Research on Business Models of Asset Management Firms

Final Report

2018/3/30

accenturestrategy
1. Considering the severity of pension finance due to the aging of society, the traditional investment strategy that relies exclusively on passive investment of the four traditional assets is approaching the limit. GPIF is required to utilize the broad knowledge of the asset management firms in order to incorporate high-quality funds while suppressing risk.

2. Based on the recognition of the above challenges, this research will focus on the following:
   1. Strengthening assessment capabilities of high-quality funds, based on understanding of characteristics of asset management business structure.
   2. Acquiring suggestions for constructing reciprocal relationships with asset management firms.

With the arrival of a “information oriented society” and the sophistication of the financial infrastructure, earning investment income with the traditional way – through “asymmetry of information” – has become more difficult. Investees’ needs are also changing as the capital flow changes. As a result, asset management firms must transform their current method of pursuing efficiency through scale within a given business model. They must either go all out and expand their size to extreme levels, or continuously rethink their investment targets and strategies. As a platform, they could also directly contribute to improving the value of the investee.

1. The existing business models of asset management firms are primarily classified into four types, in which information asymmetry between the investor and the investee and the relative size of the investment contribute to investment income:
   ① Scale-pursuit type
   ② Fund-management type
   ③ Corporate-value maximization type
   ④ Asset-specialization type
Report Summary (2/4)

2. However, digitalization has brought about three changes that led to a decline in the value of these business models:
   • The present information society has reduced asymmetry between investors and asset management firms, resulting in stronger expectations for the alignment between investment performance and management fee.
   • The arrival of an information society and the development of a market infrastructure has narrowed the information gap among investors, reducing arbitrage opportunities.
   • Because of surplus funds and shortened business cycles due to digitalization, investees’ needs now go beyond mere capital. Firms are expected for direct contribution to improve value of investee, and the screening of firms has become more stringent.

3. As a result, distinctions between asset management firms are becoming more pronounced:
   ① Scale-pursuit type: Competitive advantage cannot be obtained unless the fund is among the top tier globally in terms of assets under management.
   ② Fund-management type: Dealing with continuous changes in investees and strategies, such as ongoing shifts to illiquid assets.
   ③ Corporate-value maximization type: Facing stringent screening criteria regarding the ability to improve the intrinsic value of the investee and the sourcing ability.
   ④ Asset-specialization type: Same as above.
Asset management firms capable of providing value to the capital market could survive.

1. For the time being, securing the means of sustainable procurement of investment capabilities amid changes in the environment is critical for growth.
   - ① The scale-pursuit type can maintain its price competitiveness, as scale-pursuit efforts lead to cost efficiency.
   - ② The fund-management type, ③ the corporate-value maximization type, and ④ the asset-specialization type generally have the following strategic options:
     - Transitioning to a “platform” model and maintaining their competitiveness through the external procurement of operational capabilities (such as through M&As) and the use of technology.
     - Turning into a “boutique” firm by narrowing the list of investees and sharpening efforts to improve asset value.
     - Using the asset-value-enhancement capabilities of the core business for the asset management arm within the same company (this applies to developers, trading houses, etc.).

2. In the long run, only those that add value to the capital market will survive.
   - With respect to traditional assets, firms that have massive assets and the capabilities to provide liquidity, adjust durations, and create asset value, will survive.
   - The creation of a market for emerging assets (such as digital assets) and for idle assets, as well as the creation of value, could be a viable option for asset management firms.
Report Summary (4/4)

GPIF, from the standpoint of securing long-term returns and a source for pension payouts, must construct an investment chain as a long-term asset manager and create a virtuous circle of risk money to support economic growth.

1. In the short term, the selection of external asset managers must be based on evaluations of sustainability as a business model that can respond to changes in the outside environment and the competitive environment.

2. In the medium- to long-term, efforts must be made to promote asset management firms’ maximization of value in the capital market in preparation for future challenges.

① Promotion of the circulation of risk money into high-quality companies and assets.
   • Promotion of ESG investments: the creation of indexes, asset allocations, etc.
   • Passive managers should become more proactive: the creation of a mechanism for engagement and criteria for evaluation of asset management firms, etc.
   • Circulation of risk money into niche and emerging assets: diversified asset allocations, helping market development, etc.

② The nurturing of high-quality asset management firms.
   • The nurturing of long-term-growth investment management firms: introduction of duration-specific allocations, etc.
   • Improvement of the asset owners’ capabilities to evaluate asset management firms: the standardization of evaluation criteria, the use of a common platform for a Manager Registration system, etc.
   • Promotion of a business model in accordance with changes in the environment: lower entry barriers for overseas asset management firms, etc.
I. Research Objectives

II. Changes in the environment surrounding asset management firms
   1. Existing business models
   2. Changes in the environment
   3. The essence of the evolution of business models

III. Business models sustainable in the medium- to long-term
   1. Currently sustainable business models
   2. Conversion of long-term values to society

IV. GPIF Initiatives
The Objective of the Analysis Work for This Research
To acquire basic knowledge towards building a sound relationship with asset management firms based on supervision and reciprocation.

Research Objectives

Momentum for structural changes at asset management industry
- Global efforts to strengthen FD* and secure transparency put long-term downward pressure on commission fee.
- Manufacturing and distribution integrated model, which has been dominant in domestic market, is being abandoned.
- Asset management firms have been polarized into two types: whether pursuing scale or offering competitive products.
- The expectation of risk money providers (as promoted by the Japan Revitalization Strategy) is growing for asset management firms to directly revitalize the direct finance by providing investment products.

Objectives of this assignment
- Care must be taken to avoid the inherent risks associated with particular firms when using asset management firms to receive returns unique to individual funds.
- Corporate characteristics of asset management firms and their risks must be understood along with the investment strategies and expected performance of each fund.
- The potential impact of an asset management firms’ orientation and governance should be identified with respect to the following three criteria:
  1. Business strategy
  2. Revenue/cost structures
  3. Incentive models

GPIF situations
- Most of the Fund is invested in traditional four assets and managed passively, as super-long-term stable growth is imperative.
- An investment strategy that relies exclusively on the existing allocation method has limited potential, considering the aging population and the resulting challenge in the pension finance.
- GPIF should take advantage of broad knowledge of asset management firms in order to control risks and invest in high-quality funds.

1. Strengthening assessment capabilities based on the asset management firms’ understanding of the characteristics of companies.
2. Acquiring suggestions for building a reciprocal relationship with asset management firms.

*FD: Fiduciary Duty (An obligation of a trustee, entrusted with funds based on customer trust, to act in the best interest of the customer).

Source: Accenture based on GPIF’s procurement specification
Research Approach: Concept

The asset management industry is facing a turning point on the global scale due to the digitalization of society, advancements in analysis technology, and changes in capital flow. This report will forecast longer-term trends by focusing on the impact of changes to the external environment and the characteristics of business models with respect to three constituent elements.

Research approach

- Will examine the impact of the digitalization of society and changes in the capital flow from two aspects:
  - Impact on the funds' earnings model
  - Impact on the competitive environment.

- Will gain insights on how these changes will prompt conversions to business models sustainable in the medium- to long-term.

Business model elements*

- Customer Value Proposition
- Profit Formula
- Capability

Research Approach: Process

First, the overall picture will be determined based on changes in the environment. Detailed research and analysis for each business format will follow.

Visualization of the overall picture and clarification of issues

- What business models currently exist?
- What would be the potential impact of future macro developments?
- What business strategy could be adopted?
- How can AI be applied?

Detailed research and analysis

- What is the value of this business? What are the required capabilities?
- What are the risks for asset owners?
- What are the needs of the industry and companies?
- What should asset owners do?
- What issues should GPIF consider in light of AI’s effects or feasibility?

Scope of this research

Task Chart

Research on Business Models for Asset Management Firms

1. Business strategy of asset management firms
   - Initial hypothesis
   - Types of AM business
   - Types of strategic options
   - Types of competitive strategies

2. Revenue and cost structures of asset management firms
   - Characteristics of revenue and cost structures
   - Changes in the medium- to long-term business value
   - Environment trends
   - Risk and Needs

3. Financial incentives for asset management firms
   - Current capabilities
   - Necessary capabilities in the medium to long term
   - Environment trends
   - Risk and Needs

4. Summary
   - Corporate characteristics
   - Partnership model

Research on impact of AI

- Expected opportunities for AI adoption initial hypothesis
- Detailed analysis
  - Expected effects
  - Feasibility
- Summary

Questions

- Business Model
  - Corporate characteristics
  - Partnership

AI

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Agenda

I. Research Objectives

II. Changes in the environment surrounding asset management firms
   1. Existing business models
   2. Changes in the environment
   3. Essence of the evolution of business models

III. Business models sustainable in the medium- to long-term
   1. Currently sustainable business models
   2. Conversion of long-term values to society

IV. GPIF Initiatives
# 1. Current Business Models

## Business Models by Type | Overview

The current business models of asset management firms are characterized by two elements: the method of earning returns and the method of gaining competitive advantages. These business models are generally classified into five types, based on the two perspectives.

<table>
<thead>
<tr>
<th>Market investment type</th>
<th>Asset handling type</th>
<th>Business derivative type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scale-pursuit type</td>
<td>Corporate-value maximization type</td>
<td>Insurance companies’ asset management operations.</td>
</tr>
<tr>
<td>Fund-management type</td>
<td>Asset-specialization type</td>
<td>Real estate companies.</td>
</tr>
<tr>
<td>Market Growth</td>
<td>Price Formation</td>
<td>Infrastructure companies.</td>
</tr>
<tr>
<td></td>
<td>Underlying Asset Value</td>
<td></td>
</tr>
</tbody>
</table>

### Major products

- Passive.  
- Smart Beta.  
- Active.  
- Hedge funds.  
- Alternatives (financial products).  
- VC.  
- Buyout.  
- Turnaround/distressed.  
- Real estate.  
- Infrastructure.

### Method of earning return

- Price leadership using economies of scale.  
- Less reliant on specific persons in investment through rules and automation.  
- Focus is on low work load asset/methodologies  
- Low management costs lead to strong performance.  
- Pursues additional profits through stock lending, etc., in exchange for the liquidity.

### Method of gaining competitive advantage

- The ability to maintain and administer assets.  
- The ability to keep track of commercial distribution.  
- The ability to assess potential value.  
- The ability to provide hands-on support to maximize value.  
- Incentives closely linked with performance.

- Focus on maximizing investee’s corporate value.  
- Pursues transaction-related performance through huge gains at financial events.  
- Strength lies in the improvement of the utilization rate of specific assets.  
- Pursues flow performance by maximizing the cash flow of target assets.  
- The ability to assess potential value.  
- The ability to provide hands-on support to maximize value.  
- Incentives closely linked with performance.

- Competence of investment professionals.  
- Performance-based incentives to retain capable investment professionals.  
- Focus is on additional profit through understanding the market.  
- The capabilities of investment professionals are directly tied to performance.

- The ability to maintain and administer assets.  
- The ability to keep track of commercial distribution.  
- Incentives closely linked with performance.

- Focus is on low work load asset/methodologies  
- Low management costs lead to strong performance.  
- Pursues additional profits through stock lending, etc., in exchange for the liquidity.

- Passive.  
- Smart Beta.  
- Active.  
- Hedge funds.  
- Alternatives (financial products).  
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- Real estate.  
- Infrastructure.
1. Current Business Models

Method of Earning Return | Market investment Type

Market-investment type funds require the ability to identify earnings opportunities by detecting potential market growth and price distortions, as well as the ability to take investment positions and achieve returns by executing transactions.

<table>
<thead>
<tr>
<th>Method of Earning Return</th>
<th>Sources of returns</th>
<th>Required capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong> Scale-pursuit type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Market-average-tracking type</td>
<td>Creates a market portfolio, acquires &quot;market beta&quot; by tracking benchmarks.</td>
<td>Market Growth</td>
</tr>
<tr>
<td>2 Rule-based alpha-acquisition type</td>
<td>Acquires “market alpha” by adding universal explanatory variables of risk-return profiles.</td>
<td>Market Growth</td>
</tr>
<tr>
<td><strong>B</strong> Relative earnings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Sector-specific investment type</td>
<td>Earns returns by allocating assets to growing regions and sectors based on macroeconomic trends.</td>
<td>Market Growth</td>
</tr>
<tr>
<td>2 Stock-specific investment type</td>
<td>Earns returns by making investment decisions on individual stocks based on the company’s intrinsic value and growth evaluations.</td>
<td>Market Growth</td>
</tr>
<tr>
<td><strong>C</strong> Absolute earnings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Absolute-earnings pursuit type (macro)</td>
<td>Earns returns by forecasting market movements based on money flows, sentiment and macroeconomic trends.</td>
<td>Market Growth</td>
</tr>
<tr>
<td>4 Absolute-earnings pursuit type (stocks)</td>
<td>Earns returns by identifying cheap/expensive individual stocks and taking both long and short positions.</td>
<td>Market Growth</td>
</tr>
<tr>
<td>5 Individual-stock-spread type</td>
<td>Earns returns by spotting stocks that are moving in opposite directions, and taking both long and short positions.</td>
<td>Market Growth</td>
</tr>
<tr>
<td>6 Risk-arbitrage type</td>
<td>Forecasts specific events, such as M&amp;As, to earn from price differences before and after the events.</td>
<td>Market Growth</td>
</tr>
<tr>
<td>7 No-risk arbitrage type</td>
<td>Earns returns from a temporary price gap of stocks which converge over time and takes both long and short positions.</td>
<td>Market Growth</td>
</tr>
</tbody>
</table>

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### 1. Current Business Models

#### Method of Earning Return | Asset handling Type

Asset handling type funds require the ability to evaluate, obtain the potential value of investee companies, assets, and achieve that value.

<table>
<thead>
<tr>
<th>Method of Earning Return</th>
<th>Sources of returns</th>
<th>Required capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Capital-needs type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Management-needs type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Corporate-needs type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Rehabilitation type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Scale-advantage type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Management-turnaround type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Business-liquidation type</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Financial-evaluation type</th>
<th>Identify profit opportunities</th>
<th>Earn returns</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The ability to analyze potential growth based on the company's intrinsic value and industry trends.</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Future-value evaluation type</th>
<th>Identify profit opportunities</th>
<th>Earn returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discovers potential value of early-stage enterprises, promotes growth through risk money to earn returns.</td>
<td>The ability to analyze growth potential for individual early-stage companies.</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advice/supervision type</th>
<th>Identify profit opportunities</th>
<th>Earn returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commits to management by acquiring equity, provides advice and supervision, and improves corporate value and earn returns.</td>
<td>The ability to analyze potential growth based on the company's intrinsic value and industry trends.</td>
<td>The ability to provide management advice and supervision; the ability to communicate and exert influence.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Function-provision type</th>
<th>Identify profit opportunities</th>
<th>Earn returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provides functions such as management knowledge, operation processes, sales channels, as well as capital, to improve corporate value and earn returns.</td>
<td>The ability to analyze potential growth based on the company's intrinsic value and industry trends.</td>
<td>The ability to provide specific functions (distribution, financial management, business development knowledge, etc.).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Scale-advantage type</th>
<th>Identify profit opportunities</th>
<th>Earn returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invests in companies in the same industry and geographical locations to bundle value chains and procurement channels, and gains economies of scale to improve corporate value.</td>
<td>The ability to analyze potential growth based on the company's intrinsic value and industry trends.</td>
<td>The ability to benefit from economies of scale by unifying procurement channels of investees.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Management-turnaround type</th>
<th>Identify profit opportunities</th>
<th>Earn returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supports companies whose market evaluation has declined and helps them improve their corporate value to earn returns.</td>
<td>The ability to analyze potential growth based on the company's intrinsic value and industry trends.</td>
<td>The ability to reorganize operations; the ability to secure exits through sales.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Business-liquidation type</th>
<th>Identify profit opportunities</th>
<th>Earn returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earns returns by liquifying companies that are in financial trouble or in industrial restructuring.</td>
<td>The ability to evaluate the residual value of companies and operations.</td>
<td>The ability to secure exits through sales.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Capital-needs type</th>
<th>Identify profit opportunities</th>
<th>Earn returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fulfills the needs for capital, to create and manage assets and earns returns through income gains and capital gains.</td>
<td>The sourcing and negotiating ability based on specific expertise and networking.</td>
<td>The ability to secure exits through sales.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Management-needs type</th>
<th>Identify profit opportunities</th>
<th>Earn returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fulfills management needs by creating a system for asset management and carrying out actual management tasks to earn returns through income gains and capital gains.</td>
<td>The sourcing and negotiating ability based on specific expertise and networking.</td>
<td>The ability to maintain assets and monetize; the ability to secure exists through sales.</td>
</tr>
</tbody>
</table>
## Method of Gaining Competitive Advantage

The method of gaining competitive advantage is determined by the combination of six options of competitive strategies and two options of governance.

### Method of gaining competitive advantage

<table>
<thead>
<tr>
<th>Competitive strategy</th>
<th>Governance</th>
<th>Description</th>
</tr>
</thead>
</table>
| Improving cost efficiency | Public company | • Reduce cost price, such as labor cost of front office and brokerage commissions, to improve investment efficiency.  
• Expand asset sizes to benefit from economies of scale (with respect to cost price) and gain further competitive advantage.  
• Improve the efficiency of middle and back offices by standardizing operations and systems to reduce direct and indirect costs.  
• Expand asset sizes to benefit from economies of scale (with respect to direct and indirect costs) to gain further cost competitiveness. |
| Pursuit of investment scale | Private company | • Acquire asset management capabilities by hiring competent fund managers.  
• Secure expertise by using attractive incentives and focusing on specific areas to hire human resources. |
| Pursuit of operational scale | • Expand operations by leveraging the capabilities cultivated through existing businesses (sales network, operations, asset management knowledge, etc.).  
• Secure maneuverability that allows for partial acceptance and the sharing of functions through organizational, administrative, and system structures. |
| Hiring talent | • Acquire asset management capabilities that exceed operations performed by humans, through huge data processing capabilities and sophisticated analytical models.  
• Maintain advanced technology through continuous investments. |
| Platform development | • Utilize the ability to improve the value of existing assets and to maintain and administer them for the purposes of asset management.  
• Achieve mutually reinforcing growth by creating synergy through the continuous use of core business capabilities while simultaneously performing asset management operations. |
| Technology use | • Ensure flexibility in business development by improving the credibility of the company and acquiring methods to raise capital. |
| Derived from core business | • Secure flexibility and maneuverability in pricing, fees, and asset management strategy by eliminating the impact of investors who are seeking short-term gains. |
| Public company | |
| Private company | |
1. Current Business Models

Business Models by Type | Details

There are 12 business models based on the methods of earning returns and acquiring competitive advantage, as shown earlier.

<table>
<thead>
<tr>
<th>Competitive advantage</th>
<th>Cost effectiveness</th>
<th>Acquiring investment capabilities</th>
<th>Derived from core business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earning returns</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Scale-pursuit type</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. Market-average-tracking type</td>
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<td></td>
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<tr>
<td>2. Rule-based, alpha-acquisition type</td>
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<tr>
<td>Fund-management type</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. Growth-sector investment type</td>
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<td></td>
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<tr>
<td>2. Growth-stock type</td>
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</tr>
<tr>
<td>Absolute earnings</td>
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</tr>
<tr>
<td>1. Absolute-earnings-pursuit type (macro)</td>
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<tr>
<td>2. Absolute-earnings-pursuit type (stocks)</td>
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<tr>
<td>3. Individual-stock-spread type</td>
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<tr>
<td>4. Risk-arbitrage type</td>
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<tr>
<td>5. No-risk-arbitrage type</td>
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<tr>
<td>Corporate needs</td>
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<tr>
<td>1. Financial-evaluation type</td>
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<tr>
<td>2. Future-value evaluation type</td>
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<tr>
<td>Management needs</td>
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<tr>
<td>1. Advice/ supervision type</td>
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<tr>
<td>2. Function-provision type</td>
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<tr>
<td>3. Scale-advantage type</td>
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<tr>
<td>4. Management-turnaround type</td>
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<tr>
<td>5. Business reorganization type</td>
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<tr>
<td>Asset-specialization type</td>
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<tr>
<td>1. Capital-needs type</td>
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<tr>
<td>2. Management-needs type</td>
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</tbody>
</table>

1 Assets under management for firms that fall under each of these types are based on data from Top 400 Asset Managers (2017). Top companies that manage some 80% of the $68 trillion in total assets have been selected, and their figures have been combined. The ratios relative to the overall funds were obtained by dividing the figure for each type by $55 trillion (about 80% of $68 trillion). These ratios do not add up to 100% because of rounding.
1. Current Business Models

【Supplemental Data】Characteristics of Japan’s Asset Management Industry
Japan’s major asset management firms, which fall under the comprehensive lineup category, are not fully benefitting from economies of scale. They must transform their operations so that they will be able to withstand declining management fees.

- In Japan, the asset management industry has long been led by distributors. For this reason, many funds have mushroomed as these companies sought to earn sales commissions.

- As a result, comprehensive asset management firms with the highest amount of assets under management are not necessarily benefitting from economies of scale.

- Their profitability will inevitably fall along with a decline in management fees. Thus, these companies face an urgent need to adopt a business format that can benefit from economies of scale.

Operation efficiency of Japan’s asset management firms

<table>
<thead>
<tr>
<th>Country</th>
<th>Fund sold (Trillion yen)</th>
<th>AuM (Trillion yen)</th>
<th>AuM / Fund sold (100 million yen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
<td>6,060</td>
<td>96.6</td>
<td>159.5</td>
</tr>
<tr>
<td>U.S.</td>
<td>9,782</td>
<td>2,209.6</td>
<td>2258.9</td>
</tr>
<tr>
<td>U.K.</td>
<td>2,802</td>
<td>177.0</td>
<td>631.5</td>
</tr>
</tbody>
</table>

1 dollar = 100 yen
Source: official information based on IR reports of each firm
2. Changes in the Environment

Macro Trends

As a macro development of the asset management industry, capital flows are changing on a global basis with the base of asset owners growing and their demand changing, and these are transforming the asset management business and its related area.

Macro Trends

Politics

- Countries compete to attract risk money and improve the efficiency of the market.
- The source of risk money shifts from the public sector to the private sector.

Economics

- Prolonged low interest rates due to global monetary easing.
- Society and economy of emerging countries are maturing
- Increasing supply of risk money in emerging countries as a means of stimulating economic growth.
- Increasing societal demand on companies to contribute to society and reduce environmental burdens.

Social

- Society becomes more digitalized, prompting the emergence of digital businesses.
- A “circulation economy” develops with the use of idle assets.
- Improvements in data access and the spread of AI leads to faster and more sophisticated data analysis.

Technology

- Blockchain technology makes asset liquidation easier.

Changes in asset management-related developments

- FD, MiFID2 make the market more sound.
- The concept of an “investment chain” becomes more familiar.
- Cost-sensitive investors (retail investors and investors at small- and medium-sized institutions) are growing.
- Institutional investors become more aggressive as developed countries compete to ease their monetary stance.
- As economy and society in emerging countries mature, capital flows increase and investment becomes conservative.
- Pension funds and SWFs increase their presence.
- Information asymmetry narrows between investors and asset managers in an information society.
- Life cycles for companies and industrial structures become shorter.
- Globalization of economic activities and capital flows.
- Information asymmetry regarding investees and prices becomes narrow in an information society.
- Circulation economy and technology use lead to the formation of new assets.
2. Changes in the Environment

Changes in the Financial Market

Competition is escalating between international markets for investor funds and among investors for higher returns, promoting advancement in market infrastructure and institutional arrangements. Societal demand has also led to the creation of regulatory and institutional measures designed to protect investors and nurture the industry. These developments are impacting the earnings environment and the industry structures.

Global
- April 2006: UN creates PRI
- 2006: NYSE begins co-location services
- September 2017: T+2 stock settlements begin
- January 2016: ISG, SSC, CGC created
- April 2017: DOL Fiduciary Rule implemented
- 2010.7 FRC creates U.K. Stewardship code
- 2009: LSE begins co-location services
- October 2014: T+2 stock settlements begin
- November 2007: MiFID implemented
- January 2018: MiFID 2 implemented
- 2010.7 FRC creates U.K. Stewardship code

U.S.
- April 2006: NYSE begins co-location services
- September 2017: T+2 stock settlements begin
- January 2016: ISG, SSC, CGC created
- April 2017: DOL Fiduciary Rule implemented
- 2010.7 FRC creates U.K. Stewardship code

Europe
- November 2007: MiFID implemented
- January 2018: MiFID 2 implemented
- 2010.7 FRC creates U.K. Stewardship code

Japan
- January 2010: TSE adopts Arrowhead, begins co-location services
- January 2011: TSE, OSE merge
- May 2018: T+1 JGB settlements begin
- April 2019: T+2 stock settlements begin
- February 2014: FSA creates Japan’s version of stewardship code
- April 2014: FSA makes reference to FD

Sophistication of market infrastructure
- The settlement period reduced owing to the advancement of stock-exchange systems.
- A system infrastructure established for faster trading.

Investor protection, industry development
- Cost transparency demanded for sales, asset management firms.
- ESG promotion.
- Establishment of investment chains.

Source: news reports
2. Changes in the Environment

Changes in Investees | Shortened Business Life Cycles

The progress of digitalization has weakened the “economies of scale” that can be achieved by the size of operations and assets. The previous driving force of corporate competitiveness is being replaced by new competitive rules driven by information. Along with this development, companies with a new type of competitive advantage in customer interface and other fields are being evaluated more favorably. Business life cycles are becoming shorter as a result.

Digitalization changes competitive rules

- As products become digitalized, the effects of economies of scale have been weakened because of a decline in marginal costs.

- Customer value has shifted to “results and experience” from “products,” changing the competitive environment for the industry.
  - Industry boundaries have been blurred as the market is redefined from customers’ perspectives.
  - The biggest source of competition is customer interface and the ability to understand customers. The competitive advantage of “assets” has declined.

Non-traditional companies become more important in the portfolio.
⇒ Need for a corporate evaluation method that does not rely on existing assets or track records.
Blockchain technology is attracting attention to formulate a secondary markets for new assets. Blockchain technology can lead to drastic changes in transaction costs, reducing the hurdle for the formation of a secondary market for niche assets. Its use is becoming widespread, with Nasdaq establishing a platform for the trading of unlisted companies.

2. Changes in the Environment

Changes in Investees | Formation of New Assets in Circulation Economy with Technology Use

Blockchain technology can create a secondary market with limited participants and increase the liquidity for niche assets.

<table>
<thead>
<tr>
<th>Company Overview</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name</strong></td>
<td><strong>NASDAQ</strong> <em>(stock trading platform)</em></td>
</tr>
<tr>
<td>Nasdaq</td>
<td>A market where shares of unlisted companies can be traded between selected shareholders. Employees of participating companies can quickly trade stocks that have been provided as part of their compensation package.</td>
</tr>
<tr>
<td>U.S. / 1971</td>
<td>• Companies that do not intend to list their shares can have their stock traded within a close environment and improve their liquidity.</td>
</tr>
<tr>
<td>About 3,700 / $499M</td>
<td>Nasdaq Private Market</td>
</tr>
<tr>
<td><strong>Primary Business</strong></td>
<td>Provides trading platform</td>
</tr>
<tr>
<td>• The world’s biggest stock market for startups</td>
<td>Fees</td>
</tr>
<tr>
<td><strong>Partners</strong></td>
<td><strong>Platform users</strong> <em>(As of February 2017)</em></td>
</tr>
<tr>
<td>Chain</td>
<td>• 7 companies</td>
</tr>
<tr>
<td><em>(Provider of blockchain platform)</em></td>
<td>- Tango</td>
</tr>
<tr>
<td></td>
<td>- The Motley Fool</td>
</tr>
<tr>
<td></td>
<td>- Shazam</td>
</tr>
<tr>
<td></td>
<td>- Shuttersong</td>
</tr>
<tr>
<td></td>
<td>- eneRGi</td>
</tr>
<tr>
<td></td>
<td>- RENOVA</td>
</tr>
</tbody>
</table>

Platform users

- The Motley Fool
2. Changes in the Environment
Changes in Investees | Formation of New Assets in Circulation Economy with Technology Use

New business models that will be created as a result of the digitalization are drastically transforming the concept of “assets.” In the “sharing business”, houses, cars and other items that were once considered individual property have become cash-generating “assets.” The owners of these assets are turning into “individual enterprises.”

Sharing business causes shifts in asset owners from “individual persons”

Lv.0 : Now
Finished vehicle + Ownership

Lv.5 : Fully automated driving (sharing economy, mobility services)
Digital players and division of labor
Traditional companies’ self-disruption

Vehicle buyers

Users
Mobility service provider
Vehicle broker
Users

Horizontal specialization
Future Urban Initiative (city formation)

Transit
Driving (arranging • driving)
Maintenance
Manufacturing

- OEMs wholesale finished vehicles.
- Individuals own vehicles.
- Digital players enter each stage with their customer appeal and data.
- Individually owned vehicles leased on P2P.
- Traditional players disrupt their own business models and enter sharing and “as-a-service” businesses.
- Makers hold onto their own products.
2. Changes in the Environment
Changes in Investees | Formation of New Assets in Circulation Economy with Technology Use

Sharing-service providers need “balance sheets supplement”, “risk money provision” and “management support” as usage, ownership and maintenance of goods are unbundled. The sharing business has much in common with corporate or infrastructure investments. This creates an opportunity for asset management firms to enter the market.

### Catalyst model by asset management firms

#### Digital players
- **Users**
- **Sharing services**
- **Asset providers (brokerage/ownership)**

#### Traditional players
- **Users**
- **Sharing services**
- **Operators**
- **Manufacturing**
- **Provision of As-a-services**

**Assets that could be targeted**

- Assets that are in constant demand.
- Assets that become idle if owned exclusively.
- Earnings become less volatile by bundling different types of assets in a fund.
- Regardless of whether they are tangible or intangible.

- Nimbleness is their strength. Thus, they want to avoid owning assets for stable provision of merchandise.
- Excessive expansion in balance sheets poses a challenge.
- Lack of knowledge in operating new businesses.

The elimination of pain points by asset management firms.
2. Changes in the Environment

Changes in both asset owners and investees and investment environment, and changes in environment within asset management industry (regulations, etc.) is affecting structural changes in investor behavior and the competitive environment for asset management.

Changes in asset owners
- Cost-sensitive investors (retail investors, those at small- and medium-sized institutions) are growing.
- As economy and society in emerging countries mature, capital flows increase and investment becomes conservative.
- Information asymmetry narrows between investors and asset managers in an information society.
- Pension funds and SWFs increase their presence.
- Institutional investors become more aggressive as developed countries compete to ease their monetary stance.

Impact on asset management business
- Competition for expansion in size of passive funds and the development of factor investment methods.
- Polarization of active funds toward low-liquidity assets and bottom-up funds. Replaced by passive funds.
- Competition for developing new earnings opportunities with the use of cutting-edge technologies and investment methods (cat-and-mouse-game).
- Diversification of funds targeting individual companies and assets. A surge in demand for hands-on funds.

Changes in investees and investment environment
- FD, MiFID2 make the market more sound. The investment chain concept becomes more familiar.
- Geographically distributed asset management loses effectiveness.
- Globalization of economic activities and capital flow.
- Simple arbitrage opportunities, such as HFTs, disappear.
- Reduced information asymmetry regarding investees and prices in an information society.
- Life cycles for companies and industrial structures become shorter.
- Improved predictability of the value of investees.
- More demand for risk money for new types of assets.
- More demand for risk money for structural conversions.
- Circulation economy and technology use lead to the formation of new assets.
2. Changes in the Environment

2 Changes in the Environment: Related to AM Businesses

The scenario for changes in the environment of the asset management industry can be understood as “3 (+1).” (A): changes in the fund flow from investors; (A‘): accompanied progress in technology use; (B): changes in value provided to investees; (C): changes in industry structures.

Changes in the Environment: Related to AM Businesses

(A): changes in the fund flow from investors; (A‘): accompanied progress in technology use; (B): changes in value provided to investees; (C): changes in industry structures.

Changes in asset owners

Impact on asset management business

Cost competition and market evolution lead to stratification

A Polarization of capital flow due to narrowed information asymmetry

As economy and society in emerging countries mature, capital flows increase and investment becomes conservative.

Information asymmetry narrows between investors and asset managers in an information society.

Alternative investments capital surplus, long-term investments.

Institutional investors become more aggressive as developed countries compete to ease their monetary stance.

A’ War of attrition in technology use and product development

Price segregation expands.

Investors become more discriminating.

Demand for small-lot, low-cost funds.

Competition for expansion in size of passive funds and the development of factor investment methods.

Competition for developing new earnings opportunities with the use of cutting-edge technology, investment methods (cat-and-mouse game).

Diversification of funds targeting individual companies and assets.

A surge in demand for hands-on funds.

Industry functions become stratified, turns into platforms.

Attempts to increase value of companies, assets.

B Increased importance for raising corporate and asset values.

Geographically distributed asset management loses effectiveness.

Globalization of economic activities and capital flow.

Simple arbitrage opportunities, such as HFTs, disappear.

Reduced information asymmetry regarding investees and prices in an information society.

More demand for risk money for structural conversions.

Life cycles for companies and industrial structures become shorter.

More demand for risk money for new types of assets.

Circulation economy and technology use lead to formations of new assets.
### 2. Changes in the Environment

#### 2. Changes in the Environment: Related to AM Businesses

These changes in the environment are taking place simultaneously, promoting structural changes in the asset management industry in pursuit of effective competitive strategies and earnings.

<table>
<thead>
<tr>
<th>The scenario for environmental changes</th>
<th>Impact on asset management business</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A</strong> Polarization of the capital flow due to narrowed information asymmetry.</td>
<td>• Accelerated expansion in size and scope of rule-based investment (passive/smart beta).</td>
</tr>
<tr>
<td><strong>A'</strong> War of attrition in technology use and product development.</td>
<td>• Asset owners to choose funds more proactively, creating a linkage between performance and fees.</td>
</tr>
<tr>
<td><strong>B</strong> Increased importance for raising corporate and asset values.</td>
<td>• Technology investments to create new arbitrage opportunities and spur competition for development of new methods, such as quants trading.</td>
</tr>
<tr>
<td><strong>C</strong> Cost competition and market evolutions lead to stratification.</td>
<td>• Active funds to converge at low-liquidity assets and bottom-up management where information asymmetry still exists.</td>
</tr>
</tbody>
</table>

- Investors make more economically rational decisions, with more products catering to different needs depending on the cost and value.
- Information society and technology developments to expand the area for rule-based investment.
- Market efficiency caused by HFTs and others to make existing arbitrage structurally less profitable.
- However, progress in informatization will lead to the discovery of new arbitrage opportunities and confer benefits to those who first discover those opportunities.
- A decline in the relative value of financial engineering due to a global money glut.
- Increased expectation for industrial metabolism through the supply of risk money.
- Increased industrywide pressure for cost reductions by asset owners, FD/MiFID2, etc.
- Expectations for a circulation economy centered on the asset management business, such as the creation of investment chains.
- Industrywide efforts to streamline operations through horizontal division of labor.
- Asset management firms to become a circulation-economy platform.
2. Changes in the Environment

A. Polarization of Capital Inflows due to Narrowed Information Asymmetry

With investor needs becoming more sophisticated and the mechanism for earning returns transforming, asset management firms are facing polarization. They must either seek cost-efficiency with the use of factor investments that less rely on a specific person, or transition to performance-based business models.

The U.S., which leads the world in investment trusts, has already seen a polarization taking place with a decline in passive fees. The polarization could accelerate as investors' preference for passive funds expands globally.

Source: Morningstar, ICI (2017)
2. Changes in the Environment

War of Attrition in Technology Use and Product Development

Operations and marketing used to be the main battleground for the use of cutting-edge technology in the AM industry. In recent years, the use of technology has been rapidly expanding to frontline areas such as research. Firms must make efforts to differentiate themselves by developing new methods or creating new earning models.

Number of deals and total investment amount of startup investments related to the AM industry ¹

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The number of deals is increasing in the areas of asset management and research with respect to startup investments.

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¹ Created based on Accenture Research Watchtower2017
2. Changes in the Environment

Increased Importance for Raising Corporate and Asset Values

A global money glut has affected investor capital in such a way that entry prices for corporate investments have gone up. For investment funds, this means that entry hurdles are rising, making it difficult for them to earn returns without raising the value of the investees.

Dry powder amount in PE investments (global)

The amount of dry powder has reached a record in recent years, with surplus funds continue to be available for investment.

Corporate investment multiple (U.S.)

With surplus investment funds, corporate investment valuations have surged and have raised entry hurdles.

Source: Preqin, Pitchbook

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Increased Importance for Raising Corporate and Asset Values

Asset management firms are expected to go beyond providing mere capital as business lifecycles become shorter. They must contribute to companies’ efforts to solve management challenges and help them reorganize their operations.

Previous source of returns

<table>
<thead>
<tr>
<th>Financial engineering</th>
<th>Provides value to investees</th>
<th>Provision of risk money for structure conversions</th>
</tr>
</thead>
</table>

New source of returns

<table>
<thead>
<tr>
<th>Financial engineering</th>
<th>Provides value to investees</th>
<th>Provision of risk money for structure conversions</th>
</tr>
</thead>
</table>

Efforts to increase the value of existing assets become more important because of an excess liquidity and reduced information asymmetry.
2. Changes in the Environment

Cost Competition and Market Evolution Lead to Stratification

In the AM industry, increasing cost pressures are prompting efforts to improve efficiency through scale and through the outsourcing of non-competitive operations. Expectations are also growing for the entire industry to serve as an “industrial infrastructure” to circulate risk money and provide management resources and the importance as an “economic circulation platform” is increasing.

Pursuit of scale through integration

- Separation of production and sales through strengthened FD.
- Increasing cost pressure.
  - Increasing demand for cost transparency due to MiFID II.
  - Increasing number of highly cost sensitive investors.

Industrial infrastructure centered on asset management firms

- Growing expectations for funds to serve as an “industrial infrastructure” as the investment chains concept becomes more familiar.
- Diversified needs of investee companies as corporate and industrial change cycles become shorter.

A complete separation of production from sales against the backdrop of more stringent fiduciary duties (development of an open architecture).

Integration of management firms to pursue scale; integrations of management functions within the same group.

Outsourcing of middle and back operations and integration of IT systems to make administrative tasks more efficient.

Integration of custody banks, the emergence of back office operations providers.

- Circulation of money through funds.
- Provision of advice, people and other management resources to increase the value of the investee companies and assets, rather than merely providing money.
3. Essence of the Evolution of Business Models

Changes in Business Models along with Changes in the Environment

As a result of changes in the environment as seen in the previous section, six major developments are expected to accelerate in the asset management industry: a scale expansion in pursuit of cost efficiency (① and ②), a shift in sources for returns from information asymmetry to value creation (③ and ⑥), a change in competitive strategy to be less rely on a specific person with the use of technology and by turning into a service platform (④ and ⑤).

### Changes in Business Models

- **①** An emphasis on low-cost products to pursue investment scale.
- **②** Reduced opportunities to earn profits through arbitrage; an emphasis on products with economies of scale.
- **③** An emphasis on bottom-up investments and investments in illiquid assets.
- **④** Maintaining a competitive edge by turning into a platform.
- **⑤** Development of new profit opportunities with the use of technology.
- **⑥** Reduced opportunities to make profits by merely providing funds. An emphasis will be on value creation through hands-on support.
Agenda

I. Research Objectives

II. Changes in the environment surrounding asset management firms
   1. Existing business models
   2. Changes in the environment
   3. The essence of the evolution of business models

III. Business models sustainable in the medium- to long-term
   1. Currently sustainable business models
   2. Conversion of long-term values to society

IV. GPIF Initiatives
1. Currently Sustainable Business Models

Sustainable Business Models by Type

Business models for asset management firms are expected to converge into six types:

- **Currently Sustainable Business Models**
  - Earning returns
    - Scale-pursuit type
      - Market-average tracking type
      - Rule-based alpha-tacking type
    - Fund-management type
      - Relative earnings
        - Growth-sector investment type
        - Growth-stock investment type
      - Absolute earnings
        - Absolute-earnings pursuit type (macro)
        - Absolute-earnings pursuit type (stocks)
      - Individual-stock-spread type
      - Risk-arbitrage type
      - No-risk-arbitrage type
    - Corporate needs
      - Capital-valuation type
      - Financial-evaluation type
      - Future-value-evaluation type
    - Capital needs
      - Financial-evaluation type
      - Future-value-evaluation type
    - Rehabilitation needs
      - Scale-advantage type
      - Advise/supervision type
      - Function-provision type
    - Management needs
      - Management-turnaround type
      - Function-provision type
      - Scale-advantage type
    - Capital-needs type
      - Capital-needs type
      - Rehabilitation needs
      - Capital-needs type
      - Management-needs type

- **Cost-effectiveness**
  - Investment scale
  - Operational scale

- **Acquiring asset management capabilities**
  - Hiring talent
  - Platform development
  - Technology use

- **Derived from core business**

- **Current business models**
  - I. Cost-effective type
  - II. Active/boutique type
  - III. Corporate value enhancement type
  - IV. Platform type
  - V. Core business synergy type
  - VI. Real asset value enhancement type
  - VII. Core business capital raising type

(Reference)
1. Currently Sustainable Business Models

Sustainable Business Models (1/2)

The scale ensures the sustainability of the cost-effective model. Active/boutique and the corporate value maximization models must build a balanced system by offering attractive remuneration to hire and retain talented Investment professionals.

<table>
<thead>
<tr>
<th>Business model</th>
<th>Mechanism to ensure sustainability (balance mechanism)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Cost-effective type</td>
<td>• Improves cost-effectiveness by expanding the asset size to increase returns.</td>
</tr>
<tr>
<td></td>
<td>• Gains cost-competitiveness by taking advantage of investment and operational scale.</td>
</tr>
<tr>
<td>II. Active/boutique type</td>
<td>• Acquires “market alpha” by talented investment professionals who can identify growth stocks. The fund’s strong performance attracts new investment capital to expand business.</td>
</tr>
<tr>
<td></td>
<td>• Gains a competitive advantage by keep hiring and retaining talented investment professionals.</td>
</tr>
<tr>
<td>III. Corporate-value-maximization type</td>
<td>• Increases corporate value or liquidates companies at a high value by talented investment professionals to earn returns. The fund’s strong performance attracts new investment capital to expand business.</td>
</tr>
<tr>
<td></td>
<td>• Gains competitive advantage by keep hiring and retaining talented investment professionals.</td>
</tr>
</tbody>
</table>
1. Currently Sustainable Business Models

Sustainable Business Models (2/2)

The platform model and the core business synergy model can enhance their investment capabilities and achieve sustainable growth by maximizing their values as business entities.

<table>
<thead>
<tr>
<th>Business model</th>
<th>Mechanism to ensure sustainability (balance mechanism)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Platform type</strong></td>
<td>① Direct mechanism  ② Alignment mechanism</td>
</tr>
<tr>
<td>• Hires employees or acquires other businesses to supplement capabilities and diversify products to expand the reachable market and respond to various investor needs.</td>
<td></td>
</tr>
<tr>
<td>• Gains a competitive advantage by adopting other management strategies or handling other assets based on strengths cultivated through existing funds (sales network, trust, operational infrastructure, etc.).</td>
<td></td>
</tr>
<tr>
<td><strong>Core business synergy type</strong></td>
<td></td>
</tr>
<tr>
<td>• Earns returns by raising the value of the investees with the use of knowledge, functions and human resources of the core business.</td>
<td></td>
</tr>
<tr>
<td>• Gains competitive advantage by creating a synergy by using assets of the core business for fund operations and by receiving products and technology from investees to benefit the core business.</td>
<td></td>
</tr>
<tr>
<td><strong>Real asset value enhancement type</strong></td>
<td></td>
</tr>
<tr>
<td>• Earns returns by hiring talented investment professionals to raise the value of real assets. The fund’s strong performance attracts new investment capital to expand business.</td>
<td></td>
</tr>
<tr>
<td>• Gains competitive advantage by keep hiring and retaining talented investment professionals.</td>
<td></td>
</tr>
</tbody>
</table>
2. Conversion of Long-term Value to Society

Changes in the Fundamental Value of the Capital Market

Asset management firms provide six values to the capital market and earn revenue.

Asset management firms’ functions in the capital market

- **Duration conversion**: The function to eliminate the disparities between the supply of short- to medium-term capital and the demand for capital of varying durations.

- **Information creation**: The function to evaluate and monitor the investee in order to assess the value and risks inherent in the asset, so that those fundamentals will be reflected in the price.

- **Ensuring market efficiency**: The function to convey asset evaluation information through investment activities, so that the correct price can always be maintained.

- **Risk conversion**: The function to combine assets with various risks to achieve diversification, so that the investor money that should have a relatively low risk exposure can be invested in high-risk assets.

- **Liquidity provision**: The function to collect money from diverse investors and supply it to the market to increase asset liquidity.

- **Creation of asset value**: The function to promote proper distribution of resources in the overall capital market through information creation and liquidity provision to increase the value of companies and assets.
2. Conversion of Long-term Value to Society

Timeline of Technological Evolution

While there remain some uncertainties with respect to the pace of changes in the environment, the evolution of information technology, the main driver for these changes, has been accelerating. By the first half of the 2020s, the replacement of investments by technology will accelerate as more data will be available and AI will be accountable.

2010 - Discussion, gradual implementation
2015 - Creation, full implementation
2018 - More data will be available
2020 - 2025 - Acceleration
2030 - 2035 - Accountable AI

**Macro**

**Financial**

**Data acquisition target**

**Real economy**

**Global**

**Japan**

2014 - Smart meters were gradually installed nationwide; installation to be completed by 2014.
2015 - TSE began to sell past indication price data
2016 - Japan and Germany released a joint statement regarding cooperation and collaboration in data standardization and usage.
2018 - ECB began to collect banks’ detailed lending data on a monthly and quarterly basis.
2020 - Major countries will commercialize 5G technology.
2015 - Germany began to promote R&D on operation processes based on sensor technology and data toward the realization of Industrie4.0.

2018 - METI and MIC established a certified databank system to share 3D map data and information from ships and satellites.1
2018 - METI and MIC created data standards in the areas of automated driving, biotechnology, materials, and plants.2
2020 - Ministry of Health, Labor and Welfare will create a database for medical records at hospitals and health exam data (to be fully operational from 2025).

2018 - The Statistics Commission of the Ministry of International Affairs and Communications (MIC) will unify service data maintained separately by various sections of the government.
2022 - The Statistics Commission of the MIN to unify manufacturing census data

2018 - METI began to organize efforts to standardize data on credit card settlements and purchases.
2022 - The Statistics Commission of the MIC to unify manufacturing census data

2017 AlphaGo beatend humankind
Development of 2021 DAPRA XAI/2025-30 Quantum computer will be commercialized by major companies

---

1: The unification of service data is assumed to take two years 2: The full implementation of medical database led by MHLW is assumed to take five years 3: METI’s discussion on credit-card data standardization is assumed to take half a year 4: Accountable AI (can explain the reason for its decisions)
### 2. Conversion of Long-term Value to Society

#### Long-term Changes in the Value Provided by Asset Management Firms

Information disparities and market inefficiencies have declined with the development technology. As a result, AM firms will lose their functions of information production, ensuring market efficiency and risk conversion. However, their role of creating asset value, through the provision of liquidity and value creation, will become even more significant.

<table>
<thead>
<tr>
<th>Macro trend (see above)</th>
<th>Impact on asset management firms (radical scenario)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Duration conversion</strong></td>
<td>• Duration gaps will remain and even expand as the supply side expands its base and the demand side continues to seek long-term capital (for corporate growth investments and investments in infrastructure, etc.).</td>
</tr>
<tr>
<td><strong>Information creation</strong></td>
<td>• A reduction in information asymmetry will make information creation easier and make appropriate prices more transparent, eliminating the value of asset management firms’ information creation services.</td>
</tr>
<tr>
<td><strong>Ensuring market efficiency</strong></td>
<td>• Market efficiency will be ensured by technology and institutional structures, reducing arbitrage opportunities. Arbitrage will cease to be a function provided by asset management firms.</td>
</tr>
<tr>
<td><strong>Risk conversion</strong></td>
<td>• Risks inherent in assets will become more visible. The economic value of risk conversions will disappear.</td>
</tr>
</tbody>
</table>
| **Liquidity provision**  | • Assets that are highly liquid will be handled through direct financing or P2P trading. There will be demand for the provision of liquidity to illiquid assets.  
|                           | • This function may survive by revitalizing idle assets or providing liquidity to new assets, such as digital assets. |
| **Creation of asset value** | • More value will be found in value creation within a longer-term cycle, through an investment chain.  
|                           | • There will be demand for an expansion of investment targets to emerging assets, necessitating the need for market creation. |
**2. Conversion of Long-term Value to Society**

**How Asset Management Firms Should Operate in the Long Term**

Providing companies and assets with opportunities to grow through the circulation of risk money and value creation could constitute a fundamental value that asset management firms offer to society. There may be room to vitalize new assets and create a new market.

**Asset management firms’ functions in the capital market**

**How AM firms should operate in the long term**

- They should pool a large amount of money from investors with diverse investment horizons and risk preferences and use this money as a resource to improve the value of the original assets. They should thereby become a “medium of value creation and conversion” that creates asset value and provides returns to asset owners.

- They should become an “agent to discover and create assets” by actively finding assets that can generate value to society, such as idle assets, intangible assets and digital assets, to attract risk money.
2. Conversion of Long-term Value to Society

**Mid to Long-term Business Model of Passive managers**

The “cost-effective type” asset management firms that carry out passive investment, in addition to holding onto the current earnings model based on client fees, could also leverage the size of their assets to play an intermediary role of increasing the value of companies, thereby providing values to society in the long term.

**Engagement platform**
- **Asset owner**
  - Sells voting rights (that it owns in great numbers).
  - Makes shareholder proposals that could lead to an increase in the value of a company in the long run on behalf of asset owners and investors, and receives fees.

**Providing liquidity between buy sides**
- **Asset owner**
  - Lends shares to meet short-term demand for securities by other companies.
  - Serves as a private stock exchange to adjust supply and demand between buy sides.

**Information provider**
- **Asset owner**
  - Provides supply and demand info to other investors and market infrastructure users, and contributes to the optimization of the order execution timing.
  - Provides investor info and market price forecasts based on factor analysis to contribute to the optimization of capital procurement costs.

*Possible regulatory constraints have been intentionally ignored*
Agenda

I. Research Objectives

II. Changes in the environment surrounding asset management firms
   1. Existing business models
   2. Changes in the environment
   3. The essence of the evolution of business models

III. Business model sustainable in the medium- to long-term
   1. Currently Sustainable Business Models
   2. Conversion of long-term values to society

IV. GPIF Initiatives
Evaluation Perspectives in Selecting External Asset Managers (1/2)

In selecting external asset managers, evaluations should be made with respect to the sustainability as a business model amid changes in the external environment and the competitive environment in order to identify those with whom long-term relationships can be established.

### Evaluation perspectives

<table>
<thead>
<tr>
<th>Consistency with current business models</th>
<th>Long-term sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost-effective, sensible product lineup</strong></td>
<td><strong>Scale can be pursued continuously</strong></td>
</tr>
<tr>
<td>① Focus is on scale-pursuit funds.</td>
<td>① Maintains financial structures that can continuously make investments and raise funds.</td>
</tr>
<tr>
<td>② If high-cost funds are included, the structure is maintained in such a way that there is a scale advantage through, for example, family funds.</td>
<td>② Maintains strategies and structures that allow for the pursuit of scale, such as operations in multiple geographical locations and the inclusion of active management through factor investment funds.</td>
</tr>
<tr>
<td>③ Funds that fail to achieve a certain size are redeemed, when appropriate, to maintain cost-effectiveness. Costs of low-performing funds are not shouldered by high-performing funds.</td>
<td>① What kind of a mechanism is in place to ensure the proper size of the fund and the independence in investment decision-making to prevent an expansion for short-term gains?</td>
</tr>
</tbody>
</table>

| ① Has the capability to assess the value and potential growth of individual industries and companies in such a way that it cannot be replaced by factor investment funds. | ① How are capabilities ensured to continuously increase corporate value? |
| ② With respect to the fund’s fee structure and the fund manager’s incentive model, what kind of an alignment mechanism is used? (Whether it is not dependent on fees based on economies of scale.) | ② What kind of advantage does it have in sourcing so that it can continuously acquire high-quality investment targets? |

| ① Active/boutique type | ② Corporate-value enhancement type |

I  Cost-effective type

II  Active/boutique type

III  Corporate-value enhancement type
### Evaluation Perspectives in Selecting External Asset Managers (2/2)
(Continued from the previous page)

#### Evaluation perspectives

<table>
<thead>
<tr>
<th>Consistency with current business models</th>
<th>Long-term sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>① The management portfolio has been created under a clear and sensible strategy.</td>
<td>① How are the capabilities ensured to optimize the business portfolio in accordance with the business environment? (The securing of employees, functions dedicated to M&amp;As, etc.)</td>
</tr>
<tr>
<td>② Synergies and risk diversification function properly between different business and investment organizations.</td>
<td>② How are the externally acquired business and human resources being managed? (The creation of synergies in cost control and capabilities, distribution channels, brand value, etc.)</td>
</tr>
<tr>
<td>① The specific value of the core business is utilized in improving the investee’s asset value (the creation, maintenance, management of real estate, etc.).</td>
<td>① The asset management operations produce adequate value for the core business so that the sustainability is ensured.</td>
</tr>
<tr>
<td>② Adequate measures are taken to protect investment decisions from being unduly influenced by the biases of the core business.</td>
<td>① How are the capabilities ensured to continuously increase corporate value?</td>
</tr>
<tr>
<td>① Able to provide added value that goes beyond mere capital to increase the value of investee companies.</td>
<td>② What type of advantage does it have in sourcing so that it can continuously acquire high-quality investment targets?</td>
</tr>
<tr>
<td>② What types of incentives are given to fund managers to maximize their performance? (For example, fund managers invest their own money in the fund.)</td>
<td>② What type of advantage does it have in sourcing so that it can continuously acquire high-quality investment targets?</td>
</tr>
</tbody>
</table>
## Initiatives to Build Long-term Partnerships

Six major tasks that may be necessary to strengthen long-term relationships with asset management firms and other related players.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Task List</th>
<th>Initiatives by GPIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promoting circulation of risk money to high-quality companies and assets</td>
<td>Promoting ESG investment</td>
<td>• Creation of indexes from a ESG viewpoint.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Allocation of long-term capital.</td>
</tr>
<tr>
<td></td>
<td>Active engagement by passive managers</td>
<td>• Providing additional fees to encourage the active engagement of passive managers.</td>
</tr>
<tr>
<td></td>
<td>Circulating risk money into niche and new types of assets</td>
<td>• Creating criteria to evaluate asset management firms based on their level of engagement.</td>
</tr>
<tr>
<td>Nurturing high-quality asset management firms</td>
<td>Nurturing asset management firms focusing on long-term growth</td>
<td>• Continuous assessment of diverse assets and capital allocations.</td>
</tr>
<tr>
<td></td>
<td>Improvement of asset owners’ ability to evaluate asset management firms</td>
<td>• Creation of secondary markets and system in consultation with the industry and regulators.</td>
</tr>
<tr>
<td></td>
<td>Penetration of business models suitable for changes in the environment</td>
<td>• Introducing the concept of duration-specific allocations to promote long-term investments.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Long-term commitment with competent active managers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Sharing the platform of manager entry and the criteria of evaluation with other asset owners to make good use of each other’s assessment capability.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Simplifying procedures and assign a gatekeeper to reduce entry barriers for sophisticated global asset management firms.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Promotion of sound business models through engagement with asset management firms.</td>
</tr>
</tbody>
</table>
Appendix
Cost-effective Type – Business Model and Balance Mechanism

The size of assets must be expanded continuously. The challenge is to generate the ability to make additional investments and execute them.

• Expands the size of assets under management to improve cost effectiveness to increase returns.
  - Provides low-fee passive funds to expand asset size.
  - Gains new profit opportunities by linking active funds to indexes and expands assets through an active fund with efficient management.
• Gains cost-competitiveness by leveraging investment and operational scale.
  - Further cost effectiveness is possible through stock lending, operational and system services.

• Increasing the size of assets will benefit investment performance, the value of the business and the value of employees.
3. Currently Sustainable Business Models

Cost-effective Type – Earnings Structure and Incentive Model

Retain employees on a long-term basis. Leverage cost-competitiveness to expand assets under management to earn profits.

![Diagram of Earnings Structure and Incentive Model]

Real earnings per AuM are relatively low. Generates profit by reducing the initial cost, direct costs and indirect costs.

- Real earnings per AuM are about 20 basis points.
- Improves management efficiency by expanding the size of funds.
- The cost base declines through the standardization of operations and IT systems.

This is an incentive model under which KPIs and salaries are similar across different types of jobs. The variable salaries are also linked with the firm’s earnings. This is designed for long-term, stable employment.

- Expansion is the KPI across different types of jobs.
- The ratio of variable salaries is relatively low. Annual bonus payments are more closely linked with the firm’s earnings than the performance of individual employees.

### 3. Currently Sustainable Business Models

#### Cost-effectiveness Type – Medium- to Long-term Strategies and Challenges

<table>
<thead>
<tr>
<th>Concerns</th>
<th>Current (actual) business model</th>
<th>Current sustainable business models</th>
<th>Long-term sustainable business models</th>
</tr>
</thead>
<tbody>
<tr>
<td>①</td>
<td>The product appeal is low, but the asset is expanding due to distribution channel.</td>
<td>① Focuses on providing liquidity by taking advantage of the asset size.</td>
<td>① Providing adequate liquidity requires a certain asset size. This may mean that all but a handful of mega-players will remain.</td>
</tr>
<tr>
<td>②</td>
<td>Surviving price competition among passive funds owing to highly profitable funds, such as theme-based active funds.</td>
<td>② The earnings model puts more emphasis on stock lending or the provision of trading functions (such as dark pool).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Current (actual) business model</th>
<th>Current sustainable business models</th>
<th>Long-term sustainable business models</th>
</tr>
</thead>
<tbody>
<tr>
<td>①</td>
<td>FD rules will become more stringent and make it difficult for funds to depend on a single sales company. This may lead to a sales decline.</td>
<td>① Providing adequate liquidity requires a certain asset size. This may mean that all but a handful of mega-players will remain.</td>
<td></td>
</tr>
<tr>
<td>②</td>
<td>There are concerns about an earnings decline as passive funds keep cutting costs and active funds face difficulty expanding assets.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Currently Sustainable Business Models

Active/Boutique Type – Business Model and Balance Mechanism

The challenge is to acquire and retain talented investment professionals and maintain size of funds at an appropriate level as it focuses on areas where information disparities remain among investors.

- Identify growth stocks and acquire “market alpha” by talented investment professionals. The fund’s strong performance attracts new capital to fuel further expansion.

- Gains competitive advantage by hiring and retaining talented investment professionals.

- Investment performance improves by keep hiring and retaining talented investment professionals and it realizes the value of employees.

- A portion of salaries will be linked with the value of the business as the alignment with the value of the employees.
3. Currently Sustainable Business Models

Active/Boutique Type – Earnings Structure and Incentive Model

Incentives are provided in accordance with the fund’s performance as it seeks to achieve returns that are higher than the market average. They attract fresh capital by building a track record to expand the business.

The ratio of variable salaries is set high for fund managers and sales personnel to provide incentives for better investment performance and fund inflow.

- Fund managers invest their own money in the fund to increase the commitment for the performance.
- Stock options are provided to retain a certain number of employees.

Builds a track record to attract new assets, increase real earnings and generate profits.

- Real earnings per AuM are about 1%.
- Performance-linked funds receive fees equivalent to the amount generated in excess of the committed target return.

### 3. Currently Sustainable Models

**Active/Boutique Type – Medium- to Long-Term Strategies and Challenges**

<table>
<thead>
<tr>
<th>Concerns</th>
<th>Challenges</th>
<th>Current (actual) business model</th>
<th>Current sustainable business models</th>
<th>Long-term sustainable business models</th>
</tr>
</thead>
<tbody>
<tr>
<td>① There are cases in which earnings is pursued through an expansion in asset size, rather than through an improvement in returns (It is concerned that the pursuit of scale beyond appropriated capacity decreases the investment return and hurt clients’ interest).</td>
<td>① The pursuit of earnings through size expansion will become difficult as demand from investors on passive funds and absolute return levels increase.</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Currently Sustainable Business Models

Corporate-value Enhancement Type – Business Model and Balance Mechanism

Corporate growth is vitally important for earning returns. The challenge is to focus on specific areas to accumulate knowledge and have specialized teams cooperate with one another.

- Talented investment professionals improve corporate value and liquidate companies at high prices to earn returns. The fund’s strong performance attracts new capital to expand the asset size.
- Gains competitive advantage by hiring and retailing talented investment professionals.

- Investment performance improves by keep hiring and retaining talented investment professionals and it realizes the value of employees.
- A portion of salaries will be linked with the value of the business as the alignment with the value of the employees.

---

**Business model**

<table>
<thead>
<tr>
<th>Type</th>
<th>Method to earn returns</th>
<th>Method to gain competitive advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate-value enhancement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>specialist type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management needs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advice/supervision type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Function-provision type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale-advantage type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management-turnaround type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business-liquidation type</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Mechanism to ensure sustainability**

(balance mechanism)

- Strong performance attracts more investment capital
- Individual fund managers seeking to achieve results

- Direct mechanism
- Alignment mechanism

Cost effectiveness

- Investment scale
- Operational scale
- Hiring talent
- Platform development
- Technology use

Derived from core business

Value of business

Stock options, split payments of variable compensations

Value of employees

Fees

Investment performance

Hiring talent
3. Currently Sustainable Business Models

Corporate-value Enhancement Type – Earnings Structure and Incentive Model

Incentives are provided in accordance with the fund’s performance to increase the corporate value and achieve returns. Attract new capital by building a track record to expand the business.

Earnings structure

Example: Company C (2016)

<table>
<thead>
<tr>
<th>(Per AuM)</th>
<th>Real earnings</th>
<th>Initial cost</th>
<th>Goss margin</th>
<th>Direct costs</th>
<th>Indirect costs</th>
<th>Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.7%</td>
<td>-0.5%</td>
<td>1.2%</td>
<td>-0.4%</td>
<td>-0.3%</td>
<td>0.4%</td>
<td></td>
</tr>
</tbody>
</table>

Builds a track record to attract new assets, increase real earnings and generate profits.
- Real earnings per AuM are about 1%.
- Expenses are covered by fixed management fees.

Incentive model

Incentives are provided to improve the investment performance by supporting investee companies until the exit.
- Variable salaries are provided in accordance with the excess returns. This is to encourage managers to commit themselves from sourcing to exit.
- Fund managers invest their own money in the fund to increase the commitment for the performance.
- Stock options are provided to retain a certain number of employees.

Source: Company C Annual Reports (2016)
### 3. Currently Sustainable Business Models

#### Corporate-value Enhancement Type – Medium- to Long-term Strategies and Challenges

<table>
<thead>
<tr>
<th>Current (actual) business model</th>
<th>Current sustainable business models</th>
<th>Long-term sustainable business models</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concerns</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>① Earnings through arbitrage, rather than improving the intrinsic value of assets.</td>
<td>• -</td>
<td></td>
</tr>
<tr>
<td>② Impairs the intrinsic value of assets while seeking to gain short-term returns.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Challenges</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>① Returns obtainable through simple arbitrage or short-term rationalization measures are becoming smaller. The corporate value must be improved in a more substantial way, such as through an improvement in the topline and through structural reform of business.</td>
<td>• -</td>
<td></td>
</tr>
<tr>
<td>② Considerable time is needed to achieve returns, creating conflicts with shareholders, the parent company and fund managers seeking quick gains.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3. Currently Sustainable Business Models

Platform Type – Business Model and Balance Mechanism

The challenge is to build a mechanism to ensure the flexible use of human resources and other companies in product diversification.

<table>
<thead>
<tr>
<th>Business model</th>
<th>Mechanism to ensure sustainability (balance mechanism)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Method to earn returns</td>
</tr>
<tr>
<td>Comprehensive platform type</td>
<td>Specific-sector investment type</td>
</tr>
<tr>
<td></td>
<td>Investment type</td>
</tr>
<tr>
<td></td>
<td>Corporate value maximization type</td>
</tr>
<tr>
<td></td>
<td>Asset specialization type</td>
</tr>
<tr>
<td></td>
<td>Management-needs type</td>
</tr>
<tr>
<td>Corporate investment platform type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Specific-sector investment type</td>
</tr>
<tr>
<td>Technology-use type</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Supplements capabilities through hiring and M&As to diversify products to expand the reachable market and respond to the needs of diverse investors.
- Gains a competitive advantage by diversifying investment strategies and assets based on the strength acquired through existing funds (distribution channel, trust and the operational expertise).

① The acquired capabilities lead to a strong performance for the fund, maximizing the asset management firm’s returns.
② These returns will be used to enhance the value of the platform.
3. Currently Sustainable Business Models

Platform Type – Earnings Structure and Incentive Model

The primary thrust is the pursuit of higher returns, but cost synergies and teamwork are also considered.

<table>
<thead>
<tr>
<th>Earnings structure</th>
<th>Incentive model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: Company D (2016)</td>
<td></td>
</tr>
<tr>
<td>(Per AuM)</td>
<td></td>
</tr>
<tr>
<td>1.0%</td>
<td>4.0%</td>
</tr>
<tr>
<td>-0.3%</td>
<td>3.5%</td>
</tr>
<tr>
<td>0.7%</td>
<td>4.0%</td>
</tr>
<tr>
<td>-0.2%</td>
<td>3.5%</td>
</tr>
<tr>
<td>-0.2%</td>
<td>4.0%</td>
</tr>
<tr>
<td>0.3%</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

Diversifies asset classes, products and investment methods to expand the reachable market and increase real earnings to generate profits.

- Real earnings per AuM is about 1%.
- Expands the functions shared with the corporate section, market section, etc. to produce cost synergies.

Each fund is given two types of incentives: incentives designed for each fund to maximize performance, and incentives to improve the platform value.

- To promote value creation as a platform through collaborations among employees and among different departments, some incentives are linked with the firm’s overall performance and the performance of funds managed by other employees.

Source: Company D Annual Report 2016
### 3. Currently Sustainable Business Models

**Platform Type – Medium- to Long-term Strategies and Challenges**

<table>
<thead>
<tr>
<th>Concerns</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>① Business portfolio is not optimized with focus placed on a simple maximization through M&amp;As (skewed toward certain assets or strategies, a lack of synergies, etc.).</td>
<td>① Requires an appropriate response to changes in the business environment, such as an increase in cost pressure and a decline in earnings opportunities for active management.</td>
</tr>
<tr>
<td></td>
<td>② Requires continuous R&amp;D for cutting-edge technology and business models.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current (actual) business model</th>
<th>Current sustainable business models</th>
<th>Long-term sustainable business models</th>
</tr>
</thead>
</table>

- Seeks more sophistication as a platform player by adding various assets and expanding the capabilities to improve the asset value.
3. Currently Sustainable Business Models

Core business Synergy Type – Business Model and Balance Mechanism

The competitive advantage is in the creation of an industrial platform and ecosystem based on its strength derived from core business.

**Business model**

<table>
<thead>
<tr>
<th>Type</th>
<th>Method to earn returns</th>
<th>How to gain competitive advantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core-business synergy type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management needs</td>
<td>Advice/supervision type</td>
<td></td>
</tr>
<tr>
<td>Function-provision type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scale-advantage type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management-turnaround type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business-liquidation type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate-advantage type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price formation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underlying asset value</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Mechanism to ensure sustainability** (balance mechanism)

1. Direct mechanism
2. Alignment mechanism

- Utilizes the knowledge, functions and human resources of the core business to improve the value of the investees and earns returns.
- Gains a competitive advantage by using the assets of the core business for the fund, and using the products and technologies of the investees to benefit the core business to create synergies.

1. Uses the capabilities of the core business to improve the value of the investees and acquire strong asset management performance.
2. The creation of synergies with the core business functions as part of an alignment strategy.
3. Currently Sustainable Business Models

Core business Synergy Acquisition Type – Earning Structure and Incentive Model

Increases the value of the investees using the capabilities of the core business.

Earnings structure

<table>
<thead>
<tr>
<th>(Per AuM)</th>
<th>Real earnings</th>
<th>Initial cost</th>
<th>Gross margin</th>
<th>Direct costs</th>
<th>Indirect costs</th>
<th>Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.7%</td>
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<td>-0.3%</td>
<td>0.4%</td>
<td></td>
</tr>
</tbody>
</table>

Example: Company E (2016)

Incentive model

- Uses the capabilities of the core business to build a track record and attract new assets for management. Increases real earnings to generate profits.
  - Real earnings per AuM is about 2%.
  - Fixed management fees to cover necessary expenses.
  - Some costs are held down with the use of capabilities of the core business.

- Incentives are provided to increase the fund performance with respect to investments that can create synergies with the core business.
  - A portion of the salaries are linked with the performance of the core business.
  - Fund managers invest their own money in the fund to increase the commitment for the performance.
  - Stock options are provided to retain a certain number of employees.

Source: Company E Annual Report (2016)
3. Currently Sustainable Business Models

Core business Synergy Type – Medium- to Long-term Strategies and Challenges

**Concerns**

1. Assets of the core business are not effectively used as the asset management is positioned as a side business.

**Challenges**

1. The key is whether the intrinsic value creation capabilities of the core business can be used to gain advantage at a time when the ability to create the value of assets is becoming a distinguishing factor.

**Current (actual) business model**

- Players with the capabilities to create or increase the value of companies or tangible assets through the core business can gain a competitive edge. These assets include, for example, new classes of assets or low-liquidity assets (These players include trading houses, manufacturers and real estates companies).

**Current sustainable business models**

- Whether a competitive position can be gained with respect to new classes of assets by leading the formation of a new market.
3. Currently Sustainable Business Models

Real-asset Value Enhancement Type – Business Model and Balance Mechanism

Importance is placed on providing value in addition to capital, and on securing earnings through new asset classes. The challenge is to improve the value it provides, proactively making investments to seek new earnings opportunities, and to achieve teamwork.

<table>
<thead>
<tr>
<th>Business model</th>
<th>Mechanism to ensure sustainability (balance mechanism)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td><strong>Method to earn returns</strong></td>
</tr>
<tr>
<td>Real asset</td>
<td>Market growth</td>
</tr>
<tr>
<td>boutique type</td>
<td></td>
</tr>
<tr>
<td>Asset-</td>
<td></td>
</tr>
<tr>
<td>specialization type</td>
<td></td>
</tr>
<tr>
<td>Management-needs type</td>
<td></td>
</tr>
</tbody>
</table>

- Talented investment professionals raise the value of real assets to earn returns. The fund’s strong performance attracts new investment capital to expand operations.
- Gains a competitive advantage by hiring and retaining talented investment professionals.

- Investment performance improves by keep hiring and retaining talented investment professionals and it realizes the value of employees.
- A portion of salaries will be linked with the value of the business as the alignment with the value of the employees.
3. Currently Sustainable Business Models

Real-asset Value Enhancement Type – Earnings Structure and Incentive Model

Incentives are linked to fund performance and earns returns through the asset’s improved cash flow and capital gains. Builds a track record to attract new capital and expand the business.

**Earnings structure**

*Example: Company F (2016)*

<table>
<thead>
<tr>
<th>(Per AuM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0%</td>
</tr>
<tr>
<td>1.8%</td>
</tr>
<tr>
<td>1.6%</td>
</tr>
<tr>
<td>1.4%</td>
</tr>
<tr>
<td>1.2%</td>
</tr>
<tr>
<td>1.0%</td>
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<tr>
<td>0.2%</td>
</tr>
<tr>
<td>0.0%</td>
</tr>
</tbody>
</table>

- **Real earnings** 0.49%
- **Initial cost** -0.04%
- **Gross margin** 0.45%
- **Direct costs** -0.14%
- **Indirect costs** -0.02%
- **Profit** 0.29%

Builds a track record to attract new management assets, increase real earnings, and generate profits.

- Real earnings per AuM are about 0.5%.
- Expenses are covered by fixed management fees.
- The ratio of personnel costs is high relative to overall expenses.

**Incentive model**

*Source: Company F, securities report (2016)*

Incentives are provided to improve the investment performance by increasing the value of real assets until the exit.

- Variable salaries are provided in accordance with the excess returns. This is to encourage fund managers to commit themselves from sourcing to exit.
- Fund managers invest their own money in the fund to increase the commitment for the performance.
- Stock options are provided to retain a certain number of employees.
3. Currently Sustainable Business Models

Real-asset-value Enhancement Type – Medium- to Long-term Strategies and Challenges

<table>
<thead>
<tr>
<th>Concerns</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>① In real estate and mid-cap infrastructure investments, there still remain cases in which the source of returns is arbitrage.</td>
<td>① A excess of investment capital and progress in information technology will weed out funds that rely on simple arbitrage. It is necessary to earn returns based on the asset value.</td>
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① A excess of investment capital and progress in information technology will weed out funds that rely on simple arbitrage. It is necessary to earn returns based on the asset value.
Further deepening for future research and study

Although this research indicates the magnificent structure change from an asset management firm’s point of view, further deepening of this research, such as insights given by each player like asset owner and regulatory authority, quantitative analysis of information are yet to be conducted.

<table>
<thead>
<tr>
<th>View</th>
<th>Further deepening for future research and study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change of needs towards asset management firms from asset owner’s view</td>
<td>• The expectation for AM firm of asset owner is not only the cost optimization, which includes transparency of fees and transformation to performance-based system, but also the diversified services such as providing information or operational work, etc. .</td>
</tr>
<tr>
<td></td>
<td>• Although insights of external environment change, direction of business strategy and industry structure change have been concluded through interview for AM firms, more insights of trend change from different dimension could be gained through analysis of asset owner side such as oversea pension funds, financial institutions and non-financial companies.</td>
</tr>
<tr>
<td>Insight of regulatory authority trend</td>
<td>• The regulatory environment of AM industry is changing magnificently both inside and outside the country, promotion of fiduciary duty and stewardship code, enforcement of MiFID II in EU is developing.</td>
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<td></td>
<td>• This research is focused on the realized trend in terms of investor protection. The future research can weave the development trend of authorities into future scenario based on a mid-long term perspective like industrial development through hearing from regularity authorities.</td>
</tr>
<tr>
<td>Insight from “Disruptor” point of view</td>
<td>• The players who don’t limit themselves as traditional asset management firms have raised slowly recently, such as hedge funds that making full advantage of AI and data analysis technology and players who enters different from industry that leverage the power of seizing data.</td>
</tr>
<tr>
<td></td>
<td>• The interview targets of this research are asset management firms. More detailed disruptive scenario could be realized by hearing startup disruptors with the view of from where they discover business chance or how they understand future industry structure.</td>
</tr>
<tr>
<td>Quantitative analysis of revenue/cost structure</td>
<td>• The revenue/cost structure of asset management firms will be changed due to the pressure of lowering fees, equalization of investor’s cost, by MiFID II and cost structure change caused by technology development.</td>
</tr>
<tr>
<td></td>
<td>• This research concluded the insights of characteristics of cost structure and qualitative impact based on the public information of each company. The insights of quantitative valuation of impact to the revenue/cost structure based on the financial information including private information could be concluded.</td>
</tr>
</tbody>
</table>