NRI

Financial Services in Japan 2019/2020

Nomura Research Institute, Ltd.

PREFACE

We have written this report as food for thought on the future of financial businesses from the standpoint of how to add value to financial services in the digital age. It is intended primarily for financial institutions' executives and sales and marketing staff.

Since 2006, we have been publishing *Japan's Asset Management Business* as an offshoot of our monthly Financial IT Focus publication to provide annual updates on the Japanese asset management industry as it evolved toward greater diversity and increasingly complex service models.

With accelerating structural change now blurring boundaries between financial industries, the time has come to broaden our focus to the financial sector as a whole. From this year, we are launching a new annual report, *Financial Services in Japan*, covering not only asset management but also banking, securities broking/dealing and insurance.

Digitalization is reshaping industries globally. The financial sector is no exception. Digitalization is fundamentally changing financial businesses by rendering previously unfeasible services feasible, mainly in terms of channels of contact with customers. The public is now able to conveniently invest even small amounts of money. Fees are steadily decreasing even as account balances grow. FinTech has enabled personalized services while prompting financial institutions to drastically downsize branch networks and sales forces. Financial institutions are facing fresh competition from online platforms and new entrants from other sectors. Financial infrastructure and regulations are being revamped in response to restructuring of financial businesses. With financial business models undergoing such dramatic changes, it is important to think deeply about financial services' ultimate mission instead of merely focusing on the technologies and digitalization trends that are driving the changes. In our inaugural edition of *Financial Services in Japan*, we have gone back to basics and analyzed the Japanese financial sector's current environment to identify opportunities to add value to financial services in the digital age.

We hope you find our report valuable.

Takashi Kawai
General Manager
Financial Market & Innovation Research Department
Nomura Research Institute, Ltd.
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Introduction

Competitive pressures bearing down on Japan's financial sector

1 Banks and broker-dealers' earnings continue to decline

Of the five financial industries covered in this report, the banking and securities industries are in the midst of multiyear profit declines. Bank earnings, being largely a function of asset and liability balances, are relatively stable, though banks' net business profits are down 40% from their most recent peak in FY2011 (see top graph on page 3). The securities industry, where earnings are prone to volatility driven by financial and capital market trading volumes' variability, is faring even worse. Its aggregate operating profits have fallen to one-third of their most recent peak hit in FY2013.

Banks' protracted earnings slump is mainly attributable to domestic net interest margin compression due to chronic shrinkage in loan demand and a prolonged low interest rate environment stemming from accommodative monetary policy. The securities industry's earnings downturn has been driven largely by two factors. First, the prolonged low-rate environment has reduced bond trading profits, depressing proprietary trading operations' earnings power. Second, earnings from investment product sales also have decreased, mostly because brokers have toned down their previously aggressive promotion of selected funds, mainly monthly dividend funds, in response to an FSA directive to better align product offerings with customers' interests. The FSA's advocacy of customer-first business practices reflects that helping individual investors to achieve post-retirement financial security has become an important part of the securities industry's societal role. In sum, banking and securities industries' earnings slumps are both due to a lack of progress in realigning business models with an aging society and a slow-growth economy.

The nonlife insurance industry is likewise facing challenges. Nonlife insurers have collectively incurred underwriting losses in four of the past 10 years, most recently in FY2013. While nonlife insurance underwriting has since been profitable for five straight years, underwriting profits have been volatile. They are under pressure from large-scale natural disasters, in contrast from the factors weighing on banks and broker-dealers' earnings. What all three industries have in common, however, is that they are beset by structural headwinds.

2 Life insurers and asset management companies' earnings holding up well

Life insurers and asset management companies are outperforming banks, broker-dealers and nonlife insurers in terms of earnings stability. Life insurers' core profits grew for a third consecutive year in FY2018, recovering to just shy of their FY2014 all-time peak. Mortality gains, the biggest of the three components of life insurers' core profits, is growing by virtue of increases in Japanese longevity, which reduce death benefit payouts relative to actuarial assumptions embedded in the insurance policies that account for the bulk of life insurers' in-force business. Mortality gains should keep growing as long as the average lifespan continues to lengthen. If so, life

insurers' core profits also could continue to grow for a while.

Asset management companies (AMCs) collectively earned near-record operating profits in FY2018. Total operating profits of AMCs that belong to the Japan Investment Trusts Association (most of which run investment advisory businesses in addition to managing investment trusts) nearly matched their FY2017 all-time record level in FY2018. AMCs should benefit from steady growth in AUM, mostly in public investment trusts, including ETFs, DCIO (defined contribution investment only) funds and funds offered exclusively in fund-wrap accounts. AUM growth should in turn drive growth in the asset management industry's earnings, provided that management fees remain at current levels.

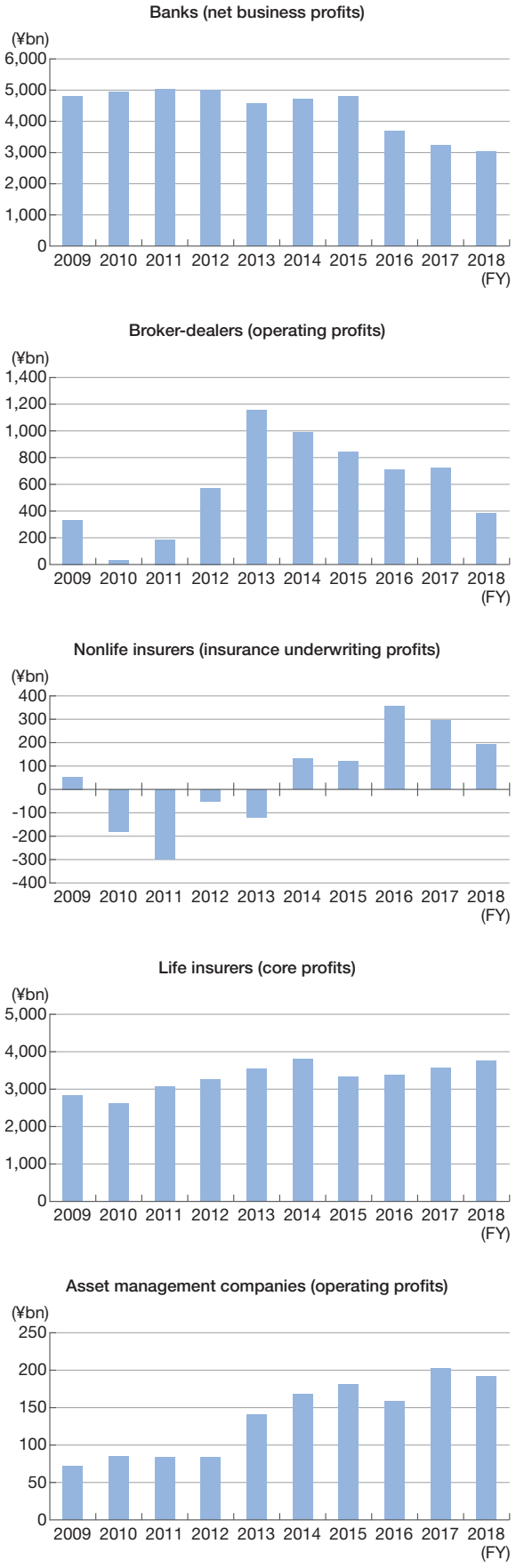
3 Competition set to intensify across financial sector

While current conditions thus differ among financial industries, one commonality is that all five industries are expected to face intensified competition going forward.

Given finance's core supporting role in modern economies, society has come to expect stable access to financial services. Financial industries are therefore tightly regulated and closely monitored. Such regulatory scrutiny has historically posed a high barrier to entry that has kept new entrants almost entirely at bay. Competition among incumbents has consequently been milder in the financial sector than in most other sectors.

However, not even the financial sector is shielded from the digitalization trend that is engulfing almost every industry globally. Digitalization is spawning innovative, individualized services by enabling data-driven insights into individuals' thought processes and behavior. Tech startups are starting to offer financial services in adjunct with their own core services.

Exhibit. **Five financial industries' aggregate profits**



Source: NRI, based largely on Japanese Bankers Association, Japan Securities Dealers Association and Hoken Kenkyujo data and investment trust management companies' financial disclosures

Although many such emerging financial services are distantly peripheral to current financial sector incumbents' core services, their advent has prompted incumbents to start deploying digital technologies in their core businesses, unleashing fresh competition from within the financial sector.

Such initiatives are happening in all five of the financial industries covered in this report. We touch upon specific examples when discussing each industry individually. In many cases, they involve building ecosystems in collaboration with players from other sectors or personalizing products or services. While such initiatives are steadily expanding financial services' overall availability, they often reduce unit revenues through competition. To offset the resultant loss in revenue, some incumbents are seeking to add more value by combining digital services with person-to-person services. These companies aim to increase user satisfaction through such means as equipping their sales personnel with digital technologies and/or incorporating human support into digital services. The common link among all such initiatives is that they leverage the competitive advantages of incumbents staffed with human resources possessing a wealth of experience in the service domain in question.

Competition will inevitably intensify even within the financial sector, most likely to the detriment of profit margins. While some incumbents may wish to avoid competition as much as possible, healthy competition ensures that consumers' needs are met and drives corporate growth by expanding demand. Last but not least, it is also conducive to development of industries as a whole.

CHAPTER
1 Banks accelerating business model restructuring

1 Banks' earnings power continues to languish

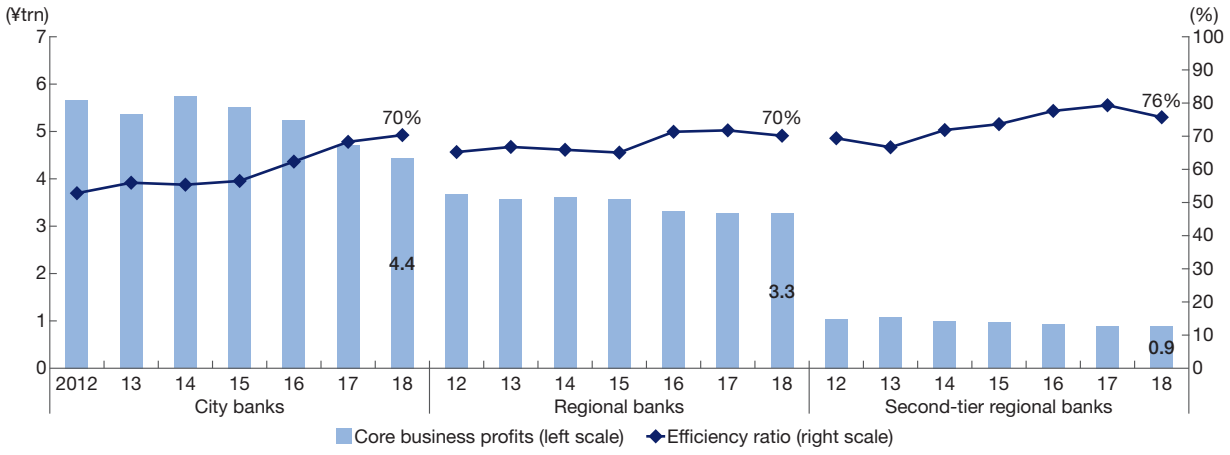
In July 2019, Chiba Bank and Bank of Yokohama, both of which primarily serve the lucrative Greater Tokyo market, announced an alliance. The alliance between two of the biggest Greater Tokyo-based regional banks bespeaks how adverse Japan's banking environment has become. The BOJ's April 2019 Financial System Report warned that Japanese banks' domestic deposit-taking and lending operations, both of which are central to financial intermediation, continue to decline in profitability even as the overall financial system remains stable. The BOJ largely attributed the decline to two structural factors–diminishing growth expectations and secular contraction in loan demand in the wake of population shrinkage–in addition to Japan's protracted low interest rate environment. The BOJ went on to recommend that banks strengthen their earnings power as a top priority.

Japanese financial regulators have recently become increasingly concerned about bank profitability because even though banks are adequately capitalized today, there is no assurance they will accumulate enough retained earnings to maintain capital adequacy into the future if their earnings power remains chronically depressed.

According to Japanese Bankers Association (JBA) data, city banks[1)] have collectively seen their gross business profits decline for four consecutive years through FY2018. Their FY2018 gross business profits were down ¥300bn year on year to ¥4.4trn. Regional banks (excluding second-tier regional banks; likewise below) saw their gross business profits decline for three straight years through FY2017 before roughly leveling off at ¥3.3trn in FY2018. Second-tier regional banks' gross business profits dropped to ¥900bn in FY2018, their fifth straight down year in a row.

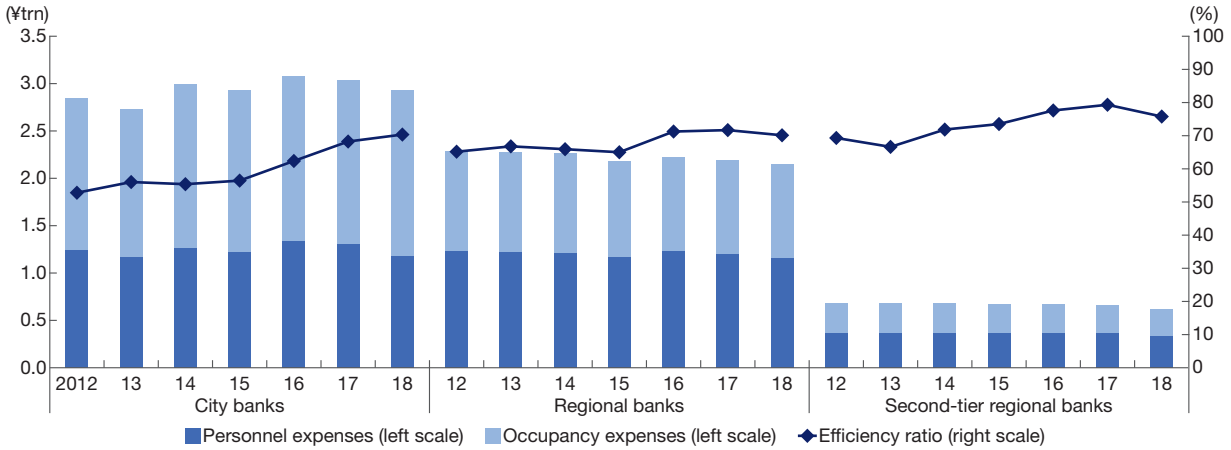
Meanwhile, efficiency ratios (overhead expenses ÷

Exhibit 1-1. **Gross business profits by bank type**



Source: JBA

Exhibit 1-2. **Operating expenses (excluding taxes) by bank type**



Source: JBA

gross business profits[2]) have continued to rise across all three bank subsectors. This trend, a reflection of banks' inability to cut overhead fast enough to offset their gross business profits' decline, is another symptom of banks' adverse environment. Among the three subsectors, second-tier regional banks had the highest (worst) FY2018 efficiency ratio at 76% versus 70% for both regional and city banks. Regional and second-tier regional banks' efficiency ratios turned downward in FY2018 while city banks' kept rising.

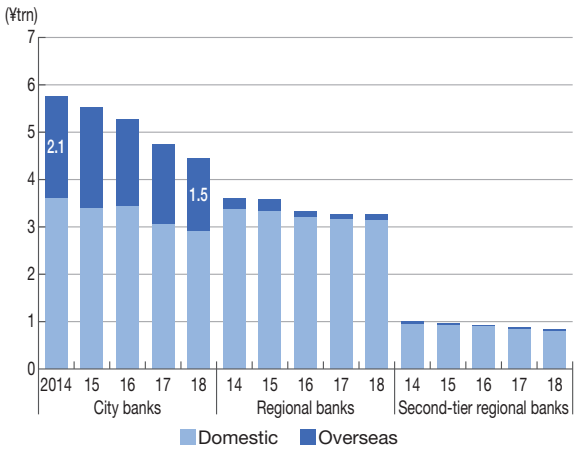
The directional divergence between city and regional banks' FY2018 efficiency ratios reflects that both of the two main overhead expense line items (excluding taxes)–personnel expenses and occupancy expenses–have been growing since FY2014 at city banks while decreasing since FY2012-13 at regional and second-tier regional banks in the wake of their ongoing cost-cutting. We assume city banks' growing overhead expenses are attributable to expansion of their branch networks not only overseas but in Japan also. Although city banks reduced their personnel expenses by over ¥100bn in FY2018, their efficiency ratio continued to rise as a result of the aforementioned ¥300bn decrease in their gross business profits. In contrast, regional banks and second-tier regional banks' efficiency ratios decreased modestly in FY2018 but unfortunately not enough to offset their gross business profit declines.

Additionally, personnel cost-cutting is lagging behind occupancy cost-cutting in all three subsectors, corroborating the long-standing perception that banks' rigid HR regimes are an impediment to overhead cost-cutting.

2 City banks' prospects not at all rosy

Being active internationally, city banks purportedly have better earnings prospects than regional financial institutions[3] with predominantly domestic operations because they have the option of expanding overseas. However, such conventional wisdom is refuted by data on the three subsectors' respective gross business profits disaggregated between domestic

Exhibit 1-3. **Domestic and overseas gross business profits by bank type**



Source: JBA

and overseas sources.

City banks' international gross business profits, a major source of incremental earnings in the first few post-GFC years, have been declining since FY2015[4]. In FY2018, they totaled ¥1.5trn, down from ¥2.1trn in FY2014.

The BOJ's April 2019 Financial System Report said major Japanese financial institutions should upgrade their risk management capabilities as a key priority in light of (1) their increased sensitivity to overseas market stresses in the wake of growth in their overseas exposures and (2) their growing credit exposure to higher-risk borrowers against a backdrop of intensification of competition with foreign financial institutions and persistently elevated foreign currency funding costs. While major financial institutions must urgently improve their overseas risk management to continue generating stable earnings from their overseas operations, doing so entails various difficulties, including recruiting the requisite human resources, gaining know-how and upgrading IT systems and other infrastructure.

3 Cost-cutting and proactive investment initiatives

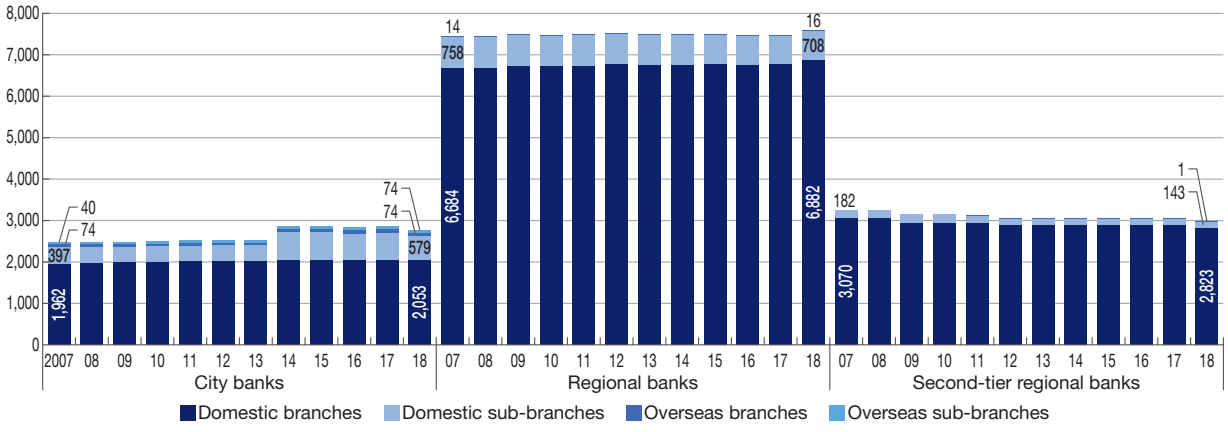
Broadly speaking, banks have two earnings growth levers at their disposal. The first is cost-cutting; the second, cultivation of new markets and/or development of new services. Following is a look at city banks and regional financial institutions' initiatives from the standpoint of these two levers, based on JBA data.

Branch network rationalization initiatives

Overseas banks often seek to shore up their earnings during recessions or earnings downturns by drastically rationalizing their branches. To see how Japanese banks compare to their foreign counterparts in this respect, we look at their cost-cutting initiatives focused on their branch networks, which account for the bulk of their operating expenses.

Second-tier regional banks have been the most aggressive in terms of branch network rationalization (Exhibit 1-4). From FY2007 to FY2018, they reduced their total domestic branch count from 3,070 to 2,823 and domestic sub-branch count from 182 to 143. Overall, they streamlined their collective physical footprint from 3,252 to 2,967 locations, a decrease of 285. Regional banks, by contrast, collectively expanded from 7,456 domestic locations (6,684 branches + 758 sub-branches) in FY2007 to 7,606 (6,882 + 708) in FY2018, an increase of 150. Through FY2017, they added more full-sized branches while reducing mini-branches as their earnings continued to decline. In FY2018, however, they resumed

Exhibit 1-4. **Bank locations by bank type**



Source: JBA

adding more mini-branches, presumably because technological innovations and reductions in branch-level costs have enabled them to rationalize back-office operations to a previously unfeasible extent.

City banks also significantly expanded their domestic footprints, collectively growing over the FY2007-18 timeframe from 2,359 to 2,632 locations, an increase of 273. While increasing their domestic branch count by only 91 from 1,962 to 2,053, city banks nearly doubled their domestic sub-branch count from 337 to 579. The sharp increase in sub-branches was attributable to SMBC's net addition of 325 sub-branches in FY2014. Since the GFC, major city banks have been expanding their overseas operations in response to a prolonged low interest rate environment domestically and a demographically driven decline in loan demand. Their domestic expansion was accompanied by overseas expansion, with their overseas branches increasing by 34 from 114 in FY2007 to 148 in FY2018 and their overseas sub-branches more than doubling over the same timespan from 31 to 74, an increase of 43.

The data suggest that domestic banks have been upgrading their offices' sales functions to offset a decline in net interest income through growth in fee/commission revenue, rather than radically revamping their branch networks. While well aware of the need to rationalize branch networks to improve operating efficiency, Japanese banks currently appear to be grappling with indecision over specifically which branches to shed and which to retain.

Proactive investment initiatives to cultivate new markets or develop new services

Banks are not standing idly by as their domestic net interest income dwindles. They have been rolling out new products and services and cultivating new markets through innovative alliances and collaborations. Recent examples of partnerships between competitors-turned-allies include Chiba Bank and Bank of Yokohama's aforementioned alliance announced in July 2019 and a non-branch ATM sharing arrangement between MUFG Bank and SMBC that was unveiled in September 2019. Bolder initiatives include Fukuoka Financial Group's August 2019 launch of a mobile-only bank, the first ever by a Japanese regional bank.

To get a clearer picture of banks' investment behavior over the past several years, we analyzed how much of their investment cash flows were spent to acquire fixed assets based on consolidated cash flow statement[5] data published by the JBA (Exhibit 1-5). Of 108 banks in the data sample, 66 spent less on fixed asset acquisitions in FY2017 than in FY2015, presumably largely because of investment cutbacks in response to declining earnings.

When we looked at how much cash was spent on property, plant and equipment (PPE) versus fixed

Exhibit 1-5. **Investment cash flow spent on acquiring fixed assets**

1. Banks that increased/reduced cash spent on acquiring fixed assets

	Increased spenders	Reduced spenders
City banks (5)	2	3
Regional banks (62)	26	36
Second-tier regional banks (41)	14	27
Total (108)	42	66

1-1. Banks that increased/reduced cash spent on acquiring tangible fixed assets

	Increased spenders	Reduced spenders
City banks (5)	2	3
Regional banks (62)	22	40
Second-tier regional banks (41)	13	28
Total (108)	37	71

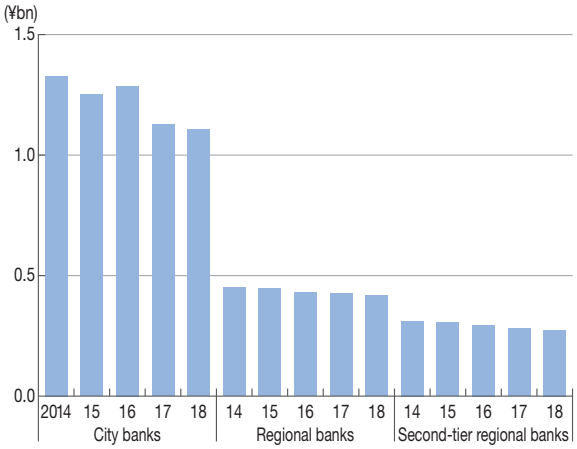
1-2. Banks that increased/reduced cash spent on acquiring intangible fixed assets

	Increased spenders	Reduced spenders
City banks (5)	3	2
Regional banks (61)	33	28
Second-tier regional banks (36)	17	19
Total (102)	53	49

Source: JBA

intangible assets, we found that 71 of the 108 banks reduced spending on PPE acquisitions between FY2017 and FY2015 whereas 53 of 102 banks increased their spending on of intangible asset acquisitions. While these data alone are not sufficient to draw reliable conclusions, they imply that banks are pursuing digitalization. Despite their earnings woes, banks seem to be increasingly investing in technologies that improve operating efficiency and/or customer service. This impression was corroborated by a recent BOJ survey[6] that found that many financial institutions of all types surveyed are planning to increase IT spending.

Exhibit 1-6. **Gross business profits per domestic branch by bank type**



Source: JBA

4 Banks are accelerating business model restructuring

With no prospect of higher interest rates on the horizon, banks are now accelerating radical business model restructuring. Many are already rationalizing their branch networks. For example, MUFG Bank now plans to downsize its branch network by 35%, revised from 20% previously, by FY2023-end. Its plan includes a 50% reduction in full-service branches[7]. SMBC, a leader in robotic process automation (RPA), plans to reap ¥30bn of cost savings from retail branch reforms in FY2021[8].

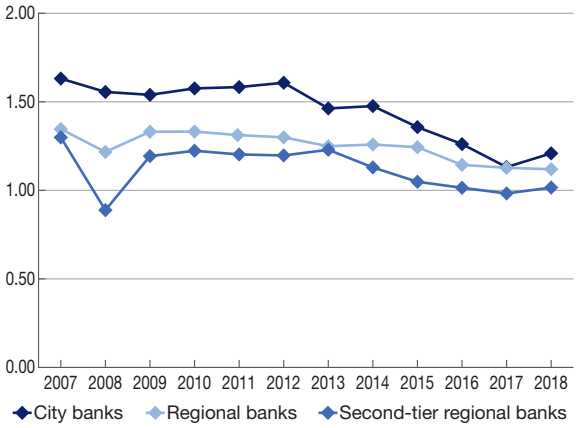
Regional financial institutions' FY2018 annual reports feature many overhead cost-cutting initiatives involving branch network rationalization, including consolidation or downsizing of branches, implementation of specialized branch concepts, repurposing of branches, co-occupancy with other financial institutions or non-financial partners, and improvements in branch operating efficiency.

Banks have started to drastically revamp their existing branch networks for at least three reasons. The first is that their branch networks' cost-efficiency has deteriorated intolerably, as touched upon in our above discussion of efficiency ratios. Gross business profit per domestic branch (including sub-branches[9]; likewise below) continues to decline across all three bank subsectors (Exhibit 1-6). In FY2018, city banks collectively earned gross business profit per domestic branch of ¥1.1bn, down some ¥200mn from FY2014. The corresponding numbers for regional banks and second-tier regional banks were ¥420mn and ¥270mn, respectively, down ¥30mn and ¥40mn from FY14.

Another gauge of efficiency is the extent to which fixed-asset investments pay off in the form of improved profitability, based on the assumption that the banking industry requires extensive branch/ATM networks backed by large-scale IT systems. One metric of fixed-asset efficiency is the fixed asset turnover (FAT) ratio (revenues ÷ fixed assets). Although the FAT ratio is not commonly used in the banking sector, we use it as a rough measure of how efficiently banks deploy operating fixed assets. For our analysis, we used gross business profits as the ratio's numerator instead of revenues. Because FAT ratios differ widely among sectors, we focused on whether the ratio is rising or falling, not its absolute level. The domestic tangible fixed asset data we used in our analysis is from the BOJ's *Financial Institutions Accounts*.

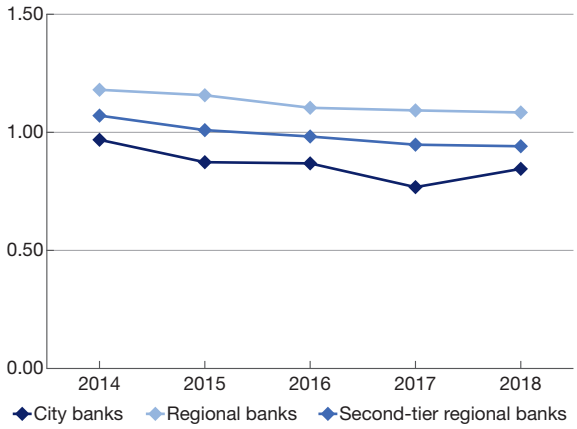
FAT ratios have been declining across all three bank subsectors since FY2007 (Exhibit 1-7). Until

Exhibit 1-7. **FAT ratios by bank type**



Source: JBA

Exhibit 1-8. **Domestic FAT ratios by bank type**

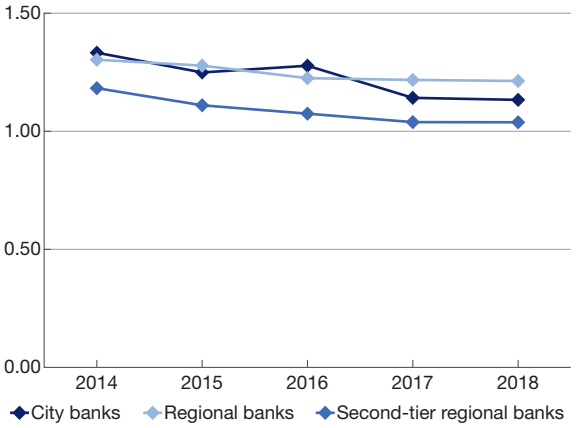


Source: JBA, BOJ

FY2012, city banks' aggregate FAT ratio was 30-40bp higher than regional banks and second-tier regional banks', presumably by virtue of economies of scale. Since FY2013, however, city banks' FAT ratio has converged with the other two subsectors'. Domestically, city banks' FAT ratio is lower than both of the other subsectors' (Exhibit 1-8).

The decline in city banks' FAT ratio since FY2013 is largely attributable to a substantial increase in "other intangible fixed assets." This increase was due more to IT investment by one bank in particular[10] than to growth in such intangible assets across the city bank subsector. Capex tends to immediately lower the FAT ratio temporarily. To factor out the impact of such IT investment binges, we recalculated FAT ratios with only tangible fixed assets in the denominator and

Exhibit 1-9. **Domestic tangible FAT ratios by bank type**



Source: JBA, BOJ

compared them among the three subsectors (Exhibit 1-9). Even when thus adjusted, however, city banks' FAT ratio did not materially improve and was tightly clustered with the other two subsectors', leading us to conclude that banks' domestic operating efficiency is declining across all three subsectors in the wake of overinvestment in tangible fixed assets.

The second reason banks are revamping their branch networks is that the ways in which they interact with customers are changing dramatically. A July 2018 JBA survey[11] found that the percentage of respondents (n = 3,400) that use bank branches was down to 75.8%, a 13.5ppt decrease from 89.3% in FY2015. In other words, 24.2% of the respondents no longer use bank branches if they ever did to begin with. Including another 20.1% who visit a bank branch less than once every six months, nearly half (44.2%) of the survey respondents rarely or never use bank branches.

Meanwhile, a vast majority of the survey respondents were regular ATM users, with 31.9% using an ATM at least once a week and another 51.0% doing so at least once a month but less than once a week. ATMs have supplanted bank branches for many people. The percentage of respondents who reported using online banking was roughly unchanged at 60% between FY2015 and FY2018. Mobile banking app usership, however, increased to 20.8% from 11% in FY2015,

reflecting progressive digitalization in the interim.

Branches' diminishing importance as a banking channel is a long-term trend. We accordingly believe banks have substantial scope to radically revamp their existing branch networks.

The third reason is that digitalization is driving banks to revamp their branch networks in two respects. First, digitalization is changing how financial services are provided and used, as epitomized by Amazon, Rakuten and other such online platforms' emergence and expansion beyond e-commerce into financial services. Nowadays, anyone with a mobile phone can access financial services and conduct transactions anytime, anywhere. Second, banks are changing how they themselves operate. New technologies like AI and RPA are changing banks' operations beyond merely streamlining business processes. Before long, banks may automate simple decision-making and allocate their human resources exclusively to higher-value-added business processes and services that only humans can perform. Banks have to identify such business processes and services that should be handled by humans and rebuild their business models accordingly.

How to rebuild business models

Ongoing digitalization and recent changes in customers' banking behavior offer banks a golden opportunity to rationalize their costly branch networks. The key challenge for banks is to optimize delivery channels while increasing customer satisfaction. Employee retraining is one key to meeting this challenge.

First, banks must deeply analyze customers' banking behavior to ascertain what types of customers use which delivery channels and why they do so. They then need to redefine delivery channels' respective roles and optimally reconfigure their channels. Delivery channels include online, mobile and telephone banking in addition to branches and ATMs.

The most important point is to build safeguards against giving customers the runaround and asking them for the same information repeatedly. We suspect many banks still have gaps in information flows among delivery channels. However, with customers using different channels for different purposes, banks crucially must rethink their delivery channel configuration and inter-channel information linkages from the customer's standpoint.

Second, banks must invest within the constraints of their management resources without attempting to be all things to all customers. Providing a full suite of banking services through every delivery channel may be cost prohibitive for small financial institutions, for example. Additionally, if a bank spreads its investments too thinly across a broad range of channels/services, customer satisfaction may suffer. In addition to reducing costs, it is imperative to optimize information flows and allocate functions among channels in a way that increases convenience and ease-of-use for customers based on their banking behavior.

Third, banks must make changes that improve earnings instead of merely focusing on efficiency. Cost-cutting alone will not build a stable earnings foundation. Insightful information on customers is extremely valuable for formulating sales strategies. Such information might include which customer demographics purchase which products or services through which channels and why; or which customer demographics search for or access what types of information. Banks already possess lots of such information on customers and their transactions but are not yet fully utilizing it. We believe banks should urgently prioritize data utilization and infrastructure upgrades for the sake thereof.

All that said, while data availability and analytics capabilities are a necessary condition for banks to

successfully compete, they alone are not sufficient. Another element is required.

Rethinking banks' competitive advantage

Banks' competitive advantage over online platforms like Amazon and Rakuten lies in their human resources and branch networks. Only a human can provide detailed advice to individuals or companies in light of their current situation and future plans. The online behemoths cannot compete with banks in this respect. Even in a digitalized society, branches will remain a beacon of trust in banks' brands. Given their deep integration into the fabric of society, banks could even elevate their status in a digitalized society. Overseas, some banks are already capitalizing on such advantages to deeply cultivate relationships with customers. While such relationship-building may not immediately pay off profit-wise, we believe it contributes to banks' long-term earnings stability.

Customer-first orientation is key to success

Even in Japan, banks have been upgrading their sales capabilities to expand fee/commission revenue sufficiently to offset net interest income erosion amid the protracted low interest rate environment. Regrettably, however, they seem to be falling short in terms of building strong relationships with customers. We attribute this shortcoming more to an inadequately customer-oriented mindset than to deficiencies in their sales personnel's skills or knowledge. The root issue is misalignment between long-term organizational objectives and short-term profit goals. All Japanese banks prominently tout their management principles and/or performance targets in their medium-term management plans, but how well are they educating their employees on their corporate principles and strategic objectives' significance in the context of selling financial products and services?

We suspect that many banks' sales personnel, if asked why they sell investment or insurance products, would not cite corporate principles or strategic objectives but simply reply, "To increase commission/fee revenues." Once they have generated revenue by making a sale, sales personnel with such a mindset are not incentivized to utilize information gained through the sales process to further deepen their relationship with the customer.

In recent years, numerous institutionalized ethical lapses related to sales of financial products and services have come to light even in the Japanese banking industry. We see these lapses as evidence that banks are placing too much priority on near-term profits amid an increasingly adverse earnings environment. Many bankers seem to think they can rectify any unethical sales practices by eliminating quantitative sales targets. The real solution, however, is not so simple because the root problem is that employees do not see the value of and are therefore not deeply invested in selling financial products and services. Before Wells Fargo tarnished its reputation through a large-scale mis-selling scheme, it was renowned for cross-selling and high employee morale. Its sales personnel enjoyed cross-selling because it was predicated on a win-win relationship. That is, the sales personnel were both living up to Wells Fargo's corporate principles and achieving personal sales targets by helping customers reach their financial goals. They would not have been able to do so if Wells Fargo had not had a pervasive culture of helping customers achieve their financial goals.

We believe that whether banks can continue to thrive commercially hinges on how customer-oriented they can become. Their future success will be largely determined by how deeply and widely they inculcate their corporate principles and strategic objectives into their workforces. Such mindset molding is a key responsibility of management.

1) City banks are Mizuho Bank, MUFG Bank, Sumitomo Mitsui Banking Corporation (SMBC), Resona Bank and Saitama Resona Bank.
2) For our analysis, we used an efficiency ratio typically used in financial analysis of non-financial companies instead of the JBA's version (overhead expenses ÷ deposits, negotiable deposits and fixed-income securities' total period-average balance) because the latter decreases as deposits increase.
3) Defined herein as regional banks and second-tier regional banks.
4) The JBA began disclosing gross business profits disaggregated between domestic and overseas sources from FY2014. We use the JBA's data from FY2014 onward for our analysis herein.
5) Companies that disclose a consolidated statement of cash flows are not required to disclose a nonconsolidated statement of cash flows, so we used consolidated cash flow statement data for our analysis.
6) https://www.boj.or.jp/research/brp/fsr/fsrb190524.htm/ (in Japanese).
7) Per Mitsubishi UFJ Financial Group's FY2018 earnings briefing materials.
8) Per Sumitomo Mitsui Financial Group's FY2018 earnings briefing materials.
9) Although sub-branches are often satellites of a full-service branch, we counted them as separate locations.
10) Mizuho Bank's "other fixed assets" increased substantially over the timeframe in question. According to its securities filings, the increase was attributable to capitalized software development costs.
11) Nationwide online survey of 3,700 men and women aged 18-79 (including 300 business owners/CEOs). The survey results were published in February 2019.

CHAPTER
2 Crunch time for full-service model in securities industry

1 Full-service brokers at a crossroads

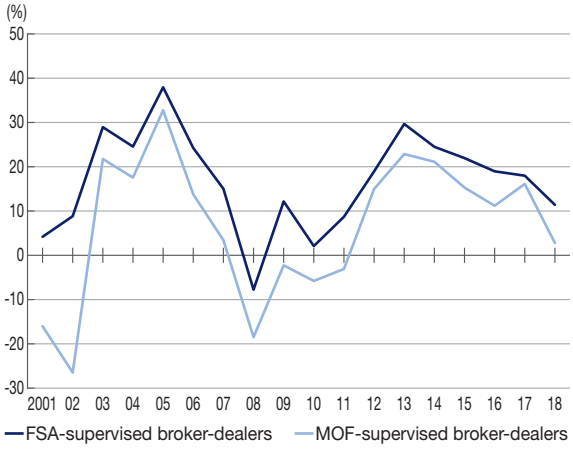
Online brokers clearly on top in Abenomics era

Full-service broker-dealers find themselves at a crossroads. Exhibit 2-1 plots JSDA-member broker-dealers' operating margins disaggregated between broker-dealers supervised by the FSA and those supervised by the MOF's regional Finance Bureaus. The former include Japan's major and junior-major broker-dealers and online-only brokers; the latter, mid-tier broker-dealers, regional banks' securities subsidiaries and local broker-dealers.

The graph shows that operating margins are in downtrends dating back to their most recent peak in FY13. The MOF-supervised group's aggregate operating margin dropped to the vicinity of 3% in FY18, the latest year in the data series. Although not shown in the graph, some companies in the group are already incurring operating losses.

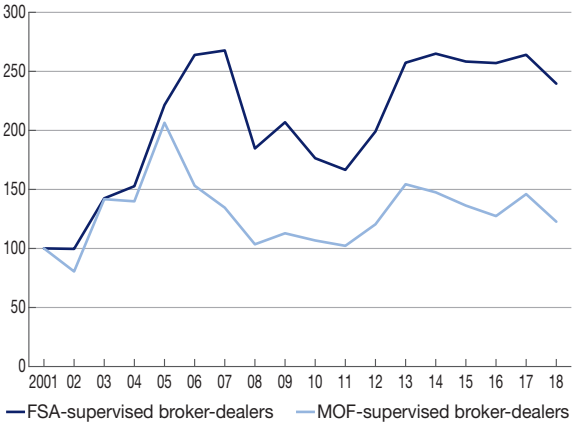
The biggest driver of the shrinkage in regional broker-dealers' operating profits is a decline in top-line operating revenues. In Exhibit 2-2, which plots operating revenues rebased to a value of 100 in FY2001, both plotted lines resemble the silhouette of two mountains, the darker line more so than the lighter one. The first mountain corresponds to the equity bull market that coincided with Japan's economic recovery during Junichiro Koizumi's premiership (2001-06); the second corresponds to the Abenomics era. While the FSA-supervised broker-dealers' operating revenues in the Abenomics era have recovered to approximate parity with their FY2007 peak, the MOF-supervised group's are languishing far below their Koizumi-era peak, though they too rebounded sharply in Abenomics' first couple of years. In other words, despite enjoying

Exhibit 2-1. **Broker-dealers' operating margins**



Source: NRI, based on JSDA data

Exhibit 2-2. **Broker-dealers' operating revenues (2001 = 100)**



Source: NRI, based on JSDA data

identical macro tailwinds of economic recovery and resurgent stock prices, the two groups have distinctly diverged in terms of their top-line trajectories ensuing from those tailwinds. Broker-dealers have historically achieved earnings growth whenever the equity market rebounds, but this pattern simply no longer holds true. The smaller/regional broker-dealers are under pressure to radically overhaul their business models.

Even within the FSA-supervised group, the only broker-dealers that continue to grow their operating revenues are two major online brokers: SBI Securities and Rakuten Securities. The major and junior-major full-service broker-dealers' operating revenues are in downtrends. Top-line stagnation is a problem common to all full-service broker-dealers irrespective of size.

2 Growing societal concerns about retirement funding

The major online brokers may not necessarily continue to outgrow the rest of the retail brokerage sector given the recent emergence of a fresh tailwind that should primarily benefit full-service broker-dealers. The tailwind is a growing need for individuals to provide for their own retirements and a dawning recognition of that need among much of the public.

On June 3, 2019, the Financial System Council's Working Group on Financial Markets (WGFM) published a report on wealth-building and asset management in a rapidly aging society. The report covered topics such as best practices for wealth-building amid societal aging and required policy responses. One line, however, was seized upon by the media and turned into a political issue. The line in question said that married couples who retire at age 65 and live for 30 more years will, on average, end up being short of funds to cover their living expenses by a cumulative ¥20mn.

Once politicized, this tidbit captured the attention of many people, including some not ordinarily interested in pension matters. In response, people have increasingly been questioning whether they themselves are adequately preparing for retirement. Since the WGFM's report was publicized, the media have reported growth in both attendance at wealth-building seminars and requests for information on individual defined contribution (iDeCo) retirement plans and Nippon Individual Savings Accounts (NISAs).

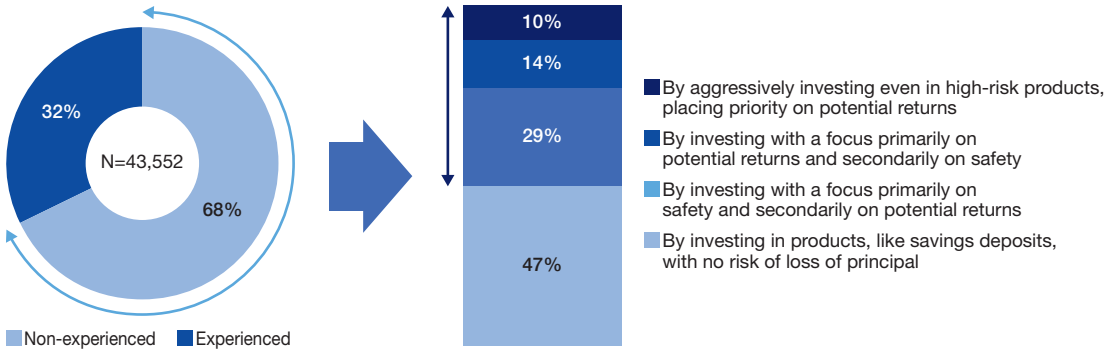
The concerns raised by the WGFM's report were reinforced by an actuarial assessment of public pension programs released on August 27, 2019, by the Ministry of Health, Labor and Welfare. Although largely unchanged from the previous actuarial assessment conducted five years earlier, the latest assessment reaffirmed the perception that future pension benefits will inevitably be lower than current benefits regardless of how much the economy grows in the interim.

Post-retirement financial security needs are major potential growth driver

Given Japanese's strong preference for savings deposits over risk assets, many observers are no doubt skeptical that Japanese will become more investment-minded regardless of how much public pension concerns escalate. Indeed, various surveys have found that no more than 20-30% of Japanese are investors. It is no wonder that many Japanese see no connection between investing and their own retirement security. However, it is important to distinguish between those who refrain from investing because they see no need to invest and those who are interested in investing but have somehow been deterred from getting started.

A September 2019 NRI survey found that only 32% of the total respondents own risk assets such as equities, bonds and investment trusts. The other 68% had no investment experience (Exhibit 2-3).

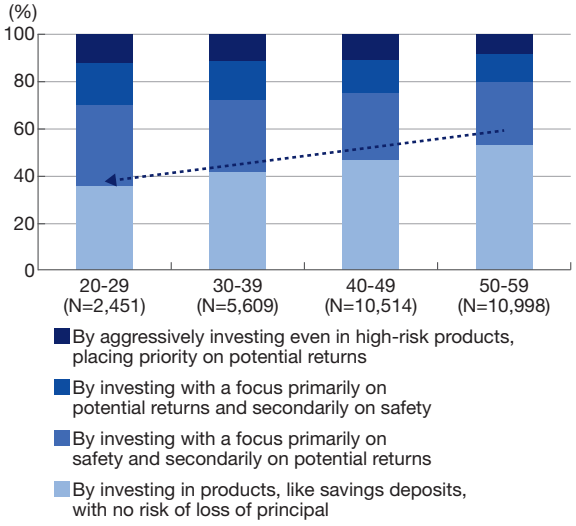
Exhibit 2-3. **Means by which survey respondents with no investment experience hope to save for the future**



Source: NRI survey of financial product purchasing habits

However, 47% of the non-investors reported that they hold their funds saved for retirement and other future needs in principal-guaranteed instruments such as savings deposits. In other words, 53% of even non-investors want to save for the future through some form of investing, though they differ in their priorities with respect to the trade-off between potential returns and safety of principal. Additionally, the percentage of respondents who expressed such latent investment needs increased as an inverse function of age (Exhibit 2-4)

Exhibit 2-4. **Means by which survey respondents with no investment experience hope to save for the future (by age group)**



Source: NRI survey of financial product purchasing habits

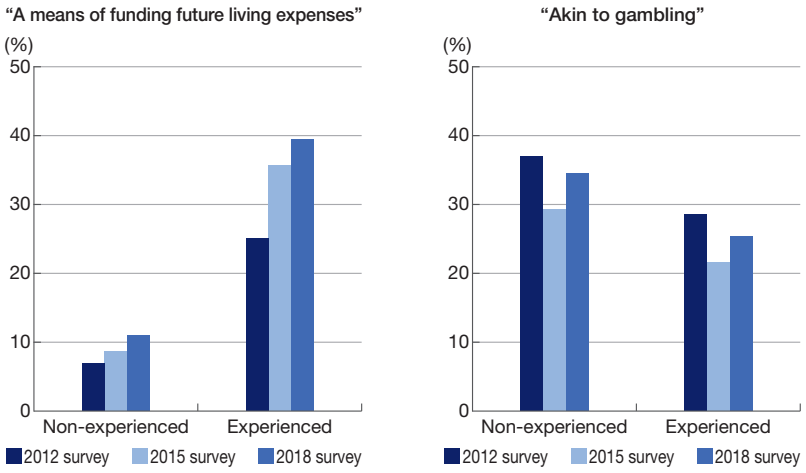
Increasingly mainstream perception of securities investment as long-term wealth-building vehicle

The idea of investment as a means of long-term wealth-building is in tune with evolving public perceptions in Japan. The JSDA conducts a triennial nationwide survey on securities investment that asks respondents about their image of securities investment. Time-series data on respondents' answers to this question reveal an interesting trend.

Namely, the percentage of respondents who perceive securities investment as "a means of funding future living expenses" has steadily increased over the past three surveys among respondents both with and without investment experience (Exhibit 2-5). Meanwhile, the percentage of respondents who consider securities investment to be akin to gambling has been decreasing. Overall, the responses to this survey question imply that perceptions of securities investment itself have been changing in recent years. With initiatives such as NISAs and iDeCo accounts, the government has for the past six years been repeatedly sending a message that investment is a long-term wealth-building vehicle. We are starting to see the results of such messaging.

Despite more than two decades of government efforts to promote investment through various policies under the slogan of "turning savers into investors," Japan's investor population has not grown much.

Exhibit 2-5. **Changes in public perceptions of securities investment**



Note: Survey sample sizes were, in chronological order, 5,203, 5,163 and 5,229 respondents with no investment experience and 1,298, 1,308 and 1,305 respondents with investment experience.
Source: NRI, based on JSDA nationwide survey on securities investment

Japanese's reluctance to invest in securities is rooted in economic structures and conventions that took shape over the long course of the postwar era, including generous interest rates on savings deposits (resulting in sufficient growth in savings account balances), a mentality that equated wealth-building with land ownership and a high degree of trust in public pensions. Another contributing factor, one that dates back to prewar Japan, was a deeply entrenched perception of securities investment as highly speculative. That this image is now changing is an important development even for the securities industry.

3 Would-be investors need person-to-person support

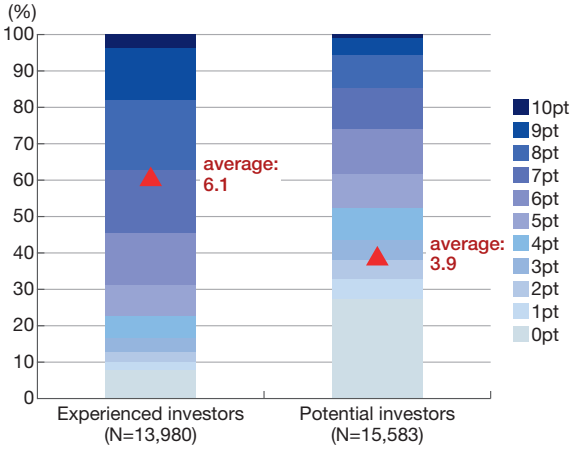
In our view, the increasingly mainstream perception of investment as a wealth-building vehicle and the growing latent demand for investments are a boon for full-service brokers in particular because neophyte investors generally lack investment literacy and need someone to help them to actually act upon their latent needs.

Our aforementioned survey included questions on basic knowledge of economics and finance to gauge respondents' financial literacy. Based on the respondents' answers to these questions, we calculated financial literacy scores. Exhibit 2-6 plots the distribution of literacy scores for respondents with investment experience ("experienced investors") versus respondents who had never previously invested despite thinking they may need to ("potential investors").

With a mean financial literacy score of 3.9 out of a maximum of 10 points, the potential investors were much less financially literate than the experienced investors, whose mean score was 6.1. The large literacy gap between the two groups was exemplified by two survey questions that respectively asked about the meaning of time diversification of investment trust holdings and the compounding effect. These questions were answered correctly by only 18% and 33% of the potential investors versus 42% and 68% of the experienced investors.

Financially literate people are generally capable of gathering information, opening investment accounts

Exhibit 2-6. **Experienced and potential investors' literacy test score distributions**



Source: NRI survey of financial product purchasing habits

and making investments themselves. Such self-sufficient investors presumably tend to gravitate toward online brokers. Potential investors, by contrast, are more likely to need someone to assist them with information gathering, making decisions and managing their assets, given their relative financial illiteracy implied by our latest survey results.

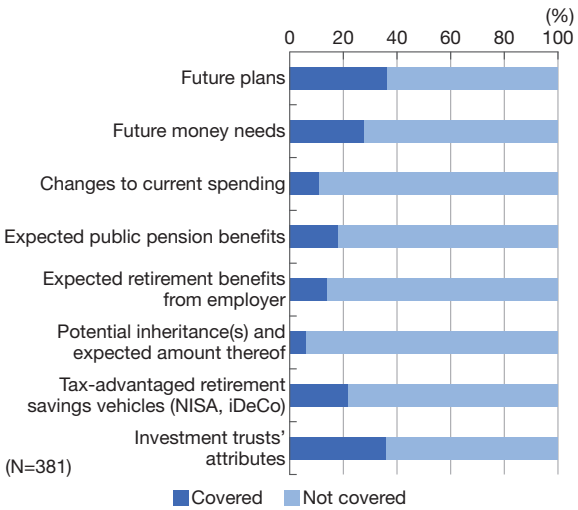
The sizable pool of people who want to build long-term wealth through investing but are unable to do so without someone's help constitutes a major opportunity for full-service brokers to tap into the value of their human resources.

Insights from sales reps' communication with customers

We first look at how full-service brokers' sales personnel currently communicate with customers before discussing how the brokers should leverage the value of their human resources in customer-facing channels.

Our survey asked company employees who had previously purchased investment trusts through brokerage sales reps about their experience, specifically about the kinds of topics addressed in their conversations with the sales reps. The multiple-choice answers included topics relevant to long-term investing such as the customer's future plans and expected future public pension benefits. The two most frequently covered topics were "future plans" and "investment trusts' attributes." The least frequently addressed topics included "expected public pension benefits," "expected retirement benefits from employer" and "potential inheritance(s) and expected amount thereof."

Exhibit 2-7. **Topics covered in consultations preceding investment trust purchases**



Source: NRI survey of financial product purchasing habits

Questions that should be asked of someone contemplating a long-term investment and the order in which they should be asked are: (1) What kind of lifestyle do you want to have in the future? (2) How much money will such a lifestyle require? (3) How much do you expect to receive in public and/or employer-provided pension benefits and inherited assets? (4) How much money do you personally have available to invest? (5) What would you like to invest in? However, our survey revealed that brokerage sales reps tend to skip from question (1) to question (5) without delving deeply enough into the extremely fundamental in-between questions of "why and how much do you need to invest?"

Of the respondents who reported that these questions were not addressed, some 40% indicated that their objective in owning investment trusts is to save for retirement. In other words, while speaking to the customer, the sales rep may not have been adequately aware that the reason the customer wanted to buy an investment trust was to prepare for retirement.

Business model reforms required to capture long-term investor demand

Although not necessarily a complete picture of sales interactions in the full-service channel, the survey responses just discussed are indicative of a communication gap between customers who want to build wealth through long-term investing and the

sales reps who serve them. In a certain sense, sales reps' failure to adequately communicate as required for long-term wealth-building may be a natural result of the brokerage-centric business models that many full-service broker-dealers have long operated under. Frankly, many people probably do not consider addressing the topic of long-term wealth-building to be part of a broker's job.

Our survey, however, found that 68% of the respondents who buy individual stocks through full-service brokers to earn short-term trading profits have long-term investment needs. In such cases, the customer perhaps expects the broker to recommend trades that will generate quick profits and the sales rep obliges without probing to discover the customer's long-term investment needs.

The big pool of untapped demand we referred to earlier consists solely of individuals with no prior investment experience. Broker-dealers may be loath to make the business-model changes that would be required to meet the long-term wealth-building needs of these legions of prospective customers not yet visible to them. Yet even their current customers have unmet long-term investment needs according to our survey results. To be able to meet long-term wealth-building needs by both responding to existing customers' latent expectations and capturing customers not yet on their radar screen, broker-dealers may not be able to avoid drastically overhauling their business models. We offer two recommendations for doing so.

First, broker-dealers should expand their sales personnel's knowledge base and extract more information from interactions with customers. Broker-dealers presumably have at least some sales reps who are credentialed as financial planners or are otherwise pursuing self-education, but management should take responsibility for elevating the value of human capital. Human resource development should be undertaken organizationally instead of being relegated to employees' own initiative. In other words, it is important to take responsibility for investing in people.

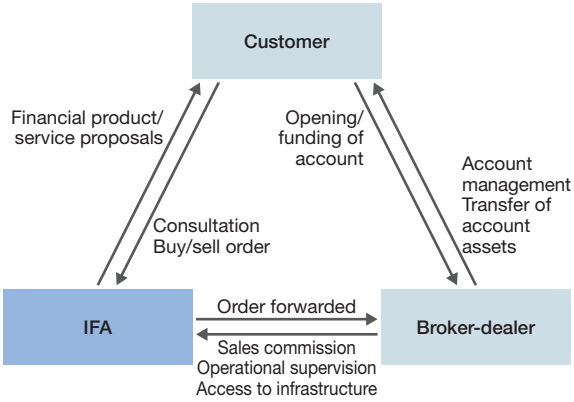
Second, broker-dealers should bolster the value of their human capital through investment in digital technologies. In addition to the already mentioned importance of shoring up sales personnel's skills, investing to create an environment conducive to full expression of those skills is also essential. In particular, sales personnel will inevitably have to deal with ever more voluminous information and data, given the need for them to consult with, seek decisions from and periodically follow-up with customers based on information specific to individual customers. Broker-dealers need to also redesign their workflows to minimize sales personnel's time spent on non-customer-facing tasks and promote shared ownership of customer service processes within their organizations.

Converting into an IFA is another, less costly option

Some in the securities industry understand the case for revamping existing business models by investing in people and digital technologies but question the practical feasibility of embarking on such a bold investment program. We do not dispute that drastic business model reforms in an environment of top-line stagnation and operating profitability challenges undeniably entail big operational risks.

On the flipside, opting to maintain the status quo likewise poses risks that cannot be ignored. Broker-dealers are therefore well advised to equip themselves to meet long-term investment needs or at least experiment toward that end. Any such initiative should revolve around their existing core brokerage operations intact. That said, smaller broker-dealers may not have the wherewithal to shoulder all of the required investment themselves. If so, they need not go it alone. They can pursue alliances and limit the

Exhibit 2-8. **IFA business model in Japan**



Source: NRI, based largely on FSA-published content

scope of their own services to match their resources. Another option is to adopt an IFA (independent financial advisor) model.

Officially classified as financial instrument intermediary service providers, IFAs have existed in Japan since 2004. They mostly recommend securities trades and other financial products to customers as an agent of a broker-dealer (financial instrument dealer) called the IFA's "sponsoring financial institution." The sponsoring financial institution provides its IFAs with a trading platform and has a duty to supervise their day-to-day operations and deal with customers' claims for damages (Exhibit 2-8).

Japan has 892 registered IFAs (584 incorporated IFAs + 308 individual IFAs) as of July 31, 2019. Eighty percent of them have just one sponsoring financial institution. Broker-dealers with high-profile IFA platforms include Ace Securities, SBI Securities, Rakuten Securities, Securities Japan, PWM Japan Securities and Mitsubishi UFJ Morgan Stanley Securities.

Value of human capital to be squarely tested

Iizuka Nakagawa Securities, based in Fukuoka Prefecture, converted from a broker-dealer into an IFA in January 2017, renaming itself Nakagawa Securities Advisors. As an IFA, it specializes in customer-facing functions such as sales and marketing. Upon becoming an IFA, its accounts and assets under custody were transferred to Tokyo-based Securities Japan. Another broker-turned-IFA is Takematsu Securities, based in Ishikawa Prefecture. It established Takematsu Investment Advisers, a financial instruments intermediary, in February 2019 and, like Iizuka Nakagawa Securities, transferred its customer assets to Securities Japan. Such cases may be indicative of a nascent trend toward broker-dealers based in provincial regions shedding their middle- and back-office operations to specialize in customer-facing functions by converting into IFAs.

In a similar vein, San-in Godo Bank and Nomura Securities announced a comprehensive alliance on August 26, 2019. According to their press releases, San-in Godo Bank's investment product sales business's accounts and its subsidiary Gogin Securities' accounts will be transferred to Nomura Securities. In return, San-in Godo Bank will take over Nomura Securities' retail customer-facing operations within its service area, including servicing Nomura Securities' Matsue Branch customers' accounts and cultivating new customers. Additionally, Nomura Securities will provide sales support by seconding employees to and sharing expert know-how and information with San-in Godo Bank.

In all three cases, a regional broker-dealer or regional bank is benefiting (or will benefit) from cost savings by capitalizing on its localized brand to specialize in customer-facing operations while transferring administrative operations, particularly custody of customer accounts, to another company. The financial institution that assumes custody of the accounts can gain additional sales channels for its products and services. Such arrangements should benefit both parties. As such, they will likely become increasingly common going forward.

In addition to cost-wise benefits, such partnering

should enable smaller broker-dealers in particular to upgrade their customer service capabilities. We believe the benefit of doing so is greater than the cost-wise benefits. Smaller broker-dealers differ widely in terms of their product and service offerings. Some are extremely limited in what they offer customers. A few have either no website or a bare-bones site with no content except a company profile. From a product line standpoint, some smaller broker-dealers offer precious little besides investment trusts, not even iDeCo accounts or *Tsumitate* NISAs (NISAs with a lower annual contribution limit but longer-term tax exemption than regular NISAs), to meet the needs of customers seeking to build long-term wealth. By affiliating with an IFA platform, such broker-dealers should be able to not only specialize in customer-facing functions but gain for tools for serving customers.

An FSA-commissioned research study on IFAs conducted by Mizuho Research Institute and published in July 2019 cited only four examples of broker-dealers that have converted into IFAs, including Iizuka Nakagawa Securities and Takematsu Securities. However, with the securities industry's operating revenues in a downtrend as discussed above, more and more broker-dealers may very well elect to convert into IFAs.

In any case, full-service broker-dealers of all sizes should recognize three key points. First, demand for long-term wealth building solutions is definitely growing. Second, broker-dealers' ability to meet such demand hinges squarely on the value of their human capital. Third, digital tools are essential to support human capital's value. Against such a backdrop, all broker-dealers face an imperative to optimize their business models as much as practical within the constraints of their respective management resources.

CHAPTER
3 Insurance industry outlook in light of changing landscape

1 Insurance industry earnings

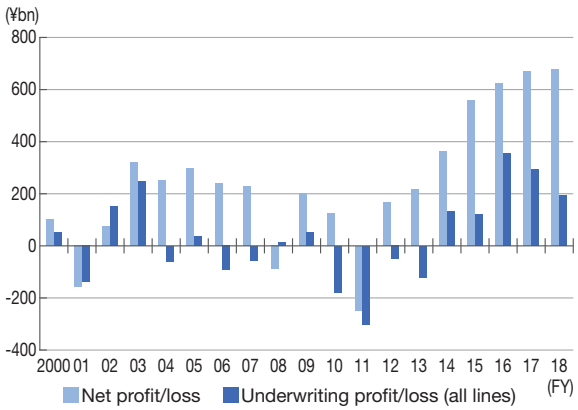
The Japanese insurance industry has performed well since 2000, earning ordinary and net profits every year except FY2001-02, FY2008 and FY2011, when it incurred losses respectively due to the September 11 terrorist attacks in the US, post-Lehman financial crisis and Great East Japan Earthquake. Its core insurance underwriting operations, however, have not fared as well profitability-wise.

Nonlife insurers' core business under pressure from natural disasters

While nonlife insurers have collectively had only three fiscal-yearly net losses since FY2000, they incurred underwriting losses eight times over the same timeframe (Exhibit 3-1). Their fire insurance underwriting in particular has been unprofitable in most fiscal years since FY2000 in the wake of an increase in natural disasters. In contrast, auto insurance underwriting, which accounts for roughly half of nonlife insurers' premium revenues, has become much more profitable, largely as a result of adoption of premium rating models that factor in drivers' age and accident history and reduction in traffic accidents due to vehicle safety improvements. Inclusive of all lines of business, nonlife insurers have earned underwriting profits for five consecutive years through FY2018 (Exhibit 3-2).

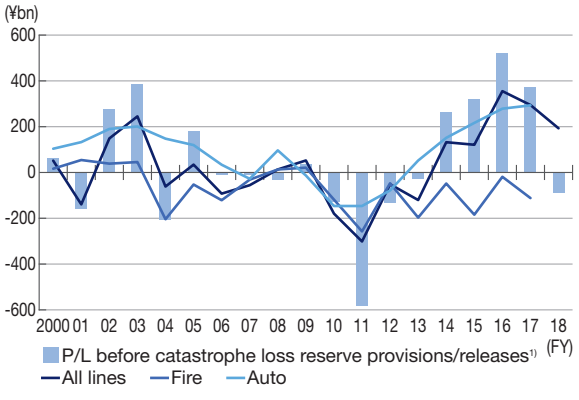
In FY2018, their collective underwriting profit was attributable to large releases of catastrophe loss reserves. If not for these releases, the nonlife insurance industry would have incurred an underwriting loss in aggregate. If major loss events like the Great East Japan Earthquake of March 2011 or the flooding and typhoons (Jebi and Trami) that struck western Japan in 2018 keep happening,

Exhibit 3-1. **Nonlife insurers' net profits/losses and underwriting profits/losses**



Note: Reinsurers are included in FY2018 data sample but not in previous years'.
Source: NRI, based on Hoken Kenkyujo data for FY2000-17 and GIAJ data and company disclosures for FY2018

Exhibit 3-2. **Nonlife insurers' underwriting profits/losses**



Note 1: For FY2018, only the three major groups' auto and fire insurance catastrophe loss reserve releases were backed out of the data.
Note 2: Reinsurers are included in FY2018 data sample but not in previous years'.
Source: NRI, based on Hoken Kenkyujo data for FY2000-17 and GIAJ data and company disclosures for FY2018

Exhibit 3-3. **Examples of major releases of fire insurance catastrophe loss reserves**

FY	Main disaster(s)	Release (¥bn)
2004	Five typhoons	▲36.4
2011	Great East Japan Earthquake, Typhoon Roke	▲278.3
2012	Great East Japan Earthquake	▲95.8
2017	Typhoon Lan	▲19.1
2018[1)]	Torrential rains in west Japan, Typhoons Jebi and Trami	▲254.6
Balance at FY2017-end		**919.5**

Note 1: FY2018 release includes only the three major groups' releases.
Source: NRI, based on Hoken Kenkyujo data for FY2000-17 and GIAJ data for FY2018

the resultant losses could deplete catastrophe loss reserves, particularly in the fire insurance business. The specter of such a scenario poses downside risk to nonlife insurers' earnings.

For example, four consecutive years of natural disaster losses on the scale of the Great East Japan Earthquake or the string of disasters that hit western Japan in 2018 would hypothetically deplete the nonlife industry's fire insurance catastrophe loss reserves as of March 31, 2018. Risk mitigation (e.g., disaster-proofing) measures to minimize natural disasters' impact, discussed further below, are becoming increasingly important for nonlife insurers' future earnings stability.

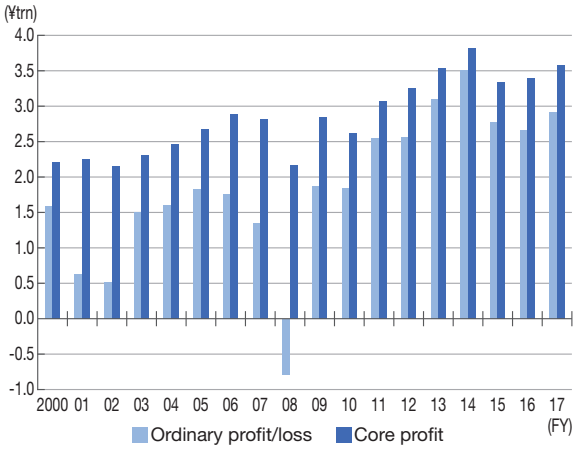
Life insurers need to make deeper inroads within younger demographics

The life insurance industry has been generating solid core profits since FY2009, albeit with some year-to-year variability but not as much as on the ordinary profit line (Exhibit 3-4).

When life expectancy increases, so do mortality gains earned on death benefit products, which account for most of life insurers' in-force business. As long as average life expectancy continues to increase, mortality gains should keep growing and, in turn, drive growth in core profits also.

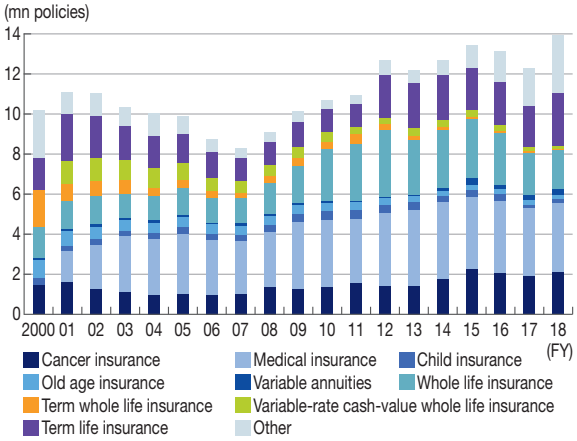
On the downside, life insurers' sales mix in the

Exhibit 3-4. **Life insurers' ordinary profits/loss and core profits**



Source: NRI, based on Hoken Kenkyujo data

Exhibit 3-5. **Life insurers' new personal insurance policies written by type (ex Japan Post Insurance)**

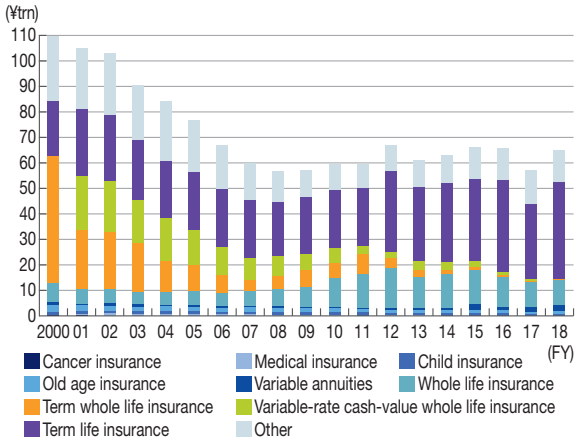


Source: NRI, based on Hoken Kenkyujo data for FY2000-17 and Life Insurance Association of Japan (LIAJ) data and Japan Post Insurance's disclosures for FY2018

personal insurance market has been worsening (Exhibit 3-5). Specifically, sales of new high-value life insurance policies have been decreasing while sales of other (e.g., medical, cancer) insurance with smaller, non-death benefits have been increasing. Although the combination of these two trends is driving growth in total new policies written, VNB (value of new business) has been decreasing (Exhibit 3-6). Total in-force policies and in-force business are likewise exhibiting the same pattern of unit growth coupled with value shrinkage.

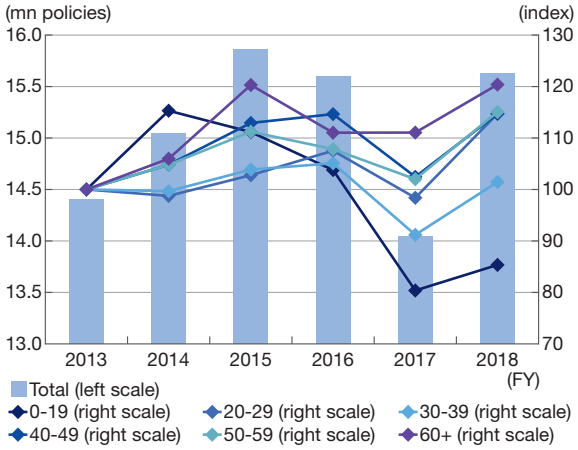
Another potentially adverse trend is sharp growth in new policies written in the 60-69 age group coupled

Exhibit 3-6. **Life insurers' personal insurance VNB (ex Japan Post Insurance)**



Source: NRI, based on Hoken Kenkyujo data for FY2000-17 and LIAJ data and Japan Post Insurance's disclosures for FY2018

Exhibit 3-7. **New policies written and increases/decreases therein by age group (rebased to 2013 = 100)**



Source: NRI, based on LIAJ data

with fewer new policies written in the below-20 and 30-39 age groups (Exhibit 3-7). Growth in elderly policyholders' share of in-force policies is conducive to growth in mortality gains as long as average life expectancy keeps increasing. If it stops increasing, mortality gains would likely decrease sharply. The shift in sales mix toward products other than life insurance likewise exerts downward pressure on mortality gains in addition to reducing in-force business. Such downward pressure will likely lead to lower core profits. To ensure stable future profits, it is important for life insurers to sell more policies to families in need of high-value life insurance and to young individuals likely to maintain coverage longer than older policyholders.

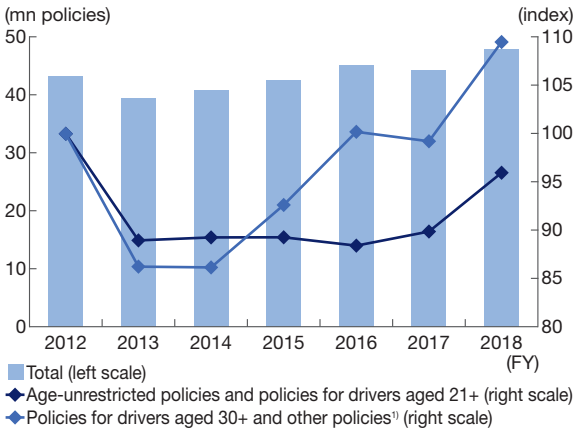
2 Changing insurance industry environment

While changes such as longevity gains and risk reduction through deployment of digital technologies may seem at first blush to be tailwinds for the insurance industry, a closer look at how the industry's environment is changing raises concerns about incumbent insurance businesses' sustainability. The following discusses changes common to both life and nonlife insurers.

Adverse demographic trends' impact

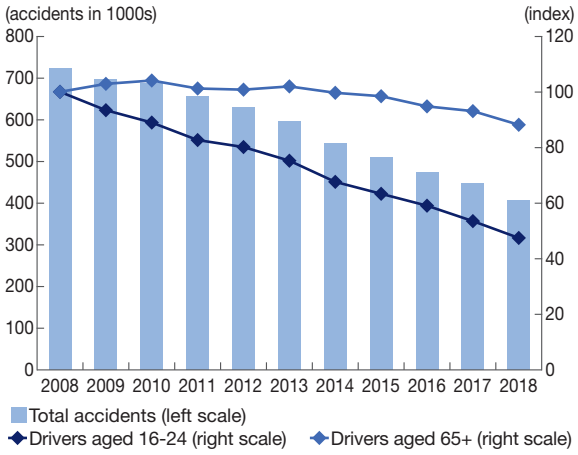
One such change is a growing elderly population coupled with a declining birth rate. These demographic trends are a headwind for nonlife insurers' earnings from their core auto insurance businesses. Low-premium policies for mature drivers are growing more rapidly than higher-premium policies for young drivers (Exhibit 3-8). Additionally, traffic accident statistics arguably corroborate increasingly frequent media reports of accidents involving elderly drivers. Though elderly drivers' automotive accident rate has decreased over the past decade, the overall automotive accident rate decreased to a greater extent, resulting in growth in elderly drivers' share of total accidents (Exhibit 3-9). In FY2018, drivers over

Exhibit 3-8. **Auto insurance policies and increases/decreases therein by policy age restrictions**



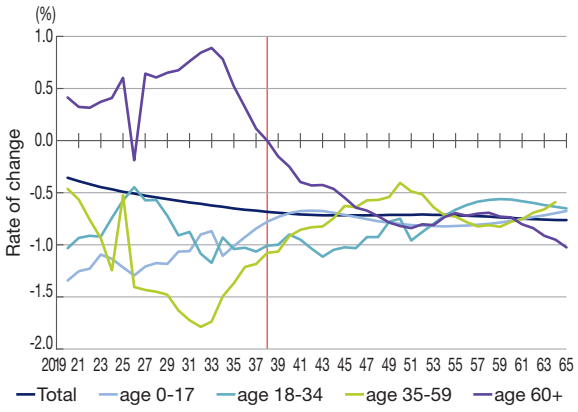
Note 1: "Other policies" include policies for drivers aged 35+.
Note 2: Index rebased to 2012 = 100.
Source: NRI, based on General Insurance Rating Organization of Japan data

Exhibit 3-9. **Traffic accidents in which a motor vehicle driver was primarily at fault**



Note: Index rebased to 2008 = 100.
Source: NRI, based on National Police Agency's traffic accident statistics

Exhibit 3-10. **Population's projected rate of change by age group (YoY rate of change)**



Source: National Institute of Population and Social Security Research's 2017 Japanese population projections based on medium fertility/mortality assumptions

age 64 had more accidents than drivers under age 30. If this trend continues, nonlife insurers' earnings would inevitably be affected and initiatives to reduce accidents among elderly drivers would become more of a priority.

In the life insurance business, the 60+ age group's share of newly written policies is increasing as previously mentioned amid a multiyear growth trend in total new policies written. Life insurers benefit from growth in the population aged 60+, which is projected to continue growing through 2037 with no interruption except a brief dip in the mid-2020s (Exhibit 3-10). Growth in the elderly population will be accompanied by growth in the subset of senior citizens who continue working beyond the standard retirement age and/or otherwise lead active lives. Growth in this active senior demographic should lead to growth in demand for life insurers' products other than life insurance, including leisure-related insurance. In response, life insurers will likely add more products targeted at the elderly and enjoy commensurate growth in their insurance premium revenues.

By the mid-2030s, however, the highly populous echo boomer generation will be 65+ while their parents, the postwar baby boom generation, will be in their twilight years at age 85+. Insurance benefit payouts will increase substantially from the mid-2030s onward. The population aged 60+ is projected to start shrinking from 2038, at which point Japan's population will be in decline across all age groups. Such across-the-board population shrinkage will likely lead to an absolute decrease in life insurance enrollment and, in turn, life insurers' premium revenues. To ensure future profits in the face of such adverse conditions, life insurers must pursue growth in younger policyholders from now on.

Natural disasters likely to keep increasing

Japan has been plagued by increasingly frequent natural disasters in recent years. In September and October 2019, it was hard-hit by Typhoons Faxai and Hagibis in addition to subtropical cyclones, mainly in the Kanto, Tohoku and Koshinetsu regions. In 2018, western Japan suffered a succession of natural disasters, including torrential rains and Typhoons Jebi and Trami. According to the General Insurance Association of Japan (GIAJ), insurance claim payouts due to storm damage since FY2012 have totaled a cumulative ¥2.4trn, including ¥1.5trn in FY2018 alone. All three of the aforementioned 2018 natural disasters are ranked among the 10 all-time costliest for insurers (Exhibit 3-11). This fact attests to how much of a historical outlier FY2018 was. FY2019 is expected to be another year of heavy insurance claims due to

Exhibit 3-11. **Japan's all-time costliest storms**

Event	Date(s)	Claims paid[1)]
Typhoon Jebi	Sept 3-5, 2018	¥1,067.8bn
Typhoon Mireille	Sept 26-28, 1991	¥568.0bn
Typhoon Songda	Sept 4-8, 2004	¥387.4bn
Snowstorms	Feb 2014	¥322.4bn
Typhoon Bart	Sept 21-25, 1999	¥314.7bn
Typhoon Trami	Sept 28-Oct 1, 2018	¥306.1bn
Torrential rains	June 28-July 8, 2018	¥195.6bn
Typhoon Goni	Aug 24-26, 2015	¥164.2bn
Typhoon Vicki	Sept 22, 1998	¥159.9bn
Typhoon Tokage	Oct 20, 2004	¥138.0bn

Note 1: Claims paid are totals of fire, auto, marine and miscellaneous casualty insurance claims.
Source: GIAJ

severe damage from typhoons and other disasters.

Whenever such disasters occur, insurance premium rates are subsequently adjusted to reflect their impact. Most recently, fire insurance premium rates were updated in October 2019 based on June 2018 reference loss cost rates (which were raised 5.5% on average). This rate adjustment did not factor in FY2018 insurance claim payouts, so insurance premiums are presumably set to rise further. If natural disasters' incidence settles back down to the vicinity of its historical norm, both premiums and nonlife insurers' profitability could stabilize, but recent trends do not bode favorably for such an outcome.

While the effects of global warming are putatively already being felt, future weather changes are expected to exceed those witnessed in the 21st century to date. The Japan Meteorological Agency's latest (March 2017) global warming projections for the late 21st century are tabulated in Exhibit 3-12.

Based on such predictions, increased property damage from storms will likely be accompanied by more human illnesses and deaths due to heatstroke and infectious diseases, to the detriment of both life and nonlife insurers. To minimize global warming's impacts, insurers urgently need to promote disaster preparedness, prevention and mitigation through localized disaster forecasting and disease prevention

Exhibit 3-12. **Projected effects of global warming in late 21st century[1)] (relative to late 20th century[1)])**

Weather variable	Projected status in late 21st century	Status as of FY2018 (Tokyo)
Annual mean temperature	Nationwide mean: **+4.5°C** Regional means: **+3.3~4.9°C**	**+0.79°C**
Days per year with maximum temperature ≥ 35°C	**Between 6 and 54 more days**, depending on region. Days with maximum temperature ≥ 25°C, days with maximum temperature ≥ 30°C and nights with minimum temperature ≥ 25°C also will increase; days with minimum temperature < 0°C and days with maximum temperature < 0°C will decrease.	**+9.7 days**
Change in annual precipitation	No clear nationwide trend	▲32.3mm
Torrential rain events per year (hourly rainfall ≥ 50mm)	Frequency of short-duration heavy rainfall will **increase on nationwide basis**; nationwide mean frequency will **more than double**.	**46% increase** in nationwide mean
Dry days per year (daily precipitation < 1mm)	Frequency of dry days will **increase on nationwide basis**, particularly **during winter in Japan Sea coastal regions**	**+6.85 days**

Note 1: Late 20th century: 1980-1999; late 21st century: 2076-2095.
Source: NRI, based on Japan Meteorological Agency's ninth projection of global warming's effects (published March 2017) and historical weather data

initiatives in addition to paying insurance claims after disasters occur.

Insurance's role in the sharing economy

Another recent development with ramifications for the insurance business is the sharing economy. The sharing economy emerged in the US in 2008, when Airbnb was launched as a platform for short-term rentals of homes and spare bedrooms. It is growing rapidly even in Japan, with sharing platform operators' revenues projected to grow to ¥138.6bn in FY2022 from ¥28.5bn in FY2015[12)]. It is also diversifying in terms of what is being shared. The sharing economy currently extends across five categories of "shareables": goods, space, skills, mobility and money.

The Japanese sharing economy's biggest market is mobility, the predominant segment of which is car sharing. Car-sharing services in Japan have over 1.6mn registered users as of March 31, 2019. They are popular in urban areas in particular. Automobile

Exhibit 3-13. **Automobile ownership and car-sharing fleet by region**

Region	Vehicles per household			Car-sharing fleet (vehicles)	
	March 31, 2005	March 31, 2019	Change	March 31, 2019	% of total
Nationwide	1.112	1.052	▲0.060	31,339	100.0
Nationwide ex 3 major metro areas, Hiroshima & Fukuoka	1.357	1.361	0.004	3,060	9.8
Tokyo	0.538	0.432	▲0.106	11,704	37.3
Osaka	0.729	0.645	▲0.084	4,419	14.1
Kanagawa	0.820	0.705	▲0.115	3,337	10.6

Source: NRI, based on Automobile Inspection & Registration Information Association and J-Tips data

ownership per urban household is decreasing, perhaps in conjunction with car-sharing services' growth. In Tokyo, for example, the number of registered vehicles per household at March 31, 2019, was down some 20% from 14 years earlier. Outside of the Tokyo, Osaka and Nagoya metropolitan areas plus Hiroshima and Fukuoka, automobile ownership is still growing (Exhibit 3-13). Japanese are not turning their backs on cars. With car-sharing services' fleets disproportionately concentrated in a handful of prefectures, the trend from automobile ownership to usage appears to be confined exclusively to urban areas.

P2P (peer-to-peer) car sharing also has been gaining popularity recently in Japan. Shareable vehicles registered on Anyca, Japan's biggest P2P car-sharing platform, has grown nearly twentyfold from 400 or so in October 2015 to over 7,000 in January 2019. Driving the vehicle of your choice when you want to drive it is becoming a common practice in urban areas. Insurers are starting to accommodate such alternative vehicle usage modalities by offering insurance for which premiums are charged by the day or the hour based on actual vehicle usage. Such time-metered insurance potentially has non-automotive applications also. It will likely spread to other insurance markets.

While policyholders will surely welcome time-metered billing for insurance coverage, insurers may incur generally higher loss rates on such insurance. Expansion of the sharing economy, particularly car sharing, consequently may weigh on nonlife insurers' earnings. Currently, insurers are actively accommodating shared-car users through such means as safe-driving telematics apps and discounted premiums on new policies for the apps' users, but their loss rates need to be monitored going forward.

In the sharing economy, shareability extends even to insurance itself. P2P insurance is gaining prevalence overseas, mainly in Europe, the US and China. Exhibit 3-14 briefly explains how it works.

While yet to receive regulatory approval in Japan, P2P insurance is conceptually similar to group life insurance. With Japanese group insurance, if the group members' insurance claims during the (one-year) coverage term are below a designated threshold, the surplus of premiums over claims is refunded to the group members as dividends. P2P insurance can be modeled after conventional group insurance, with an voluntary group insuring itself against an arbitrary risk (enrolling in insurance coverage). P2P insurance differs from conventional group insurance in that every step from formation of the group to enrollment of peers, submission and payment of claims and distribution of refunds is automated with software.

P2P insurance does not require the involvement of an incumbent insurer. Disruptors from the tech or

Exhibit 3-14. **P2P insurance in a nutshell**

	How P2P insurance works
1	A group interested in insuring against the same risk contributes insurance premiums into a fund.
2	If any insured events occur, insurance benefits are paid from the fund.
3	When coverage term ends, any money left in the fund is refunded to group members who did not file claims.

Source: NRI

other sectors can enter the P2P market by leveraging InsurTech. The P2P model is accordingly seen as a major prospective threat to incumbent insurers. Even Japanese incumbent insurers will presumably start selling P2P insurance before long. When they do, one major issue they will face is what to do with the many employees they have hitherto needed to sell insurance and process claims.

P2P and other InsurTech-enabled insurance businesses basically do not require much manpower. They can sign up many policyholders with a small staff and IT. China's Ant Financial, for example, launched a P2P insurance pool called Xiang Hu Bao in 2018 and enrolled over 50mn policyholders within six months. It aims to grow Xiang Hu Bao to 300mn policyholders over the next two years. To compete against such upstart insurers, incumbents will need to make major changes to their workforces and corporate cultures predicated on their existing business models.

IoT devices conceptually change insurance's value proposition

IoT devices' rapid proliferation in recent years will undoubtedly engender major changes even in the insurance sector. Widespread deployment of IoT devices enables automated, data-based monitoring of processes previously reliant on humans and, in turn, risk control/prediction across various domains. The IoT's applicability to insurance is best exemplified by auto and health insurance.

In the automotive realm, IoT technology enables insurers to identify driver-specific risks and predict/detect accidents by directly associating drivers with vehicles. More specifically, insurers can identify policyholder-specific risks by collecting information from vehicles. Additionally, autonomous driving is expected to progress from its current level of conditional automation (SAE Level 3) to full automation (SAE Level 5) by the 2030s.

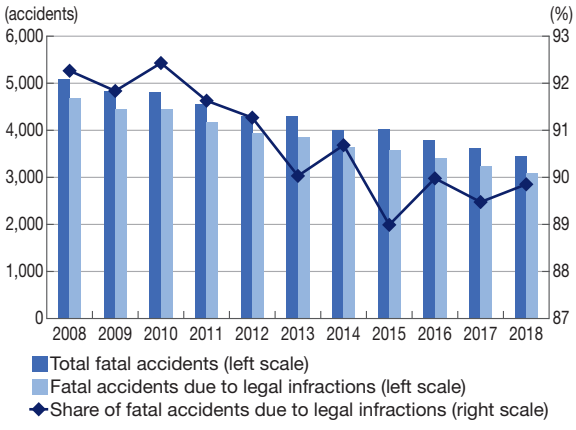
Exhibit 3-15. **Autonomous driving levels**

Level	Description	Definition
0	No automation	Driver performs all vehicle operating tasks.
1	Driver assistance	A system performs vehicle operating/control subtasks within limits[1], either longitudinally (acceleration/braking) or transversely (steering).
2	Partial automation	Systems perform vehicle operating/control subtasks within limits both longitudinally and transversely.
3	Conditional automation	Systems perform all vehicle operating tasks within limits. Driver must be ready to appropriately intervene when necessary.
4	High automation	Systems perform all vehicle operating tasks and respond to operating difficulties within limits.
5	Full automation	Systems perform all vehicle operating tasks and respond to operating difficulties under all circumstances.

Note 1: Said limits are not necessarily only geographic; they may also involve environmental or traffic conditions, speed, time of day, etc.
Source: Ministry of Land, Transport, Communications and Tourism's guidelines on autonomous driving safety technologies

In a world of fully autonomous driving, driving infractions would essentially be nonexistent. At-fault traffic accidents due to, for example, tailgating, attention lapses or failure to heed a traffic signal would be eliminated. Fully autonomous driving can greatly reduce traffic fatalities, some 90% of which are currently due to legal infractions. By doing so, it is expected to drastically reduce loss rates for auto insurance and other insurance that covers risks related to traffic accidents while simultaneously lowering insurance premium rates also.

Exhibit 3-16. **Percentage of fatal traffic accidents due to legal infractions**



Source: NRI, based on National Police Agency Traffic Bureau data

In the healthcare space, a broad range of IoT devices are in already widely used, including wearables that collect personal bio-data, remote patient monitoring and emergency alarm services and devices such as digital pillboxes that facilitate healthy habits. Life insurers are increasingly offering insurance products that use information obtained from such devices to promote better health. With life insurers now able to collect individualized data, they are offering policyholder-specific discounts on insurance premiums and rolling out products that incentivize policyholders to improve their health. Conventional insurance services without such real-time connectivity with policyholders have hitherto been based mainly on outcomes such as hospitalization or adverse health events. Going forward, however, preventive insurance services like advice for staying healthy or preventing illness based on real-time collection and analysis of behavioral and bio-data from policyholders will likely become more prevalent.

Such IoT-enabled disease prevention initiatives are already proving successful. One example is the so-called Kure model, a program run by the city of Kure in Hiroshima Prefecture. It identifies patients with diabetic kidney disease based on diagnostic billing codes and provides them with guidance to arrest the disease's progression. The program has reduced new dialysis patients by roughly 60% over a six-year span. Based on such results, use of IoT technology is expected to help reduce health insurance benefit payouts rates.

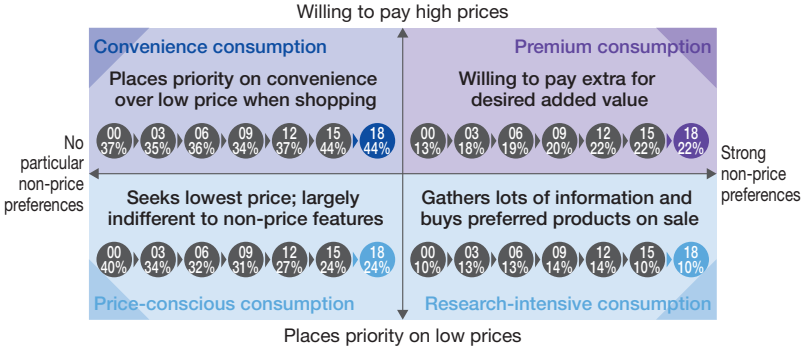
Use of IoT devices such as smartphones and smart appliances extends beyond the automotive and healthcare domains into just about every other sector of the economy. IoT devices preemptively detect many types of risks so preventive action can be taken before an insured event occurs. They also enable insurers to offer services tailored to a highly aged society, including welfare monitoring services for the elderly. Insurers are accordingly expected to expand their insurance-adjacent businesses.

In sum, mass proliferation of IoT devices will drastically change the concept of the value provided by insurers. Historically, insurers have provided value mainly from the time an insured event occurs until the insurance claim for that event is paid. Going forward, they could provide value even before any such event occurs. If so, they would likely reprice their product offerings to reflect the value of not only their insurance function but also auxiliary services such as safe driving support, disease prevention and health promotion. Such services may eventually become earnings growth drivers for insurers.

Responding to changes in consumer behavior

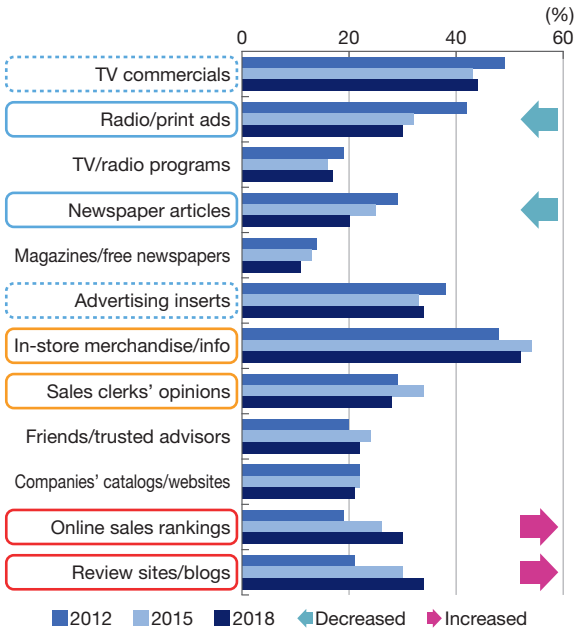
Lastly, we look at how insurers are affected by changes in customer behavior. According to our 2018 Questionnaire Survey of 10,000 Consumers, two of four styles of consumption have increased in popularity since 2000. The first is convenience consumption, whereby the consumer seeks to minimize time and effort spent on shopping. The second is premium consumption, whereby the consumer willingly pays extra for desired added value (Exhibit 3-17). Among the other two consumption

Exhibit 3-17. Distribution of consumers among four consumption styles



Source: NRI 2018 Question and Survey of 10,000 Consumers

Exhibit 3-18. **Changes over time in information sources used when shopping for goods or services**



Source: NRI 2018 Question and Survey of 10,000 Consumers

styles, price-conscious consumption, which is distinguished by a frugal mindset, has become less prevalent. The information sources on which consumers place the most emphasis when shopping for something is shifting away from information put out by companies (e.g., TV commercials, print advertisements) toward information posted online by strangers (e.g., reviews, blogs). When making restaurant reservations, for example, consumers seem to ascribe more credibility to ratings on restaurant review sites like *tabelog*.

Our survey results imply that some 70% of consumers are now overwhelmed by too much online information on products and services. If so, the trend toward seeking simpler, more convenient assistance with purchase decisions while disregarding nonessential information should become more pronounced. The archetypical example of such assistance is informal reviews or numerical ratings by one's peers.

In light of such, purchase decisions made with relatively little deliberation based on conveniently available information will likely become even more common going forward. If so, channels of contact with consumers may be dominated by providers of convenient communication services like Line, making it harder than in the past for insurance sales reps to make personal contact with prospective customers.

3 Changing environment's implications for future of insurance business

Of the changes in insurers' environment discussed above, societal aging and natural disasters' growing incidence pose unavoidable downside risks to insurers' earnings. To successfully navigate such risks, insurers need to shed costs and roll out products that leverage IoT and other digital technologies, particularly in their retail businesses. They must also continue to cultivate longer-term customers amid the trend toward granularly time-metered insurance. In light of such plus consumers' growing penchant for convenience, the insurance industry could evolve along the following lines.

Personalization of insurance products

Widespread adoption of IoT devices is expected to lead to not only migration from conventional products priced using static data (e.g., mortality rates) to products that incorporate dynamic data (e.g., health status) but also a shift toward individualization of assumed risks also. At some point, insurers may be able to formulate hyper-customized product recommendations based on individuals' dynamic data and deliver them directly to the customers' personal smartphones. For customers, the act of choosing a product from among multiple alternatives may become obsolete. Instead, they would merely decide to accept or reject products recommended specifically to them. Meanwhile, insurers should be able to reduce claims/benefit payouts by virtue of the IoT-enabled risk detection/prediction services discussed above.

If such personalized products become available,

insurers should be able to switch to a low-cost, lightly staffed operating model through such means as maximally downsizing their human sales forces and automating claims processing by sharing data with healthcare providers.

Building a cross-sectoral ecosystem

With IoT-enabled insurance products, competitive advantage accrues from the IoT devices deployed. Insurers accordingly may find themselves at a disadvantage if device makers enter the insurance market. The US EV maker Tesla reportedly plans to enter the auto insurance market in a big way. Other manufacturers may successively follow suit. If so, they could pose a threat to insurers. Additionally, granularly time-metered billing for insurance will become more prevalent as the sharing economy expands further. Insurance coverage consequently may become progressively shorter in duration and be paid for in progressively smaller installments. For insurers to remain profitable in such an environment, we see a need for them to form ecosystems around themselves as the nucleus.

One example of an ecosystem is a Finnish MaaS (mobility as a service) platform called Whim. The Whim app can be used for everything from mapping out the optimal route to one's desired destination to booking the means of transportation to get there and paying the requisite fare(s). Ideally, insurers should set up such services revolving around themselves but, depending on how the service's purpose is defined, they may not be able to feasibly do so. In the case of Whim, mobility is a feasible purpose; insurance is not. In other words, Whim's service is not conducive to insurance usage in and of itself. Insurers therefore must define their insurance ecosystems' purpose properly. A good example is health insurance that promotes healthy lifestyles as discussed above. In such an ecosystem, the insurer would play the central role in line with the objective of promoting better health.

From a profitability standpoint, we believe it is a good idea to define insurance ecosystems' purpose as a figurative journey with multiple steps, all with a single objective. To use a travel analogy, such an ecosystem would be akin to the Shikoku 88-temple pilgrimage or a tour of Japan's 100 most famous castles. By forming ecosystems comprising partner companies that share the ecosystem's designated purpose, insurers can build long-term customer relationships that encompass all of the ecosystem's nodes.

While the customer is pursuing the designated objective, various risks will come into play. Insurers can design insurance that comprehensively covers multiple risks by collecting dynamic data on customers from its ecosystem partners and using apps to handle everything from enrolling customers in insurance coverage to paying claims. Additionally, insurers can retain customers on a long-term basis and earn additional revenues from service fees by providing added value (e.g., payment services, rewards points redeemable only within the ecosystem) that motivates customers to achieve the designated objective. Such value-added services could become important new revenue sources.

The challenge of redefining humans' role

Using digital technologies in retail businesses as discussed above will obviate the need for humans to structure insurance coverage and make sales presentations. Additionally, automation of claims processing will reduce the involvement of insurers and insurance agencies' personnel in handling claims.

On the other hand, compassion and other such human qualities currently beyond the ken of digital technologies like AI are integral to the insurance business. While humans may no longer explain personal risks to customers, they will still be needed to fulfill insurance's role as a component of life planning through such means as helping customers

with family budgeting and explaining umbrella coverage against diverse risks. Humans should play increasingly important roles as insurance evolves into a more comprehensive financial service.

Insurers have to build earnings foundations that can withstand changes in the environment. Doing so will entail continued reallocation of human resources to new businesses, including insurance-adjacent services, and the commercial insurance market, where human expertise plays an important role in underwriting decisions and loss assessments.

12) Source: Yano Research Institute, *Sharing Economy Market 2018* (September 12, 2018).

CHAPTER
4 Asset management industry under pressure to rethink its business domain

1 Investment trust ownership has broadened markedly

Our discussion of the asset management industry begins with a look at the potential size of the Japanese asset management industry's retail investor market segment–i.e., the public investment trust market. We then discuss challenges facing the industry and how to surmount them.

The public investment trust market, considered the asset management industry's most promising growth market 5-6 years ago, has plateaued over the past several years, with open-end equity investment trust (ex ETF) AUM oscillating in the ¥60-65trn range since FY2014. While the market thus outwardly appears to be essentially static in AUM terms, big changes are happening beneath the surface in terms of investment trust ownership and the public's perception of investment trusts.

First, ownership of stocks and investment trusts has been increasing among men aged 20-39 and women aged 40-59 according to the JSDA's triennial nationwide survey on securities investment (Exhibit 4-1.A). The JSDA data confirm that the percentage of people who own stocks or investment trusts is increasing in demographics younger than the 60+ age group hitherto said to account for the lion's share of Japanese retail investors. According to the same survey data disaggregated into five income strata[13], stock or investment trust owners has been increasing among respondents with an annual household income between ¥3mn and ¥5mn while trending sideways among respondents in the top income stratum of ¥5mn or more. Additionally, data stratified

Exhibit 4-1.A. **Stock or investment trust owners as a percentage of survey respondents**

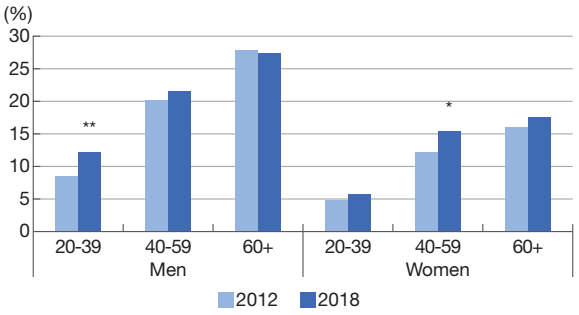


Exhibit 4-1.B. **Stock owners as a percentage of survey respondents**

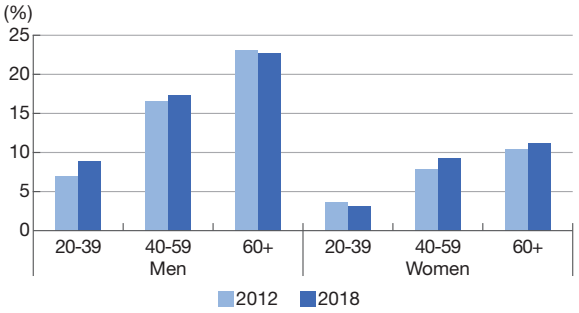
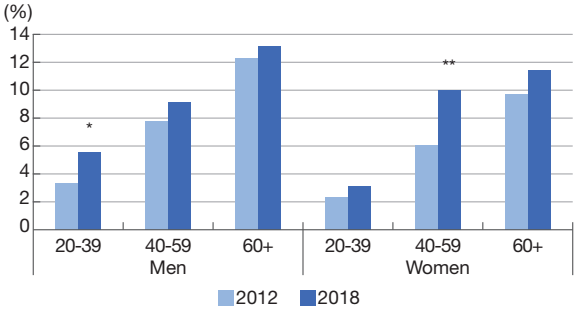


Exhibit 4-1.C. **Investment trust owners as a percentage of survey respondents**



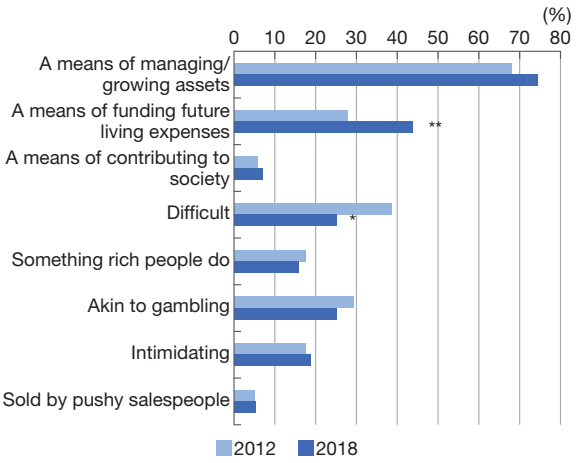
Note: *: p < .05; **: p < .01, where the p-values are two-sided null hypothesis probabilities with respect to the difference between the 2012 and 2018 data points.
Source: NRI analysis of anonymized JSDA nationwide survey data (2012 and 2018)

by value of financial asset holdings showed growth in the percentage of respondents with holdings of less than ¥500,000 but no material growth in the other three strata with larger holdings. While the percentage of investors did not change materially in the top stratum by either income or financial asset holdings–i.e., among the affluent class that includes most investors–it increased in less affluent strata. In other words, investment is gaining prevalence across a broader range of income/wealth demographics.

Such broadening of the Japanese investor class is more evident in investment trust ownership than in stock ownership. The percentage of people who invest in stocks was more or less unchanged across all age groups between 2012 and 2018 (Exhibit 4-1.B) while the percentage who invest in investment trusts increased among men aged 20-39 and especially among women aged 40-59 (Exhibit 4-1.C). Male investors are more prevalent than women investors in all age groups except 40-59, where investment trust ownership is equally if not more popular among women than men. Investment trust ownership is broadening across income strata also, with the percentage of fund investors increasing in the stratum with incomes between ¥1mn and ¥2mn in addition to the aforementioned ¥3-5mn stratum.

Meanwhile, attitudes toward securities investment are likewise changing. Exhibit 4-2 shows how survey respondents who actually invest in securities view securities investment on the whole (the graph plots data for 20-39 year-olds of both genders as an example). It compares survey responses between 2012 and 2018, a timeframe that encompasses the January 2014 advent of Nippon Individual Savings Accounts (NISAs). The most common image of securities investment in both 2012 and 2018 was "a means to grow assets," but the image that saw the biggest increase in prevalence between the two surveys was that of securities investment as "a means of funding future living expenses." Although securities investment may still be strongly associated

Exhibit 4-2. **Image of securities investment among 20-39 year-old stock or investment trust owners of both genders**



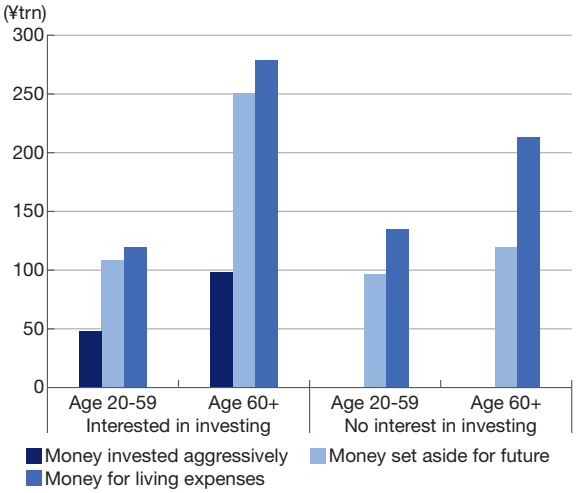
Note: *: p < .05; **: p < .01, where the p-values are two-sided null hypothesis probabilities with respect to the difference between the 2012 and 2018 data points.
Source: NRI analysis of anonymized JSDA nationwide survey data (2012 and 2018)

with aggressive short-term trading, which was not one of the survey's multiple-choice responses, it is increasingly seen as a long-term wealth-building vehicle and not only among 20-39 year-olds. The same trend is evident among 40-59 and 60+ year-old stock or fund investors of both genders. Moreover, it was evident even among survey respondents who do not invest in stocks or investment trusts. Securities investment's public image is steadily changing.

2 Investment trust market's huge growth potential

Securities investment and particularly investment trusts' ongoing perceptual evolution toward a "long-term wealth-building" image may lead to growth in the investment trust market. If securities investment's long-entrenched image as an aggressive short-term trading vehicle were to remain dominant, the investment trust market would be unlikely to draw inflows from more than a small subset of the public. If securities investment develops more of an image as a long-term wealth-building vehicle, inflows to the investment trust market could multiply several-fold as investment trusts gain popularity as a means of saving for the future and/or retirement.

Exhibit 4-3. **Distribution of personal financial assets (ex pensions and life insurance)**



Source: Estimates based largely on NRI survey data (2015) and BOJ Flow of Funds data

To shed light on specifically how much growth potential the investment trust market has, a 2015 NRI survey asked respondents to apportion their personal financial assets into three buckets: money for living expenses, money set aside for the future and money aggressively invested in pursuit of growth. Based on the responses to this survey question, Exhibit 4-3 plots our estimates of how much money is in each of the three buckets on a nationwide basis, broken down between people interested and people uninterested in investment and, within each of these two groups, by age bracket.

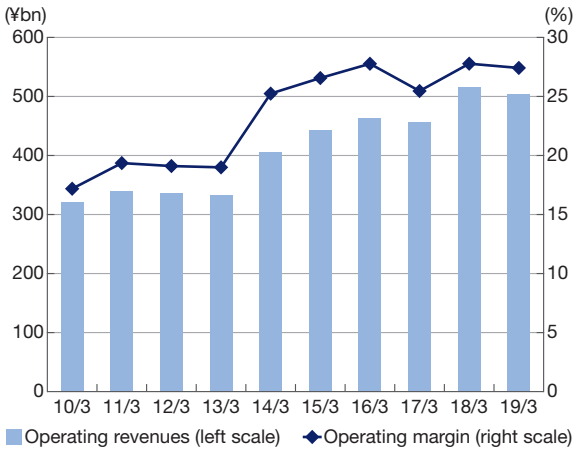
By our estimates, nearly four times as much money was set aside for the future than aggressively invested in pursuit of growth. If the idea that investment trusts are a smart place to invest money earmarked for future use becomes conventional wisdom, investment trusts would likely see growing inflows from the ¥360trn set aside for the future by people interested in investment. Additionally, with investment trusts increasingly perceived as a long-term wealth-building vehicle even by people with no interest in investing, some of their ¥217trn set aside for the future may likewise find its way into the investment trust market.

3 Investment trust companies under threat from fee compression

Investment trust companies' aggregate operating revenues[14] are in a growth trend dating back a number of years (Exhibit 4-4). In FY2018 (19/3 in Exhibit 4-4), operating revenues were down a bit from their year-earlier all-time record but remained at a high level. Operating margin has been above 25% every year since FY2013. Even in FY2009, during the depths of the GFC, operating margin was a healthy 17%. Given such high profitability, investment trust companies should have a bright future if they could count on benefiting from the market growth potential described above, but their future prospects are actually not entirely rosy. Their existing business is under threat from a multiyear decline in public investment trusts' average management fee rate (total management fee revenue as a percentage of aggregate AUM).

Based on data on management fees (investment trust companies' share of trust fees) extracted from funds' prospectuses and performance reports, the average management fee rate dropped sharply from 55bp to 52bp over the four years through FY2015 and has subsequently continued to sag, most recently to

Exhibit 4-4. **Investment trust companies' aggregate operating revenues and operating margin**



Note: Data are for AMCs that sponsor public investment trusts and have a March fiscal year-end. Operating revenues are net of public investment trust account servicing fees. Operating margin = operating profit ÷ operating revenue.
Source: NRI estimates based largely on investment trust companies' financial disclosures

51bp (Exhibit 4-5).

We attribute the average management fee rate's decline to two factors. The first is growth in AUM intermediated by entities with a strong incentive to minimize trust fees. For example, AUM of investment trusts held in defined contribution (DC) pension plans have been steadily growing year after year[15] (Exhibit 4-6). DCIO (DC investment only) funds alone have ¥5.5trn of AUM as of FY2018-end. DC plan assets are split 90:10 between corporate plans and iDeCo (individual DC) retirement accounts. Corporate DC plans' menus of investment options tend to strongly reflect the preferences of the company sponsoring the plan[16]. Many such sponsors place priority on investment cost efficiency in particular. As of FY2018, DCIO investment trusts' average management fee rate was 23bp, well below the corresponding average for regular investment trusts.

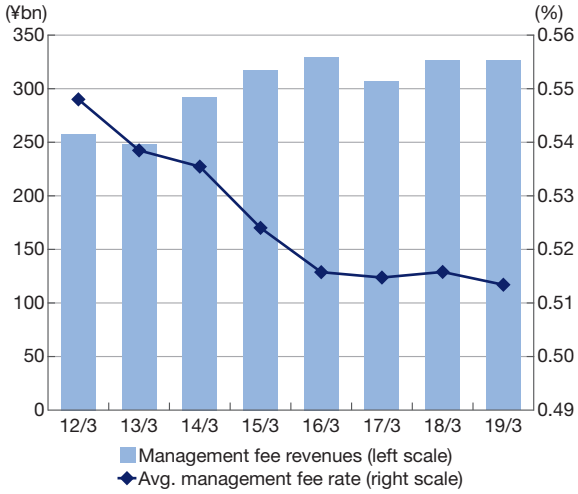
Another channel in which investment trusts are offered through entities with an incentive to minimize management fees is DMA (discretionary managed account) services, most notably fund wrap accounts, which have been around since 2004. Investment trusts available through fund wrap services currently have over ¥7.5trn of AUM. DMA agreements typically set the DMA provider's compensation at a fixed percentage of the invested assets, giving the provider a strong incentive to maximize customer assets. DMA providers consequently seek to minimize trust fees that detract from funds' net assets in proportion to the fee rate. The average management fee charged by DMA-only funds is a low 28bp.

Investment trusts offered through entities with a strong incentive to minimize trust fees, such as DCIO and DMA-only funds, already account for over 20% of open-end equity investment trust (ex ETF) AUM. Such funds' AUM share is even higher when their definition is expanded to include other arrangements designed to lower trust fees, like *Tsumitate* NISAs.

The second factor depressing management fee rates is growth in index funds' AUM share. Index funds' share of AUM in regular investment trusts (i.e., those other than, e.g., DCIO and DMA-only funds) has grown to 6.1% from 4.0% five years ago (Exhibit 4-7)[17]. Moreover, trust-fee competition among index funds is intensifying. The average index fund trust fee has decreased from 30bp to 23bp over the seven years through FY2018.

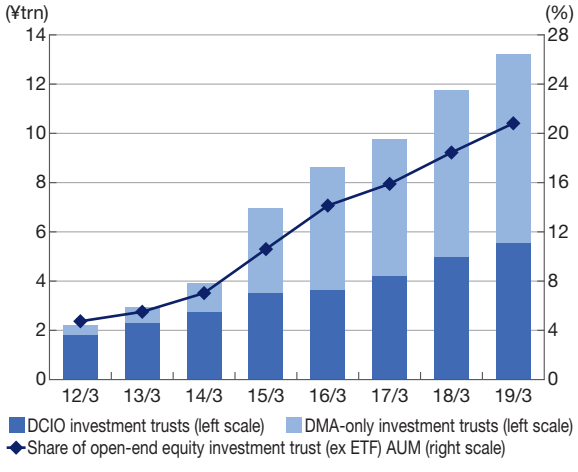
Other trends that may be exacerbating such fee compression include diversification of asset management services offered by banks and

Exhibit 4-5. **Public open-end equity investment trust (ex ETF) management fee revenues**



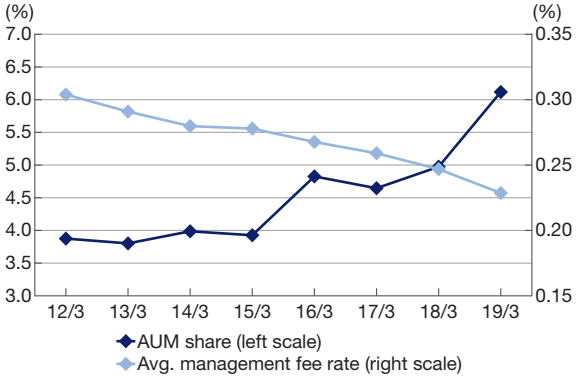
Note: Management fee revenues are investment trust companies' share of trust fees.
Source: NRI estimates

Exhibit 4-6. **DCIO and DMA-only investment trust AUM**



Source: NRI estimates

Exhibit 4-7. **Index funds' AUM share and average management fee rate**



Note: AUM share is index funds' share of investment trust AUM excluding DCIO and DMA-only funds. Average fee rate data are AUM-weighted averages. Index funds do not include balanced investment trusts composed solely of passive funds.
Source: NRI estimates

broker-dealers; widespread use of index funds in internationally diversified portfolios, mainly by younger investors; and migration from DB corporate pension plans to DC plans, including iDeCo accounts, in the private pension segment, the third layer of the Japanese pension system. If so, management fee rates' ongoing decline will continue and perhaps even accelerate.

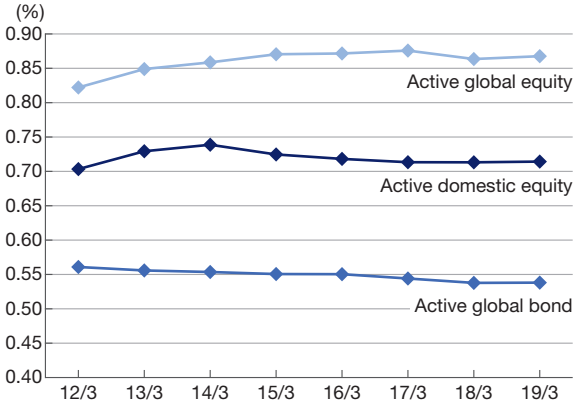
4 Active funds holding up well against fee compression so far

In contrast to index funds and investment trusts offered through entities incentivized to minimize trust fees, active funds have mostly escaped fee compression to date. Exhibit 4-8 plots average fee rates for regular actively managed investment trusts[18]. Whereas index funds' average management fee rate declined nearly 25% (7bp) between FY2011 and FY2018, active funds' average fee rates have held up much better. Actively managed global bond funds' average fee rate dropped a mere 2bp from 56bp to 54bp over the FY2011-18 period while actively managed domestic equity and global equity funds' average fee rates respectively rose 1bp and 5bp, the former from 70bp to 71bp and the latter from 82bp to 87bp. A similar pattern has been observed overseas also.

For example, the UK Financial Conduct Authority mentioned in a November 2016 report[19] that "mainstream actively managed fund charges have stayed broadly the same for the last 10 years" whereas "charges for passive funds have fallen over the last five years." Index funds are qualitatively very similar to each other and therefore susceptible to price competition. Active funds, by contrast, differ in various respects such as their investment policies, active risk exposure and excess return targets. Given such differences, active funds that charge lower trust fees are not necessarily more cost-efficient than competitors with higher fees. Active funds consequently tend to eschew price competition. In other words, their differentiation insulates them against fee compression.

As long as the status quo persists, asset management companies (AMCs) should continue to enjoy a favorable earnings environment, but their pricing power in the actively managed space may not be sustainable. Japan's Government Pension Investment Fund (GPIF) is transitioning to a performance-based compensation scheme for active managers that involves decomposing investment returns into beta (market return) and alpha (excess return) components. The GPIF intends to compensate active managers for beta at the same fee rate it

Exhibit 4-8. **Active funds' average management fee rates**



Note: Data are AUM-weighted averages of management fee rates of active funds, excluding DCIO and DMA-only funds, that are benchmarked against a broadly diversified index and invest exclusively in one of the following asset classes: domestic equities, global equities, global bonds.
Source: NRI estimates

pays to passive managers. For alpha, it will pay fees commensurate with the manager's outperformance. If such performance-based fee structures spread to the retail market segment, active funds' management fees may be affected.

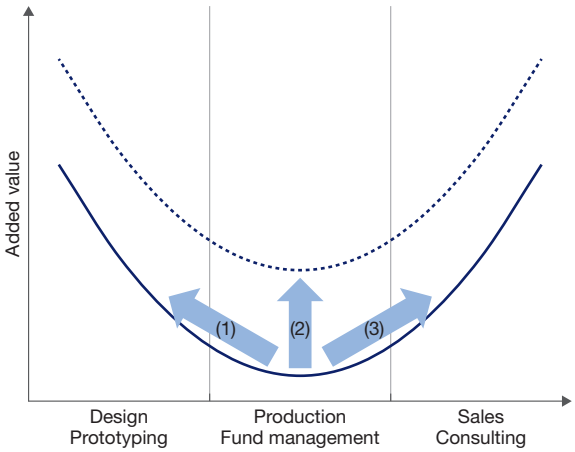
Impetus toward such a shift in pricing is already starting to emerge, though it may not sound like an imminent threat at the moment. One of the FSA's Principles for Customer-first Business Practices is fee transparency (Principle 4). Regarding trust fees, the FSA simply wants asset managers to disclose fees in a manner understandable to customers, but a number of financial institutions have gone further by pledging to set "reasonable" fees. If rationally justifying management fees' level becomes a common practice, even active funds' management fees would inevitably come under downward pressure.

5 Defenses against fee compression

If management fee compression is an irreversible trend, investment trust companies need to adjust their business strategies accordingly. They would basically have to choose between thoroughly committing to a low-fee strategy or seeking to add more value. The first option would entail offering index funds and competing on the basis of price. Such a strategy would require unremitting pursuit of operational efficiency and therefore likely result in a small handful of winners and many losers. The second option offers a broader range of opportunities. We discuss it in the context of the "smile curve" concept that has been applied to various industries.

The smile curve, which depicts added value as a function of process domain, is applicable to the asset management industry also. Creation of new products that innovatively combine investment techniques tend to generate high profit margins and can allow the innovator to climb the smile curve to an upstream process domain (arrow (1) in Exhibit 4-9). However, development of innovative investment products rarely involves proprietary IP. Competitors are generally able to easily launch copycat funds, as was seen in the past with currency overlay funds and target distribution funds. The first mover's high margins consequently end up being short-lived.

Exhibit 4-9. **Asset management industry's smile curve**



Source: NRI

Another approach is to seek to add more value without migrating to a different process domain (arrow (2) in Exhibit 4-9). One conceivable way to do so is to branch into a new asset class. Some Japanese AMCs, mainly major ones, have in fact already taken such a tack. Our annual survey of AMCs' management priorities found that a few AMCs have set up in-house teams to invest in frontier markets, the smaller, less-developed cousins of emerging markets. Similar initiatives are afoot in other asset classes as well, including private equity and private credit. With such asset classes already populated by foreign rivals with considerable expertise, Japanese AMCs' success at boosting their overall profitability by expanding into new asset classes will hinge upon how well their products stack up quality-wise against foreign competitors'.

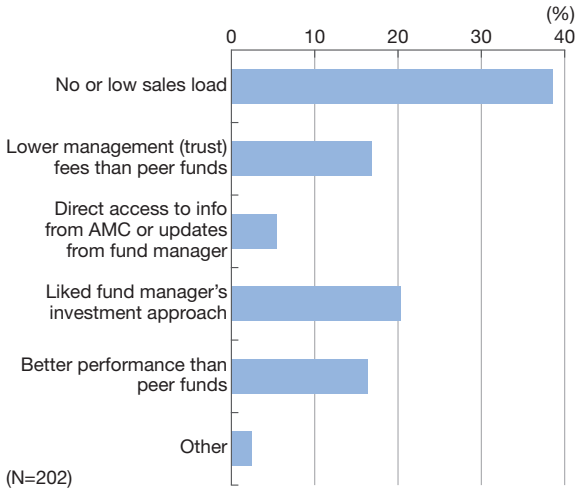
Downstream shift (1): direct sales

A third way to add more value is to migrate to a downstream process domain (arrow (3) in Exhibit

4-9). One option for doing so is direct sales by the AMC. In simple terms, a direct sales model eliminates the fees ordinarily paid to fund distributors. The resultant savings are shared between the AMC and its customers, with the former earning more revenue and the latter paying lower fees. Additionally, by building direct channels of contact with customers, AMCs can grow their businesses without having to accommodate fund distributors' strategies. Since the mid-2000s, the Japanese AMCs selling funds directly to retail investors have mostly been independent (i.e., unaffiliated with a financial group). They have been persistently disseminating their investment philosophies to retail investors through their own communication channels. Their differentiated investment approaches have recently been resonating with more and more individual investors.

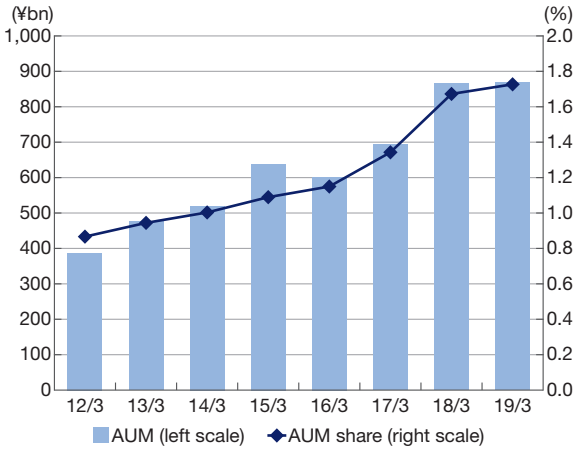
Our August 2019 survey on financial product purchasing habits asked respondents who had purchased an investment trust directly from an AMC why they did so. The top response was "because I was not charged a sales load;" the second most frequent was "because I liked the fund manager's investment approach" (Exhibit 4-10). When an AMC's distinctive investment approach and customers' endorsement of it are publicized through the media, rapid growth in the AMC's AUM tends to ensue.

Exhibit 4-10. **Foremost reason for buying direct investment trusts**



Source: NRI survey of financial product purchasing habits (August 2019)

Exhibit 4-11. **Direct investment trusts' AUM**



Note: AUM share is direct investment trusts' share of investment trust AUM excluding DCIO and DMA-only funds.
Source: NRI, based largely on Japan Investment Trusts Association (JITA) data

Direct investment trusts' AUM have more than doubled from below ¥400bn to nearly ¥900bn over the seven years through FY2018 (Exhibit 4-11) while their share of total investment trust AUM (excluding DCIO and DMA-only funds) rose from 0.9% to 1.7%.

Even some AMCs affiliated with major banking groups have recently adopted the direct sales model. Unlike the incumbent direct-sellers, these new entrants initially planned to limit their direct fund offerings to no-load, low-fee index funds, but they have found themselves at a disadvantage against online brokers selling equivalent funds on a larger scale. They are now starting to offer differentiated active funds in the direct-sales channel, like the incumbent direct-sellers. However, it is not easy for recent new entrants to quickly gain traction in the direct sales channel. The incumbents took a long time to build large customer followings.

Downstream shift (2): wrap account providers

A second approach to migrating along the smile curve to a downstream process domain is to provide a fund wrap service platform to banks and brokers. Because fund wrap portfolios are customized to customers' individual needs, fund wrap services could be more

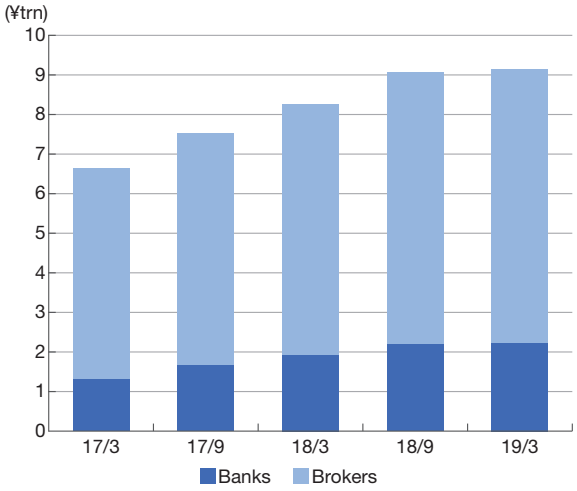
profitable than standardized asset management services. Unlike AMCs' existing investment trust businesses, which provide only individual investment products to banks and/or brokers, a fund wrap platform would provide the IT systems and know-how that banks and brokers need to construct optimal fund portfolios for customers. In the direct sales channel, AMCs compete against banks and brokers. A fund wrap platform, by contrast, provides banks and brokers with tools to better serve their customers. By refraining from going all the way downstream via the direct sales route, AMCs would be much less likely to elicit pushback from their existing fund distributors.

Investment trust are increasingly seen as a long-term wealth-building vehicle as mentioned earlier. While customers seeking to build long-term wealth want stable returns from investment trusts, they are unlikely to capture stable returns through their own investment acumen alone. Earning stable returns over the long term requires investment behavioral consistency irrespective of market conditions, even severe volatility. Few individuals innately possess the requisite consistency and equanimity. Wrap accounts help customers to maintain consistent investment behavior.

First offered in Japan by major brokers, wrap accounts are now available from banks also. Wrap account assets provided by banks have grown to over ¥2trn, roughly one-quarter of total wrap account assets (Exhibit 4-12). Wrap accounts are currently offered by most megabanks and trust banks and have the potential to become a major business even for regional financial institutions. Customers' investment preferences do not seem to differ much between megabanks/trust banks and regional financial institutions, at least according to survey data on investment trust ownership (Exhibit 4-13).

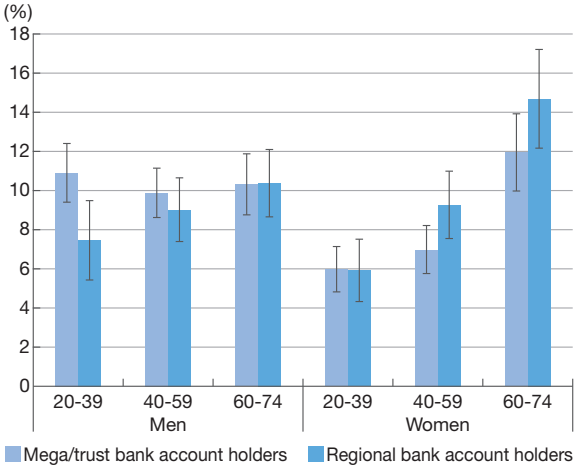
To provide wrap account services, a financial institution must possess the asset management know-how to appropriately service customers' portfolios in a timely manner. Many financial institutions, particularly regional ones, lack the resources to perform this function entirely on their own. Such financial institutions require the cooperation of a partner with asset management expertise. Investment trust companies could fulfill the investment advisory function for fund wrap services. A number of investment trust companies currently offer low-fee index funds. Such low-cost index funds are typically an essential ingredient of fund wrap services. They could provide additional services like recommending portfolio allocations that

Exhibit 4-12. Wrap account assets under custody



Source: NRI, based largely on Japan Investment Advisers Association (JIAA) data and company disclosures

Exhibit 4-13. Percentage of investment trust owners without a brokerage account



Note: Error bars denote estimates' margin of error at 95% confidence level.
Source: NRI survey of wrap account holders (March 2019)

meet customers' investment objectives or managing customer accounts.

In fact, a number of companies have entered this space over the past three years or so, including a newly established investment advisory firm, online brokers and FinTech companies. They have been actively partnering with incumbent financial institutions. The 32 financial institutions with which they have collectively partnered to date include 21 regional financial institutions, some of which are rapidly growing cumulative sales of wrap account assets. On a nationwide basis, however, regional financial institutions have barely scratched the surface of the wrap services market. They have ample scope for much more growth.

As the passively managed share of investment trust AUM increases, AMCs will be increasingly challenged to stay profitable by exclusively managing funds in conventional asset classes. When forced to respond, AMCs have a number of strategic options to maintain profitability as discussed above. Initially, many will presumably remain focused exclusively on asset management services and seek out ways to be able to continue to add sufficient value within their current business domain. However, if AMCs broadly recognize asset management services' societal significance, they might migrate to a downstream process domain and play a role in providing investment services tailored to customers' individual needs. When viewed through such a lens, business opportunities for AMCs are expanding.

13) The five income strata were less than ¥1mn, ¥1-2mn, ¥2-3mn, ¥3-5mn and ¥5mn or more.
14) We tallied operating revenues for investment trust companies that sponsor public investment trusts and have a March fiscal year-end. Operating revenues include investment advisory and discretionary management fees in addition to investment trust trustee fees (net of estimated account servicing fees paid to fund distributors for public investment trusts).
15) Investment trusts held in DC plans include both DCIO funds and funds available also in, e.g., NISAs and/or other taxable accounts. DCIO funds account for most of the estimated ¥7.0trn of investment trust AUM held in DC accounts (as of March 31, 2019).
16) Under the law, an administrator selected and hired by the plan's sponsor company is responsible for selecting the investment products on the plan's menu and communicating with plan participants (the company's employees) about the menu. In practice, however, sponsor companies are said to have considerable influence over their plans' investment menus.
17) These AUM share data are for index funds that invest exclusively in one of the four following asset classes: domestic equities, domestic bonds, global equities, global bonds. Inclusive of REIT index funds and balanced investment trusts composed solely of passive funds, index funds' AUM share at March 31, 2019, was 8.7%.
18) The active funds in our sample were limited to those benchmarked against a broadly diversified index in their respective asset classes. The specific domestic equity indexes were the TOPIX, TOPIX Total Return Index, Nikkei 225, Nikkei 225 Total Return Index, JPX-Nikkei 400, JPX-Nikkei 400 Total Return Index and Russell/Nomura Total Market Index (including dividends); the foreign equity indexes were MSCI World and MSCI Kokusai; the foreign bond indexes were the FTSE World Government Bond Index, JPMorgan Global Government Bond Index and Bloomberg Barclays Global Aggregate Bond Index.
19) FCA, Asset Management Market Study Interim Report (November 2016).

Appendix Japan's asset management business

Our preceding discussion of the asset management industry mainly covered the retail market segment (public investment trusts). The other two market segments are discussed below.

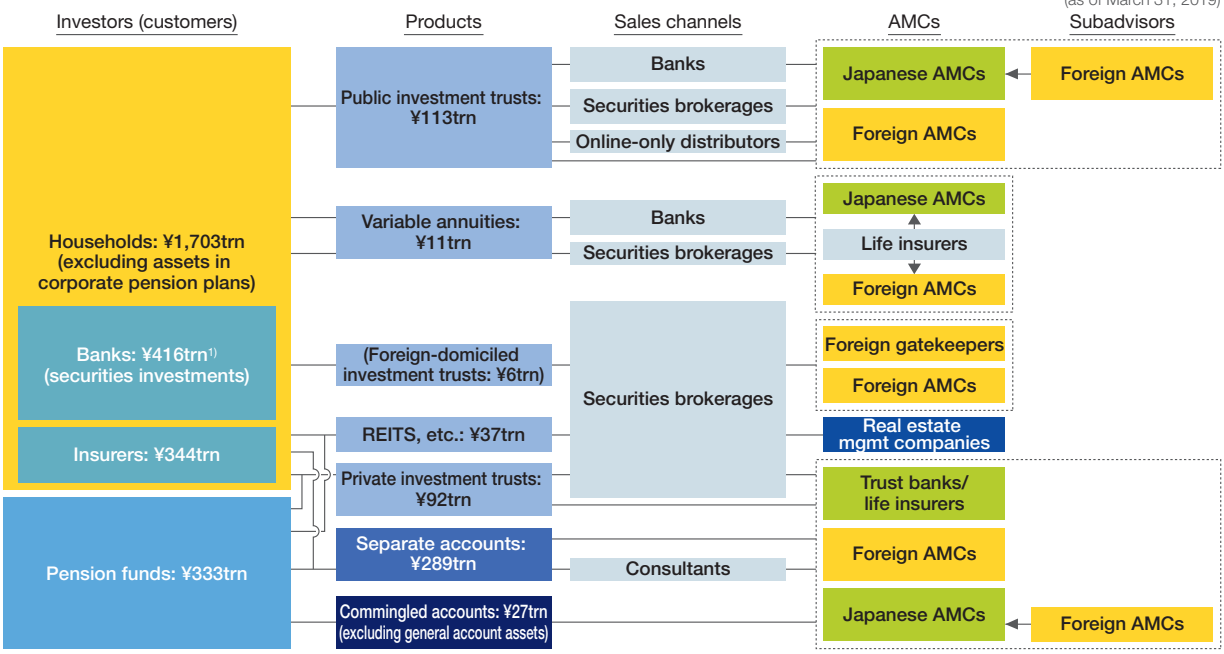
I. Japanese investor trends

Asset management industry continues to tread water

We begin with an overview of the Japanese asset management industry as of FY2018-end. Exhibit 5-1 is a simplified schematic of the Japanese asset management market at March 31, 2019, in terms of products and players, namely investors, distributors and asset managers. It shows who manages money and acts as intermediaries for which types of investors. AMCs in Japan mainly serve three types of customers: retail investors (households), corporations including financial institutions and pension funds. Adjusted to avoid double-counting of financial institutions' securities holdings essentially funded with retail customers' deposits, Japanese investors' financial asset holdings at March 31, 2019, totaled an estimated ¥2,036trn, a ¥27trn increase from a year earlier. Household financial assets accounted for ¥25trn of the ¥27trn increase; pension assets, for the remaining ¥2trn. The share of total financial assets managed by AMCs was ¥642trn, a ¥23trn year-on-

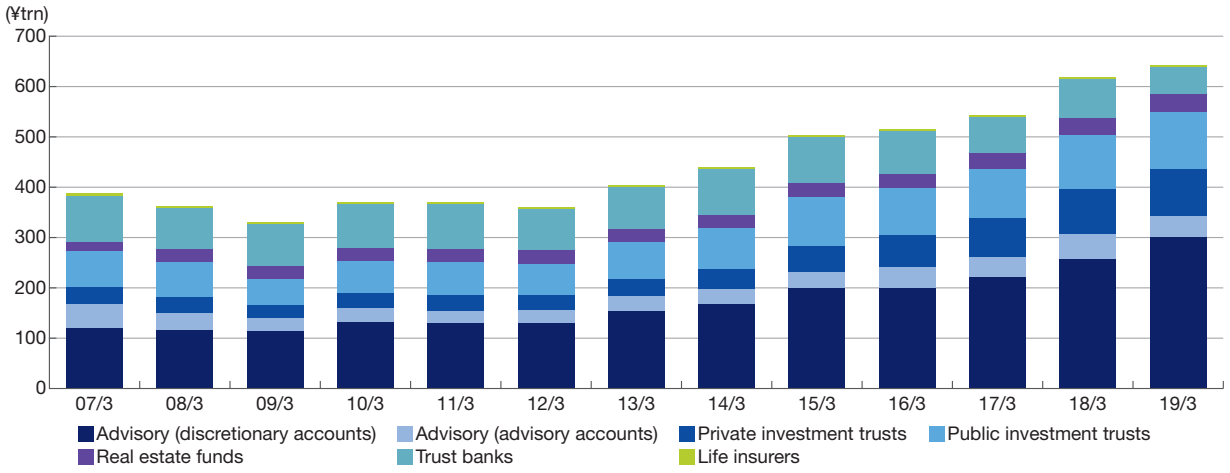
Exhibit 5-1. **Overview of Japan's asset management business**

(as of March 31, 2019)



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

Exhibit 5-2. **AMCs' AUM**



Note: Life insurers' AUM are DB pension asset mandates.
Source: NRI, based largely on JITA and JIAA data and AMCs' business reports

year increase (Exhibit 5-2). We largely attribute the increase to major financial groups placing existing assets under the management of affiliated AMCs, resulting in statistical double-counting of those assets. Assets actually managed on behalf of households and pension funds most likely did not increase appreciably.

Developments among households, pension funds and financial institutions

Household financial assets (excluding claims on corporate pension assets) at March 31, 2019, totaled ¥1,703trn, a ¥25trn increase from a year earlier. Their composition remained largely unchanged, with bank deposits and insurance products accounting for three-quarters of the total.

Disregarding asset price appreciation and the effects of changes in economic conditions, we estimate that societal aging alone will continue to drive growth in household assets at a rate of about ¥28trn per year for the foreseeable future. Even with the population aging rapidly, household financial assets continue to grow because the elderly in aggregate are not materially spending down their financial assets. If prevailing trends persist, ¥22trn or nearly 80% of the estimated ¥28trn annual additions to households' financial assets will end up in bank accounts or insurance products. Investment trusts should see annual inflows of around ¥3trn. Previously persistent outflows from income-oriented investment trusts have tapered off in FY2019 to date. Of the ¥3trn, inflows to investment trusts via DC pension plans and fund wrap accounts will likely account for ¥1.5trn per year on average. With more and more Japanese investing in funds in regular installments out of concern about their post-retirement financial security, inflows to even non-income-oriented investment trust should average over ¥1trn per year.

Pension funds, Japan's largest institutional investors, collectively held an estimated ¥333trn of assets as of March 31, 2019. Public pension funds' share of this total remained unchanged at two-thirds or ¥223trn, a ¥2trn year-on-year increase. Corporate and other private pension funds' assets were flat year on year at ¥110trn. By far the biggest player in the pension space is the Government Pension Investment Fund (GPIF), which manages the National Pension scheme's assets and Employee Pension Insurance reserves earmarked for benefits payable to private-sector workers. The GPIF holds over 47% of Japan's total pension assets. In April 2018, it adopted a new performance-based compensation scheme for external managers to allow active

managers to earn variable fees commensurate with their excess returns in exchange for a reduction in their base fee rate to parity with passive managers' fee rate. If this performance-based compensation model spreads throughout the pension fund market, active managers that deliver excess returns would be rewarded handsomely but the asset management industry as a whole would inevitably suffer a decline in management fee revenues.

Financial institutions' investment securities holdings at March 31, 2019, totaled some ¥760trn, down ¥2trn from a year earlier. Of this total, banks (ex Japan Post Bank) accounted for ¥211trn, *shinkin* banks and credit unions for ¥69trn, Japan Post Bank for ¥137trn, life insurers for ¥320trn (¥59trn of which was held by Japan Post Insurance) and nonlife insurers for ¥23trn.

Since the BOJ embarked on QQE in April 2013, financial institutions have been investing heavily in foreign securities and fund products out of a strong need to earn more yield than is available domestically. Since FY2017, however, the FSA has been warning about regional financial institutions' risk management with respect to securities investment. Even some major financial institutions have turned cautious on fund investment since FY2018. The environment is no longer conducive to continued brisk growth in financial institutions' aggregate fund investment holdings.

Ⅱ. Current state of asset management business

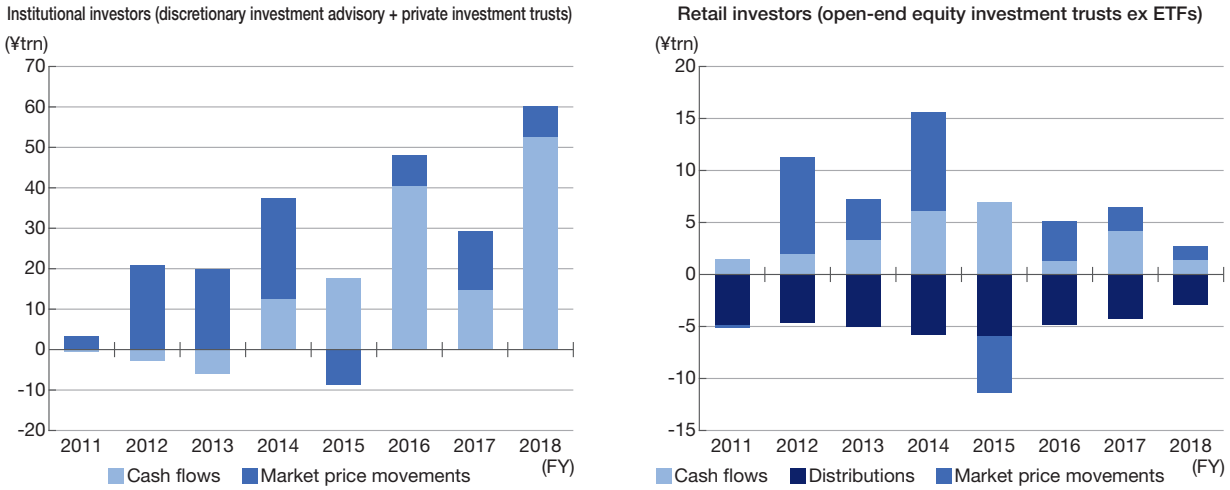
1 Current state of asset management business

The following is an update on how AMCs, defined as firms specializing in investment trust management and/or investment advisory services, are faring in their businesses based on various data, including NRI surveys.

Profit margin downturn

Exhibit 5-3 plots annual changes in AMCs' AUM disaggregated by causative factor. First, in the institutional market segment (leftward graph: total of discretionary investment advisory AUM and private investment trust AUM), asset price appreciation boosted AMCs' AUM in FY2018 by roughly ¥7.6trn, about half as much as in FY2017. The reduction in price gains was attributable to a global equity market selloff in the fiscal third quarter. Meanwhile, net inflows of new assets boosted AMCs' AUM by a whopping

Exhibit 5-3. **Changes in AUM disaggregated by causative factor**



Source: NRI, based largely on JITA, JIAA and NRI Fundmark data

¥52.5trn, but some ¥50trn of the inflows occurred within major Japanese financial groups in conjunction with intra-group reorganization of asset management functions. Excluding this ¥50trn, asset net-inflows shrank to a four-year low of ¥2.5trn.

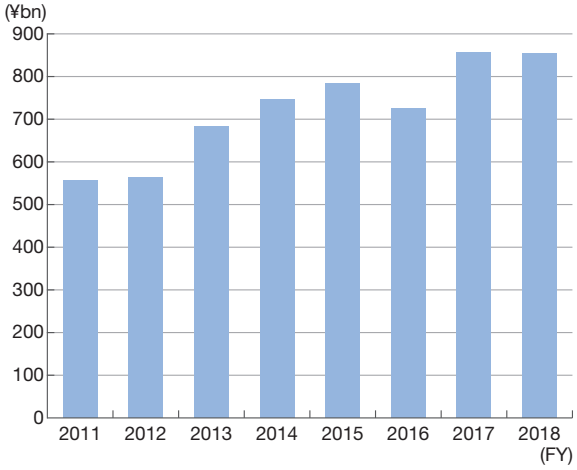
Of the asset management industry's FY2018 net inflows of ¥52.5trn, ¥49trn went into discretionary investment advisory products. Net of the ¥50trn of intra-group flows, discretionary investment advisory products suffered a net outflow, albeit a minuscule one. Private investment trusts' previously rapid growth slowed in FY2018 as their net inflows shrank to a modest ¥3.5trn from ¥11trn in FY2017 and ¥12trn in FY2016. For several consecutive years through FY2017, private investment trusts attracted substantial inflows from financial institutions seeking an alternative to low-yielding JGBs, partly by virtue of advantageous accounting treatment of gains on investment trust holdings. Private investment trust inflows' downshift in FY2018 was presumably in response to financial institutions' inability to upgrade their risk management fast enough to keep pace with their risk assets' torrid growth and regulators' growing concern about the situation.

In the retail market segment (rightward graph: open-end public equity investment trust (ex ETF) AUM), asset price appreciation added ¥1.3trn to AMCs' AUM while asset net-inflows contributed another ¥1.4trn, both less than in FY2017. Net of dividend distributions, which totaled ¥3trn in FY2018, retail investment trusts experienced a small net outflow and, in turn, a slight reduction in AUM (NAV).

Since cresting at an all-time peak in FY2015, retail investment trusts' dividend distributions have decreased for three straight years through FY2018. Their average distribution yield[20] has followed suit, dropping from the vicinity of 10% at FY2015-end to around 8% one year later, 7% two years later and 4.5% three years later.

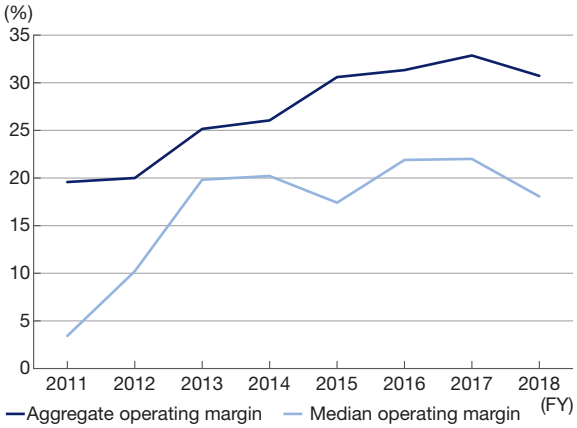
AMCs' management fee revenues and operating margins of domestic AMCs that sponsor public investment trusts are respectively plotted in Exhibits 5-4 and 5-5 based on data available at time of this writing. For FY2018, we estimate aggregate management fee revenues at ¥854.5bn, slightly below FY2017's all-time record level, and operating margin at 31%, down 2ppt from FY2017 but still quite high. The drop in operating margin interrupted a multiyear margin expansion trend. The median FY2018 operating margin was 18%, down 4ppt from FY2017. Both the aggregate and median operating margins reverted to their respective FY2015 levels in FY2018, mainly as a result of decreased revenue

Exhibit 5-4. **AMCs' aggregate management fee revenues**



Source: NRI, based on JITA and JIAA data

Exhibit 5-5. **AMCs' operating margins**



Note: The above graph plots operating margin data for domestic public investment trust sponsors (number of AMCs in data sample varies by fiscal year). Aggregate operating margin is aggregate operating profits of the AMCs in the sample divided by their aggregate net operating revenues.
Source: NRI, based on JITA data

from investment advisory mandates. We surmise that many active managers fell short of their excess return targets under performance-based compensation schemes adopted by public pension funds in recent years.

2 Outlook for asset management business

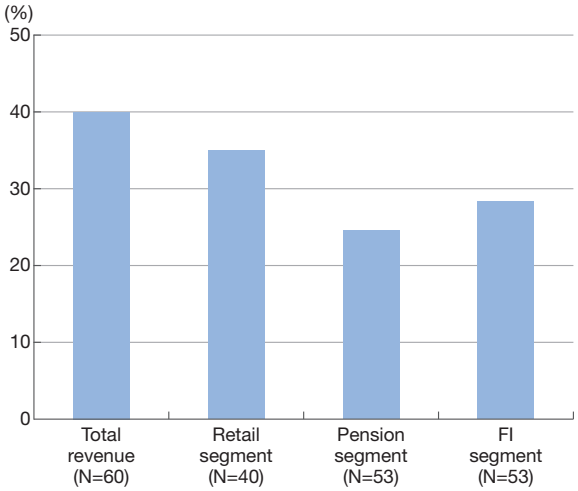
At NRI, we annually survey AMCs' management (NRI Survey of Asset Management Companies' Management Priorities[21]) to ascertain the asset management industry's consensus outlook and latest business conditions. The following is a rundown of how AMCs see their near-term business environment as revealed by survey responses.

Growth expectations have shifted from FI segment to retail segment

First, we look at AMCs' overall revenue outlook. Exhibit 5-6 plots the percentages of survey respondents forecasting cumulative revenue growth of at least 50% over the next five years on a company-wide basis and by business line (investor segment). Some 40% of the respondents expect their total revenues to grow at least 50% over the next five years. By investor segment, the share of respondents forecasting five-year revenue growth of at least 50% increased slightly in the retail segment while decreasing in the pension and financial institution segments in 2019 relative to 2018. As a result, the retail segment became the top-ranked segment by perceived top-line growth prospects, followed in descending order by the financial institution and pension segments. Financial institutions were the top-ranked segment in both of the previous two surveys.

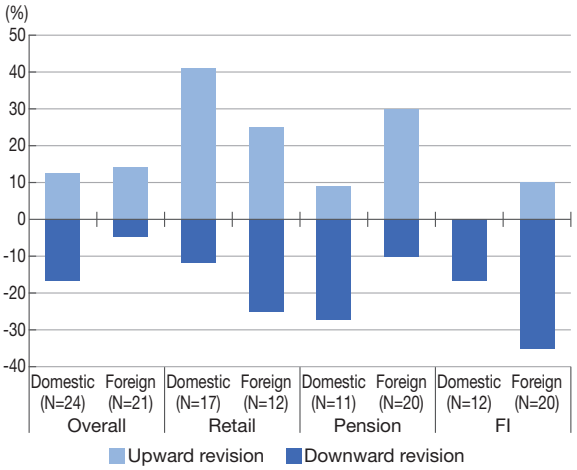
Exhibit 5-7 compares the revenue outlook between 2019 and 2018 by plotting percentages of upwardly and downwardly revised revenue forecasts among respondents that participated in both years' surveys. Some 70% of the domestic-AMC respondents and 80% of the foreign-AMC respondents left their company-wide revenue forecasts unchanged from 2018. Among respondents that revised their company-wide forecasts in 2019, a sentiment gap was evident between the domestic and foreign subsamples, with upward revisions outnumbering downward revisions among the latter and vice-versa among former. By investor segment, downward revisions outnumbered upward revisions among both domestic and foreign respondents across all segments with only two exceptions: domestic

Exhibit 5-6. **Percentage of survey respondents forecasting revenue growth of at least 50% over next five years**



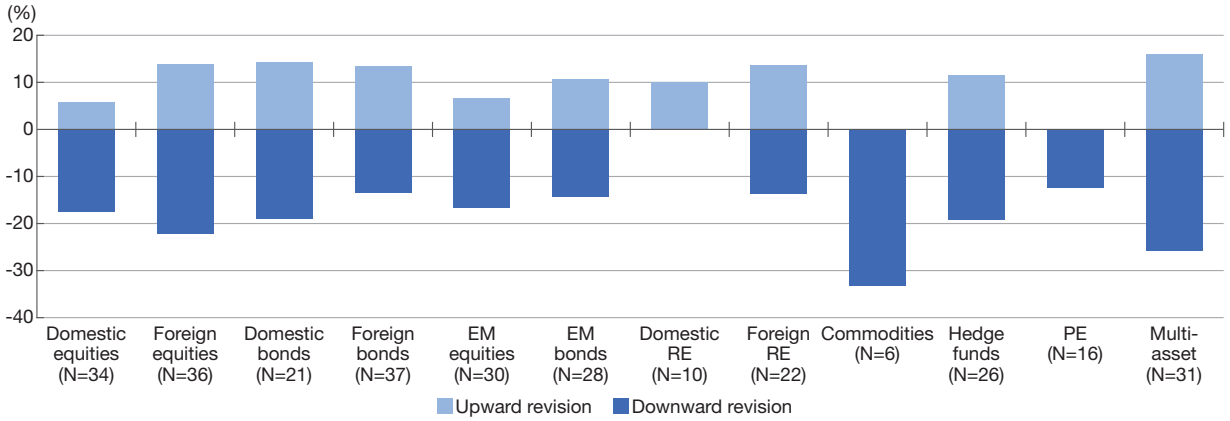
Note: FI: financial institution
Source: NRI Survey of Asset Management Companies' Management Priorities

Exhibit 5-7. **Percentage of survey respondents that revised their revenue growth forecasts from previous year (overall and by business segment)**



Note: Data samples are limited to AMCs that participated in survey in both 2018 and 2019. FI: financial institution segment.
Source: NRI Survey of Asset Management Companies' Management Priorities

Exhibit 5-8. **Percentage of survey respondents that revised their asset in/outflow forecasts from previous year (by asset class)**



Note: Data samples are limited to AMCs that participated in survey in both 2018 and 2019. Numbers in parentheses are subsample sizes.
Source: NRI Survey of Asset Management Companies' Management Priorities

respondents' retail segment forecasts and foreign respondents' pension segment forecasts. Downward revisions were most prevalent in the financial institution segment, unsurprisingly given the big downshift in private investment trust inflows.

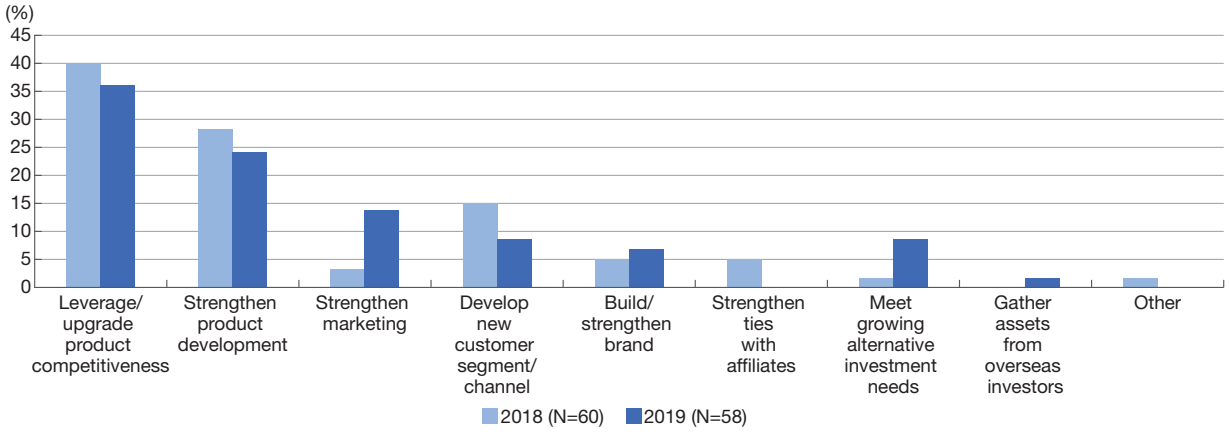
Using the same format as Exhibit 5-7, Exhibit 5-8 shows how survey respondents' asset inflow outlook changed between 2018 and 2019 by asset class. Overall, the 2019 forecast revisions were preponderantly downward, with no single asset class standing out notably from the others. Contrary to 2018, downward revisions predominated in 2019 even in the multi-asset and alternative asset classes, perhaps reflecting deterioration in the outlook for the pension and financial institution segments, the main sources of demand for products in those asset classes[22)].

3 Direct marketing as a strategic growth driver

Exhibit 5-9 shows how AMCs responded in 2019 versus 2018 to a survey question on their top priority for expanding in scale or increasing profitability over the next five years. The top response in both years was "to better leverage or upgrade product competitiveness." The response that increased most in frequency between the two surveys was "to strengthen marketing."

The FSA's Principles for Customer-first Business

Exhibit 5-9. **AMCs' top priority for scaling up business or increasing profitability**



Source: NRI Survey of Asset Management Companies' Management Priorities

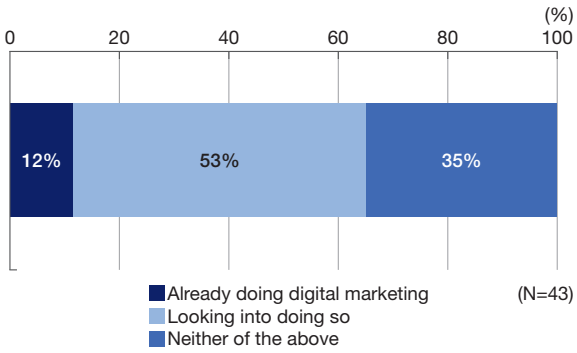
Practices impel AMCs to appropriately manage conflicts of interest in the retail segment. The days when AMCs could automatically count on affiliated distributors to sell their products simply because they are affiliates are coming to an end. AMCs consequently must put step up their sales efforts targeted at unaffiliated distributors. Hence the increase in survey respondents placing priority on strengthening their marketing.

Another survey question asked public investment trust sponsors to identify the biggest potential threat to the asset management business in their eyes (Exhibit 5-10). "Changes in fund distributors' behavior" ranked second among the responses behind "active fund fee compression." Such concern about fund distributors is consistent with the increased priority on strengthening marketing.

For AMCs, marketing extends beyond engagement with fund distributors. It includes messages directed at retail investors also, at least in the case of AMCs that sponsor public investment trusts. With the exception of general advertising, AMCs have previously not done much marketing aimed at retail investors. Recently, however, they seem increasingly interested in marketing directly to retail investors.

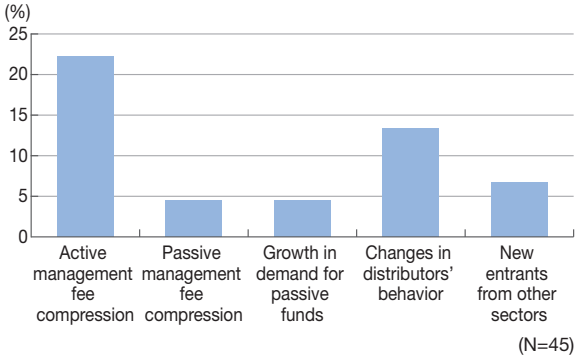
Our survey found investment trust companies to be highly interested in digital marketing targeted based on customer information, with 12% already doing it and 53% looking into getting started, though most are not yet engaged in such digital marketing (Exhibit 5-11). Our survey also inquired about what impediments or difficulties respondents have encountered with respect to digital marketing that utilizes customer information. Many respondents reported they have little experience in marketing to retail investors and therefore lack marketing know-how, staff and/or access to customer information (Exhibit 5-12). The picture that emerges from our survey data is that AMCs, while recognizing the importance of marketing to retail investors, are still in the initial stages of acting on that recognition. Fund distributors in Japan have historically had monopoly control of information on retail investors' investment

Exhibit 5-11. AMCs' posture toward digital marketing targeted based on customer information



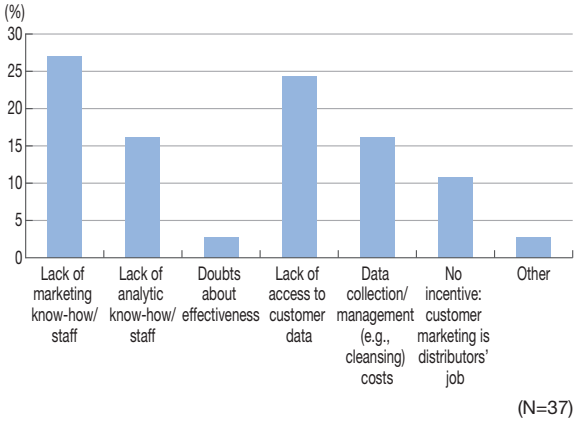
Note: Survey responses of AMCs that sponsor public investment trust (N=43).
Source: NRI Survey of Asset Management Companies' Management Priorities

Exhibit 5-10. Biggest threat to asset management business in AMCs' eyes



Note: Survey responses of AMCs that sponsor public investment trust (N=45). The remaining 49% of responses pertain to threats in the pension or financial institution market segments.
Source: NRI Survey of Asset Management Companies' Management Priorities

Exhibit 5-12. Impediments to digital marketing



Source: NRI Survey of Asset Management Companies' Management Priorities

trust holdings. However, with digital services now available to help retail investors track their investment trust holdings amid widespread proliferation of handy apps, AMCs that place importance on personal data will likely continue pursuing new services in collaboration with digital service providers and/or direct sales.

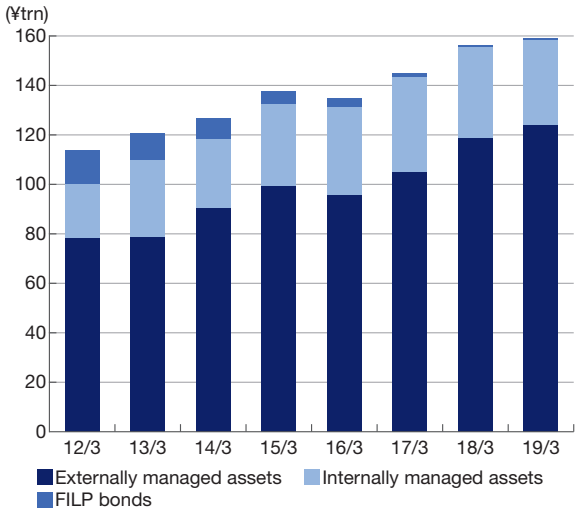
III. Market trends and product strategies by customer segment

1 Pension segment

Pension assets stand at ¥333trn

Japanese pension assets at March 31, 2019, totaled an estimated ¥333trn, a ¥2trn year-on-year increase and new all-time record. This total was split 2:1 between public pension schemes (National Pension, Employees' Pension Insurance and Mutual Aid Associations) and corporate and other pension plans (the "other" are National Pension Funds and the Small-scale Enterprise Mutual Aid System). Public pension assets were up ¥2trn from a year earlier at ¥223trn while corporate/other pension assets were unchanged year on year at ¥110trn.

Exhibit 5-13. **GPIF's AUM**



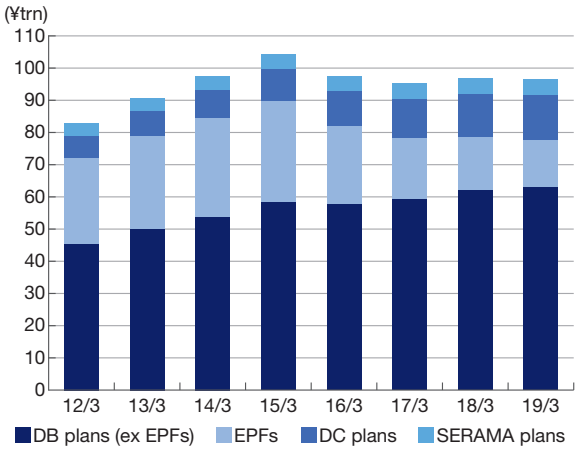
Source: NRI, based on GPIF annual reports

The GPIF ended FY2018 with AUM of ¥159trn, a ¥2trn year-on-year increase (Exhibit 5-13). The GPIF's AUM were 100% market-invested except for ¥1trn of FILP (Fiscal Investment and Loan Program) bond holdings. Despite a nearly 10% third-quarter drawdown concentrated in its equity portfolios, the GPIF earned a +1.54% return on its market-invested assets in FY2018, its third consecutive year of positive returns. The externally managed portion of the GPIF's market-invested AUM at March 31, 2019, increased ¥5trn year on year to ¥124trn while internally managed AUM were down ¥2trn to ¥34trn or 22% of total AUM, a 2ppt reduction from a year earlier. Even though externally managed AUM grew, the GPIF's fees paid to external managers in FY2018 decreased ¥19.3bn year on year to ¥25.5bn because of active managers underperforming their excess return targets under the GPIF's newly adopted performance-based compensation scheme. The decrease in fees paid reduced the GPIF's average management fee rate (calculated as a percentage of average total AUM during the fiscal year) back below 3bps.

Mutual Aid Associations manage pension reserves earmarked for benefits payable to their respective constituencies, mostly civil servants and private school employees. Their pension reserves as of March 31, 2019, were unchanged from a year earlier at ¥56trn, ¥31trn of which were reserves for Employees' Pension Insurance benefits.

Corporate pension assets at March 31, 2019, totaled ¥97trn, likewise unchanged year on year (Exhibit 5-14). Defined benefit (DB) pension plans' share of this total was down slightly from a year earlier at ¥78trn. Employees' Pension Funds (EPFs) continued to shrink in number in FY2018, with 10 funds dissolving and 16 transferring the substitutional portion of their assets to the government, leaving 10 surviving EPFs (with 160,000 participants in total) at fiscal year-end. Eight of the ten plan to remain in existence. EPF assets at March 31, 2019, were down ¥2trn year on year to ¥15trn, ¥12trn of which is

Exhibit 5-14. **Corporate pension assets**



Note: DC pension plan assets include iDeCo assets. 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

managed by the Pension Fund Association (PFA). The PFA will continue to account for the vast majority of EPF AUM going forward.

Among DB corporate pension plans, contractual DB plans continued to decrease in number in FY2018 while fund-type DB plans increased by 13 to 761 and added more participants, bringing their collective total to 9.4mn. DB corporate pension plan assets increased ¥1trn in FY2018 to ¥63trn at fiscal year-end, offsetting the reduction in EPF assets. However, now that EPF dissolutions and asset reversions to the government have run their course, more EPF conversions into DB corporate pension plans are unlikely. We doubt DB corporate pension plan assets will grow much if at all going forward.

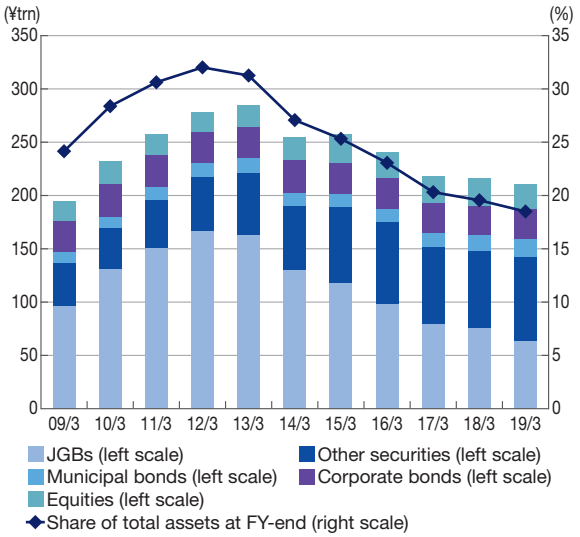
The defined contribution (DC) pension complex is steadily growing in scale. Corporate DC plans ended FY2018 with aggregate assets of ¥12.4trn and 6.88mn total participants, respectively ¥800bn and 400,000 more than a year earlier. Individual DC (iDeCo) retirement plans, which have gained popularity since their eligibility requirements were drastically relaxed in January 2017, added 360,000 more participants in FY2018 to bring their aggregate enrollment to 1.21mn at fiscal year-end. iDeCo enrollment has continue to grow in FY2019, surpassing 1.31mn as of July 31. Additionally, a new DC retirement plan program called iDeCo+ (iDeCo Plus) was launched in May 2018 for small businesses with up to 100 employees but without any corporate pension, including DC, plan. It allows employers to contribute to their employees' iDeCo accounts on top of the employees' own contributions. Additionally, it imposes no restrictions on the split between employee and employer contributions (the employer can even contribute more than the employee), provided that the combined contribution does not exceed the annual iDeCo contribution limit. According to DC plan administrators, iDeCo+ has been well received by eligible employers and employees alike. iDeCo assets, which totaled ¥1.6trn at March 31, 2018, should keep growing in tandem with iDeCo enrollment, aided by initiatives such as iDeCo+.

2 Financial institution segment

Banks facing dearth of promising investment opportunities

According to JBA data, Japanese banks' investment securities holdings at March 31, 2019, totaled

Exhibit 5-15. **Japanese banks' investment securities holdings by asset class**



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

¥211trn[23], down ¥6trn year on year in a continuation of their major decline dating back to the BOJ's launch of QQE in April 2013 (Exhibit 5-15). Investment securities' share of banks' total assets likewise shrank, dropping to 18%. City banks' investment securities holdings ended FY2018 unchanged year on year at ¥107trn, while regional and second-tier regional banks' were respectively down ¥4trn and ¥1trn from a year earlier at ¥67trn and ¥13trn. Trust banks' investment securities holdings at March 31, 2019, were flat year on year at ¥21trn[24].

Within banks' aggregate investment securities portfolio, JGB holdings continued to decrease in FY2018, falling ¥12trn to ¥64trn at fiscal year-end. This ¥64trn equates to 30% of banks' total investment securities holdings, down from nearly 60% immediately before QQE's inception. Municipal bonds and "other securities," the latter of which largely comprise foreign bonds and private investment trusts, have bucked the ongoing downtrend in banks' overall securities holdings. The former have held steady at nearly ¥30trn for several years straight. The latter grew ¥7trn in FY2018 to end the fiscal year at ¥79trn, exceeding banks' JGB holdings for the first time.

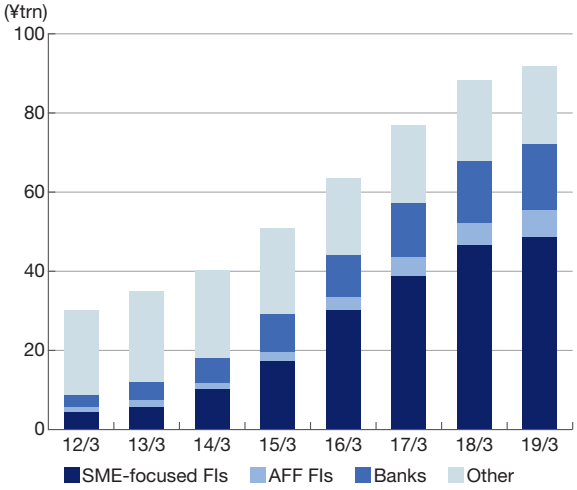
Banks' further downsizing of their securities holdings in FY2018 was naturally accompanied by continued growth in deposits at the BOJ et al., which increased ¥18trn to ¥246trn at fiscal year-end. Such deposits grew across all types of banks, up ¥12trn to ¥167trn at city banks, ¥4trn to ¥40trn at regional banks, ¥200bn to ¥7trn at second-tier regional banks and ¥2trn to ¥31trn at trust banks. Such across-the-board growth in deposits receivable bespeaks a dearth of attractive investment opportunities for banks.

Slower growth in financial institutions' fund investments

While reducing JGB holdings, banks have been rapidly expanding their holdings of "other securities," including private investment trusts. Banks, among other financial institutions, have become important customers for the asset management industry.

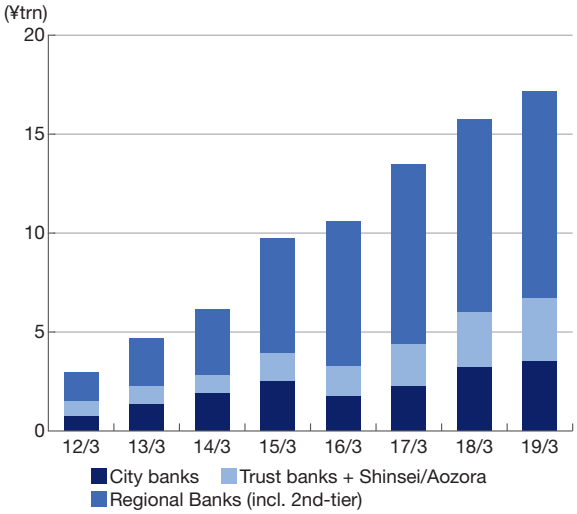
Exhibits 5-16 and 5-17 plot private investment trust AUM disaggregated by beneficial owner category. Before the BOJ launched QQE, private investment trust ownership was concentrated in the "other" category, which includes insurers, pension funds and public investment trusts (Exhibit 5-16). Today, by contrast, nearly 80% of private investment trust AUM are beneficially owned by banks, SME-focused financial institutions (Japan Post Bank,

Exhibit 5-16. Financial institutions' private investment trust holdings by financial institution type



Note: AFF FIs are financial institutions serving the agricultural, forestry and fishery sectors.
Source: NRI estimates, based on JITA and BOJ data

Exhibit 5-17. Banks' private investment trust holdings by bank type



Source: NRI estimates, based on JITA and BOJ data

shinkin banks, Shinkin Central Bank, Shoko Chukin Bank, etc.), and financial institutions catering to the agriculture, forestry and fishery sectors (Norinchukin Bank, agricultural cooperatives, etc.). SME-focused financial institutions, led by Japan Post Bank, cast an especially large footprint in the private investment trust market with total holdings of nearly ¥50trn, over 50% of private investment trust AUM. Banks' private investment trust holdings exceed ¥10trn, much of which is dispersed across many regional and second-tier regional banks.

Growth in financial institutions' private investment trust holdings has been gradually slowing lately. For several straight years through FY2017, SME-focused financial institutions added nearly ¥10trn annually to their private investment trust holdings before cutting back to a ¥2trn increment in FY2018. Banks likewise throttled back their private investment trust holdings' annual growth to ¥1trn in FY2018 from nearly ¥3trn previously. This downshift partly reflects deterioration in the forex and rates market outlooks. Another likely contributing factor is a growing recognition that regional and second-tier regional banks in particular cannot safely continue to expand their risky asset holdings without upgrading their risk management. Amassing securities investment know-how takes considerable time. Additionally, Japanese financial institutions are newly required to disclose core net business profits before gains/losses on investment trust redemptions, effective from FY19. Gains on investment trust redemptions, unlike gains on the sale of, e.g., ETF holdings, have hitherto been included in core net business profit, giving SME-focused financial institutions in particular an incentive to own investment trusts. Some financial institutions may have curtailed their fund investments in response to the new disclosure requirement. We accordingly see little prospect of resurgent growth in financial institutions' fund investments for the time being.

3 Product market trends by investor segment

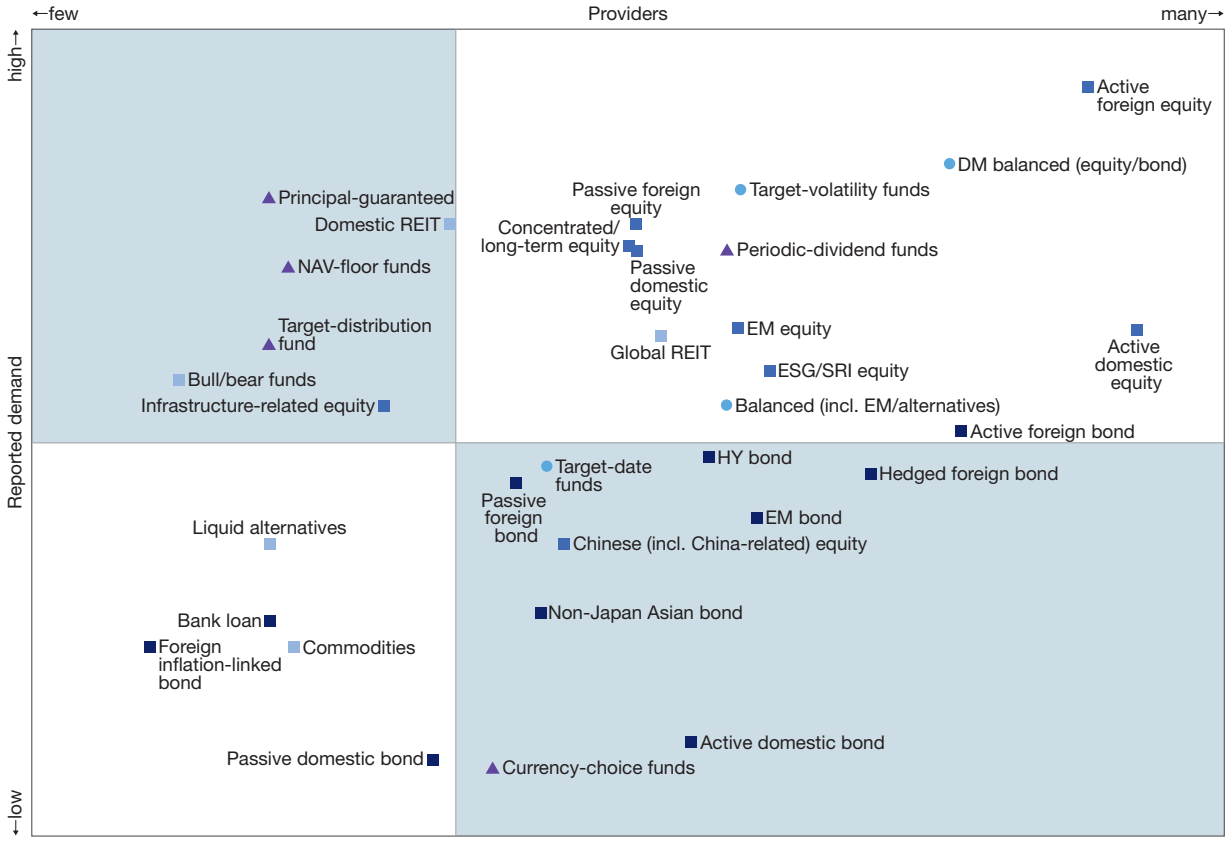
We have created product opportunity maps for the retail, pension fund and financial institution segments based on our survey data. These maps plot the strength of investor demand for various products (as assessed by AMCs) against the products' current availability (based on the number of providers that offer each product). The maps help to distinguish between promising products (strongly demanded products offered by few providers (upper left quadrant)) and competitively disadvantaged products (out-of-favor products offered by many providers (lower right quadrant)). Exhibit 5-18 presents our product opportunity maps for a subset of products.

First, in the retail investor segment, actively managed foreign equity funds were the top-ranked product on the demand scale for a third consecutive year. Actively managed domestic equity funds, last year's second-ranked product, are much less popular this year. Domestic REITs, by contrast, are ranked higher this year than last year. Principal-guaranteed funds, newly added to our survey this year, are ranked higher than both passively managed domestic and foreign equity funds. These demand-wise rankings presumably reflect the products' recent sales performance. For example, among actively managed foreign equity funds, the top-ranked product on the demand scale, the products recently capturing the most inflows are thematic equity funds focused on technologies like 5G telecom and leading-edge biotech. Such funds accounted for some 30% of total domestically domiciled public fund (ex ETF) sales in FY2018. Meanwhile, IPOs of actively managed domestic equity funds, which slipped in the demand-wise rankings, decreased 32% year on year in value terms in FY2018, whereas IPOs of domestic REITs, which rose in the rankings, increased some 13%.

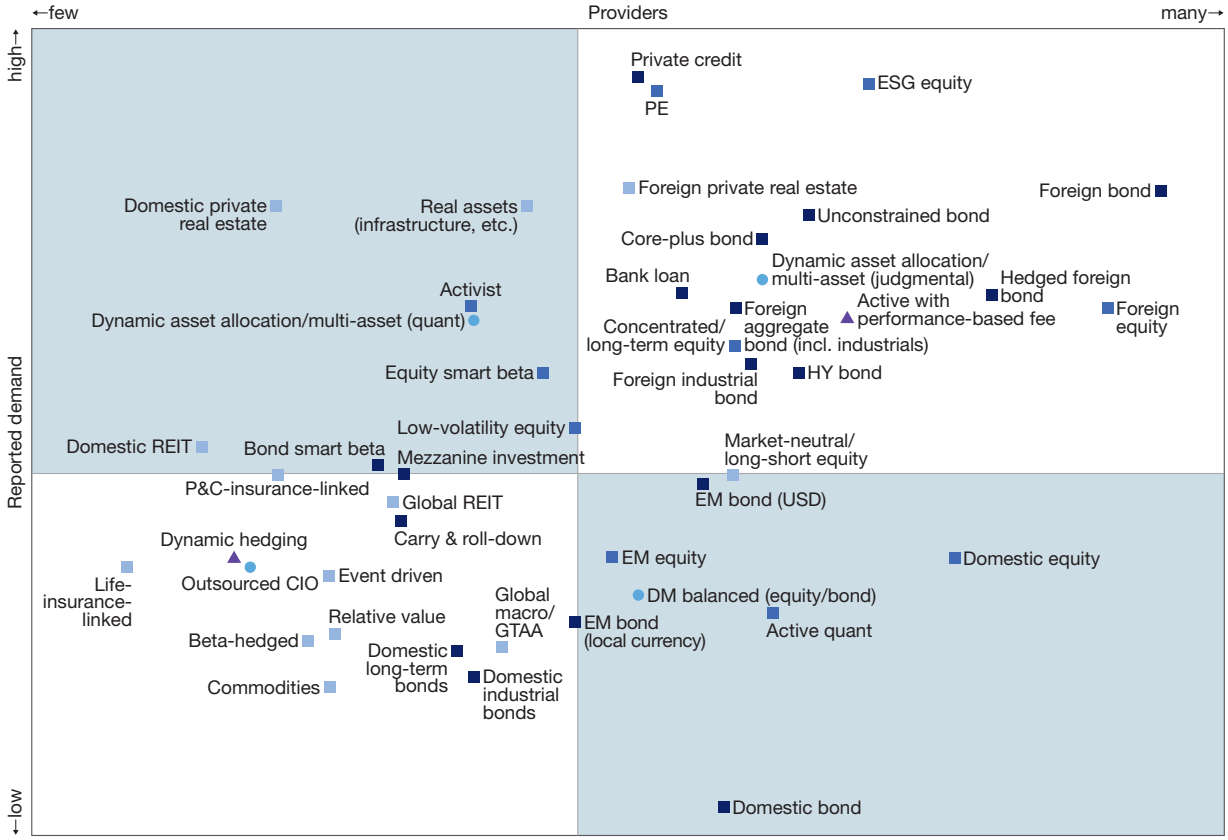
Principal-guaranteed funds, reportedly in demand as a substitute for JGBs, first hit the market in July 2018.

Exhibit 5-18. **Product supply and demand maps by customer segment**

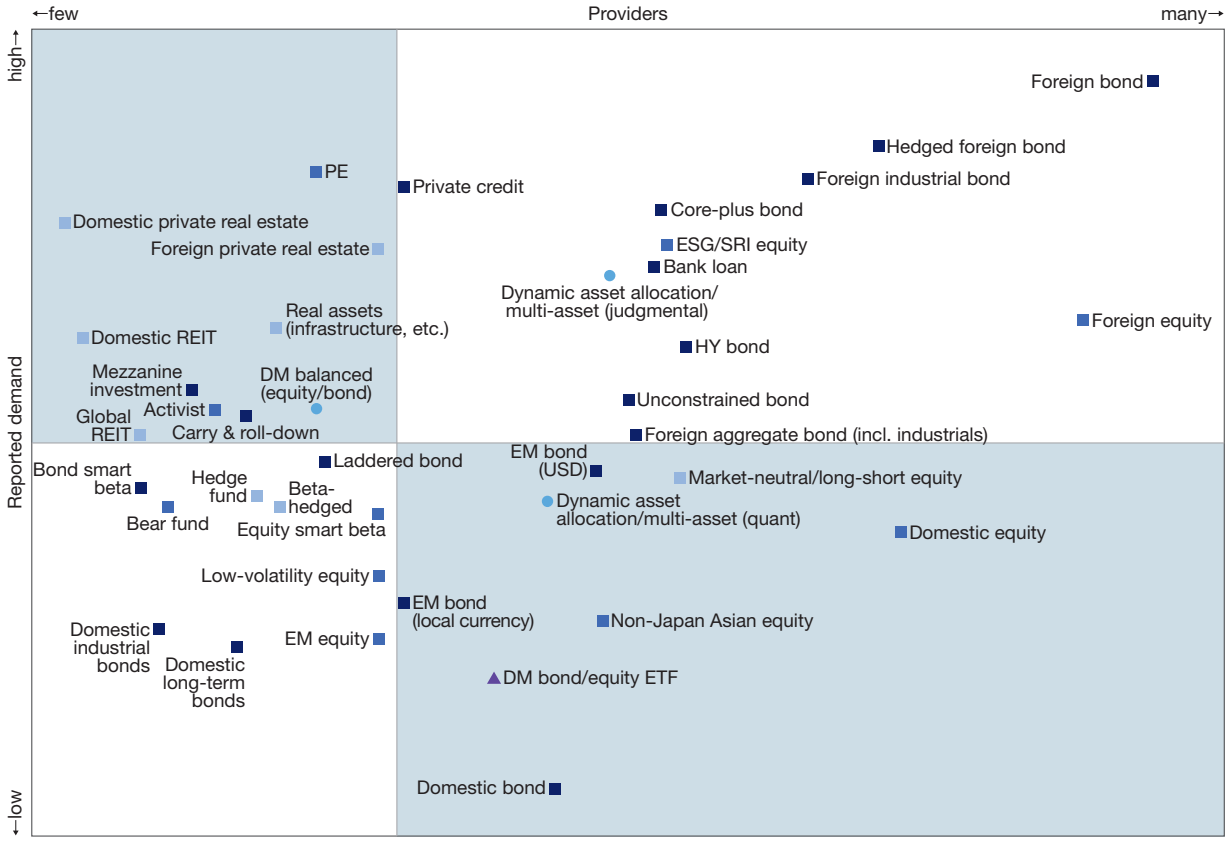
(a) Products for retail investors



(b) Products for pension funds



(c) Products for financial institutions



Note: The vertical scale is an indexed scale of the strength of demand from customers (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

Over the 14 months through August 2019, 13 such funds were launched and collectively gathered roughly ¥300bn of assets, equivalent to about 30% of the aggregate IPO value of all funds (ex ETFs) launched over the same timeframe. The principal-guaranteed funds are sold through an average of 20 distributors apiece, a higher number than other types of funds' corresponding averages. Their broad distribution is another measure of the strength of demand for them. While highly rated on the demand scale, principal-guaranteed funds are available from few AMCs so far. Their availability should continue to increase going forward.

In the pension segment, private credit and private equity (PE) remain the two top-ranked products. ESG/SRI equity funds rose in the demand-wise rankings to near-parity with private credit/PE. On the downside, unconstrained bond funds and bank loan products have lost popularity. We surmise that PE demand is concentrated among public and some large corporate pension funds. Private credit is reportedly in demand even among corporate pension funds by virtue of offering sizable spreads and stable income streams together with lower price volatility than conventional corporate bonds. Public pension funds are still underweight alternative investments relative to their maximum policy-portfolio allocations to alternatives. With some large corporate pension funds also planning to increase their PE allocations, demand for private asset products should remain strong.

ESG/SRI equity products appear to be garnering a high degree of interest among corporate as well as public pension funds, but with corporate pension funds allocating a relatively small share of their assets to equities (particularly domestic equities) on average,

demand seems to be concentrated mainly in the public pension space. Unconstrained bond funds and bank loan products' loss of popularity is presumably attributable to the former's underperformance and growing wariness toward the bank loan market, mainly in the US.

In the financial institution segment, foreign bond funds bounced back to the top of the demand-wise rankings in FY2018 after dipping in FY2017. Their comeback presumably reflects increased demand for JGB-substitute fixed-income products amid a consensus that interest rates are in a cyclical downtrend. Besides foreign bond funds, other products highly ranked on the demand scale include private credit, PE, foreign industrial bonds and ESG/SRI equity products. According to survey responses from foreign AMCs in particular, these products' popularity seems to be driven by demand from major financial institutions, foreign AMCs' main customers. Among domestic AMCs, survey respondents reported strong demand for hedged foreign bond products, core-plus bond funds and domestic real estate (ex REITs), presumably from regional financial institutions, a key submarket for domestic AMCs. Regional financial institutions may regard such products as attractive options for reinvesting proceeds from maturing JGBs.

Retail investors will likely continue to seek financial products conducive to long-term investing while institutional investors will likely keep looking to harvest a wide variety of risk premia. AMCs' future success hinges on how well AMCs can keep abreast of investors' ever-changing needs and roll out competitive products to meet those needs.

20) Calculated as trailing-one-year distributions divided by net assets.
21) NRI has conducted this survey annually since FY2007, most recently in July-August 2019. The 2019 survey's sample of valid responses encompassed 61 AMCs (35 Japanese, 26 foreign) that collectively account for 76% of the Japanese asset management industry's total AUM.
22) See the final section below for information on absolute demand levels on a product-by-product basis.
23) JBA data includes overseas branch accounts.
24) The JBA total differs from the sum of the city bank, regional bank, second-tier regional bank and trust bank subtotals because it additionally includes Shinsei Bank and Aozora Bank's securities holdings.

Author's Profile

Hisashi Kaneko

Senior Researcher

Financial Market & Innovation Research Department

focus@nri.co.jp

Hitomi Kawahashi

Senior Researcher

Financial Market & Innovation Research Department

focus@nri.co.jp

Shinji Odaira

Senior Researcher

Financial Market & Innovation Research Department

focus@nri.co.jp

Katsutoshi Takehana

Senior Researcher

Financial Market & Innovation Research Department

focus@nri.co.jp

Takuya Maeyama

Researcher

Financial Market & Innovation Research Department

focus@nri.co.jp

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Inquiries to:	Financial Market & Innovation Research Department focus@nri.co.jp