

Japan's
**Asset Management
Business**
2016/2017

FOREWORD **How will asset management companies
respond to structural change?**

CHAPTER 1 **Japanese investor trends**

CHAPTER 2 **Current state of
asset management business**

CHAPTER 3 **Market trends and product strategies
by client segment**

CHAPTER 4 **Challenges facing equity investment
strategies**

FOREWORD

How will asset management companies respond to structural change?

The Japanese asset management industry's growth of recent years has slowed to a crawl in 2016. Revenues and profits continued to grow in FY2015 but will likely decline in FY2016 for the first time in five years if current capital market conditions persist. Asset management companies themselves concur with this downbeat assessment according to our latest survey. Meanwhile, tectonic changes with the potential to dramatically reconfigure the industry landscape are afoot on multiple fronts. Much hinges on how the industry responds to these changes.

Big data analytics and artificial intelligence are already starting to have an impact on short-term equity investment strategies, though perhaps not appreciably yet in Japan. Computerized investment strategies are ascendant among investors seeking to profit from mispricings due to informational inefficiencies. This trend bodes ill for traditional active management. It is not a transitory fad but a game changer that will have an enduring impact on equity investment strategies. Many overseas institutional investors recognize that how they respond to such changes in the investment environment has major implications in terms of investment strategy.

Other changes now unfolding will heavily influence the Japanese investment trust business's future course. They include growth in fund wrap accounts, growing utilization of robo-advisors, DC pension plan reforms, public pension funds' ongoing investment reforms and continued growth in banks' fund holdings. Any missteps in responding to these trends could undeniably upend the asset management industry's established pecking order.

Backed by a wealth of data, research and analysis, this report accurately depicts ongoing changes in the Japanese asset management environment. How asset management companies respond to these changes could be instrumental in shaping their future. We hope asset management companies find this report helpful in formulating strategy.

Sadayuki Horie

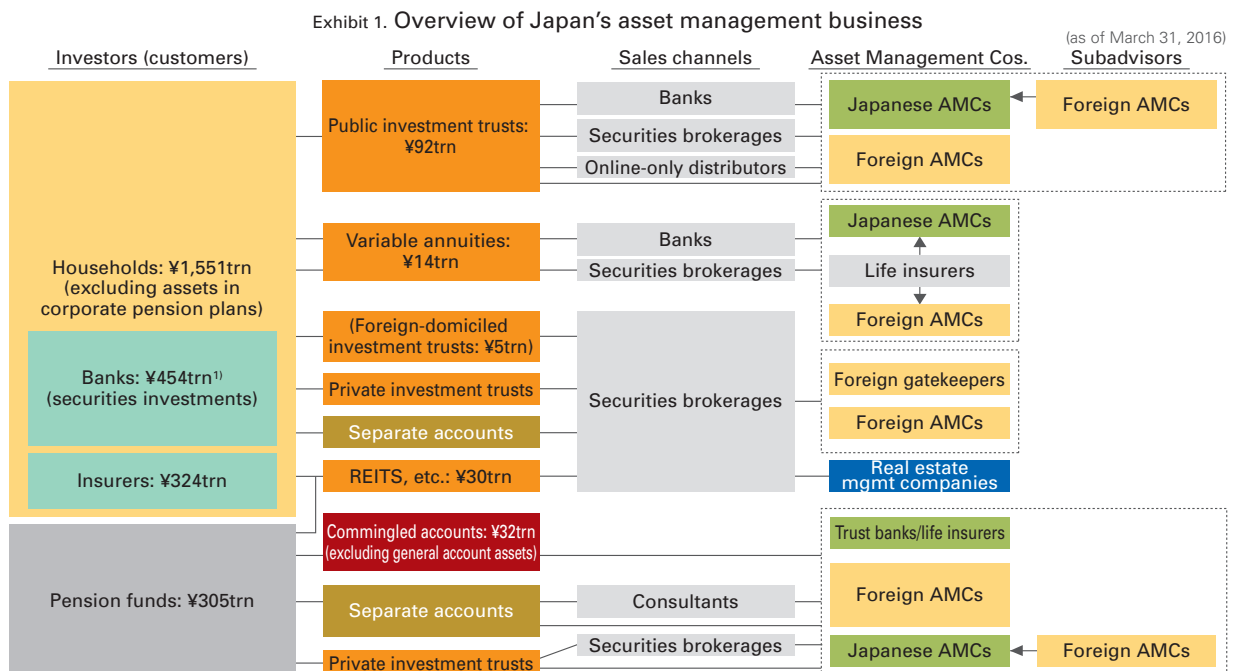
Lead author of *Japan's Asset Management Business 2016/2017*
Nomura Research Institute, Ltd.
Financial Technology and Market Research Department
November 2016

Financial asset growth streak halted

The Japanese asset management industry's growth streak dating back to 2012 stalled in 2016, primarily in response to deterioration in global capital market returns. Inflows of assets to public investment trusts, the most popular of which invest in foreign assets, have slowed, partly because the yen had been strengthening. Additionally, many pension funds incurred negative returns in FY2015. Banks' fund investments, however, have continued to grow. Assets in NISAs (Nippon Individual Savings Accounts), tax-exempt investment accounts available since January 2014, have also continued to grow, albeit at a decelerating pace. Cumulative asset

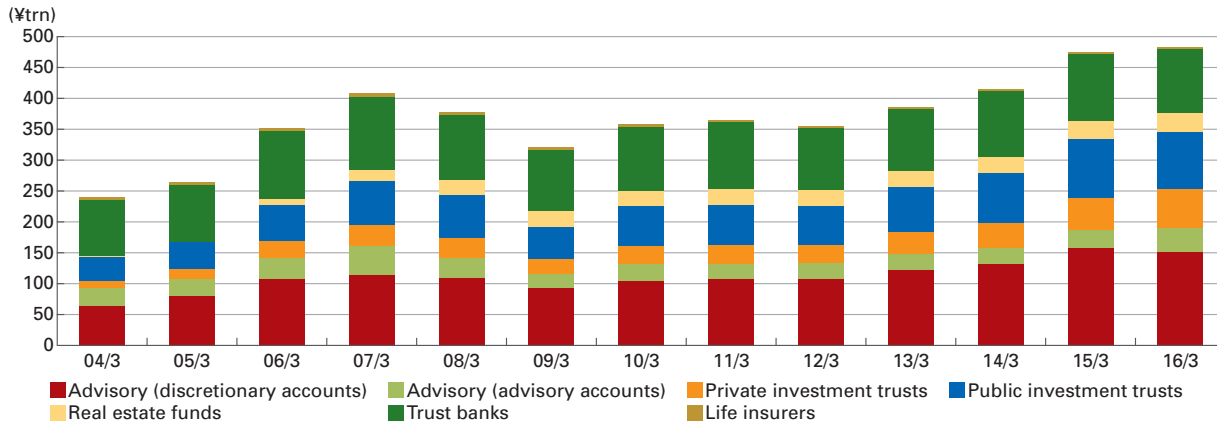
purchases in NISAs total over ¥8trn, including ¥5trn of investment trust holdings. Even amid such an adverse environment, industry-wide AUM have not shrunk, suggesting that the Japanese asset management industry may be on solid footing.

Exhibit 1 presents a simplified overview of the Japanese asset management market at March 31, 2016, in terms of products and players, the latter comprising investors, asset managers and distributors. It shows which types of asset managers manage money for which investor classes, how investor assets are allocated, and how asset flows are intermediated. Asset management companies (AMCs) in Japan mainly serve three types of clients:



Note 1: Excludes Norinchukin Bank and Zenkyoren.
Source: NRI, based on data from various sources

Exhibit 2. AMCs' AUM



Note: Life insurer AUM are DB pension asset mandates and do not include general-account assets with guaranteed returns.

Source: NRI, based on Investment Trusts Association of Japan and Japan Securities Investment Advisers Association data and financial statements in AMCs' business reports submitted to the FSA and Ministry of Finance's Kanto Local Finance Bureau

retail investors (households), corporations including financial institutions and pension funds. Adjusted to take into account that financial institutions' securities portfolios are largely funded with retail customers' deposits, Japanese investors' financial asset holdings at March 31, 2016, totaled an estimated ¥1,856trn, a ¥45trn decrease from a year earlier. Of this ¥45trn, household financial assets accounted for ¥33trn; pension assets, for ¥13trn.

The ¥1,856trn of total financial assets' professionally managed subtotal is ¥482trn¹⁾, a ¥7trn increase from a year earlier. Professionally managed assets are closing in on the ¥500trn mark and now account for 26% of total financial assets.

Developments among households, pension funds and financial institutions

Household financial assets at March 31, 2016, totaled roughly ¥1,551trn, a ¥33trn decrease from a year earlier. Their composition has remained largely unchanged, with bank deposits and insurance products accounting for over 70% of the total.

We expect lump-sum retirement benefits and monthly savings to remain key funding sources for household financial asset holdings. We estimate that together

they will account for ¥18trn of annual inflows into financial assets over the next five years. On top of this ¥18trn, we estimate proceeds from sales of households' existing equity and other asset holdings at ¥3trn annually. Of the resultant total of ¥21trn of annual financial asset inflows, we estimate that some ¥17trn, around 80%, will end up in bank accounts or insurance products. We expect the remaining ¥4trn or so to flow into risk assets, mainly equity investment trusts. Investment trust outflows in the form of dividend distributions have been gradually decreasing from a high annual run rate of ¥5trn sustained for several years through FY2014. With investment trust sponsors stepping up disclosure to customers, distributions will presumably continue to decrease, although their rate of decline is hard to predict. If investment trusts' annual dividend distributions were to fall to half of their current levels, our estimate of annual investment trust inflows net of dividend distributions over the next five years would be ¥2trn. In addition to these net inflows, we estimate based on NRI survey data that NISA inflows will continue at an annualized run rate of nearly ¥3trn for the next three years and then essentially cease altogether on a net basis during the final two years of our five-year forecast horizon, reflecting that the NISA tax-exemption is scheduled to be phased out from the fourth year onward. If 60% of NISA inflows

are invested in equity investment trusts, annual investment trust inflows via NISAs would average somewhat over ¥1trn per year for the next five years. Including these NISA-intermediated inflows, we estimate total investment trust net-inflows over the next five years at roughly ¥3trn per year.

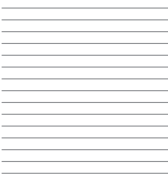
Pension funds, Japan's largest institutional investors, ended FY2015 with total assets estimated at ¥305trn. Of this total, public pension funds accounted for ¥195trn; corporate and other private pension funds, for ¥110trn, both down modestly (¥6trn and ¥7trn, respectively) from a year earlier. While the decline in total pension assets was chiefly due to negative capital market returns, the decline in corporate pension assets was largely attributable to dissolution of Employees' Pension Funds (EPFs). When EPFs are dissolved, the so-called substitutional portion of their assets is transferred to the government, to be managed by the Government Pension Investment Fund (GPIF). These asset inflows may be sufficient to offset projected growth in public pension benefit outlays. If so, the GPIF's assets may not be drawn down much for a while. The GPIF is continuing with investment reforms such as enlarging its portfolio management staff, revamping its processes for hiring and evaluating external asset managers and adopting performance-based compensation arrangements for external managers. The GPIF's ongoing reforms remain AMC's biggest focal point in the pension market segment.

Financial institutions' investment securities holdings at March 31, 2016, totaled about ¥778trn, a ¥28trn decrease from a year earlier. Of this total, banks (ex Japan Post Bank) accounted for ¥240trn, *shinkin* banks and credit unions for ¥69trn, Japan Post Bank for ¥144trn, life insurers for ¥301trn (Japan Post Insurance's share of which was ¥64trn) and nonlife insurers for ¥23trn.

While financial institutions' total security holdings decreased, banks' holdings of "other securities,"

which include funds, continued to grow in FY2015. Their growth reflects an imperative to diversify into assets offering higher returns than those available in Japan, where interest rates remain minuscule if not negative, suppressed by the BOJ's massive JGB purchases. Amid the Japanese asset management industry's recent downshift in growth, financial institutions are the only market segment with reliable growth prospects. Japan Post Bank, for example, is now building a securities investment team. Financial institutions are therefore likely to remain AMC's most important clients from a near-term business strategy standpoint.

1) With respect to trusts and life insurers, this total includes only assets managed on behalf of pension/annuity customers. In the case of life insurers in particular, the total includes only special-account balances, not general-account assets with guaranteed returns (e.g., fixed-amount insurance, fixed annuities).



1 Current state of asset management business

In this chapter, we look at the state of AMC's business based on various data, including proprietary surveys (we define AMCs as firms specializing in investment trust management and/or investment advisory services).

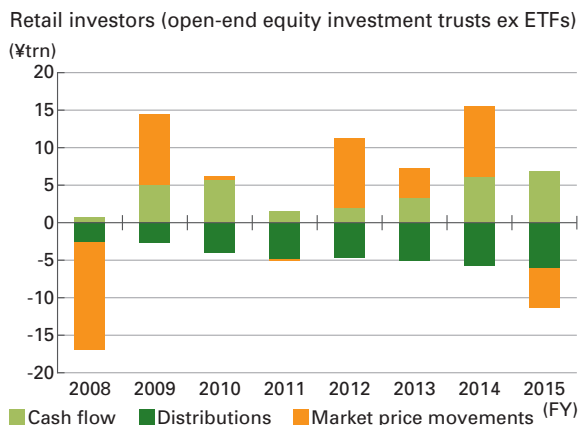
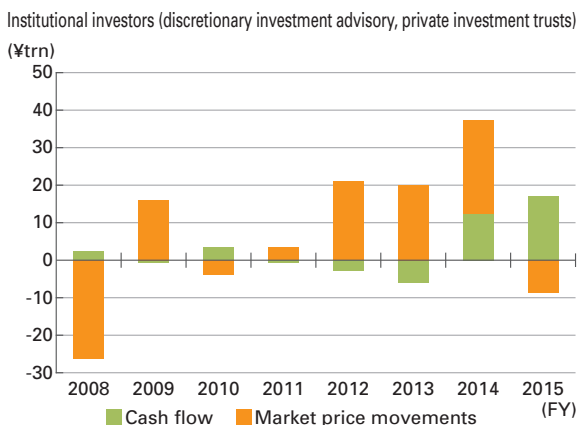
All-time record revenues by a hairsbreadth

Exhibit 3 plots annual changes in AMC's AUM disaggregated by causative factor. First, in the institutional market segment (leftward graph: total of discretionary investment advisory AUM and private investment trust AUM), adverse asset price movements reduced AMC's AUM by some ¥9trn in FY2015 in the wake of reversal of previous yen depreciation and equity market appreciation trends, both dating back to the latter half of FY2012. This

¥9trn was overshadowed by asset net-inflows of ¥17trn, most of which flowed into private investment trusts, presumably mainly from financial institutions. Financial institutions' private investment trust holdings have been growing rapidly since FY2013. Their growth appears to have accelerated in FY2015. Excluding private investment trusts' net inflows, the remainder of the institutional net-inflows mainly came from public pension funds. Private pension funds in aggregate accounted for a small net outflow of assets from AMCs in FY2015.

In the retail market segment (rightward graph: open-end public equity investment trust (ex ETF) AUM), AMC's saw net inflows (not counting investment trust distributions) of ¥6.9trn, a post-Lehman record. Distributions, however, increased to an all-time record of ¥6.0trn, net of which AMC's retail net-inflows were only about ¥1trn. Additionally, declines in assets' market value reduced AMC's retail AUM by ¥5.4trn.

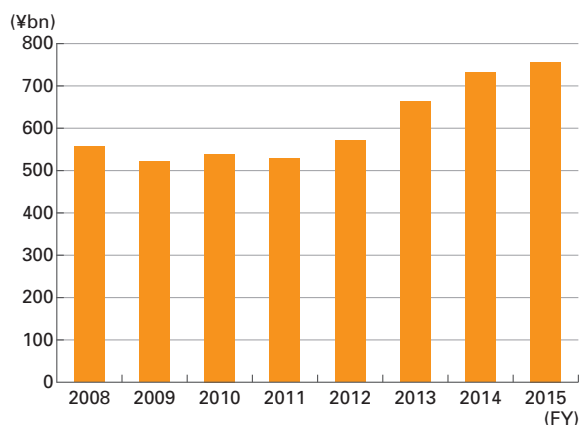
Exhibit 3. Changes in AUM broken down by causative factor



Note: Adjusted to reflect M&A and assets switched between contractual modalities.

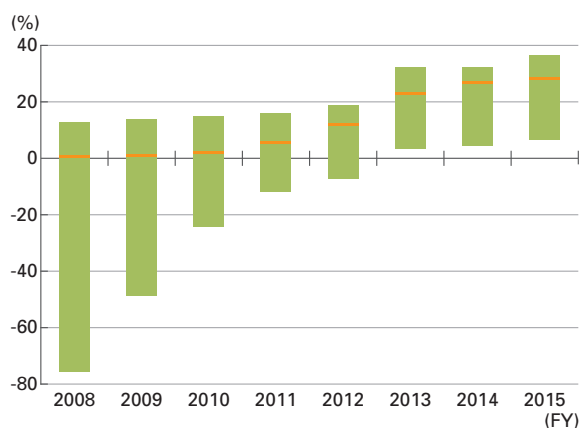
Source: NRI, based largely on data from the Investment Trusts Association of Japan, Japan Securities Investment Advisers Association and NRI Fundmark

Exhibit 4. AMC's aggregate management fee revenues



Source: NRI, based on AMC's business reports and Japan Securities Investment Advisers Association data

Exhibit 5. Dispersion of AMC's operating margins



Note: The above graph plots operating margin data for domestic public investment trust sponsors (number of AMC's in data sample varies among fiscal years).
Source: NRI, based on AMC's business reports

In the first half of FY2015, retail net-inflows were relatively steady at around ¥800bn monthly. Since mid-FY2015, however, they have slowed sharply in the wake of Chinese equity markets' precipitous sell-off in August-September 2015 followed by Japanese market weakness in early 2016.

Exhibit 4 plots the asset management industry's aggregate management fee revenues. Based on data available at time of this writing, we estimate FY2015 management fee revenues at ¥760bn, an all-time record. Despite a decline in public investment trusts' net assets, AMC's public investment trust AUM grew about 5% on an annual-average basis. This AUM growth drove AMC's FY2015 revenue growth.

Exhibit 5 plots operating margins' interquartile ranges for domestic AMC's (investment trust management companies only). Domestic AMC's median operating margin in FY2015 was 28%, slightly higher than in FY2014 and likewise an all-time record (based, like Exhibit 4, on data available at the time of this writing).

2 Outlook for asset management business

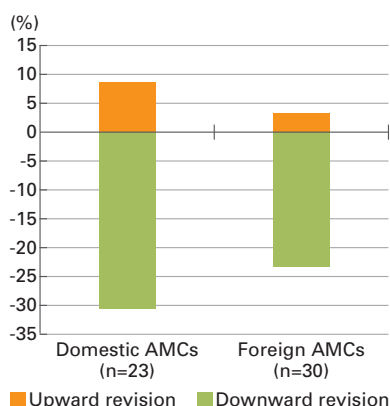
AMC's revenues and profit margins have been buoyant for several years through FY2015. Japan's major capital markets' valuations in FY2016 through the time of this writing have averaged about 10% below their FY2015 averages (in yen terms). If this valuation discount persists, AMC's revenues and profits will decline in FY2016. With retail investment trust inflows recently slowing to a trickle and public pension funds, a key source of AMC's asset inflows in recent years, now finished reallocating assets from trust banks to active managers, the overall asset management industry no longer has much prospect of major asset inflows. While demand from financial institutions has been holding up well even recently, financial institutions' tendency to concentrate their fund investments among a select few managers is unlikely to change much. In sum, the industry outlook is not optimistic.

We annually survey AMC's (*NRI Survey of Asset Management Companies' Management Priorities*²⁾) to ascertain their consensus outlook and latest business conditions. Based on the survey responses, we gauge AMC's near-term outlook for their business environment as follows.

Downshift in retail inflows has dimmed revenue outlook

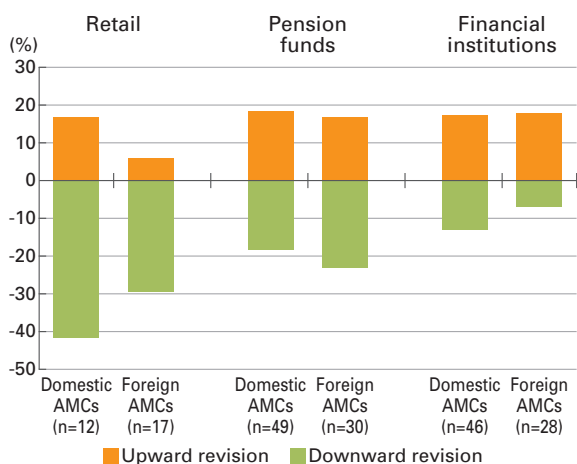
First, in terms of AMC's overall revenue outlook, Exhibit 6 plots the percentages of upwardly and downwardly revised 3-5 year revenue forecasts (i.e., projected revenue growth rate due to asset in/

Exhibit 6. Percentage of survey respondents that revised their revenue growth forecasts in 2016 relative to 2015



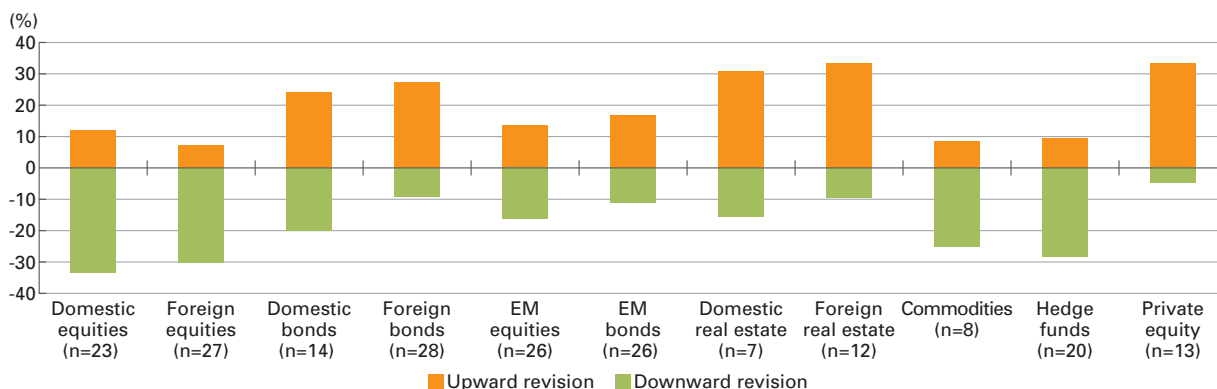
Note: Data samples are limited to AMCs that participated in survey in both 2015 and 2016, excluding those involved in mergers in the interim.
Source: NRI Survey of Asset Management Companies' Management Priorities

Exhibit 7. Percentage of survey respondents that revised their revenue growth forecasts in 2016 relative to 2015 (by business segment)



Note: Data samples are limited to AMCs that participated in survey in both 2015 and 2016, excluding those involved in mergers in the interim. Retail segment's data sample is limited to investment trust sponsors.
Source: NRI Survey of Asset Management Companies' Management Priorities

Exhibit 8. Percentage of survey respondents that revised their asset in/outflow forecasts in 2016 relative to 2015 (by asset class)



Note: Data samples are limited to AMCs that participated in survey in both 2015 and 2016.
Source: NRI Survey of Asset Management Companies' Management Priorities

outflows, excluding changes in AUM due to changes in market prices) in 2016 relative to 2015 among respondents that participated in both years' surveys. Many respondents among both domestic and foreign AMCs lowered their projected company-wide revenue growth rates in 2016 relative to 2015.

Exhibit 7 plots equivalent revenue forecast data for three market segments: retail investment trusts, pension funds and financial institutions. AMCs' revenue outlook is most pessimistic in the retail segment. In the pension fund segment, revenue forecast revisions were almost evenly split between upward and downward. In the financial institution segment, upward revisions moderately outnumbered downward revisions. Overall, the retail segment ranks worst, the financial institution segment ranks least worst and the pension fund segment ranks in between in terms of AMCs' perception of deterioration in their revenue environment over the past year. Even in the data broken down by market segment, there were no notable differences in response patterns between domestic and foreign AMCs.

Exhibit 8 plots, by asset class, percentages of 2016 survey respondents that revised their asset inflow forecasts upward or downward relative to 2015. While the respondents' forecasts for domestic and foreign equity inflows and hedge fund inflows were revised

downward on balance, their collective outlook for foreign bond inflows was more bullish in 2016 than in 2015. These changes reflect that the BOJ's negative interest rate policy³⁾ (NIRP), adopted in January 2016, has intensified demand for hedged foreign bonds not only among investors that predominantly invest in yen bonds but even in the retail segment as discussed further in Chapter III. Domestic and foreign real estate and private equity were three other asset classes on which survey respondents, though relatively few in number, were preponderantly more bullish in 2016 than in 2015.

Outlook for investment trust growth driven by NISAs and DC plans

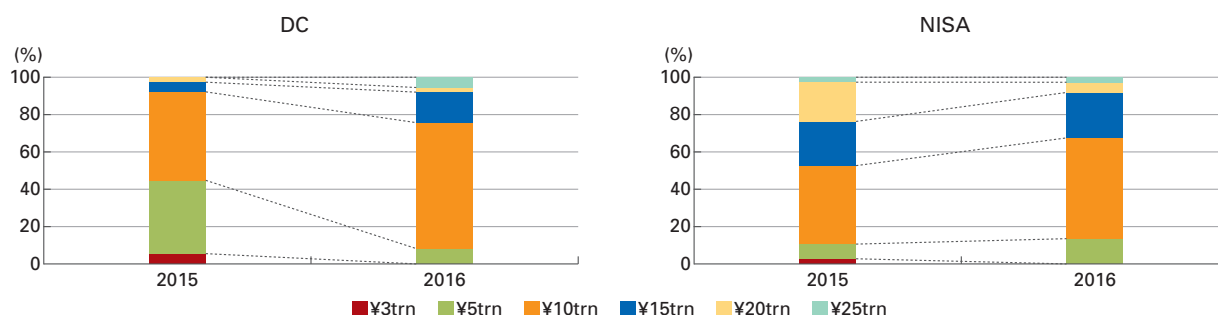
The recent downshift in overall retail investment trust inflows is undoubtedly attributable to deterioration in market conditions. Inflows via defined contribution (DC) pension plans, however, have been extremely stable even if currently small in scale. DC plan eligibility is set to substantially expand pursuant to a Defined Contribution Pension Act amendment passed in May 2016. If more pension plan participants elect to invest their retirement account assets in investment trusts by virtue of DC plans' proliferation, hitherto steady investment trust inflows via DC plans should grow. Another promising driver of growth in investment trust inflows is NISAs, the tax-advantaged investment accounts available since January 2014. Our survey asked respondents to forecast investment trust holdings in DC plans and NISAs five years hence

(i.e., at FY2021-end).

First, Exhibit 9's leftward graph plots 2015 and 2016 survey responses to this question for DC plans. Some two-thirds of the respondents projected that DC plans' investment trust holdings would grow to around ¥10trn in five years, up from ¥4.5trn⁴⁾ as of March 31, 2015, the most recent date for which the data are available. If DC-plan-intermediated investment trust inflows maintain their current run rate of roughly ¥450bn per year, DC plans' investment trust holdings would increase to almost ¥7trn as of FY2021-end. Many survey respondents thus expect investment trust inflows via DC plans to accelerate from their status-quo baseline. Meanwhile, the percentage of respondents projecting around ¥15trn of investment trust holdings in DC plans within five years roughly tripled between 2015 and 2016. Many AMC's have become more bullish on DC plans, likely in response to the aforementioned Defined Contribution Pension Act amendment.

Next, the corresponding survey data for NISAs are plotted in Exhibit 9's rightward graph. Actual investment trust holdings in NISAs at December 31, 2015, the end of the second year since NISAs' inception, was ¥3.3trn. Investment trust inflows via NISAs thus averaged ¥1.7trn annually over NISAs' first two years. If their annualized run rate were to remain unchanged over the next five years (until the end of the seventh year from NISAs' inception), cumulative inflows would grow to nearly ¥12trn.

Exhibit 9. Forecasts of DC pension plan and NISA investment trust holdings five years hence



Source: NRI Survey of Asset Management Companies' Management Priorities

However, NISAs have been granted tax-exempt status for only five years from the year in which they were opened. NISAs opened in 2014 are slated to become taxable accounts from January 2019. If investment trust inflows via NISAs were to cease from 2019, investment trust holdings in NISAs would peak in the vicinity of ¥8trn. Of the available survey responses, the base-case scenario would be “around ¥10trn” irrespective of whether or not the respondents factored in the phase-out of NISAs’ tax-exempt status from 2019. However, this response was chosen by only about half of the survey respondents. One-quarter, roughly the same proportion as in 2015, projected that NISA investment trust holdings in five years would be around ¥15trn, well above the base-case scenario. The respondents projecting ¥15trn apparently still expect NISAs to grow in prevalence and/or NISA holders to increase their investment trust purchases⁵⁾.

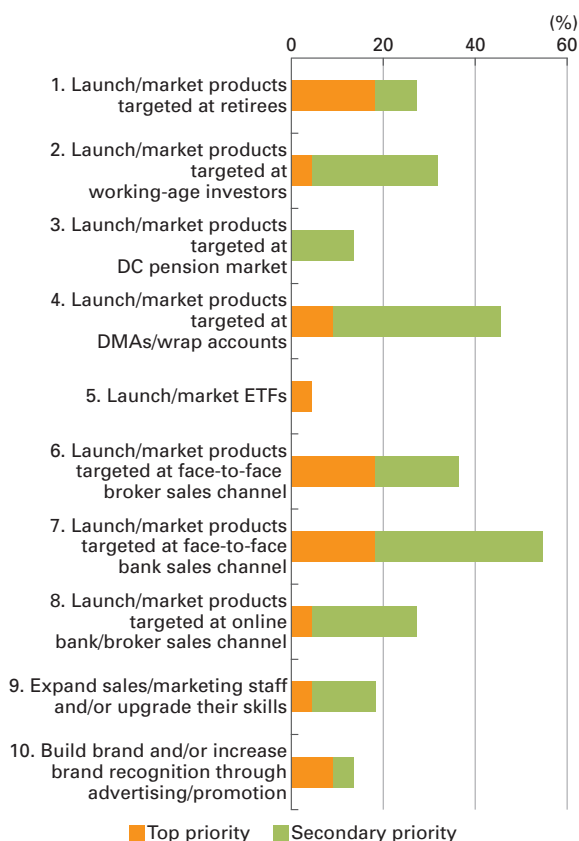
AMCs’ priorities in investment trust business

From AMCs’ perspective, investment trusts for DC pension plans and investment trusts for NISAs are distinctly different businesses. A majority of NISA assets are owned by individuals aged 60 and older. NISA holders’ age profile differs greatly from that of DC plans, which generally prohibit asset distributions until age 60. NISA holders as a whole are thus more interested in collecting dividend distributions than in long-term wealth building. Additionally, hardly any NISA holders use fund distributors’ monthly investment programs (services that automatically withdraw a certain amount of money from investors’ bank accounts monthly and purchase investment trusts in accord with a designated allocation). NISA investors’ psychology and fund distributors’ sales approaches toward NISA investors tend to be influenced by contemporaneous market performance. In this sense, NISA investment trusts are similar to conventional investment trusts marketed to taxable-account investors.

Another respect in which investment trusts marketed through DC plans differ is their impact on AMCs’ revenues. They tend to charge lower fees than conventional investment trusts for two reasons. First, DC plans’ investment options are limited to funds that the plan sponsor or administrator deems suitable for long-term wealth building. Second, the pending Defined Contribution Pension Act amendment limits the number of investment options that can be offered in DC plans. Funds offered in DC plans are thus more susceptible to price (i.e., management fee rate) competition. Although DC plans are a source of stable investment trust inflows, they are unlikely to become a core revenue source for AMCs any time soon.

Perhaps in recognition of these factors, AMCs place more priority on marketing conventional investment trusts than on expanding the DC plan market

Exhibit 10. AMCs’ priorities in retail investment trust business

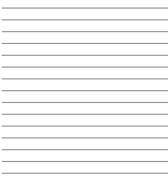


Note: Survey respondents were asked to select their top priority and up to two secondary priorities.
Source: NRI Survey of Asset Management Companies’ Management Priorities

segment. Exhibit 10 shows 2016 survey respondents' priorities in the retail investment trust business (respondents were asked to select one response as their top priority and up to two additional responses as secondary priorities). The most popular responses were initiatives targeted at the conventional investment trust sales channel via banks and brokers and initiatives targeted at wrap account providers. Few respondents selected the response regarding the DC plan market. In terms of end-investors, AMCs generally place more priority on products and marketing targeted at retirees than at working-age investors. Although AMCs expect the overall DC plan market to grow moderately, few are pursuing growth opportunities in that market.

AMCs indisputably need to generate revenues from conventional business models targeted mainly at retirees through incumbent sales channels for the time being. Additionally, how they should specifically target other channels and market segments is not readily apparent. Nonetheless, short-termism may cause AMCs to miss out on revenue opportunities in market segments they should be cultivating for their futures' sake. With new developments like DC plans expected to take a long time to take root and become key revenue sources for the asset management industry, AMCs' management should adopt a commensurately long-term perspective in making decisions and managing operations.

-
- 2) NRI has conducted this survey annually since FY2007. In 2016, NRI distributed the survey questionnaires in August and received valid responses from 69 AMCs (34 Japanese, 35 foreign) by the September deadline.
 - 3) As the name implies, NIRP is a central bank policy of setting a nominal policy rate below 0%.
 - 4) According to the Federation of Pension Plan Administrators' DC Pension Statistics for March 31, 2002, through March 31, 2015.
 - 5) The percentage of respondents that selected the extremely bullish response of "around ¥20trn" decreased by three quarters between 2015 and 2016 as respondents became more realistic in their projections.



1 Pension business

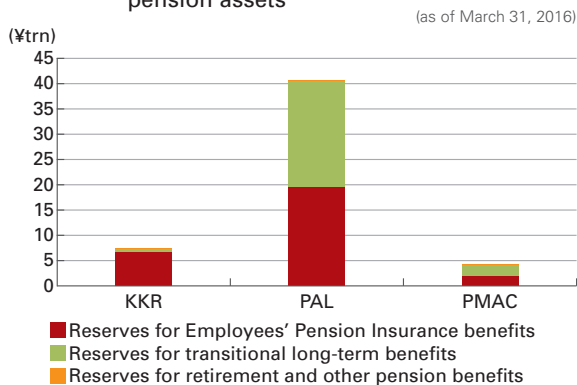
Pension assets decrease for first time in four years

Japanese pension assets at March 31, 2016, totaled an estimated ¥305trn, a ¥13trn decrease from a year earlier, their first annual decline in four years. Of this ¥305trn total, public pension schemes (National Pension, Employees' Pension Insurance and Mutual Aid Associations) accounted for some 62% or ¥195trn, a ¥6trn year-on-year decrease. Corporate pension plans and other pension schemes (National Pension Funds and the Small-scale Enterprise Mutual Aid System) accounted for the remaining ¥110trn, a ¥7trn year-on-year decrease.

Effective October 2015, employee pension benefits

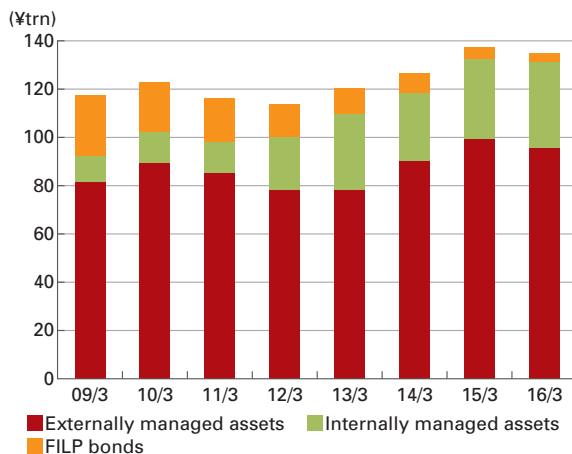
were standardized across all public pension schemes. Mutual Aid Associations' preexisting pension reserves have been segregated into Employees' Pension Insurance Scheme pension reserves (reserves for Employees' Pension Insurance benefits) and reserves formerly earmarked for so-called third-tier pension benefits (reserves for transitional long-term benefits). Additionally, Mutual Aid Associations have begun accumulating reserves for new occupation-specific benefits also (reserves for retirement and other pension benefits). Mutual Aid Association pension reserves' breakdown by category as of March 31, 2016, is shown in Exhibit 11. The total reserves are roughly evenly split between Employees' Pension Insurance reserves and the former third-tier pension reserves. Mutual Aid Associations manage some ¥52trn of pension assets, ¥28trn of which are reserves for Employees' Pension Insurance benefits.

Exhibit 11. Breakdown of Mutual Aid Associations' pension assets



Source: NRI, based on data from the Federation of National Public Service Personnel Mutual Aid Associations (KKR), Pension Fund Association for Local Government Officials (PAL) and Promotion and Mutual Aid Corporation for Private Schools of Japan (PMAC)

Exhibit 12. GPIF's AUM



Source: NRI, based on GPIF annual reports

The GPIF manages nearly all National Pension reserves and the portion of Employees' Pension Insurance reserves earmarked for benefits payable to private-sector employees. The GPIF's AUM at March 31, 2016, were roughly ¥135trn, a ¥3trn decrease from a year earlier (Exhibit 12). In FY2015, the GPIF's overall investment return was -3.8%, its first negative return in five years. Its AUM outsourced to external managers decreased roughly ¥3trn in FY2015 to ¥96trn while assets managed in-house extended their ongoing growth trend, increasing ¥2trn to ¥35trn. The GPIF's actual asset allocation at FY15-end was 39% domestic bonds, 23% domestic equities, 14% foreign bonds and 23% foreign equities, nearly identical to its model portfolio allocations for Employees' Pension Insurance reserves (35% domestic bonds, 25% domestic equities, 15% foreign bonds and 25% foreign equities).

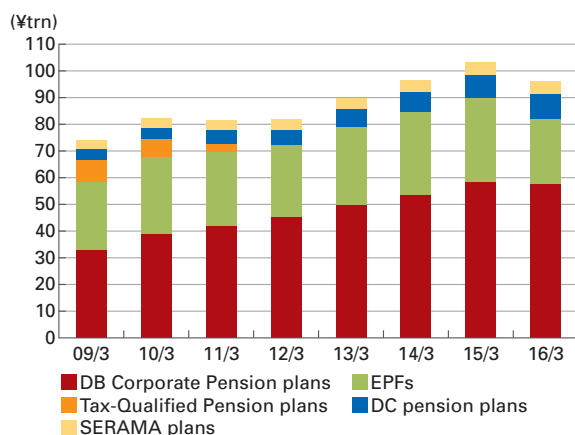
Corporate pension assets at March 31, 2016, totaled roughly ¥97trn, a ¥7trn year-on-year decrease (Exhibit 13). The reduction in assets was predominantly attributable to attrition among EPFs, 175 of which were dissolved in FY2015, leaving 256 remaining at fiscal year-end. EPF assets were reduced to ¥24trn, a ¥7trn year-on-year decrease. EPF participants decreased 1.1mn to 2.54mn. EPF dissolutions have

continued in FY16, culling the EPF population to 165 as of 30 September. Ninety percent of these 165 EPFs have received tentative permission to dissolve and transfer the substitutional portion of their assets and liabilities to the government. The number of EPFs that will ultimately survive the ongoing wave of dissolutions is estimated in the low to mid-teens.

Defined-benefit (DB) Corporate Pension plans ended FY2015 with assets of ¥58trn, nearly unchanged from a year earlier. Although their total number continued to decrease in FY2015, their total participants increased in the wake of growth in fund-type DB plans. EPFs could continue to be converted to DB Corporate Pension plans to some extent in conjunction with re-nationalization of the substitutional portion of EPFs' assets and liabilities.

Corporate DC pension assets at March 31, 2016, totaled about ¥9.5trn, a year-on-year increase of only ¥500bn, but DC plans are growing briskly in both number and enrollment. Including individual DC pension plan assets, which exceed ¥1trn, total DC pension assets were approaching ¥11trn at FY2015-end. The pending Defined Contribution Pension Act amendment passed by the Diet in May 2016 will extend individual DC plan eligibility to civil servants and stay-at-home spouses (National Pension class-3 insured) effective from January 2017. DC plans could continue to steadily grow.

Exhibit 13. Corporate pension assets

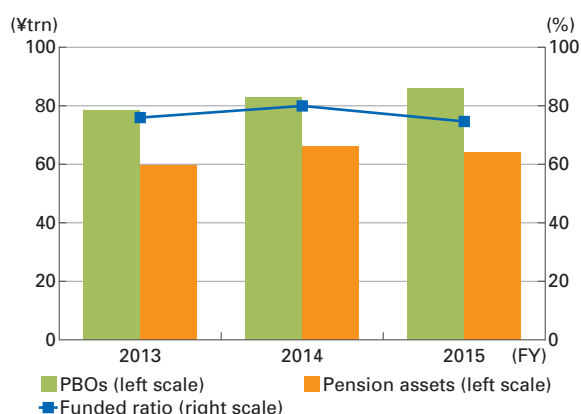


Note: SERAMA: Smaller Enterprise Retirement Allowance Mutual Aid
 Source: NRI, based on data from the Trust Companies Association of Japan, Federation of Pension Plan Administrators, and Organization for Workers' Retirement Allowance Mutual Aid

Corporate pension market segment heading into period of change

From the standpoint of pension benefit accounting, corporate pension plans' funded status worsened modestly in FY2015 as a result of market factors. Exhibit 14 shows Tokyo Stock Exchange (TSE) 1st Section-listed companies' pension assets, pension benefit obligations (PBOs) and the ratio of the former to the latter (labeled "funded status" in the graph). PBOs ended FY2015 at ¥86trn, a ¥3trn year-on-year increase attributable to 60% (927) of the companies

Exhibit 14. Corporate pension plans' overall funded status



Note: The above data pertain to 1,554 TSE 1st Section-listed companies for which FY2013-15 financial statement data are available.
Source: NRI, based on Nikkei data

having lowered the discount rate they use to calculate PBOs. Eighty-seven of them lowered their discount rates to 0% or below 0%.

Pension assets decreased ¥2.2trn to ¥64trn at FY2015-end. The decrease was due to market factors, as shown in Exhibit 15, which breaks down pension assets' change during FY2015 by contributing factor. Corporate DB plans in aggregate continue to pay benefits in excess of incoming contributions. Moreover, overall investment returns were negative (¥1.7trn loss) in FY2015. TSE 1st Section-listed companies' pension plans' funded status consequently worsened to 75%, down five points from a year earlier.

Corporate pension plans are currently heading into a period of change. First, DB plans are slated to be granted more flexibility vis-à-vis contributions. This flexibility will enable DB plan sponsors to make additional tax-deductible contributions to keep their plans financially sound even when downside risk rears its head. Ideally, DB plan sponsors would proactively shore up their DB plans in accord with this policy's intent, but other measures slated to take effect at the same time will allow them to transfer risk to employees. One such measure is the advent of risk-sharing corporate pension plans⁶⁾ in addition to

Exhibit 15. Factors behind changes in corporate pension assets

	FY2014	FY2015	Change
Beginning balance	59.2	66.0	6.8
Contributions	2.7	2.5	△0.1
Benefit outlays	△2.9	△3.0	△0.1
Investment returns	7.0	△1.7	△8.7
Ending balance	66.0	63.9	△2.2
Contributions to DC plans	0.8	0.8	0.1

Note: Unit: ¥trn. The above data pertain to 1,554 TSE 1st Section-listed companies for which FY2013-15 financial statement data are available. Due to rounding, ending balances may not exactly coincide with beginning balances plus/minus adjustments.
Source: NRI, based on Nikkei data

existing corporate DC plans. The new risk-sharing plans allow investment risk to be shared between the employer and employees. Sponsors of overfunded DB plans may choose to (partially) convert their DB plans to a risk-sharing plan or corporate DC plan instead of opting for flexible contributions.

From the standpoint of long-term investment returns, pooling pension assets in corporate pension plans is better than having individuals manage their own retirement accounts because pooled pension plans are better able to diversify, reduce costs, access sufficient expertise and utilize appropriate asset management techniques. Corporate pension plans seeking to ensure they can meet their future pension obligations even amid an adverse investment environment are looking to the asset management industry to provide effective solutions. If the industry is unable to do so, employees are likely end up individually bearing more of the investment risk involved in managing the assets that will fund much of their post-retirement income.

Another development with the potential to change the pension business environment is a pooled asset management service recently launched by the Pension Fund Association (PFA). It offers corporate pension plans a low-cost asset management solution in the form of a balanced portfolio that includes alternative investments (e.g., infrastructure, real

estate, hedge funds) and has an expected return of +2.6%, higher than many corporate DB plans' assumed rates of returns typically ranging between +2.0 and +2.5%. Many corporate DB plans may potentially use the PFA's service as a core portfolio. If the PFA's asset management service expands, it may effectively upgrade the asset management of manpower-constrained small-scale DB plans and consolidate management of their assets among fewer AMCs.

2 Securities investment by banks

Banks reduce their investment securities holdings for third straight year

According to Japan Bankers Association (JBA) data, Japanese banks ended FY2015 with investment securities holdings totaling ¥240trn⁷⁾, a ¥17trn decrease from a year earlier. Their investment securities' share of their total assets likewise declined, down 2.3 points to 23%. Banks have reduced their securities holdings for three consecutive years since the BOJ launched quantitative and qualitative easing (QQE) in April 2013. QQE was intended to spur banks to reallocate assets from JGBs to risk assets, particularly loans, but the banking industry's total deposits receivable⁸⁾ have increased since QQE's inception. In response to banks continuing to accumulate excess reserves on deposit at the BOJ instead of investing those funds in loans or risk assets in accord with QQE's intent, the BOJ adopted its NIRP in January 2016, imposing a negative interest charge of 0.1% on a portion of banks' excess reserves. Banks' deposits receivable nonetheless continued to grow even in FY2015, albeit to a lesser extent than in FY2014. City banks ended FY2015 with deposits receivable of ¥116trn (up ¥14trn year on year); regional banks with ¥21trn (up ¥2trn); second-tier regional banks with ¥4trn (up ¥200bn); and trust banks with ¥23trn (up ¥9trn). Most notably, trust banks collectively increased their deposits receivable

by a whopping ¥9trn for a second consecutive year.

Meanwhile, city banks reduced their investment securities holdings again in FY2015, ending the fiscal year with ¥117trn, a hefty ¥13trn decrease from a year earlier. Regional banks' securities holdings turned downward, decreasing ¥3trn to end the fiscal year at ¥79trn. Second-tier regional banks and trust banks ended FY2015 with investment securities holdings unchanged from a year earlier at ¥17trn and ¥25trn, respectively⁹⁾.

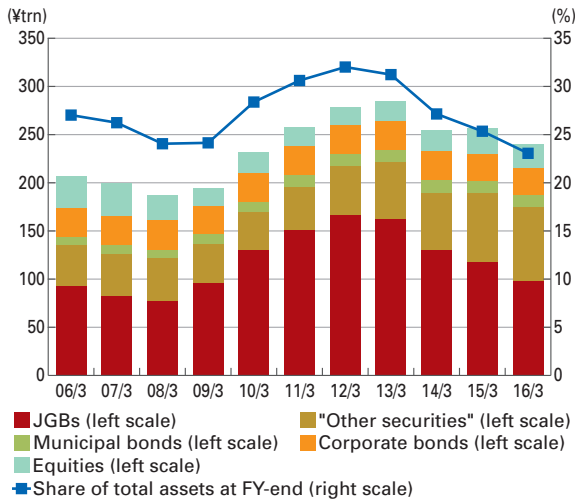
Banks' JGB holdings at a turning point

Banks further reduced their JGB holdings in FY2015 to ¥98trn, down ¥19trn year on year to the equivalent of 41% of their total securities holdings (Exhibit 16). City banks accounted for ¥14trn of this ¥19trn decrease, ending the fiscal year with JGB holdings of ¥53trn. In place of the divested JGBs, banks increased their holdings of "other securities"¹⁰⁾. Their "other securities" holdings at fiscal year-end totaled ¥77trn, 32% of their total investment securities holdings. However, banks' "other securities" increased in FY2015 by only ¥5trn, less than half of their FY2014 increase of ¥12trn.

City banks and regional banks both increased their "other securities" holdings in FY2015 by less than in FY2014. The former ended the fiscal year with "other securities" of ¥42trn (up ¥3trn year on year); the latter, with ¥18trn (up ¥2trn). Second-tier regional banks and trust banks' "other securities" holdings were unchanged year on year at ¥3.7trn and ¥12trn, respectively.

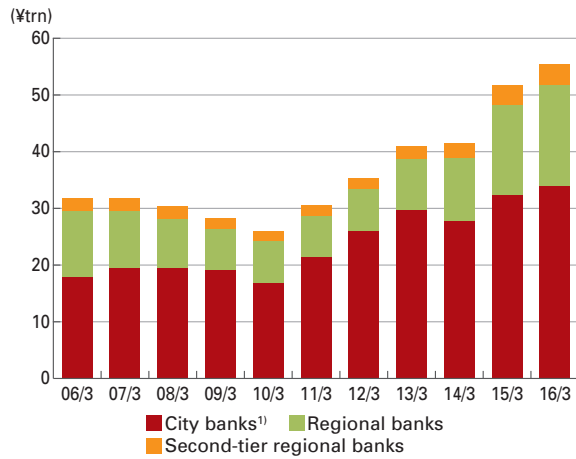
July 2016 was marked by a momentous event in terms of banks' role in the JGB market. Namely, Bank of Tokyo-Mitsubishi UFJ (BTMU) withdrew from the ranks of JGB primary dealers. It cited several reasons for doing so, including plans to consolidate JGB trading within its group and compliance with pending regulatory tightening¹¹⁾. BTMU disclosed that

Exhibit 16. Japanese banks' investment securities holdings by asset class



Source: NRI, based on JBA's *Financial Statements of All Banks*

Exhibit 17. "Other securities" holdings by bank type (excluding overseas branch accounts)



Note 1: City banks are Mizuho Bank, Bank of Tokyo-Mitsubishi UFJ, Sumitomo Mitsui Banking Corporation, Resona Bank and Saitama Resona Bank.
Source: NRI, based on BOJ's *Domestic Bank Assets and Liabilities*

it plans to also reduce its JGBs holdings, excluding JGBs held as trading collateral, over the medium/long term¹². With bank profits under growing pressure from the BOJ's NIRP, banks are grappling with how negative-yielding JGBs fit into their investment programs.

Banks continue to diversify their securities investments

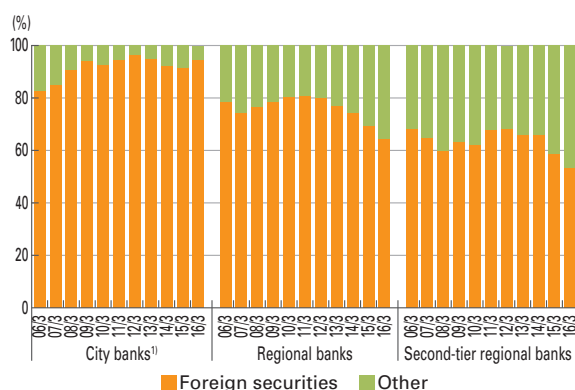
According to the BOJ's *Domestic Bank Assets and Liabilities*, banks held ¥68trn of "other securities" (excluding securities held in foreign branch accounts) at March 31, 2016. During FY2015, banks' "other securities" grew only ¥4trn, much less than their FY2014 increase of ¥12trn. Of the ¥68trn total, foreign securities accounted for ¥56trn, a ¥3trn year-on-year increase. Banks' non-foreign "other securities" holdings (e.g., funds¹³, hedge funds, structured bonds) increased ¥1trn year on year to ¥12trn at FY2015-end.

City banks and regional banks increased their "other securities" holdings in FY2015, the former by ¥2trn to ¥34trn and the latter by ¥2trn to ¥18trn (Exhibit 17). Second-tier regional banks' "other securities" holdings remained roughly unchanged

at ¥3.7trn.

Over 90% of city banks' "other securities" holdings are foreign securities, mostly foreign bonds. A December 2015 NRI survey of Japanese banks inquired about which securities the respondents had increased their holdings of since QQE's inception. The major banks' top response was foreign government bonds. In recent years, city banks and some regional banks have been progressively stepping up lending in overseas markets where credit spreads are wider than in Japan, and foreign bonds have become a popular investment option among Japanese banks from the standpoint of foreign-currency liquidity. Among regional banks and second-tier regional banks, non-foreign securities account for a larger and recently growing share of "other securities" holdings (Exhibit 18). Regional banks and second-tier regional banks' top response to the aforementioned survey question was fund products. Eighty-six percent¹⁴ of regional bank and second-tier regional bank respondents reported having increased their fund holdings since QQE's inception. In comparison to major banks, regional banks and second-tier regional banks have fewer management resources (e.g., staff, investment know-how) devoted to securities investment. To compensate, they are apparently utilizing AMC's

Exhibit 18. Composition of banks' "other securities" holdings by bank type (excluding overseas branch accounts)



Note 1: City banks are Mizuho Bank, Bank of Tokyo-Mitsubishi UFJ, Sumitomo Mitsui Banking Corporation, Resona Bank and Saitama Resona Bank.
Source: NRI, based on BOJ's *Domestic Bank Assets and Liabilities*

expertise and portfolio management capabilities as they diversify their investable universes.

Another survey question, this one directed specifically at the banks that reported investing in funds, asked what types of funds they invest in. The top responses were domestic ETFs (94% of respondents) and non-ETF domestic equity funds (94%), followed in descending order by laddered developed-market (DM) government bond funds (78%), non-laddered DM government bond funds (67%) and domestic private REITs (56%)¹⁵⁾.

Banks' securities investments going forward

With domestic interest rates gradually declining since QQE's inception, banks' outstanding loans have been slowly growing in recent years. Banks' net interest income, however, is shrinking in the wake of the further interest rate declines triggered by the BOJ's NIRP. Amid such a protracted low-rate environment, banks face an urgent imperative to rapidly strengthen their earnings foundations. In their securities portfolios, they have been diversifying into higher-yielding assets than JGBs since QQE's inception. In response to interest rates' latest NIRP-driven decline, banks have been divesting JGBs to shed yen interest

rate risk while increasingly investing in non-JGB assets, particularly foreign securities and funds. Our survey asked the fund-investor respondents about their FY2016 fund investment plans. Forty-seven percent¹⁶⁾ replied that they plan to increase their fund holdings. This percentage has presumably increased since the BOJ launched its NIRP.

Another reason for banks' growing caution toward yen interest rate risk is regulatory developments. In April 2016, the Basel Committee on Banking Supervision finalized and issued a standard entitled *Interest Rate Risk in the Banking Book* (IRRBB). The new standard will tighten the materiality threshold for identifying so-called outlier banks (banks considered to potentially have undue IRRBB) from 20% to 15%¹⁷⁾ (effective January 2018). Although the IRRBB standard will apply to internationally active banks, even Japanese banks subject to only domestic regulatory standards will be forced to pay heed to it given the magnitude of the Japanese banking industry's JGB holdings. Japanese banks will presumably continue to diversify their investment portfolios into risks other than yen interest rate risk in the aim of sustainably increasing their investment returns.

Banks' securities investment challenges

Such diversification would increase bank balance sheets' exposure to risks other than interest rate risk. Banks must transition from their hitherto JGB-centric portfolio management to portfolio management geared toward broader diversification. In actuality, however, Japanese banks, except certain major ones, lack the resources to upgrade their portfolio management capabilities to accommodate broader diversification. In response to an NRI survey question about securities investment priorities, 90% of respondents¹⁸⁾ cited upgrading and/or refining risk management as a priority. The subset of banks that are ramping up investment in fund products have been diligently upgrading their capabilities to analyze fund portfolios' overall risk and performance since

FY2015.

With banks expanding their investable universe to include foreign securities and fund products, regulators are intensifying their oversight of banks' risk management. Japan's FSA recently advised banks to beware of concentrated risk exposures to specific countries, sectors and/or asset classes in addition to yen interest rate risk exposure¹⁹⁾. The BOJ echoed this warning in its FY2016 bank examination policy. The BOJ instructed its bank examiners to check whether banks (1) identify and analyze their securities holdings and overall portfolios' risks by risk factor, (2) monitor market prices, risk exposures and compliance with risk limits as closely as warranted by their portfolio management techniques and securities holdings' risk characteristics, (3) periodically test risk measurement methods' adequacy and limitations through such means as backtesting and take corrective action as necessary and (4) have adopted risk management frameworks that function effectively throughout stress scenarios' every phase.

Our survey found that risk analysis/management support is one key service that banks expect from AMCs. Banks expect AMCs to closely communicate with them even after they have invested in the AMCs' products.

Importance of clarifying securities investment risk appetite

While securities investment is becoming an increasingly important earnings source for banks, few banks other than the major ones have adequately staffed front-offices or sufficient management resources relative to the size of their total securities portfolios. Our survey found that securities portfolios accounting for over 20% of banks' total assets are generally managed by teams of only 3-10 personnel at regional banks and 3-5 personnel at second-tier regional banks.

When a bank expands its investable universe, it must explicitly set the parameters of its risk appetite—specifically, how much of which types of risk it is willing to take, how it intends to do so and how much return it aims to earn in exchange. Currently, however, many banks tend to place priority on their target rates of return and neglect risk appetite's qualitative aspects, particularly the “how” of risk-taking. We attribute this tendency to a dearth of experience with securities investment and/or risk management thereof in the C-suites of most banks other than major ones. Many banks are consequently managing their operations from a short-term standpoint without devoting enough attention to building a business model that places securities investment alongside lending operations as a core earnings source. Now is the time for banks to clarify their medium/long-term risk appetites in terms of what types of investment products they are willing to invest in, how much of what types of risks they are willing to assume and how they plan to do so.

3 Life insurers' asset management operations

JGB holdings decrease for second consecutive year

Japan's 42 life insurers' investment securities holdings at March 31, 2016, totaled ¥301trn, a ¥1.1trn increase from a year earlier, according to the Life Insurance Association of Japan. Investment securities' share of life insurers' total assets as of the same date was 81.8%, up 30 basis points from a year earlier.

JGBs continue to account for the largest share of life insurers' investment securities holdings at 49% (¥149trn), followed by foreign securities at 26% (¥79trn), corporate bonds at 8% (¥25trn) and equities at 7% (¥20trn), all largely unchanged from a year earlier. However, life insurers' JGB holdings, which had grown uninterrupted from FY1997

through FY2013, decreased for a second straight year, down ¥200bn, despite bond price appreciation due to interest rate declines. Although life insurers are not actively shedding JGBs, they have curtailed JGB purchases. Foreign securities holdings, by contrast, continued to grow, increasing by ¥5.4trn despite yen appreciation. Domestic equity holdings decreased ¥2.9trn in the wake of equity market losses. Life insurers have been diversifying their investment strategies, reallocating assets mainly into foreign securities. With domestic interest rates falling lower than previously anticipated, such international diversification is becoming increasingly important to generating returns high enough to cover the rates of return payable to policyholders and annuitants.

Life insurers had been becoming increasingly risk-tolerant in response to growth in unrealized gains in the wake of equity market appreciation and yen depreciation, but this trend is at risk of coming to an abrupt halt. While the four biggest life insurers' net unrealized gains on securities holdings increased to ¥27trn in FY2015, boosted by declining interest rates, their net unrealized gains on holdings of "other securities" (securities other than policy-reserve-matching bonds, held-to-maturity bonds and equity holdings in subsidiaries and affiliates) decreased ¥4trn to ¥13trn (Exhibit 19). The reduction in net unrealized

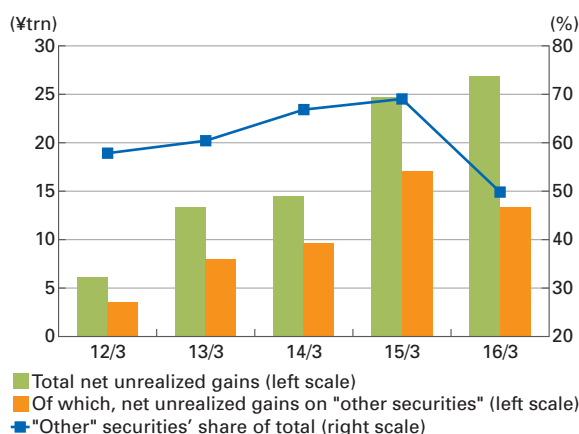
gains on these freely tradable "other securities" may prompt life insurers to dial down their risk tolerance. On the other hand, with net unrealized gains on "other securities" at FY2015-end still above their level of two years earlier, life insurers may continue to diversify their investment strategies as usual. In any case, the possibility of their risk tolerance changing in response to deterioration in the investment environment is a risk that bears monitoring.

Negative rates' impact on investment strategies

Negative interest rates are unlikely to significantly change life insurers' long-standing practice of investing mainly in fixed-income assets duration-matched to their policy reserves. Negative rates will likely have more of an impact on insurance product sales than on life insurers' asset management policies. If status-quo interest rates persist, the (currently 1%) interest rate that life insurers are required to use to calculate their policy reserves will almost certainly be lowered. Whenever this rate has previously been lowered, life insurers have adjusted their insurance premiums in response. If life insurers lower their products' assumed rates of return (in other words, raise insurance premiums), some cash-value insurance products' cash value at maturity or total annuity value may be less than the sum total of their premiums collectible. If so, life insurers would likely discontinue sales of such products.

Existing life insurance products' average assumed rate of return is currently in the 2.0-2.5% range, but it continues to decline about 10 basis points per year as new policies and annuities with assumed rates of return in the vicinity of 1% are issued and existing ones with high assumed rates of return progressively decrease. Most insurers have consequently seen previously negative spreads between their investment returns and the effective rate-of-return payable to policyholders and annuitants turn positive since FY2013. In FY2015's second half, however, life

Exhibit 19. Four biggest life insurers' net unrealized gains on securities holdings



Source: NRI, based on four life insurers' financial statements

insurers' interest and dividend income decreased as a result of domestic interest rate declines coupled with yen appreciation's detractive impact on the yen-equivalent value of foreign-source interest and dividend income. Life insurers thus face an adverse outlook in FY2016. Concerns about renewed negative spreads between investment returns and rates-of-return payable have started to reemerge.

In light of the domestic interest rate environment, life insurers will likely continue to reallocate some fixed-income assets from JGBs to foreign bonds and other higher-yielding assets. To the extent that they reinvest proceeds from maturing JGBs back into JGBs, they may continue to purchase mainly super-long JGBs. Overall, however, they may trim their JGB holdings. Life insurers have already reduced their equity holdings sufficiently. Many plan to leave their equity holdings unchanged or even increase them, though they favor foreign equities over domestic equities in accord with the market outlook.

When investing in foreign corporate bonds, government bonds and other securities, life insurers prefer countries with relatively high yields in the wake of globally declining interest rates (Exhibit 20). Successfully investing in such bonds requires know-how different from that required to invest in DM government bonds. With their investment needs

expanding beyond traditional asset classes, life insurers will presumably outsource asset management on a larger scale than previously, predominantly in credit, emerging-market equity and alternative asset classes. Life insurers had barely started to actively expand their investable universe into overseas securities markets when they encountered headwinds from yen appreciation and upward revaluation of their liabilities due to negative rates. In contrast to life insurers' largely uniform investment behavior over the past few years, their respective responses to these headwinds could very well differ as a function of differences in their financial strength.

Life insurers' in-force business, mainly life insurance policies providing death benefits, is projected to shrink over the medium term. Additionally, life insurers' standard mortality table is slated to be updated by 2020 for the first time since 2007. The revision will reduce life insurers' mortality margins over the medium term. If in-force business is further reduced by life insurers restricting sales of cash-value insurance products in response to low interest rates, their expense margins also would likely decrease. The life insurance industry has historically been supported by mortality margins and expense margins even during periods when spreads between investment returns and rates-of-return payable were negative. Going forward, however, life insurers' asset management capabilities will be tested more than ever before.

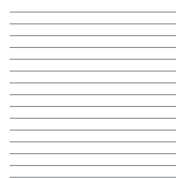
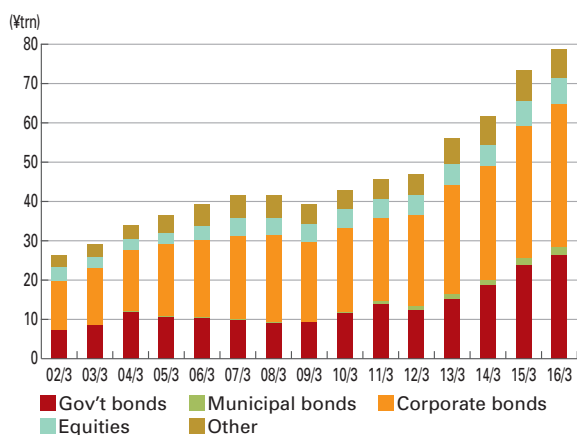


Exhibit 20. Life insurers' foreign securities holdings

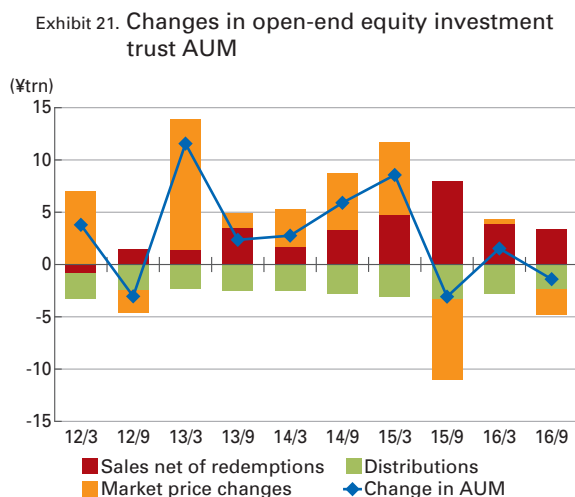


Source: NRI, based on Life Insurance Association of Japan data

4 Retail business

Open-end equity investment trust distribution channels diversifying

Public investment trust AUM as of September 30, 2016, totaled ¥88.8trn, down ¥8.3trn from March 31, 2015. Bond investment trusts accounted for ¥5.0trn of this decline. The BOJ's NIRP forced nearly all money market funds and intermediate-term JGB



Source: NRI, based on Fundmark data

funds to close down. Even some long-term bond funds have been closed down. Bond investment trusts' AUM consequently declined 30%, from ¥16.7trn to ¥11.7trn, over the 18 months through September 2016.

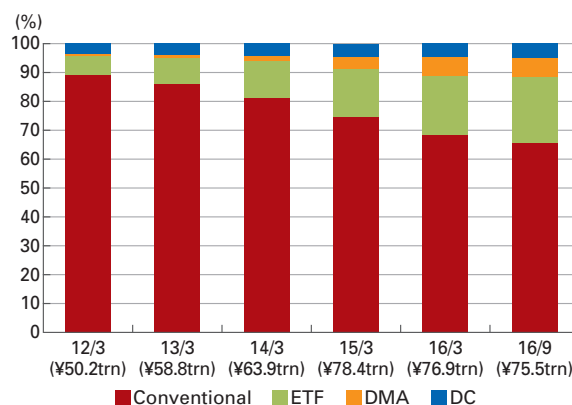
Over the same 18-month period, AUM in open-end equity investment trusts, which account for the lion's share of public investment trust AUM, decreased from ¥78.4trn to ¥75.5trn. Customer purchases exceeded redemptions by ¥15.2trn over this timeframe, but net of dividend distributions of ¥8.5trn, inflows netted to only ¥6.7trn (Exhibit 21). Meanwhile, asset price declines detracted from public investment trust AUM by ¥9.7trn. Netted against the ¥6.7trn of net inflows, this ¥9.7trn loss resulted in a ¥2.9trn decrease in open-end equity trust AUM over the 18 months through September 2016. This ¥2.9trn equates to an annualized rate of decline of not quite 4%.

Given the small decrease in AUM in open-end equity investment trusts, which generate the bulk of public investment trust management revenues, the retail market segment may appear at first blush to essentially be stagnant. Beneath the surface, however, it is indeed undergoing changes. One such change is diversification of investment trust distribution channels. Public investment trusts are

distributed through four channels: conventional ones (e.g., banks, brokerages), discretionary managed account (DMA) services, DC pension plans and public equity markets, where investment trusts are bought and sold in the form of ETFs, like listed stocks. Most public investment trusts were originated to be distributed exclusively through one of these channels. We refer to those distributed via conventional channels as conventional investment trusts, those traded on public equity markets as ETFs, and those distributed exclusively through DMAs and DC pension plans as DMA investment trusts and DC investment trusts, respectively. We can roughly calculate AUM and asset in/outflows for each category of investment trust. Exhibit 22 shows how the breakdown of open-end equity investment trust AUM among channels has changed over the past few years. The trend most evident in Exhibit 22 is that conventional investment trusts' formerly 90% share of AUM has been steadily declining. Meanwhile, ETFs, DMA investment trusts and DC investment trusts' respective shares of AUM have all been increasing year after year. The three combined now account for one-third of open-end equity investment trust AUM.

Another ongoing change in the public investment trust market is a trend toward indexation. This trend has been driven by not only growth in ETF AUM but also dramatic growth in index funds' prevalence

Exhibit 22. Breakdown of open-end equity investment trust AUM by distribution channel



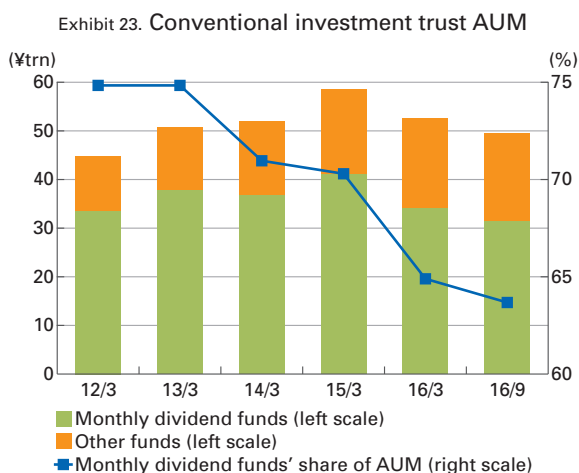
Source: NRI, based on Fundmark data

even in the other distribution channels. Below, we look at developments, including indexation, in each distribution channel in turn.

Conventional investment trusts: monthly dividend fund AUM down, indexed AUM up

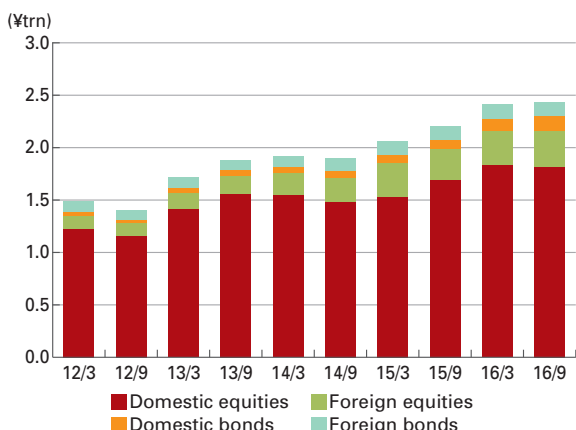
Conventional investment trusts' AUM peaked around March 2015 and has since been in a decline attributable to a steep drop in monthly dividend funds' AUM. Over the 18 months through September 2016, monthly dividend funds have seen their AUM fall from ¥41.2trn to ¥31.5trn, a nearly ¥10trn decrease (Exhibit 23). While monthly dividend funds' net inflows from customer purchases net of redemptions have recently been averaging about ¥2trn per year, their dividend distributions have been running at nearly ¥5trn per year, resulting in annualized outflows in the vicinity of ¥3trn. These trends mean that monthly dividend funds are structurally incapable of retaining their AUM in the absence of favorable market conditions. With the 60-79 year-old population said to constitute monthly dividend funds' main customers projected to gradually shrink going forward and fund distributors under scrutiny for indiscriminately pitching monthly dividend funds to customers, monthly dividend funds' net inflows may never recover to their former level.

In contrast, AUM in conventional investment trusts



Source: NRI, based on Fundmark data

Exhibit 24. Index fund AUM (conventional investment trusts)



Source: NRI, based on Fundmark data

other than monthly dividend funds grew, if barely, from ¥17.4trn to ¥18.0trn over the 18 months through September 2016. This increase is partly attributable to steady growth in index fund AUM. Index funds' share of conventional investment trust AUM (excluding monthly dividend funds) is at a 10-year high of 13.5%. Index funds are becoming increasingly variegated. Since FY2013, major AMCs and some foreign AMCs have launched subfamilies of no-load index funds with low trust fees also. These subfamilies comprise a wide variety of funds, some of which track indexes previously unfamiliar to retail investors, such as yen-hedged DM government bond and high-yield bond indexes. Index funds not in the Japanese equity asset class have consequently been outpacing Japanese equity index funds in terms of AUM growth, with their share of total index fund AUM increasing from 17.5% to 25.2% over the three and half years through September 2016 (Exhibit 24). We anticipate steady index-fund AUM growth driven partly by ongoing diversification of available fund types.

DMA investment trusts: promising growth prospects

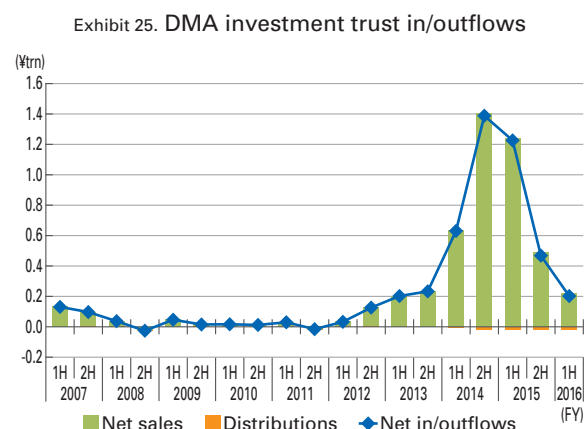
DMA is a synonym for wrap account. Because DMA services differ from other distribution channels in terms of their fee structures, AMCs offer investment trusts exclusively for the DMA channel that are distinct

from their conventional investment trust offerings. DMA investment trusts are distinguished from AMC's other retail businesses in other respects also. For example, staffing requirements differ between DMA and conventional investment trust businesses because AMCs need not provide sales assistance to fund distributors in the DMA channel.

Financial institutions that offer DMA services charge investment advisory and administrative fees, generally as a percentage of customers' account balances. DMA services are consequently gaining favor among financial institutions looking to break away from the traditional investment trust business model heavily dependent sales commissions. Until recently, DMA services had been available from only a few sources, mostly major brokerages and trust banks. Over the past year or so, online brokers and FinTech companies have been entering the DMA space in rapid succession. Additionally, new investment advisory firms have been springing up to provide fund wrap services through regional banks. DMA services' availability was previously restricted to face-to-face sales channels and geographically concentrated in major metropolitan areas, but new entrants are now rolling out DMA services across a broad range of channels throughout Japan. This trend bodes promisingly for growth in wrap account usership.

Wrap accounts include fund wraps and separately managed accounts (SMAs). The former's investment options are limited solely to investment trusts; the latter's include individual stocks and/or bonds in addition to investment trusts. The former constitutes a bigger market than the latter. Even in SMAs, investment trusts are often used to invest in foreign securities. Investment trusts are thus DMA services' predominant investment vehicle.

Net inflows to DMA investment trusts began to pick up from mid-FY2012 half and surged in FY2014 (Exhibit 25). In FY2014's second half in particular, DMA investment trust inflows spiked to



Source: NRI, based on Fundmark data

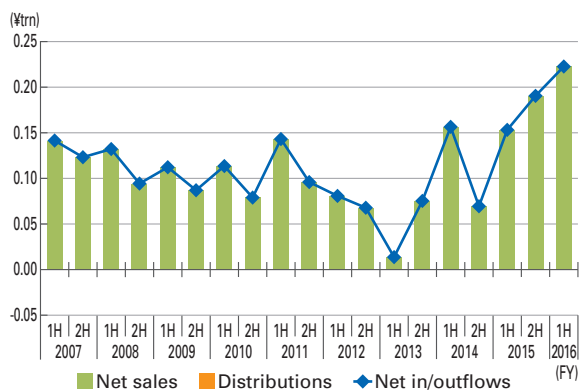
a semiannual record of ¥1.4trn. They subsequently receded once domestic and foreign asset prices turned downward from FY2015, falling all the way to ¥200bn in FY2016's first half. A distinctive feature of DMA services is periodic consultations with existing customers. These consultations' true worth in terms of maintaining customer satisfaction is being tested during the current market slump. If the consultations prove sufficiently effective at retaining customers, more financial institutions will likely enter the DMA services market.

Fee levels have become more of a focal point as the DMA services market has grown. The main fund wrap services reportedly charge investors an average of 2.2% per year, including investment advisory, investment trust management and other fees. Opinions differ on how high or low fees should be, but intensification of competition from new entrants could very well drive fees downward. If so, use of index funds in DMAs would presumably increase as a cost-cutting measure. The trend toward indexation thus could spread to DMA services also.

Steady growth in DC investment trust AUM

Investment trusts accounted for ¥4.5trn of the over ¥10.2trn of assets in DC pension plans at March 31, 2015. Funds offered exclusively in DC plans reportedly accounted for some 80% of this ¥4.5trn.

Exhibit 26. DC investment trust inflows



Source: NRI, based on Fundmark data

Their widespread prevalence reflects that their trust fees are usually lower than conventional investment trusts' because fund distributors play a more limited role in the DC channel than in conventional sales channels.

DC investment trusts have experienced continuous net inflows from FY2007 through mid-FY2016 (Exhibit 26). On a semiannual basis, these net inflows embarked on a growth trend from FY2015's first half. Their growth has been driven by growth in DC plan participants. In recent years, DC plan participants have been increasing by 400,000 annually (reaching 6.09mn as of July 31, 2016). With DC plan contributions averaging a bit over ¥10,000 per month per participant, 400,000 new participants per year equate to a ¥50bn annual increase in total contributions. DC plan participants collectively allocate about 40% of their contributions to investment trusts. This 40% allocation implies prospective growth in DC investment trusts' annual net inflows of ¥20bn per year.

Most DC investment trust offerings are index funds, reflecting a strong preference for low fees. Among DC investment trusts other than balanced funds, index funds account for three quarters of total AUM. Once the pending DC plan reforms discussed below take effect, index funds' share of AUM could increase further as a result of intensification of price

competition in the DC channel.

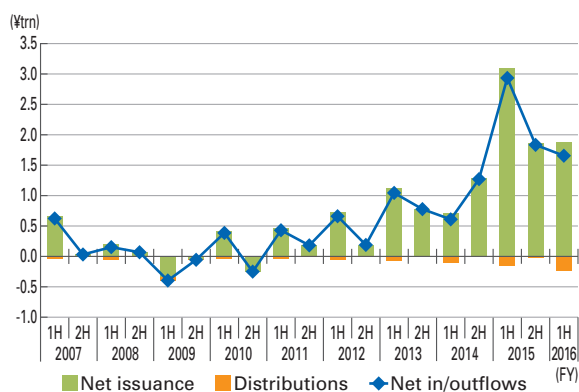
The DC plan reforms slated to take effect within the next two years are the most far-reaching since DC plans' inception in Japan. Two of the reforms will have significant impacts on the asset management industry. One is expansion of individual DC plan eligibility. The other pertains to DC plans' default investment option. First, enrollment in individual DC plans has hitherto been restricted to the self-employed and company employees without access to a workplace pension plan. Effective from January 2017, employees of companies with corporate pension plans, civil servants and even nonworking spouses will become eligible to enroll in individual DC plans. In response, financial institutions throughout Japan are expected to step up promotion of individual DC plans. Second, a safe harbor provision is slated to be added to rules regarding DC plans' default investment option (the investment product in which contributions are automatically invested when a DC plan participant has not expressly designated an asset allocation) to encourage DC plan sponsors to designate investment trusts as their plans' default investment option instead of the principle-guaranteed products (e.g., savings deposits) that have hitherto been DC plans' universal default investment option. Any investment trusts designated as default options will likely be low-risk ones such as balanced funds or target-date funds.

While the pending reforms will indisputably benefit the asset management industry, individual DC plans and use of investment trusts as the default investment option are unlikely to rapidly gain widespread prevalence. The reforms' beneficial impact on the industry will therefore likely take quite a while to fully manifest.

ETFs facing competition's from index funds

In recent years, ETFs have grown more rapidly than any other class of investment trusts. ETF AUM as

Exhibit 27. ETF in/outflows



Source: NRI, based on Fundmark data

of September 2016 totaled ¥17.3trn, a 6.5-fold increase from five years earlier. ETFs in aggregate have experienced net inflows in every semiannual period since FY2011's first half. Their semiannual net inflows grew to ¥2.9trn in FY2015's first half before leveling off in the vicinity of ¥1.7trn over the next two periods. (Exhibit 27). These inflows predominantly stemmed from the BOJ. The BOJ tripled its annual ETF purchases from ¥1trn to ¥3trn in late October 2014 before doubling them to ¥6trn in July 2016. The BOJ's appetite for ETFs is not shared by city banks, regional banks or foreign investors, the three of which increased their ETF holdings in FY13-14 but, unlike the BOJ, not since.

Retail investors' ETF holdings also have been growing since FY2012, albeit mostly by virtue of equity market appreciation. Net inflows to ETFs from retail investors have been negligible. For retail investors' ETF holdings to grow, the retail ETF-owning class must expand but its growth prospects are constrained by headwinds from the indexation trend in the other three channels.

ETFs currently are used by retail investors as mainly short-term trading vehicles. To capture demand from not only short-term traders but also investors interested in long-term wealth building, the ETF complex needs a broader product line-up and more competitive fee rates. Although the ETF universe has been expanding in recent years, it still does not

Exhibit 28. Trust fee rates of lowest-fee index funds by asset class

Asset class	Domestic ETF	Conv. IT	DMA IT	DC IT
Domestic bond	N/A	0.13%	0.14%	0.10%
Domestic equity	0.06%	0.17%	0.18%	0.15%
Foreign DM gov't bond	0.10%	0.17%	0.18%	0.15%
Foreign DM gov't bond (currency hedged)	0.10%	0.20%	0.30%	0.26%
Foreign DM bond (including credit)	N/A	0.64%	N/A	N/A
EM bond (USD)	N/A	0.60%	N/A	N/A
EM bond (local currency)	0.35%	0.12%	0.53%	0.52%
Foreign DM equity	0.06%	0.20%	0.21%	0.16%
EM equity	0.15%	0.29%	0.35%	0.55%
Frontier equity	0.95%	N/A	N/A	N/A
High-yield bond	-	0.40%	N/A	N/A
J-REIT	0.16%	0.28%	0.26%	0.55%
Global REIT	N/A	0.30%	0.30%	0.53%
Commodities	0.45%	0.40%	0.24%	-

Note: IT: investment trust. N/A (not applicable) means that no index fund is available in that asset class through that distribution channel.

Source: NRI

encompass all asset classes typically owned by long-term investors (Exhibit 28). While ETFs' trust fees are generally low, they no longer differ much from DMA, DC and conventional investment trusts' in the wake of low-fee index funds' growing prevalence. When an ETF is illiquid, any cost advantage would be further diminished by the market impact of trade execution. The Financial System Council is currently deliberating on expanding ETF sales to the bank channel, but given ETFs' insufficient advantage over conventional index funds, sales channel expansion is unlikely to lead to growth in retail ETF ownership.

In last year's edition of this report (*Japan's Asset Management Business 2015/2016*), we noted the importance of retail investors recognizing that investment trusts are a vehicle for saving for the future. Toward that end, we recommended that fund distributors transition to AUM-based revenue models and offer diversified investment trust portfolios that generate stable returns. As mentioned above, no-load index funds with low management fees have started to gain broad popularity and DMA services' growth is reaccelerating. These trends imply that

fund distributors are indeed transitioning to AUM-based business models and doing better at offering diversified portfolios. Over the past year, the investment trust business has not grown as rapidly as we had envisioned but it is definitely on track toward AUM growth.

5 Product market trends by client segment

We have created product opportunity maps for three investor segments (retail, pension funds, and financial institutions) based on data from our Survey of Asset Management Companies' Management Priorities. These maps plot the strength of investor demand for various products (as assessed by AMCs) against the products' current availability (assessed based on the number of providers that offer each product). They are useful for identifying promising products (strongly demanded products offered by few providers (upper left quadrant)) and competitively disadvantaged products (poorly demanded products offered by many providers (lower right quadrant)). Exhibit 29 presents our product opportunity maps for a subset of products.

First, in the retail investor segment, domestic and foreign REITs remain highly ranked on the demand scale (vertical axis) for a second consecutive year. Periodic-dividend funds likewise continue to rank highly, though their ranking has slipped somewhat over the past several years. These products' rankings reflect retail investors' income needs and are consistent with fund inflow data. Another product with a high demand ranking is actively managed foreign equity funds. Their ranking is consistent with certain theme funds' recently heavy inflows. Meanwhile, currency-hedged foreign bond funds are ranked much higher on the demand scale in 2016 than in 2015. Although the BOJ's NIRP has suppressed the entire yield curve, retail investors have not necessarily been affected by negative rates. The increase in retail demand for currency-hedged foreign bond funds

even without any inducement from negative rates could be because such funds are few in number and/or are used by fund distributors to stimulate retail demand.

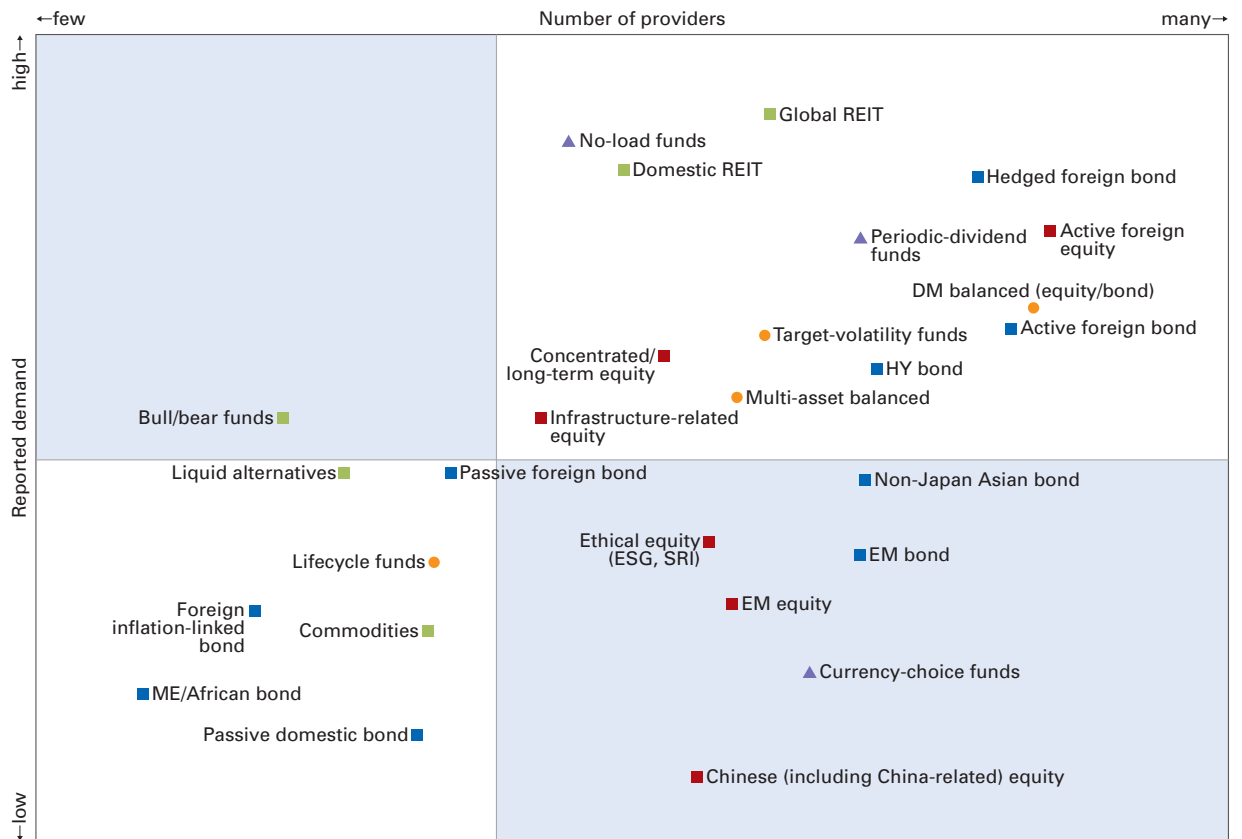
Investors directly affected by the BOJ's NIRP are those with domestic bond holdings, namely pension funds and financial institutions. In the pension fund segment, currency-hedged foreign bond funds' demand ranking was much higher than in 2015 while core-plus bond funds maintained a high demand ranking. These rankings reflect pension funds' need for a substitute for domestic bonds in their asset allocations. Additionally, survey respondents reported strong demand for other products (e.g., aggregate bond funds, industrial bonds) that could be utilized in foreign bond investment strategies. The pension fund segment's demand rankings make sense when one considers that, as a result of de-risking, DB Corporate Pension plans on average already have larger foreign bond allocations than domestic equity or foreign equity allocations.

In the financial institution segment, foreign bond and currency-hedged foreign bond funds were both ranked higher on the demand scale than previously. Other highly ranked products include high-yield (HY) bonds, bank loans and mezzanine strategies. Financial institutions continue to seek yield and diversify away from yen interest rate risk. Domestic real estate also has a high demand ranking. In equity asset classes, market-neutral/long-short funds were highly ranked whereas long-only equity products were ranked much lower than in 2015.

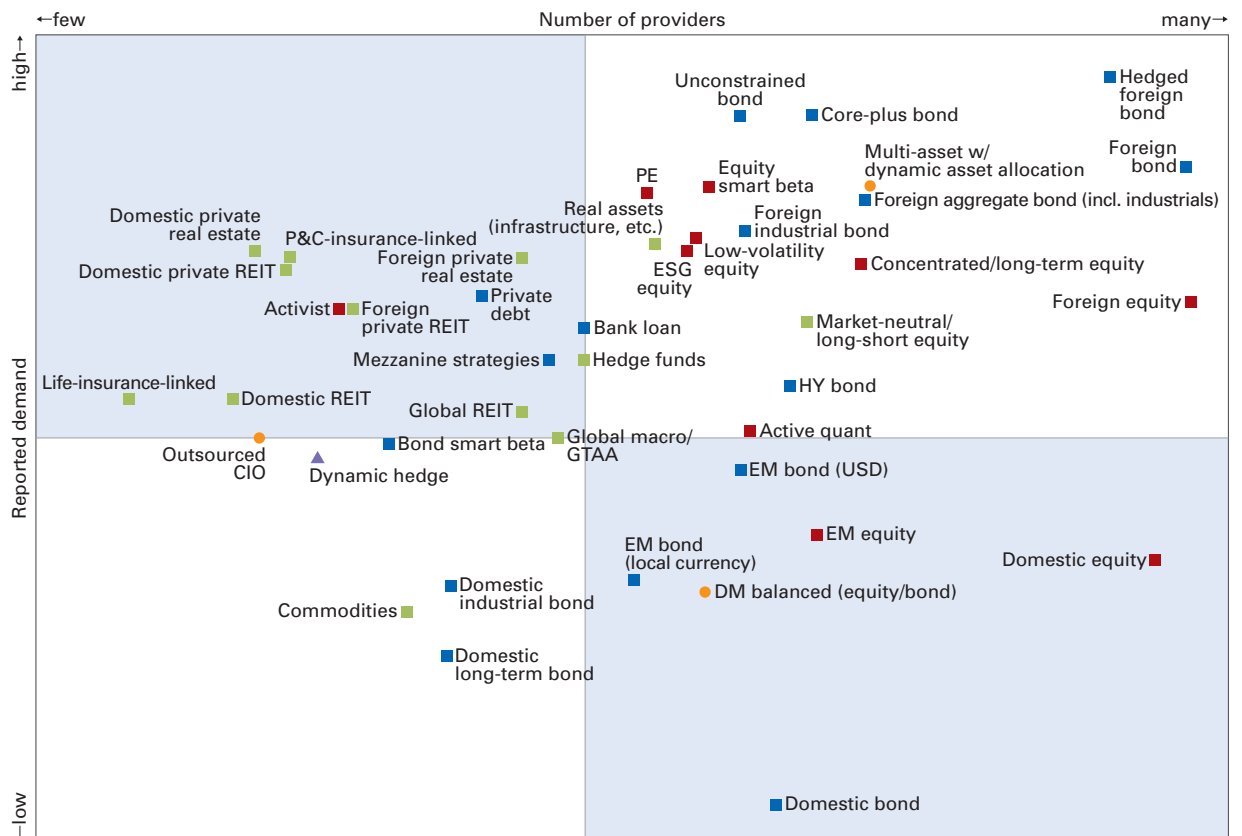
In sum, currency-hedged foreign bond funds' demand rankings were higher in 2016 than in 2015 across all three segments. A number of other products (e.g., multi-asset) also were highly ranked in all three segments. Demand rankings were more similar across segments than in previous years.

Exhibit 29. Product supply and demand maps by client segment

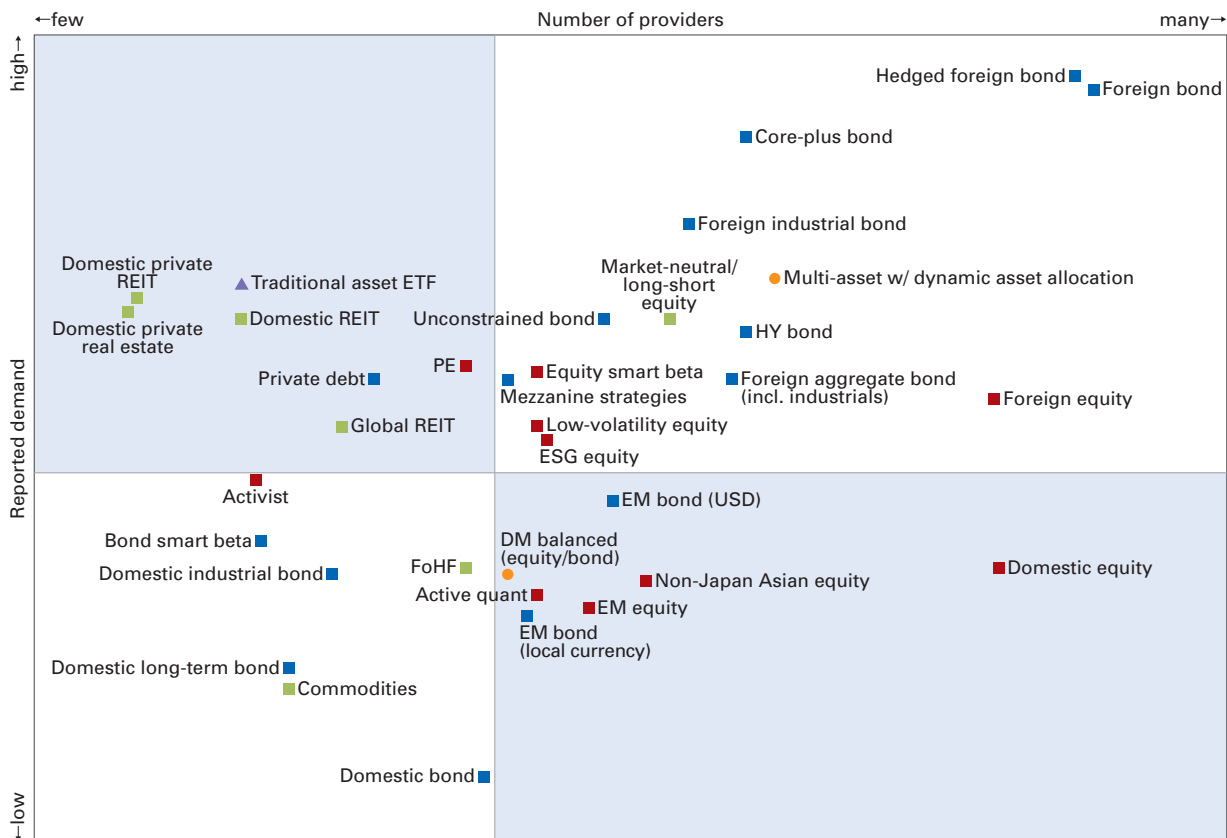
(a) Products for retail investors



(b) Products for pension funds



(c) Products for financial institutions



Note: The vertical scale is an indexed scale of the strength of demand from clients (based on AMCs' assessment of demand). The horizontal scale represents the number of AMCs that offer the product (scaled by number of providers not by value).

Source: NRI, based on *Survey of Asset Management Companies' Management Priorities*

- 6) With risk-sharing corporate pension plans, the plan sponsor's downside risk is capped and benefits are subject to reduction if investment losses exceed the cap. Pension assets are managed collectively, but sponsors would likely be able to move pension liabilities off balance sheet under certain conditions.
- 7) JBA data includes overseas branch accounts.
- 8) Deposits receivable are deposits held at the BOJ, Japan Post Bank, and other financial institutions in addition to negotiable deposits receivable.
- 9) The JBA total differs from the sum of the city bank, regional bank, second-tier regional bank and trust bank subtotals because it includes Shinsei Bank and Aozora Bank's securities holdings also.
- 10) "Other securities" are foreign securities and domestic securities other than JGBs, corporate bonds, municipal bonds and equities.
- 11) Such regulatory tightening included the Basel Committee on Banking Supervision's *Interest Rate Risk in the Banking Book* standard published in April 2016 (effective January 2018) and a proposed increase in government bonds' risk weight for regulatory capital purposes.
- 12) According to a July 14, 2016, *Nikkei* article (online edition).
- 13) Fund holdings reported by banks. Some financial institutions report fund holdings as the funds' underlying assets based on look-through information.
- 14) Out of 36 valid responses (n=36).
- 15) n=36.
- 16) n=36.
- 17) Ratio of IRRBB to Tier 1 capital.
- 18) n=39.
- 19) FSA, *Progress and Assessment of Strategic Directions and Priorities 2015-2016* (September 2016).

Challenges facing equity investment strategies

Changing equity investment environment

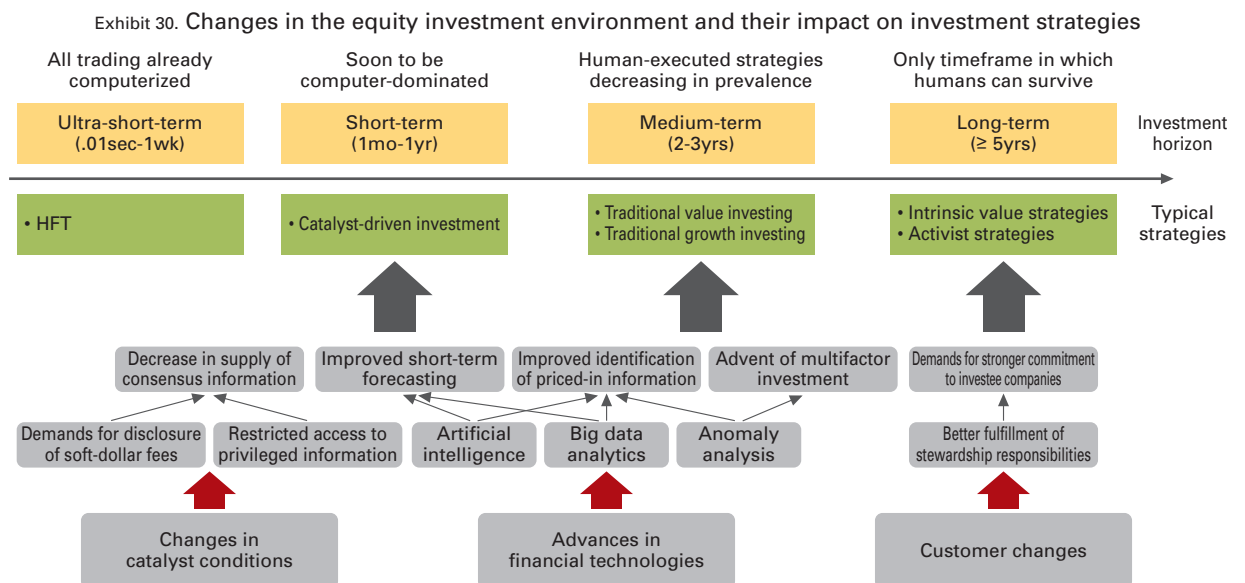
To cap off the above overview of Japan's asset management industry based on statistical and survey data, we lastly look at two matters of importance to many AMC's: incipient changes in the equity investment environment and their impact on investment strategies. While artificial intelligence and robotics' impact on human employment has been a hot topic recently, portfolio managers' jobs will be affected by other recent developments. We expect these developments to lead to major changes in equity investment strategies also.

Exhibit 30 summarizes changes in the environment surrounding equity investment strategies and the impacts thereof. It broadly classifies these changes as changes in catalyst conditions, advancements in

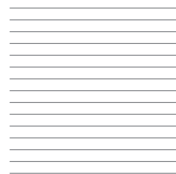
financial technologies and customer changes.

Impact of reduction in consensus information

First, changes in catalyst conditions are changes in conditions that give rise to some sort of catalyst that affects stock prices (e.g., companies' quarterly earnings reports, changes in analysts' consensus estimates, M&A events, changes in business plans). For example, the Japan Securities Dealers Association's recently released draft guidelines on securities analysts' interactions with the companies they cover and communication with investors could reduce the prevalence of the earnings preview commentaries that analysts have hitherto published in advance of companies' quarterly earnings reports. Additionally, proposed fee disclosure regulations



Source: NRI



under consideration in Europe would require AMCs to disclose a breakdown of the trading commissions and research-related fees that they pay to brokers. With these proposed regulatory changes yet to be finalized, their impact is hard to predict, but AMCs' access to research and other information from brokers could change substantially. Brokers may pare down the services they provide to AMCs. Meanwhile, AMCs have started to scrutinize the content of various reports they receive from brokers and are considering insourcing at least some such research.

These changes will likely have a major impact on equity investment/trading strategies with a time horizon of one year or less. Many such strategies involve forecasting share price performance through comparison of consensus information priced into stocks and proprietary information. Access to consensus information is essential to trading stocks. If the amount of various consensus-related information published by brokers and investment banks decreases in response to the changes we are discussing here, portfolio managers would lose trading opportunities. Reduction in such information's availability would make it more difficult for portfolio managers to analyze the information embedded in stock prices and, in turn, likely reduce portfolio managers' incentive to trade. Such a reduction in short-term trading could lead to decreased market liquidity.

Impact of advances in financial technologies

The second change is the impact of advancements in financial technologies. We will look at such advancements in the context of two broad trends: utilization of unstructured data and analysis of market anomalies.

Analysts have hitherto modeled stock prices and valued companies based on structured data such as historical financial information or share price data.

Today, however, unstructured data is increasingly being utilized by virtue of advancements in artificial intelligence and big data analytics. Examples include analysis of voluminous social media content, textual analysis of companies' annual reports and/or regulatory filings, and analysis of point-of-sale data, satellite data or video of CEOs' media appearances. Such analyses enable investors to more accurately assess company activities in real time. Improvement in forecasting accuracy with respect to not only individual companies' sales and profits but also macro variables such as GDP, interest rates and commodity prices is starting to have a major impact on short-term investment strategies.

According to AMCs that have successfully utilized such technologies to generate superior returns, computers are supplanting humans in swiftly and accurately ascertaining what information is currently priced into stocks. Voluminous information, execution speed and analytical capabilities are regarded as crucial building blocks of short-term investment strategies. In all three of these respects, computers already vastly overpower humans.

For portfolio managers whose investment process involves forecasting short-term price movements as a core skill, identifying discrepancies between information embedded in market prices and proprietary information in their possession is a source of investment insight. Such managers must develop a unique investment perspective to outperform computers in terms of both information availability and discernment of information embedded in market prices. Even if they do so, however, their investment perspective would sooner or later likely be replicated by a computerized algorithm and lose its edge.

Another financial technology trend is analysis of market anomalies. First, fundamental indexes designed to rectify inefficiencies in capitalization-weighted indexes have increased since the turn of the millennium. Second, various factors have been

identified through pursuit of inefficiencies in humans' investment behavior, leading to growth in so-called smart beta strategies. Much money is already invested in smart beta.

While such investment strategies may or may not prove successful in the long run, decomposition of returns into their constituent root-level sources has already become a mainstream strategy for not only equity investment but asset allocation also. If the sources of value investing and/or growth investing strategies' excess returns can be explained by certain factors, it is only natural for such traditional strategies to be supplanted by lower-cost smart beta strategies, as is already happening in large pension funds' portfolios. Even among investment strategies with investment horizons of up to 2-3 years, currently mainstream strategies based on human judgment may be supplanted by strategies based on various quantitative analytics.

Customer changes and their impact

Lastly, AMC's customers, not all but some, are changing in ways that will affect equity investment strategies. Initiated by big institutional investors like the GPIF, such change has had little impact to date but is worth noting because it might spread to other customers.

Specifically, asset owners like AMCs and pension funds are being called upon to play a bigger stewardship role in the aim of increasing their medium/long-term investment returns on behalf of their customers or beneficiaries through a stronger commitment to their investee companies. However, institutional investors with a short-term investment orientation would be hard-pressed to fulfill such stewardship responsibilities. Indeed, short-term investment strategies are virtually incompatible with stewardship.

With short-term equity investment strategies,

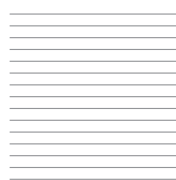
investors' primary focus is forecasting share price performance. Buying cheap stocks and selling richly valued stocks are the sources of short-term strategies' returns. The type of information most pertinent to short-term share price performance is the catalyst information discussed above. While catalysts have implications in terms of companies' long-term intrinsic value, their informational content tends to predominantly consist of short-term (e.g., quarterly or annual) operating performance data. Any difference between such data and the corresponding consensus forecasts could have a major impact on share price performance. Short-term earnings forecasting is thus a short-term investor's primary job. Such short-term forecasting differs vastly from stewardship.

With long-term equity investment strategies, by contrast, investors must accurately assess companies' long-term intrinsic value. Doing so requires a deep understanding of investee companies and their business environment as well as constructive engagement with the companies' management. Executing a long-term strategy is the proper approach to pursuing better medium/long-term returns.

If pension funds and/or other institutional clients demand that AMCs fulfill their stewardship responsibilities, AMCs would be compelled to change their investment strategies. For active managers, such a change would mean a shift from short-term to long-term strategies. Even passive managers, instead of merely buying and holding a benchmark index's constituent stocks, may have to take action to spur large companies with a chronically subpar profitability to proactively improve their earnings.

Recommendations for AMCs

The above discussion mainly pertains to the three changes' impact on equity investment strategies, but advancements in financial technologies could have a major impact on not only equity but also bond



investment strategies. Bond investment strategies can be broadly classified into those based on analysis of individual companies and issues' creditworthiness and those based mainly on forecasts of monetary policy and/or macroeconomic variables. The former are varied, ranging from buy-and-hold strategies to trading strategies that seek to profit from changes in credit risk premia by forecasting credit rating migrations. Specific examples of newly emerging investment strategies based on macroeconomic forecasting include strategies that utilize GDP forecasts based partly on changes in cities' nocturnal luminosity as measured by orbiting satellites. Computerized analysis of similarly unconventional data may be applicable to forecasting credit rating migrations also. If so, human judgment may be subordinated to computerized algorithms even in credit risk analysis.

What is clear from our discussion thus far is that competitive conditions are changing dramatically for certain types of investment strategies and AMCs that persist with business as usual would be at risk of losing competitive advantage and, in turn, customers. In equity asset classes, the changes discussed above could have a major impact on short-term investment strategies in particular. Even in fixed-income asset classes, such changes may affect investment strategies that involve forecasting macroeconomic variables or near-term credit risk.

AMCs need to take action on various fronts. In short-term equity investment strategies, they must utilize a much broader range of data than they have previously. In-house ownership of all data sources and analytical capabilities is not feasible. AMCs may, for example, have to actively purchase data and analytical services from unstructured data providers. Equally importantly, AMCs should recruit personnel with quantitative analysis expertise and rebuild investment strategies targeted at specific niches in which they can differentiate themselves.

AMCs may need to also rebuild their long-term equity investment strategies, as we recommended in last year's edition of this report. In the wake of recent advancements in financial technologies, including artificial intelligence, many forecasting techniques involving unstructured (e.g., textual) data mining are being developed but none, as far as we know, for assessing companies' long-term intrinsic value. If pension funds ask AMCs to better fulfill their stewardship responsibilities, AMCs could see an increase in long-term equity mandates from pension funds. Given how long building a skill set generally takes, AMCs might be well-advised to form specialized teams to address such issues.

Long-term investment strategies based on human judgment are undergoing major challenges. They will likely be progressively encroached upon by computers over time. AMCs must boldly adapt to such changes in the environment and differentiate themselves from competitors. AMCs of course differ in terms of their respective strengths. Whichever path they choose, however, they will undoubtedly have to develop new investment strategies to thrive in a competitive environment vastly different from what they have hitherto known.

Author's Profile



Japan's Asset Management Business 2016/2017

Date of Issue	December 28, 2016
Publication	Nomura Research Institute, Ltd., Otemachi Financial City Grand Cube, 1-9-2 Otemachi, Chiyoda-ku, Tokyo 100-0004, Japan http://www.nri.com/global
Publisher	Hajime Ueda
Editor-in-Chief	Kenichi Hikita
Editing	Financial IT Marketing Department
Inquiries to:	Financial IT Marketing Department focus@nri.co.jp



Japan's

Asset

Management

Business

2016/2017