
7269	Suzuki	Trans.Equip.	2024-03-22	1,767	3,471.4	14.2	1.5	1.6	0	
7816	Snow Peak	Other Prod.	2024-03-29	1,250	47.7	41.9	3.1	0.0	0	
8395	The Bank of Saga	Banks	2024-03-15	2,130	36.5	6.9	0.3	3.3	0	At the earning release of June 2024

Note: Universe based on current CG report published by 29, Mar.2024; if "disclosure based on each principle of code" or "reason for not implementing each principle of code" are in column of "Response to realization of management with awareness of capital cost and stock price", screening by stocks with net cash being positive, cross-share holdings to net assets being 10% or more, and Sub-1X P/B as of 9 Feb; P/E, ROE, Expected Dividend yield as of 5 Apr.

For important disclosures regarding companies that are the subject of this screen, please see the Morgan Stanley Research Disclosure Website at www.morganstanley.com/researchdisclosures.

Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

Exhibit 194: Stocks moving from "Under consideration" to "Disclosed"

Code	Stock	TSE 33 sectors	Latest CG report release date	Share price (JPY,4/5)	Market Cap (JPYbil, 4/5)	P/E (X)	P/B (X)	Expected Div Yld, %	MTP flag
1926	Raito	Construction	2024-03-27	2,030	105.9	10.3	1.1	3.2	0
3401	Teijin	Text&Apparel	2024-03-28	1,424	281.9	34.3	0.6	2.1	0
3486	Global Link Management	Real Estate	2024-03-28	2,917	23.3	7.3	2.6	3.4	1
3681	V-cube	Inf.&Com.	2024-03-29	262	6.8	22.2	10.7	0.0	0
4956	Konishi	Chemicals	2024-03-26	1,509	106.3	13.4	1.3	2.0	0
4973	Japan pure chemical	Chemicals	2024-03-28	3,160	19.2	33.1	1.3	3.2	0
5331	Noritake	GI.&Cer.Prod	2024-03-28	4,170	123.8	11.0	0.9	2.9	0
6143	Sodick	Machinery	2024-03-29	716	39.2	51.9	0.5	4.1	0
6706	DKK	Elec. App.	2024-03-26	2,088	22.8	0.0	0.5	2.9	0
6965	Hamamatsu Photonics	Elec. App.	2024-03-28	5,280	871.6	22.3	2.6	1.4	1
7231	Topy	Trans.Equip.	2024-03-26	2,658	64.0	11.4	0.5	3.7	0
7270	Subaru	Trans.Equip.	2024-03-15	3,461	2,609.3	7.7	1.1	2.8	1
7272	Yamaha Motor	Trans.Equip.	2024-03-22	1,451	1,524.0	8.2	1.3	3.4	1
7276	Koito Manufacturing	Elec. App.	2024-03-29	2,313	711.9	14.6	1.1	2.2	0
7817	Paramount bed	Other Prod.	2024-03-29	2,586	159.7	14.1	1.1	2.5	0
7966	Lintec	Other Prod.	2024-03-21	3,100	237.7	35.3	0.9	2.8	0
8142	Toho	Whsle Trade	2024-03-29	3,125	34.4	8.4	1.2	3.5	0
8344	The Yamagata Bank	Whsle Trade	2024-03-28	1,142	37.1	26.1	0.3	3.1	0
8392	The Oita bank	Whsle Trade	2024-03-25	3,025	49.1	8.9	0.2	3.0	1
8706	Kyokuto Securities	Sec.&Com.Fut	2024-03-13	1,420	46.5	14.2	0.9	7.7	0
9099	Chilled & Frozen Logistics	Land Trans.	2024-03-28	3,010	77.3	21.6	1.4	1.3	0
9880	Innotech	Elec. App.	2024-03-21	1,893	25.9	17.6	1.0	3.7	1

Note: Universe based on current CG report published by 29, Mar.2024; if "disclosure based on each principle of code" or "reason for not implementing each principle of code" are in column of "Response to realization of management with awareness of capital cost and stock price", screening by stocks with net cash being positive, cross-share holdings to net assets being 10% or more, and Sub-1X P/B as of 9 Feb; P/E, ROE, Expected Dividend yield as of 5 Apr.

For important disclosures regarding companies that are the subject of this screen, please see the Morgan Stanley Research Disclosure Website at www.morganstanley.com/researchdisclosures.

Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

Exhibit 195: Stocks in “under consideration” category that may release new MTP this fiscal year

Code	Stock	TSE 33 sectors	Latest CG report release date	Share price (JPY, 4/5)	Market Cap (JPYbil, 4/5)	P/E (X)	P/B (X)	Expected Div Yld, %	Timing for disclosure (from CG report)
1515	Nittetsu Mining	Mining	2023-12-01	4,965	82.9	11.0	0.6	3.4	In the next MTP planned to be released at May 2024
1721	COMSYS Holdings	Construction	2024-02-29	3,445	458.2	14.5	1.2	3.0	May, 2024
1801	Taisei	Construction	2023-12-26	5,703	1,053.9	23.4	1.2	2.3	In the next MTP planned to be released at May 2024
1815	Tekken	Construction	2023-12-12	2,654	41.6	11.2	0.6	3.8	Spring, 2024
1888	Wakachiku	Construction	2023-12-18	3,675	47.6	10.2	1.1	3.3	In the next MTP at FY 2024
1942	Kandenko	Construction	2023-12-12	1,679	344.7	14.7	1.1	2.1	In the next MTP
1945	Tokyo Energy	Construction	2023-12-22	1,214	42.5	13.5	0.6	3.3	In the next MTP at FY 2024
2117	Wellneo sugara	Foods	2024-02-19	2,246	78.7	14.7	1.0	4.1	In the next MTP planned to be released at May 2024
2270	Megmilk Snow Brand	Foods	2023-12-08	2,635	186.4	9.3	0.8	3.0	In the next earning results at May 2024
2288	Marudai food	Foods	2024-03-25	1,611	42.7	33.4	0.6	1.2	In the next MTP planned to be released at May 2024
2296	Itoham Yonekyu	Foods	2023-12-22	4,090	235.1	14.9	0.8	3.1	In the next MTP planned to be released at May 2024
3197	Skylark	Retail Trade	2024-03-28	2,378	540.9	72.1	3.3	0.4	In the next MTP planned to be released in FY 2024
4028	Ishihara Sangyo	Chemicals	2023-12-20	1,721	69.5	8.2	0.6	3.5	In the next MTP planned to be released at May 2024
4611	Dai Nippon Toryo	Chemicals	2023-12-27	1,167	34.7	7.2	0.6	3.0	In the next MTP starting from FY 2024
4997	Nihon Nohyaku	Chemicals	2023-12-21	720	59.0	15.5	0.8	2.5	Spring, 2024
5202	Nippon Sheet Glass	Gl.&Cer.Prod	2023-12-26	514	47.0	3.1	0.4	0.0	In the next earning results at May 2024
5233	Taiheiyu cement	Gl.&Cer.Prod	2023-12-11	3,530	430.6	10.2	0.7	2.0	In the next MTP
5269	Nippon Concrete	Gl.&Cer.Prod	2023-12-27	397	22.9	17.7	0.6	3.3	In the next MTP planned to be released at May 2024
5357	Yotal Refractories	Gl.&Cer.Prod	2024-01-12	1,454	30.0	8.5	0.9	3.6	May, 2024
5471	Daido Steel	Iron & Steel	2023-12-19	1,693	367.8	11.3	0.9	2.7	In the next MTP
5631	Japan Steel	Machinery	2024-03-04	3,453	256.9	18.2	1.5	1.7	In the next earning results at June 2024
6464	Tsubaki Nakashima	Machinery	2024-03-25	850	35.4	8.5	0.6	4.1	During FY 2024
6517	Denyo	Elec. App.	2024-01-31	2,262	51.7	11.8	0.7	2.3	In the next MTP planned to be released at May 2024
8016	Onward	Text&Apparel	2023-12-25	571	90.2	11.7	1.0	4.2	In the next MTP planned to be released at April 2024
8214	AOKI HD	Retail Trade	2023-11-30	1,108	96.0	13.7	0.7	3.6	May, 2024
9024	Seibu HD	Land Trans.	2024-03-28	2,400	776.1	17.2	1.7	1.0	At the year end earning result
9081	Kanagawa Chuo Kotsu	Land Trans.	2023-11-13	3,170	39.9	13.6	0.7	1.9	April, 2024
9513	Jpower	Elec.Pwr&Gas	2024-04-01	2,515	460.3	6.9	0.4	3.6	In the next MTP planned after FY 2024
9684	SQUARE ENIX	Inf.&Com.	2024-01-30	5,489	672.6	15.3	2.0	1.8	In the next MTP planned to be released at May 2024

Note: Universe based on current CG report published by 29, Mar. 2024; if "disclosure based on each principle of code" or "reason for not implementing each principle of code" are in column of "Response to realization of management with awareness of capital cost and stock price", screening by stocks with net cash being positive, cross-share holdings to net assets being 10% or more, and Sub-1X P/B as of 5 Apr., P/E, ROE, Expected Dividend yield as of 5 Apr.

For important disclosures regarding companies that are the subject of this screen, please see the Morgan Stanley Research Disclosure Website at www.morganstanley.com/researchdisclosures.

Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

Exhibit 196: Stocks moving from “No disclosure” to “Disclosed”

Code	Stock	TSE 33 sectors	Latest CG report release date	Share price (JPY, 4/5)	Market Cap (JPYbil, 4/5)	P/E (X)	P/B (X)	Expected Div Yld, %	MTP flag
1663	K&O Energy Group	Mining	2024-03-27	3,090	87.6	17.9	0.9	1.3	0
1802	Obayashi	Construction	2024-03-26	1,792	1,292.6	23.4	1.2	4.0	0
1899	Fukuda	Construction	2024-03-27	5,530	49.7	11.7	0.6	2.0	1
1949	Sumitomo densetsu	Construction	2024-03-27	3,415	121.7	13.1	1.2	2.8	0
1973	NESIC	Inf.&Com.	2024-03-29	2,434	363.4	25.4	2.6	2.0	0
2060	Feed One	Foods	2024-03-22	991	38.1	7.9	0.8	2.7	0
2150	CareNet	Services	2024-03-28	625	29.3	18.6	2.5	1.9	0
2269	Meiji HD	Foods	2024-03-29	3,333	978.1	18.2	1.2	2.9	0
2389	Digital HD	Services	2024-03-29	1,174	20.5	24.1	0.7	3.8	0
2491	ValueCommerce	Services	2024-03-27	1,049	36.2	12.6	1.5	4.0	1
2501	Sapporo HD	Foods	2024-03-29	5,972	470.6	46.5	2.6	0.9	0
2533	Oenon HD	Foods	2024-03-22	357	23.4	10.4	1.0	2.2	1
2897	Nissin Foods HD	Foods	2024-03-06	4,112	1,268.9	22.4	2.6	1.6	1
2929	Pharma Foods	Foods	2024-03-22	929	27.0	14.5	2.8	2.2	0
3036	Alconix	Whsle Trade	2024-03-28	1,426	44.3	10.2	0.6	3.8	0
3252	Jinushi	Real Estate	2024-03-25	2,547	46.6	8.4	1.3	3.3	0
3405	Kuraray	Chemicals	2024-03-28	1,632	579.0	11.6	0.8	3.1	0
3433	Tocalo	Metal Prod.	2024-03-29	1,800	110.2	18.4	2.0	2.8	0
3591	Wacoal HD	Text&Apparel	2024-01-31	3,527	215.1	0.0	0.9	2.8	0
3635	Koei Techmo	Inf.&Com.	2024-03-11	1,572	528.3	13.8	3.2	3.2	0
3697	SHIFT	Inf.&Com.	2024-03-28	22,000	392.2	47.2	12.9	0.0	0
3902	MDV	Inf.&Com.	2024-03-27	611	24.5	23.3	5.5	1.1	0
3964	Aucnet	Inf.&Com.	2024-03-27	2,411	59.7	12.8	2.6	2.4	0
4004	Resonac	Chemicals	2024-03-28	3,584	662.7	64.9	1.2	1.8	0
4189	KH Neochem	Chemicals	2024-03-29	2,374	88.2	9.6	1.4	3.8	0
4480	Medley	Inf.&Com.	2024-03-28	4,310	141.1	53.6	7.9	0.0	0
4631	DIC	Chemicals	2024-03-28	2,985	284.0	28.3	0.8	3.4	0
4633	Sakata INX	Chemicals	2024-03-27	1,606	87.0	9.8	0.8	2.5	0
4722	Future	Inf.&Com.	2024-03-28	1,680	160.2	14.2	2.9	2.5	0
4725	CAC	Inf.&Com.	2024-03-28	1,954	40.1	14.5	1.0	4.1	0
4755	Rakuten Group	Services	2024-03-28	858	1,839.3	0.0	2.2	0.0	0
4812	Dentsu Soken	Inf.&Com.	2024-03-29	4,810	313.5	19.9	3.8	2.2	0
4922	Kose	Chemicals	2024-03-28	7,733	468.6	35.0	1.7	1.8	0
5105	TOYO	Rubber Prod.	2024-03-29	2,824	435.1	8.6	1.1	3.7	0
5302	Nippon Carbon	Gl.&Cer.Prod	2024-03-29	5,380	63.7	14.5	1.2	3.7	0
5310	TOYO Tanso	Gl.&Cer.Prod	2024-03-29	7,980	167.5	19.7	2.0	1.5	0
5332	TOTO	Gl.&Cer.Prod	2024-03-25	4,115	728.3	18.4	1.4	2.4	0
5706	Mitsui Mining and Smelting	Nonfer.MtIs	2024-03-25	4,829	277.0	15.3	1.1	2.9	0
5727	Toho Titanium	Nonfer.MtIs	2024-03-26	1,525	108.7	24.1	2.0	1.3	0
5802	Sumitomo Electric	Nonfer.MtIs	2024-03-28	2,309	1,833.2	15.0	0.9	2.7	0
5959	Okabe	Metal Prod.	2024-03-28	793	39.1	13.1	0.6	3.8	0
6099	Elan	Services	2024-03-27	908	55.0	19.3	5.1	1.5	0
6268	Nabtesco	Machinery	2024-03-27	2,615	316.5	35.7	1.2	3.1	0
6278	Union Tool	Machinery	2024-03-28	4,485	88.7	28.7	1.2	1.9	0
6440	JUKI	Machinery	2024-03-26	557	16.6	41.1	0.5	3.6	0
6465	Hoshizaki	Machinery	2024-03-29	5,603	811.7	24.6	2.5	1.7	0
6653	Seiko	Elec. App.	2024-03-27	1,297	16.3	11.7	1.2	3.1	0
6817	Sumida	Elec. App.	2024-03-27	1,210	39.8	6.9	0.7	4.4	0
6856	Horiba	Elec. App.	2024-03-29	15,715	668.4	17.9	2.3	1.7	0
6871	Micronics Japan	Elec. App.	2024-03-29	8,110	324.6	47.4	7.6	0.6	0
7038	Frontier Management	Services	2024-03-27	1,591	18.7	18.7	5.0	3.2	0
7128	Maruka Furusato	Whsle Trade	2024-03-29	2,103	52.9	12.2	0.7	2.9	0
7130	Yamae	Whsle Trade	2024-03-28	2,667	73.8	7.4	1.0	2.2	0
7220	Musashi Seimitsu	Trans.Equip.	2024-03-28	1,630	106.8	10.5	0.9	2.5	0
7309	Shimano	Trans.Equip.	2024-03-28	22,120	1,986.9	36.8	2.5	1.3	0
7347	Mercuria	Sec.&Com.Fut	2024-03-25	1,016	21.8	9.8	1.1	2.2	0
7354	Direct Marketing	Services	2024-03-25	294	13.9	20.8	1.0	1.0	0
7525	Rix	Whsle Trade	2024-03-13	4,135	35.7	11.1	1.5	3.4	0
7729	Tokyo Seimitsu	Prec. Inst.	2024-03-26	11,900	501.0	26.7	3.3	1.5	0
7732	Topcon	Prec. Inst.	2024-03-28	1,723	186.6	60.5	1.8	2.4	0
7740	Tamron	Prec. Inst.	2024-03-27	7,010	164.0	13.5	2.0	3.0	0
7751	Canon	Prec. Inst.	2024-03-28	4,459	5,947.3	14.4	1.3	3.4	0
7769	Rhythm	Prec. Inst.	2024-03-04	3,620	30.4	74.7	1.0	1.3	0
7944	Roland	Other Prod.	2024-03-27	4,440	125.0	13.7	3.1	3.8	0
7974	Nintendo	Other Prod.	2024-03-27	7,888	10,244.1	20.5	3.7	2.4	0
7976	Mitsubishi Pencil	Other Prod.	2024-03-28	2,406	152.3	11.3	1.1	1.7	0
7984	Kokuyo	Other Prod.	2024-03-29	2,531	307.6	13.4	1.1	3.0	0
8074	Yuasa Trading	Whsle Trade	2024-03-15	5,450	120.4	9.2	1.2	3.3	0
8113	Unicharm	Chemicals	2024-03-28	4,665	2,896.2	30.6	4.0	0.9	0
8133	Itochu Enex	Whsle Trade	2024-03-15	1,582	184.9	11.3	1.1	3.3	0
8864	Airport Facilities	Real Estate	2024-03-28	608	32.2	17.3	0.5	2.3	0
9041	Kintetsu Group	Land Trans.	2024-03-26	4,351	829.6	19.7	1.7	1.1	0
9048	Nagoya Railroad	Land Trans.	2024-03-28	2,110	415.0	18.9	1.0	1.2	0
9090	AZ-com maruwa	Land Trans.	2024-03-27	1,284	177.2	17.9	3.2	2.3	0
9260	Nishimoto	Whsle Trade	2024-03-28	5,850	84.0	9.3	1.0	3.2	0
9449	GMO	Inf.&Com.	2024-03-22	2,749	300.1	18.2	3.5	1.8	0
9749	Fuji soft	Inf.&Com.	2024-03-26	6,000	404.4	18.0	3.0	1.4	0
9759	NSD	Inf.&Com.	2024-03-15	3,050	262.3	23.9	4.0	2.3	0

Note: Universe based on current CG report published by end-Feb. 2024; if “disclosure based on each principle of code” or “reason for not implementing each principle of code” are in column of “Response to realization of management with awareness of capital cost and stock price”, screening by stocks with net cash being positive, cross-share holdings to net assets being 10% or more, and Sub-1X P/B as of 5 Apr.; P/E, ROE, Expected Dividend yield as of 5 Apr.

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Source: Bloomberg, FactSet, QUICK Workstation, I-N Information Systems, Morgan Stanley Research

Exhibit 197: FSA's "Action Program for Accelerating Corporate Governance Reforms" – Issues related to sustainable corporate growth and longer-term enhancement of enterprise value Please update with edited version

Items	Details of measures/discussion	Results	Future direction (draft)
A) Management with a focus on profitability and growth potential	- Promote management with an awareness of profitability and growth based on an accurate understanding of capital costs (including review of business portfolios, allocation of management resources based on appropriate risk-taking, such as investment in human capital and intellectual property, capital investment, etc.) 【Implemented sequentially from spring 2023】	- Tokyo Stock Exchange requested companies listed on the prime market and standard market to realize management with a focus on capital costs and stock prices. (March 2023) - A list of companies that made disclosure based on the request has been published. (January 2024-) - With regard to the request, points and case studies compiled based on interviews with investors were published. (February 2024)	- Continuously follow up on the status of each company's initiatives, and consider points to keep in mind when encouraging substantial responses - It is possible to focus on whether there is a discrepancy between the content of disclosure and the actual content of initiatives, whether specific discussions are being held in discussions at the board meetings and in dialogue with investors, whether resources are being secured in such responses, etc.
B) Management with sustainability in mind	- Promote sustainability-related initiatives through the use of a framework for disclosure of information on sustainability, including human capital, intellectual property, and diversity, newly established in securities reports (publication of a collection of good examples). 【Implemented sequentially from 2023 to 2025】 - Actively participate in international discussions for the formulation of sustainability disclosure standards, and promote the enhancement of disclosure of sustainability information centered on human capital. 【Continuous implementation after 2023】 - Proceed in consideration of additional measures according to the status of corporate efforts to improve diversity of board of directors and core personnel, such as increasing the ratio of female officers (targeting at least 30% by 2030).	- FSA published a "2023 Reference Casebook of Good Practices on the Disclosure of Narrative Information" on the disclosure of ideas and initiatives concerning sustainability. (December 2023) - A specific consideration is underway regarding the disclosure and assurance of sustainability information in the Financial Council's Working Group on Disclosure and Assurance of Sustainability Information. (March 2024-) - At the Tokyo Stock Exchange, the listing regulations were revised in relation to the setting of quantitative targets for the ratio of female officers to companies listed on the prime market. (October 2023)	- As corporate management is exposed to various risks such as pandemic, cybersecurity risk, and geopolitical risk throughout the supply chain, consider management with a sense of resilience - It is considered important to be aware of the connection between financial information and non-financial information, the role of supervision by the Board of Directors, and management and dialogue with awareness of corporate culture. However, consider other points considered important. - In order to ensure diversity, it is considered necessary to allocate to investment in human capital, etc., including securing diversity and formulating a human resource development policy according to the characteristics and growth stage of the company, but other points considered important
C) Demonstration of the function of independent outside directors (improvement in the effectiveness of the Board of Directors, Nominating Committee and Compensation Committee)	- Based on the expansion of disclosure of information on the status of activities of the Board of Directors, Nomination Committee, Compensation Committee, etc. in the securities report, the establishment of a PDCA cycle through the evaluation of the effectiveness of the Board of Directors, etc., through the actual status of such investigations, the collection and publication of cases, etc., and the further demonstration of functions. 【Fall 2023】 - Promote the implementation of awareness activities (skilling through training, etc.) to promote understanding of the expected roles of independent outside directors. 【Spring 2023】	- The Ministry of Economy, Trade and Industry, in collaboration with the Financial Services Agency and the Tokyo Stock Exchange, published "Initiation of Outside Directors" in January 2024 as part of efforts to secure and improve the quality of outside directors.	- It is important to check the roles of the parties concerned and whether constructive discussions are being held at the board of directors meeting - Share an understanding of the roles and functions that outside directors, chairman of the board of directors, chairman of the Nominating Committee and Compensation Committee, and the Board Secretariat should truly play, and consider measures to ensure that these roles and functions are performed more appropriately

Source: FSA, Morgan Stanley Research

Exhibit 198: Issues related to dialogue between companies and investors Please update with edited version

Items	Details of measures/discussion	Results	Future direction (draft)
A) Substantialization of stewardship activities	- Promote initiatives by managers, asset owners, etc. to resolve issues (secure sufficient resources at managers, ingenuity in engagement methods, grant incentives, and expand the structure of asset owners such as pensions, etc.) for the realization of stewardship activities. 【Implemented sequentially from spring 2023】	- At the Financial Council's "Task Force on Asset Management", discussions were held on efforts to effectively implement stewardship activities, and recommendations were made in the report on promoting collaborative engagement, etc. (December 2023) - At the Financial Council's "Working Group for Tender Offer System, Large Shareholding Report System, etc.", a systematic discussion was held to promote dialogue between investors and companies, and in the report, in addition to reviewing the mass holding report system, recommendations were made to ensure transparency of real shareholders. (December 2023)	- It is important to have awareness of what kind of dialogue is important in the process (line) of the dialogue leading up to the exercising of voting rights (dots), and the stewardship code is reviewed based on that point as well. - It is useful to share specific examples and certain perspectives on desirable and undesirable engagements based on the opinions of investors, companies, etc. - Consider how to check compliance with the Stewardship Code for more effective engagement
B) Enhancement of information disclosure as a basis for dialogue	- Request the disclosure of the status of discussions with investors and the details, etc. of companies listed on the Prime market. 【Spring 2023】 - Recommend the intent of Comply-Or-Explain and work on clarifying good and insufficient cases of Explain. 【Spring 2023】 - Continuously consider measures to effectively and efficiently provide information required by investors prior to the general meeting of shareholders, including the efficiency of disclosure of duplicate disclosures such as securities reports and business reports. - Promote the consideration of measures to promote timely disclosure of information by companies so as to serve as the basis for dialogue with investors.	- In order to encourage companies listed on the Prime market to disclose the status of the conduct of dialogue with shareholders, "[t]he promotion and disclosure of dialogue with shareholders" was announced on the Tokyo Stock Exchange. (March 2023) - In order to encourage voluntary inspection of listed companies, "points and cases of "explain" that contribute to constructive dialogue" were published on the Tokyo Stock Exchange. (March 2023)	- It is necessary for all companies and investors to consider the necessary measures in detail according to the scale and circumstances of each subject in addition to the necessary responses in common - It is important not only to consider and disclose initiatives aimed at realizing corporate governance reform at each subject, but also to pursue and steadily implement results that meet the objective of improving corporate value in the medium to long term.
C) Promotion of dialogue with global investors	- Promote dialogue between companies and investors through "visualization" of a group of companies that respond autonomously and actively to the expectations of global investors (ratio of independent outside directors, diversity, disclosure in English, etc.). 【Implemented sequentially from summer 2023】 - In particular, Prime-listed companies will further expand the English language disclosure, including the obligatory disclosure of the English language. 【Fall 2023】	- At the Tokyo Stock Exchange, discussions were advanced toward making English disclosure mandatory for companies listed on the prime market, and the system outline for revision of the listing regulations was published, including making financial results information and timely disclosure information mandatory in priority. (Published in February 2024 and applicable from disclosures after April 1, 2025) - The Financial Council's "Working Group for the Tender Offer System and the Large Shareholding Report System, etc.," which included matters related to ensuring transparency of the large shareholding report system, the Tender Offer System, and the real shareholders, has been published. (December 2023) - Among the above reports, a draft amendment to the Financial Instruments and Exchange Act, etc., including clarification of the scope of "joint holders" in the large shareholding reporting system has been submitted to the Diet. (March 2024)	- Consider points to keep in mind for the enhancement of substantial disclosure at companies - For companies that meet certain requirements, prepare a specific list of indicators related to capital profitability, market evaluation, growth potential, etc., and the status of corporate governance such as the appointment status of independent outside directors. - It is necessary to follow up on the situation based on the obligation to disclose in English
D) Solving legal issues	- Consider clarifying the scope of "Important Proposed Conduct, etc." and "Joint Holder" in the large shareholder reporting system. - Consider the transparency of real shareholders. - Consider the method of protection of minority shareholders associated with partial purchase (Tender Offer with cap).	- The Financial Council's "Working Group for the Tender Offer System and the Large Shareholding Report System, etc.," which included matters related to ensuring transparency of the large shareholding report system, the Tender Offer System, and the real shareholders, has been published. (December 2023) - Among the above reports, a draft amendment to the Financial Instruments and Exchange Act, etc., including clarification of the scope of "joint holders" in the large shareholding reporting system has been submitted to the Diet. (March 2024)	
E) Solving market condition issues	- Consider information disclosure and governance for subordinate listed companies. - Regarding the reduction of cross-shareholdings, continue to follow up on the progress made in light of strengthening the discipline of information disclosure in securities reports, changes to listing maintenance standards in association with the revision of the Tokyo Stock Exchange market category, and the progress of the progress measures, and proceed to examine further measures as necessary. 【Implemented sequentially from 2023 to 2025】	- Tokyo Stock Exchange announced "minority shareholder protection and improved disclosure of information on group management" and "expected role of independent outside directors in listed companies with controlling shareholders and controlling shareholders" in relation to the disclosure and governance of information on dependent listed companies. (December 2023) - The Financial Services Agency updated its "2023 Reference Casebook of Good Practices on the Disclosure of Narrative Information" and published examples of disclosure of cross-shareholding (March 2024) - The FSA published matters to be noted in light of the results of the review of the 2023 Securities Report Review and the results of the review, and pointed out issues, etc. related to cross-shareholdings. (March 2024)	- It is important for each company to continue to take measures, including disclosure, in order to protect minority shareholders, based on the above request from the Tokyo Stock Exchange. - With regard to cross-shareholdings, it is important to verify and disclose the appropriateness of the purpose of holding them once again in light of the Corporate Governance Code

Source: FSA, Morgan Stanley Research

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(as of April 30, 2024)

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Stock Rating Category	Coverage Universe		Investment Banking Clients (IBC)			Other Material Investment Services Clients (MISC)	
	Count	% of Total	Count	% of Total IBC	% of Rating Category	Count	% of Total Other MISC
Overweight/Buy	1456	38%	343	46%	24%	645	41%
Equal-weight/Hold	1746	46%	336	45%	19%	725	46%
Not-Rated/Hold	2	0%	0	0%	0%	1	0%
Underweight/Sell	606	16%	70	9%	12%	221	14%
Total	3,810		749			1592	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

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