Action Plan of the Growth Strategy

June 21, 2019

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(Table of Contents)

Chapter 2Realization of Society 5.0
2. Fintech/finance203. Mobility224. Corporate governance265. Smart public services286. Next-generation infrastructure297. Aiming for realization of a carbon-free society29
 3. Mobility
 3. Mobility
 4. Corporate governance
 5. Smart public services
6. Next-generation infrastructure
Chapter 3 Reforms to Social Security System for All Generations
1. Securing employment opportunities up to the age of 70
2. Promotion of mid-career hiring and experienced personnel hiring 35
3. Prevention of disease and nursing care
Chapter 4 Reinforcement of Regional Measures under Population Decline
1. Maintenance of Community Infrastructure and Competition Policy 41
2. Supplying human resources to regions
3. Revitalization of communities with rapidly declining populations 46
4. Tourism development
5. National Strategic Special Zones 46
6. Increase productivity of SMEs and micro businesses

Chapter 1 Fundamental perspective

(1) Background

AI, IoT, robots, big data, blockchain, and other Fourth Industrial Revolution digital technologies and data utilization are general purpose technology (GPT) that broadly affect all industries, similar to adoption of electric power from the 19th to 20th century and IT inroads through the end of the 20th century.

Japan needs to revamp its overall socioeconomic system, including the format of corporate organizations and the content and format of individual work, in order to fully harness the potential of new GPT from the Fourth Industrial Revolution to improve productivity and realize economic in the new "Reiwa" era.

The Fourth Industrial Revolution will bring about structural change from uniform competition focused on costs to competition for acquisition of added value. This is competition for creation of new products and services with high added value that relies on the extent to which corporate executives fully utilize digitalization and achieve differentiation. Creation and acquisition of added value are key issues.

The Fourth Industrial Revolution will also heavily affect the labor market. Polarization is steadily advancing in the labor market worldwide due to decline in mid-skill work and increases in high-skill and low-skill work. To expand high-skill jobs, it is vital to cultivate human resources who possess capabilities and skills that cannot be replaced by machinery and AI, such as creativity, instinct, design, and planning.

Whether "organizational" and "human resource" reforms advance in these ways in response to the Fourth Industrial Revolution will determine whether it is possible to enhance labor productivity through creation of added value.

(2) Government and policy reforms

The pace of changes occurring with the Fourth Industrial Revolution is fast and sudden, and the world is changing significantly. Japan's ability to be a leader in the Fourth Industrial Revolution depends on whether the government is capable of preparing timely and detailed response measures and getting the private sector to take detailed action based on these measures. The next 1-2 years are critical.

To accomplish this, the entire government needs to promptly prepare the environment, including necessary legislation, and should seek to complete the formulation of national-level fundamental infrastructure and rules in the 2020 Ordinary National Diet Session.

Japan continues to promote bold monetary policy and dynamic fiscal management under Abenomics, and the government should also take the lead in open innovation initiatives, such as promoting mobility of human resources, and implement deregulation to encourage new entrants and stimulus and secure the sustainability of economic policies.

(3) Organizational reforms

Corporate innovation activities are important in realizing the Fourth Industrial Revolution. Expectations remain strong for venture companies as drivers of innovation, and assistance should be given. However, the role of existing companies and large companies with abundant capital and personnel resources is also important in the Fourth Industrial Revolution because it requires investments in R&D work with a lengthy gestation period.

Japan's labor productivity growth rate was lower than rates in the United States and United Kingdom in 2001-07 (Figure 1). Since 2011, meanwhile, Japan has the top growth rate among G7 countries (Figure 2).

Figure 1 Annual average growth rate of real labor productivity per hour (2001-07)

1.36%1.33% 1.24%

Germany

France

0.99%

Canada

Italy

2.11[%]2.04%

United

United

Kingdom

Japan

2.40%

1.90%

1.40%

0.90%

0.40%

-0.10%

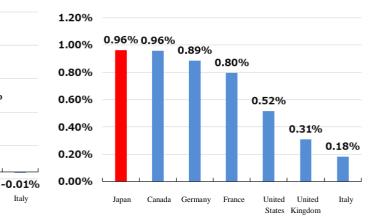


Figure 2. Annual average growth rate of real labor productivity per hour (2011-17)

Nevertheless, the absolute value of Japan's labor productivity is still low at just 65% of the level in the United States (Figure 3). Since productivity is based on "selling price – cost," there is debate as to whether high costs or low selling prices are responsible for Japan's low labor productivity.

Markup rate data are useful in confirming this point. The markup rate is a measure of the multiple of price to manufacturing cost in actual sales and uses cost as the denominator (marginal cost) and selling price as the numerator. If the value is 1, the selling price is just covering costs.

While US and European companies have rapidly raised their markup rates since 2010, Japanese companies remained at low rates (Figure 4).

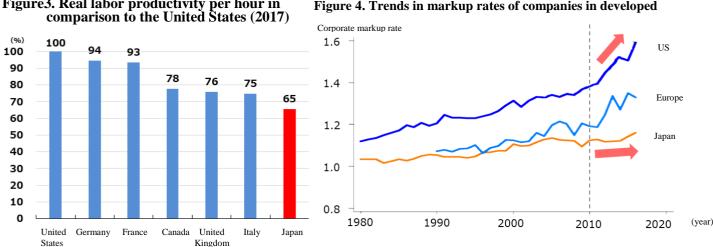


Figure 3. Real labor productivity per hour in

Markup rate distribution in the United States was concentrated near 1x, which meant that prices were just covering costs, in 1980. In 2016, meanwhile, its markup rate is rising to the right with a long tail (Figure 5). This shows increase in the number of companies capable of obtaining healthy prices thanks to the Fourth Industrial Revolution and other reforms.

In other developed countries besides the United States, corporate markup rate distribution is changing in the same way (Figure 6). While some companies with high markup rates are emerging in Japan too, the change margin is very small compared to other countries (Figure 7).

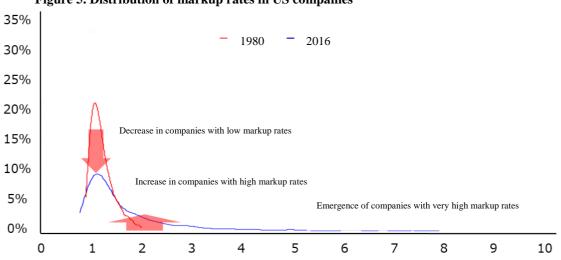
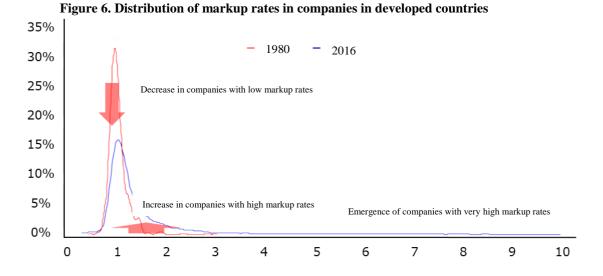
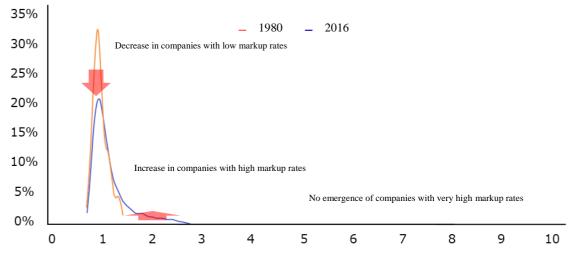


Figure 5. Distribution of markup rates in US companies







A core issue for raising Japan's labor productivity is creation of added value from the

customer perspective. In other words, Japan must strive to raise the markup rate and profitability through utilization of Fourth Industrial Revolution digital technologies and data to create new products and services with high added value.

Real data is a strength for Japanese companies. Japan needs to leverage real data and real world (physical space) knowhow, its expertise, and bolster initiatives in virtual space (cyber space) through public and private efforts.

To achieve this, it is necessary to build an environment capable of using data, the biggest resource in the Fourth Industrial Revolution, and creating innovation ahead of the world. Japan should take a leading role in realizing privacy protection while still enabling free distribution of data in international society. These efforts will help in fostering more intelligent and prosperous regional living and national lifestyles and also in resolving global issues, such as global environmental problems and aging.

(4) People reforms

① Creating jobs with high added value

The Fourth Industrial Revolution is heavily affecting the labor market structure too. A primary example of this structural change is polarization.

In the United States, mid-skill production, sales, and administrative jobs are declining, while low-wage care, cleaning, and personal service jobs and high-wage technology and specialty jobs are increasing (Figure 8). Similar polarization is starting to occur in Japan too (Figure 9).

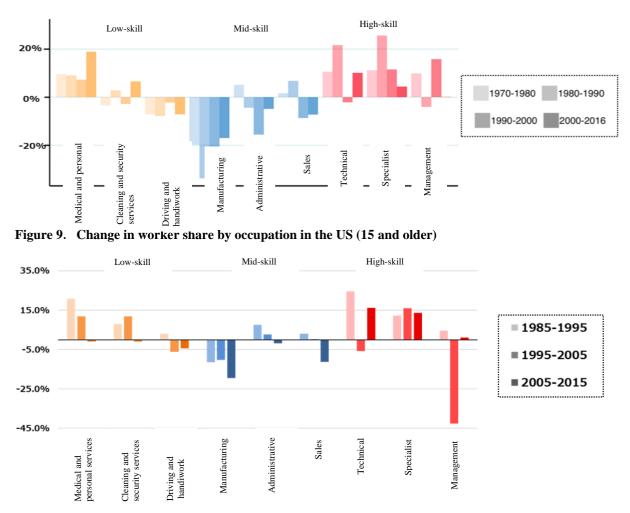


Figure 8. Change in worker share by occupation in the US (ages 16-64)

"People" are the driving force that supports economic growth. To promote utilization of the capabilities of each person amid dramatic innovation and the prospect of sharp decline in the younger generation, it is essential to accelerate investments in human capital in society as a whole and build structures that enable people to attain high-skill jobs.

Companies and individuals must respond flexibly to change and strengthen resilience to shocks in an era of significant change driven by the Fourth Industrial Revolution and population decline. This requires expansion of diverse, flexible corporate organizations and cultures toward work styles to accommodate forces of decentralization and personalization unleashed by the Fourth Industrial Revolution.

Japan needs to realize a new value creation society that increases true mobility and lets people conduct work with high added value by freely utilizing their personal capabilities without restriction by organizations through reforms to liberate people from constraint and stagnation in organizations and giving them opportunities to engage in different worlds.

As the Fourth Industrial Revolution advances, human capabilities that cannot be replaced by machinery and AI, such as creativity, instinct, design, and planning will increasingly create added value. To expand employment with high added value in response to polarization of the labor market, it is necessary in the educational system, including elementary school, to cultivate human resources with excellent capabilities in respective areas by shifting from mass output of mistake-free education to respect for various approaches and different ideas.

Furthermore, the Fourth Industrial Revolution is creating a wage premium for people with graduate degrees. Wage-premium fields that pay premiums to master's and PhD degree graduates, using bachelor degrees as 0%, are basic and fundamental fields, such as psychology, art, communications, literature, and physics in the sciences (Figure 10). These results indicate that the basic portion is the issue when combined with AI. Japan needs to strengthen liberal arts education, regardless of arts or science programs, including in graduate school education. Universities possess diverse knowledge that is a vital source of added value in a knowledge-intensive society. It is important to expand the role of universities and utilize them as a drive force of innovation.

Companies also must promote increased use of people with graduate school degrees. They need to promote reinforcement of basic data and AI literacy too.

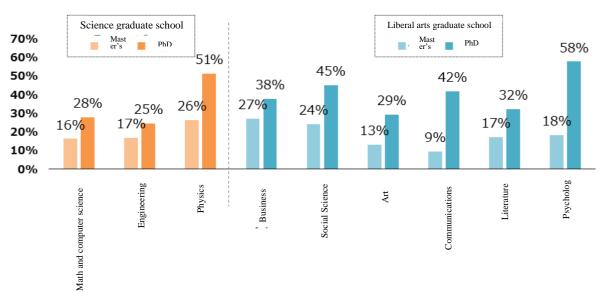


Figure 10. Increase in lifetime wages for graduates in the United States (per department)

5

While individual workers need to take initiative on their own in developing capabilities and forming careers, companies must assist in harnessing the capabilities of employees through additional education. Japan also needs to continue provision of recurrent education for learning again at anytime and on multiple occasions to address changing times after people have become full members of society.

2 Expansion of flexible and diverse work styles

Japan must promote a model change that adjusts Japan-style employment practices premised on lifetime employment and seniority to accommodate changes in society and encourage diverse hiring and work styles.

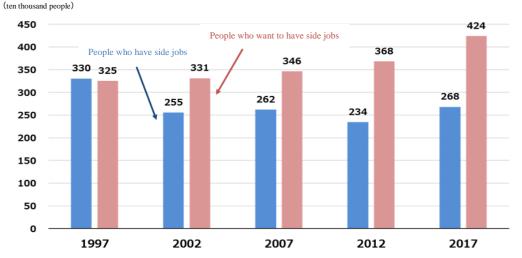
Along with revisions to the approach of bulk hiring of new university graduates currently progressing, Japan needs to expand career hires of mid-career and experience personnel and promote changes to employee assessment and compensation systems.

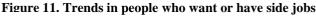
To support this process, it is important to provide an environment in which students and others seeking employment can join companies with an understanding of their employment policies. The government should pursue more transparency by calling on individual large companies to disclose information on the percentage of mid-career and experienced hires in light of the current handling of mid-career and experienced hiring results as a selective disclosure item.

③ Expansion of side jobs and second jobs

Despite an upward trend in people who want to have side jobs in recent years, the number of people who actually have side jobs has been flat (Figure 11).

Looking at the relationship to creation and acquisition of added value for main-business companies, many people engage in side businesses in areas that differ with their man business (except for the "medical and welfare" industry) and this activity provides opportunity for the main-business company to accumulate diverse experience (Figure 12).





Provisional Translation

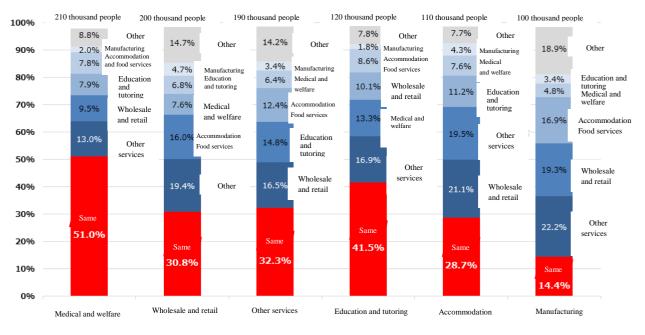


Figure 12. Percentage of type of side job by industry

Additionally, survey results for people engaging in side business show that 90% had heightened awareness of their main business or no change and 20% felt stronger motivation in their main business (Figure 13).

In fact, among high-level human resources involved in thinking and analysis, people with side jobs earned 36% higher wages in their main business than those without this activity (Figure 14). This suggests that lowering corporate boundaries and letting high-level employees hold a side job enhances the value of main business.

Furthermore, while leaving a corporate job to create a business entails risk anywhere in the world, a majority of people launching new businesses retains their existing jobs to alleviate this risk in other countries (Figure 15).

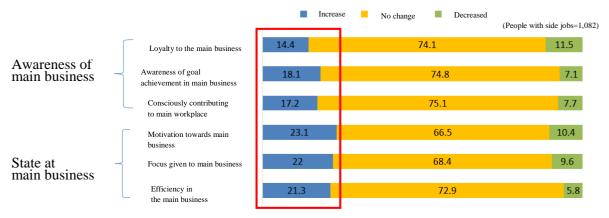


	Figure 13	. Influence on	main business	by side jobs
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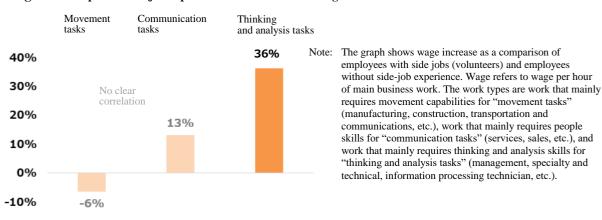


Figure 14. Impact of side job experience on main business wages

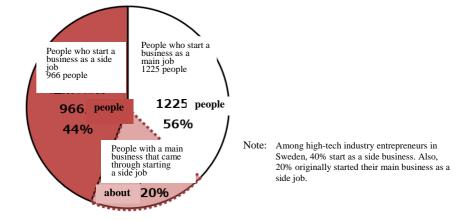


Figure 15. Breakdown of high-tech industry entrepreneurs in Sweden

Expansion of side or second jobs increases personal income, generates feedback to the main business via acquisition of skills and experience, and facilitates transition to and preparation for other job options in the future in an era of a 100-year life. Japan must foster an environment that helps interested people pursue side or second jobs by addressing concerns about work hours and health management through accelerated clarification of key issues as well as promotion of model work rules in side or second job situations and provision of initiative examples. It is also necessary to promote entrepreneurship via side or second jobs.

Technology advances are increasing new job formats for people working on their own that involve obtaining short-term or one-time jobs over the Internet. This is known as the Gig Economy. In particular, it is contributing to expansion of work opportunities for seniors (Figure 16). With data showing that just under 70% of society in the middle-aged and senior segments at 40 years old and above in Japan (Figure 17), the Gig Economy offers the possibility of expanding employment of seniors.

Self-run business owners and freelancers also report a higher level of satisfaction than company employees. This includes large discrepancy in "sense of achievement and fulfillment" and "skill, knowledge, and experience enhancement" (Figure 18). Japan must develop and environment that give individuals an option to select self-run business and freelance paths.

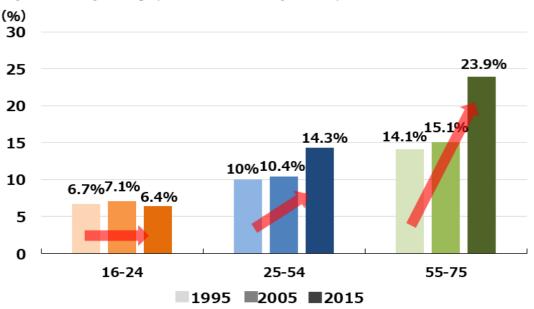
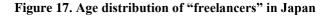


Figure 16. Change in employment ratio due to Gig Economy (1995-2015)



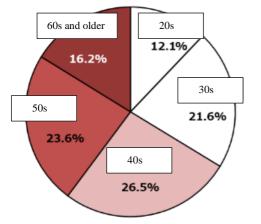
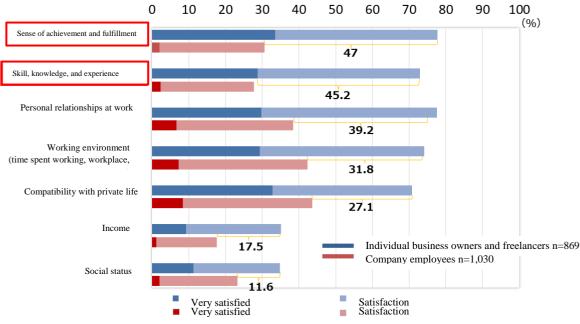


Figure 18. Comparison of the level of satisfaction between individual business owners, freelancers, and company employees



④ Provision of infrastructure to expand diverse work formats

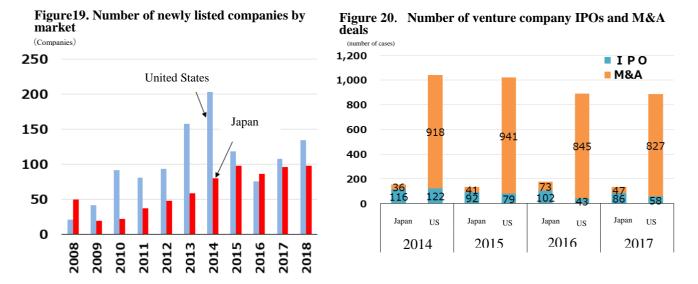
Japan must expand application of employee insurance to workers with short hours and others with the aim of realizing social insurance for all workers and thereby addressing expansion of diverse work formats.

(5) Promoting open innovation

① Importance of the role of existing companies

Common wisdom had been that cultivation of venture companies and new stock listings were a shortcut in promoting innovation that creates added value. This view led to the conclusion that Japan's low number of new stock listings was an issue.

However, the number of newly listed companies in Japan has been steadily rising in recent years, and Japan surpassed the United States in new listings in 2016 (Figure 19). It is also worth noticing that the number of newly listed companies in the United States has been declining since 2014. A reason for decline in new listings in the US is that acquisition from an existing company is more attractive than a new listing in terms of access to internal funds and ease of developing technology with a long gestation period (Figure 20). The behavior of existing large companies hence is an important factor in fostering innovation.



In fact, analysis of national labor productivity improvement factors shows a larger contribution from existing companies than new-listing companies in both Japan and the United States. Structural reforms at existing large companies are driving improvements (Figure 21, Figure 22).

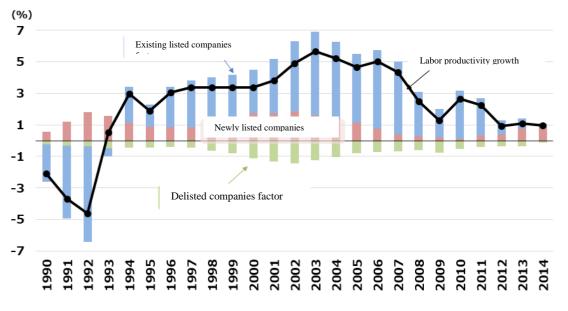
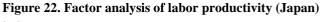
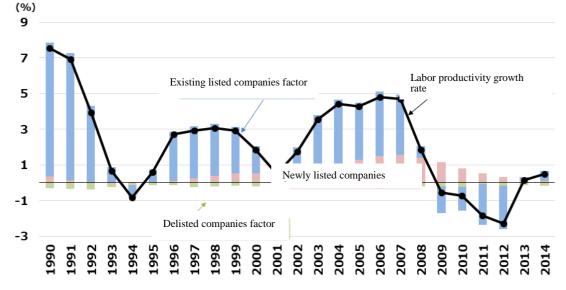


Figure21. Factor analysis of labor productivity (US)





② Current situation at existing companies

Japan has more companies with a lengthy history of over 10 years than other developed countries (Figure 23). While some observers believe this is a hurdle to innovation, profitability tends to be higher at companies with a longer corporate age in the United States (Figure 24).

This result indicates that existing large companies are growing by proactively entering new fields and acquiring innovative venture firms.

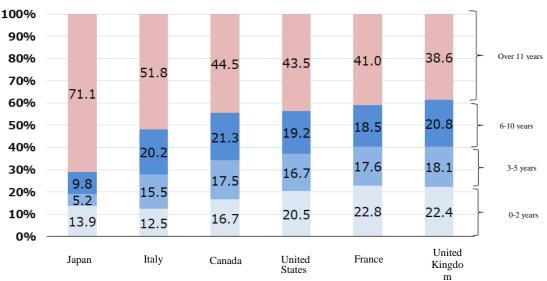
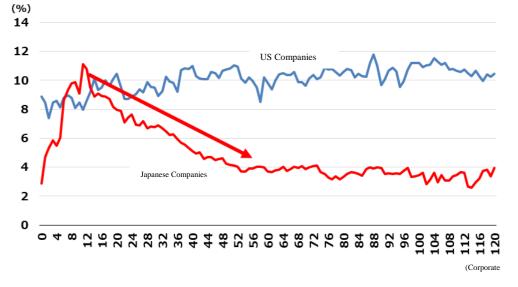


Figure 23. Corporate age distribution



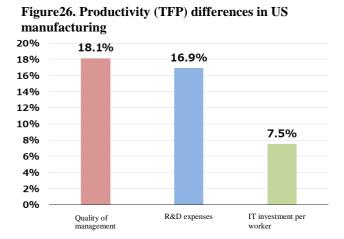


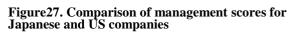
US companies are also successfully lifting profitability by expanding scale and diversifying businesses. Japanese companies, meanwhile, tend to have lower profitability as they become larger and diversify due to build-up of non-core businesses. This difference might reflect a gap in internal capital market utilization efficiency at existing companies (Figure 25). Japanese existing companies hence have the potential to achieve results by investing internal business resources in new areas.

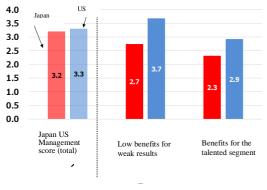
Diversification de	Scale	Small	Medium	Large	Very Large)
Professional	Japan	8.8%	5.9%	6.5%	7.0%	Diversification degree
Occupation	US	-0.5%	11.4%	7.7%	10.4%	Specialization: up to 10% Semi-specialization: 10% to 30%
Ouasi-	Japan	7.4%	5.3%	6.2%	6.2%	Semi-diversification: 30% to 50%
specialization	US	4.7%	11.5%	10.7%	7.8%	
Semi-	Japan	6.2%	5.7%	5.2%	4.7%	Scale (sales) Small : up to 50 billion yen Medium : 50 billion yen to 500 billion yen
diversificatio	US	9.9%	9.2%	8.3%	8.6%	Large : 500 billion yen to 2 trillion yen Very large: 2 trillion yen and above
	US	5.1%	5.4%	5.4%	3.0%	
Diversification	Japan	-15.2%	9.0%	11.0%	13.7%)

Empirical research utilizing a corporate database conducted jointly by management and economic researchers at Harvard, Stanford, MIT, and other universities discovered that management quality is more important than IT investment budgets in determining productivity (Figure 26). This is why companies need to promote improvement in management quality by linking compensation and promotions to results (Figure 27).

Existing companies need to allocate internal funds to new areas and areas with high risk and substantially moved forward with investments in new businesses and venture companies that can provide a future growth foundation. These efforts should involve utilization of a "separate unit" with independence from the company itself and a management style that simultaneously promotes both mature and new businesses. Corporate governance reforms, meanwhile, have reached a point of needing to move beyond just formalities and shift to genuine management reforms.





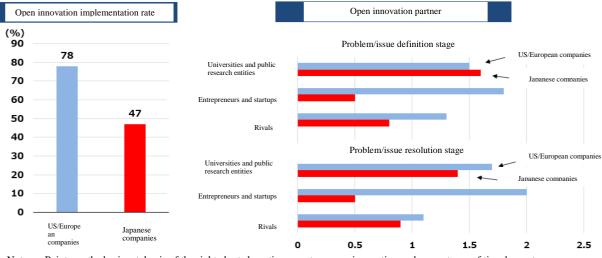


③ Promotion of open innovation

While the open innovation implementation rate for Japanese companies is low, joint activities with universities and public research organizations in deciding and solving issues are comparable to the US and Europe.

Meanwhile, Japan has collaboration among companies, such as existing companies and

Figure 28. Open innovation implementation rate and partner comparison



Note: Points on the horizontal axis of the right chart show time spent on open innovation and percentages of time by partners; calculated as the average value for respondents (0 = 0%, 1 = More than 0% and less than 25%, 2 = 25% to less than 50%, 3 = 50% to less than 75%, 4 = Over 75%)

start-ups and between existing companies, than in the US and Europe (Figure 28).

To take the fullest advantage of possibilities offered by the Fourth Industrial Revolution, Japan needs to support creation of new venture companies and existing companies must move beyond the closed and retention approach to human resources, technology, and capital and transition to open and collaborative organizational management.

In recent years, exit strategies for venture companies in the United States have shifted from IPOs to outright sale to another company. This change reflects the growing importance of corporate acquisitions as a source of funds versus new listings on the stock market that faces an information gap regarding the potential of technologies held by venture companies in the Fourth Industrial Revolution.

In Japan, while collaboration with universities and public research entities had been the focus of open innovation, it is important to engage in Co-Opetition as a new way of creating added value that involves cooperating in areas where cooperation makes sense and competing when competition is appropriate. Large companies, SMEs, ventures, universities and others should dynamically collaborate in an open shared business approach. It is necessary to proceed with collaboration between large companies and venture companies, acquisitions of venture companies by existing companies, and collaboration between rival existing companies.

Specifically, Japan must consider preparation of an environment that facilitates business reorganization, expands corporate venture capital, and promotes R&D among companies.

Chapter 2 Realization of Society 5.0 1. Improvement of rules for the digital market

Summary

Global data volume has been rapidly expanding in recent years. Digital platform companies are dramatically increasing potential access to global and other markets for SMEs, small business, ventures, and individual users.

Users, meanwhile, have expressed concerns about the difficulty of direct negotiations, one-sided rule changes, and high usage rates. These conditions highlight the need to improve legislation and guidelines for ensuring transparency and fairness in transaction practices.

Another concern is the threat of hindering competition via data monopoly in digital markets. Similar action is also needed.

Coordination of competition policy in the digital market requires high-level expert knowledge and also overcoming vertical divisions among ministries and agencies in order to facilitate timely responses amid accelerating changes. Japan intends to develop a new framework for these issues.

(1) Current situation

Digital platform companies are expanding their business scope from the digital world of simple mail (messaging), searches, and contents to real-world fields such as retail at actual stores, IT-based smart homes, and automated driving.

Digital platform companies dramatically improve potential access to global and other markets for SMEs, ventures, and freelancers (these advances are known collectively as the Gig Economy). Many observers acknowledge specific benefits, such as acquisition of new customer development opportunities, reduction of revenue collection costs, and ability to use production and sales tools.

Common issues raised about digital platform companies, meanwhile, are difficulty of direct negotiations, one-sided rule changes, high usage rates and fees, and arbitrary and uncertain search results. A majority of respondents also mention difficulty in switching the digital platform company they work with (Figure 29). There have been frequent incidents of digital platform companies abusing their dominant position.

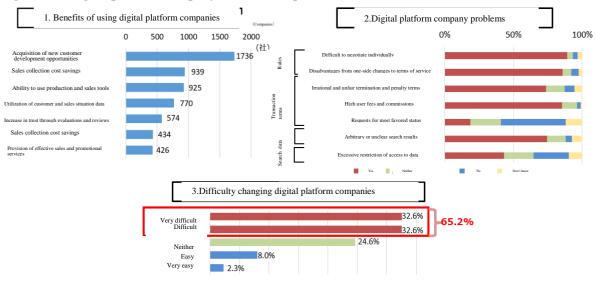


Figure 29. Digital platform company benefits and problems

< Examples of incidents involving digital platform companies>

Amazon e-book incident (June 2015)

EU competition authorities conducted a survey of alleged competition restrictions by Amazon (US) through a provision that requests business partners to give Amazon at least the same terms in cases of offering a contract with better terms than for Amazon to another distributor (so-called most-favored nation treatment).

 \Rightarrow In 2017, Amazon promised the EU competition authorities that it would not use this provision.

■ Google Shopping incident (June 2017)

EU competition authorities conducted a survey of alleged illegal favoring of Google's (US) own service through abuse of the dominant position of its search engine by giving priority display of the shopping service it provides.

⇒ Authorities levied a EUR2.42 billion (314.6 billion yen) penalty against Google for violation of EU competition law.

Furthermore, data monopoly in the digital market poses a threat of hindering competition even if a company's sales only hold a small share of the market. Some observers have noted that anti-trust authorities are not giving sufficient consideration partly due to their weak knowledge of the digital market.

In the United States and Europe, authorities are putting efforts into development of corporate combination review methods, including data value assessments. Japan also needs to work on developing corporate combination review methods, including suitable evaluation of data value, while collaborating with US and European authorities.

< Example of an issue related to inadequate assessment of data value in a business combination review>

■ Facebook acquisition of WhatsApp incident (2014)

- ① Facebook (SNS) proposed the acquisition of WhatsApp (SNS) for \$19bn (2.09 trillion yen)
- ② The EU implemented a review of the possibility of integrating user data between the messaging apps of these two companies in the future. It prepared a future market forecast, including data assessment, and decided to accept the company's explanation about the technological difficulty of data integration. Authorities approved the acquisition.
- (3) However, Facebook subsequently integrated data from the two apps, and this increased Facebook's dominance. The EU reversed its initial assessment and decided to levy a penalty of EUR110mn (14.3 billion yen) in 2017.

(2) Direction of government actions

① Established an expert organization for assessing competitive conditions in the digital market in the Cabinet Secretariat

Building a framework for global data distribution requires construction of a powerful and clear framework for data collection, storage, management, and distribution in Japan. Detailed issues run across many ministries and agencies, including R&D on data security, development of shared, general-use data formats, promotion of data cleansing, ensuring privacy and security for data distribution, promotion of a Society 5.0 cybersecurity framework, strategic management from the standpoint of strengthening industrial competitiveness based on data types and structure ranging from sensitive technology to general technology information, and formulation of data portability and API disclosure policies.

The government hence plans to create an expert organization on domestic and overseas data and digital markets (Digital Market Competition Headquarters (provisional)) comprised of experts with diverse and high-level knowledge across ministries and agencies. This organization will be given authority to promote innovation through responses to a variety of issues related to above-mentioned data usage, including data portability and API disclosure, authority to obtain survey results and other reports based on the Act on Prohibition of Private Monopolization and Maintenance of Fair Trade (the Antimonopoly Act) and other related laws and regulations from the standpoint of defining and assessing the digital market where global digital platform companies compete and promoting competition and innovation, and authority, authority to plan and handle overall coordination of fundamental policies on the digital market, authority to cooperate and collaborate with competition authorities of other countries.

Specific tasks include (a) assessing the competition situation in digital markets, (b) improving rules for a variety of platform businesses and conducting surveys and making recommendations on issues related to the Antimonopoly Act, protection of personal information, and other matters, (c) issuing recommendation on stimulation of the digital market, including SMEs and venture companies, and (d) participating in rule formulation process related to competition assessment in the digital market handled by the international frameworks such as the G7, G20.

The expert organization will bring together specialists from legal, economics, information engineering, systems theory, and other fields, and the secretariat will broadly recruit knowledgeable administrative officials from the Japan Fair Trade Commission General Secretariat and Ministry of Economy, Trade and Industry, Ministry of International Affairs and Communications, and other ministries in charge of digital-related policies.

The Digital Market Competition Headquarters (provisional) will build a strategic framework for a data-driven society through close collaboration with the IT Strategic Headquarters, the Cybersecurity Strategic Headquarters, and various ministries and agencies.

Additionally, under the Cabinet Secretariat, it shall also begin project management throughout the year of a government information system aimed at achieving work reforms from a service perspective and bulk requests and booking of budgets related to government digital infrastructure.

(2) Improvement of rules to ensure transparency and fairness in transactions between digital platform companies and users

(Mergers and Acquisitions)

Data monopoly in the digital market poses a threat of hindering competition even if a company's sales only hold a small share of the market. Some observers have noted that antitrust authorities are not giving sufficient consideration partly due to their limited knowledge of the digital market. Japan therefore needs to prepare guidelines and/or legislation to conduct reviews of business combinations that include assessment of data value. Attention will be given to avoid interfering with innovations in this process.

(Transparency and fairness of transaction practices, etc.)

Digital platform companies dramatically improve potential access to global and other markets for SMEs, venture companies, and freelancers (Gig Economy). However, transactions between digital platform companies and users also face potential problems, such as (a) one-sided application of contract terms and rules, (b) service additions and excess cost burden, and (c) excessive restrictions on access to data.

The government hence needs to improve legislation and guidelines to ensure transparency and fairness of transaction practices and other unique relationships formed in the digital market and aims to submit a bill to the National Diet's 2020 Ordinary Session (the Act on Improving Transparency of Digital Platformer Transactions (provisional)).

Meanwhile, consideration will be given in improving rules to use of rules that respect autonomy with a "comply or explain" approach initially for the purpose of avoiding interference with digital innovation for the Fourth Industrial Revolution.

Specific consideration items will be clarification and disclosure of contract terms and

transaction rejection reasons, clarification of rankings (order of presentation for product search results), disclosure in cases of digital platform companies giving preference to their own products and services, disclosure of requests for most-favored-treatment clauses (such as clauses requesting the best terms among business partners), and an obligation to arrange a complaint processing system.

③ Revision of the Act on the Protection of Personal Information

Regarding the Act on the Protection of Personal Information, the government aims to review measures to prevent inappropriate use of personal information, including adoption of a framework that lets individuals ask companies and others to stop usage of their data, apply provisions without discrimination to domestic and foreign companies, and adjust the framework to promote more utilization of anonymized information not sufficiently employed up to now and submit a revisions bill to the National Diet's 2020 Ordinary Session

④ Promotion of data transfers and openness

The government plans to consider design of a detailed system for data portability and API disclosure in specific areas, such as finance and medical. It will also improve rules suited to the digital market for legacy regulations and other areas.

(5) International DFFT discussion and WTO formulation of data distribution rules

To ensure reliability related to privacy, security, and intellectual property rights and facilitate unfettered flow without national border concerns of data that is beneficial to resolving business and social issues, it is necessary to seek promotion of data free flow internationally. Japan aims to lead international discussion utilizing the G20 and other opportunities based on the "Data Free Flow Trust (DFFT)" concept.

Furthermore, Japan intends to promote formation of an international consensus for development of high-level rules with as many member countries as possible in negotiations on rules related to electronic commerce transactions at the WTO, including data free flow.

(6) Toward 5G development and realization of a G-Spatial Society

As part of efforts for realizing Society 5.0, 5G service launches in all prefectures by the end of fiscal 2020 and the government intends to provide necessary assistance for nationwide deployment of 5G base stations, optical fiber, and other information and communications infrastructure by telecom carriers and others, while also ensuring security, and accelerate the 5G development plan by fiscal 2024. At that time, in order to realize regional revitalization, pioneering local public organizations that have specific efforts to solve their own regional issues will be given priority for support.

Furthermore, the government plans to promote social deployment of advanced technologies using geospatial information with a goal of realizing a society with advanced utilization of geospatial information (G-Spatial Society).

⑦ Refining regulations based on social deployment of digital technology

Some observers note that the regulatory framework is not keeping up with changes in ways of ensuring safety and reassurance amid rapid advancement of digital technology. The government needs to implement regulatory reforms across industries in collaboration with the Council for Promotion of Regulatory Reform.

The High Pressure Gas Safety Act certifies business officess conducting sophisticated plant safety using IoT and big data (permanent monitoring data) as super-certification sites as a

refinement of the regulations. This certification approves a longer continuous plant operation period than normal and provides significant streamlining of periodic inspections (from once a year at normal sites to as long as once every right years). The government will consider redesign of similar regulations for safety in other fields too.

In legislation related to finance and payments, the government is looking at refinement of consumer protection by promoting innovations in credit provisions, such as permitting credit reviews that utilize technology and data under the Installment Sales Act. It plans to pursue regulatory refinements in other fields as well.

2. Fintech/finance

- Summary

Existing regulatory frameworks divided by industry, such as banks and service providers, hinders flexible service provision by new entrants and others. The government plans to promptly revise regulatory regimes for payments and other areas.

(1) Current situation

Existing financial regulations use frameworks that are fundamentally divided by industry, such as banks and fund transfer service providers.

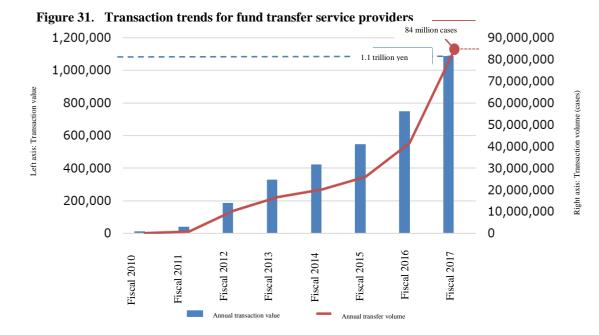
Particularly in the payments field, some observers note that the regulatory scheme divided by business categories interferes with market entry by newcomers and flexible provision of services amid diversification of services in recent years (Figure 30).

Furthermore, the value and number of transactions handled by fund transfer services other than Japanese banks are steadily rising with advances by the Fourth Industrial Revolution (Figure 31).

(Figure 31). "Business category" laws currently regulate providers of financial transaction agent and broker services in general, not only in the payments field (Figure 32). There is concern about interference with market entry by newcomers in these areas too.

	Banks	Fund transfer services (fund transfer businesses)	Transportation IC cards, etc. (prepaid payment method issuer)	Credit cards (comprehensive credit payment broker)
	Payments	Payments (limited to amounts less than one million yen per time)	Payments (conversion not possible after putting funds into the card)	Payments
Services	Loans			Loans related to product purchases, etc.
	Deposits (deposits can be put toward loans)	Retention of user funds (only available for payments)	Retention of user funds (only available for payments)	
Laws	Bank Act	Fund payment method	Fund payment method	Installment Sales Act
Law composition	License systems	Registration system	Registration system	Registration system

Figure 30. Current financial legal system



[Function]	on J Pavments Deposit receipt Fund As		Asset manag	ement	Risk transfe	er
Business type	Electronic payment agent	Bank agent	Financial product broker	Investment advisor	Insurance offeror	Insurance broker
Entry regulation format	Registration	Approval	Registration	Registration	Registration	Registration
Side business registration	Notification of updates	Approval	Notification	Notification	Notification	-
Fiduciary duty/loyalty duty	Fiduciary duty	-	Fiduciary duty	Fiduciary duty Loyalty duty		Fiduciary duty
Affiliate financial entity (yes/no) Information provision, prohibited acts, etc.	Information provision to avoid being mistaken as banking, etc.	Affiliate system (multiple allowed) Disclosure duty for multiple affiliations with different fees Prohibits abuse of dominant position, etc.	Affiliate system (multiple allowed)) * Salespeople assigned to financial product brokers Disclosure duty for multiple affiliations with different fees Prohibits provision of special benefits, etc.	Receive compensation from users Prohibits provision of special benefits, etc.	Affiliate system (Life insurance offerors can only have one affiliation as a general rule) Prohibits provision of special benefits, member composition rules	Prohibits fee receipt from users (bring inkan (seal)) Disclose receipt of fees from insurers
User asset acceptance Separate management		Separate management duty	Prohibited	Prohibited	Separate management duty (bring inkan (seal))	
User asset protection Compensation capacity protection	Asset base (Net asset value not negative) Conclusion and disclosure of a contract with a bank (sharing damages liability with the bank,	Asset base (at least 5 million yen in net assets (company)at least 3 million yen (individuals) Affiliation damages compensation liability	Affiliation damages compensation liability	Provision of a sales deposit (5 million yen)	Affiliation damages compensation duty	Deposit (20 million yen to 800 million yeu) /guarantee consignment contract/damages tability incurance
System maintenance Personnel criteria (qualifications, etc.)	System maintenance duty	System maintenance duty Sufficient knowledge and experience	System maintenance duty Passed sales person test (bring inkan (seal))	System maintenance duty Sufficient knowledge and experience	System maintenance duty Passed test (association rule	System maintenance duty Passed test (bring inkan (seal))

Figure 32. Financial transaction regulations

(2) Direction of government action

The government intends to revise the existing legal framework for financial and commercial transactions divided by business categories and to pursue realization of a function-based, cross-segment framework that applied the same rules to the same functions and risks. It hopes to promote entry by newcomers, innovations through competition among various services, and competition related to financial service quality.

(Payments)

The government plans to adopt a cross-segment framework in the payments field that has been cited as an area in which the vertical structure by business segment under current laws interferes with free selection of business models and services by service providers. This initiative aims to realize flexible, highly convenient cashless payment methods, besides existing bank fund transfers and conventional relatively high-sum credit card payments, through market entry by newcomers and competition among various services by ①allowing seamless payments that combine prepaid and postpaid formats (note 1) and ②creating a new fund transfer type positioned between banks and existing fund transfer firms and thereby facilitating a wide range of fund transfers (note 2) other than just bank fund transfers. In this process, the government also intends to introduce frameworks that enable smooth business deployment by fintech companies and other payment service firms, such as utilization of performance provisions in credit reviews under the Installment Sales Act. It plans to submit necessary bills for these changes to the National Diet's 2020 Ordinary Session.

(Note 1) Seamless payments combining prepaid and postpone formats:

Facilitate provision of seamless payment service using prepaid, postpaid, and other formats through adoption of a different system for small-sum, low-risk payments than the existing one for relatively

high-sum payments.

(Note 2) Non-bank fund transfers with a wide value range:

In addition to existing fund transfer business that handles fund transfers up to one million yen, create a new type of fund transfer positioned between banks and existing fund transfer business and formulate a system that enables the transfer of funds exceeding one million yen with simpler regulations than applied to banks.

(Cross-segment legal framework)

The government intends to review measures for realization of a cross-segment financial services brokering legal framework that allows provision across segments of services for various functions, such as payments, fund provision, asset management, and risk transfer. It hopes that this initiative will enable provision of a highly convenient one-stop channel that meeting the needs of individual users utilizing smartphones and other devices, simplify selection of financial services that meet personal needs by users, and encourage competition for financial service quality. The government aim to prepare its fundamental approach for this initiative during 2019.

3. Mobility

Summary -

Shortage of drivers is becoming a serious issue, mainly in regional areas, amid heavy reliance on automobiles as a means of transportation.

Mobility is an important pillar of Society 5.0. Japan needs to make revisions to the system of paid passenger transportation in a personal-use vehicle from a user perspective that make the current system easier to utilize.

Collaboration with taxi businesses offers a way of reducing the burden on local public entities and it is also beneficial for users, through provision of a safe and reliable service.

The government hence aims to develop a legal framework that lets taxi businesses receive consignments and simplifies procedures for participation in an implementing entity. This transportation envisions not only local residents, but also tourists in light of a future era of 40 million foreign visitors to Japan.

Additionally, revisions should enable ride sharing, including use of IT, in the taxi business to provide less expensive fees for users.

For drones, the government plans to take steps that expand usage beyond line of sight.

(1) Current situation

All generations rely heavily on automobiles as a means of transportation in regional areas. Automobile reliance is over 50% for the 80 and older age group (Figure 33). Furthermore, a growing number of older workers and many seniors go outside for shopping and various tasks at hospitals, public offices, and other locations.

There is also a worsening manpower shortage of the business drivers, and the effective jobopening ratio is twice the average for all occupations (Figure 34.). It is currently difficult to maintain the transportation network from standpoint of recruiting taxi drivers. The number of taxi drivers has been declining from a peak at 381,943 people in 2005 to 289,373 people in 2016, or 24% less than the peak (Figure 35).

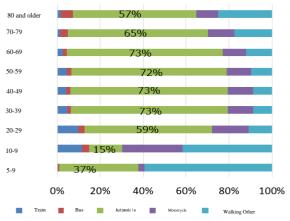
The government needs to promptly prepare traffic safety measures and arrange transportation means that support movement in regional areas by seniors and others, particularly in light of recent accidents involving senior drivers and traffic accidents harming

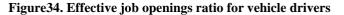
Provisional Translation

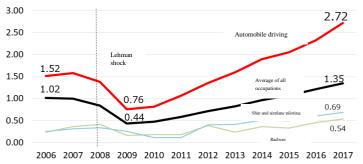
children.

The government must review ways to simplify provision of paid passenger transportation in personal-use vehicles (Figure 36) as a transportation means that supports regional movement. Meanwhile, 80% of municipalities do not have a dedicated person for this area (Figure 37) and handling vehicle assignment and safety management is a high hurdle for municipalities.

Figure 33. Auto reliance in regional areas (besides the three major urban areas)







Note: Does not include work with a contract period of less than four months or seasonal work. Total (Year) average effective job openings ratio including these categories (2017) was 1.50x.



Figure 36. Local mobility transportation methods

Types		Characteristics
Route buses		Street buses set routes, bus stops, and operating times and run at fixed times on fixed routes. This public transportation service is vital to the lives of local residents for commuting to work and school, going to see doctors, and other activities.
Buses	Community buses	This bus service is mainly planned by municipalities to address demand that is not fully covered by street buses and runs at fixed times on fixed routes.
	Demand-based buses	This bus service defines areas and dynamically operates on the shortest route to meet user requests and goes to locations requested by users.
Ц	Taxis	This is a public transportation service that provides door-to-door service that meets diverse mobility needs for the daily lives of a wide range of users from children to seniors.
Taxis	Ride-sharing taxis	This is a ride-sharing transportation service provided by taxi businesses in collaboration with local public entities to maintain daily-life transportation in local areas. It runs in a variety of formats that range from fixed times and routes to on-demand service in order to meet regional needs.
	Paid passenger portation service with private vehicle	This is a transportation service using private vehicles after taking necessary safety measures operated by municipalities, NPO entities, and others. Measures to ensure safety and reliability include 1) confirming safety (type-2 license or type-1 license + driving class, arrangement of a person in charge of driving management, etc.) and 2) user protection (fee display).
	bility that does not equire approval or	This covers transportation as assistance that does not require approval or registration under the Road Transportation Act to provide a means of transportation in regional areas (it only allows receipt of fees
regist	ration under the Road ransportation Act (assistance)	to pay for gasoline, road usage fees, and parking area fees incurred by the driver in actual service and voluntary tips).

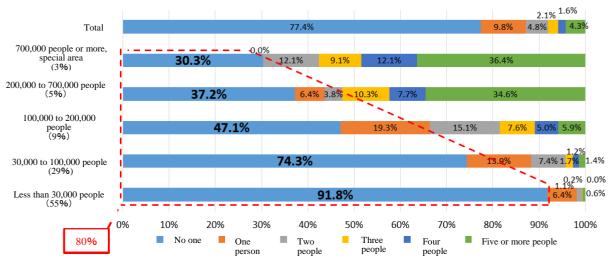
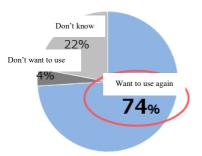


Figure 37. Percentages of the number of people in charge of local public transportation by populations

Additionally, implementation of ride sharing for taxis offers usage at a lower fee for customers and improves the productivity of taxi businesses. Tokyo conducted a real-world test of ride-sharing taxi service in 2018. As indicated in Figure 38, 70% of users responded that they want utilize it again.

Figure 38. Full-fledged deployment of ride-sharing taxis



(2) Direction of government actions

① Paid passenger transportation service with personal-use vehicles

(Creation of a system for paid passenger transportation in personal-use vehicles jointly with transportation businesses)

Collaboration in which municipalities consign operational management to transportation businesses (taxi businesses, etc.) is a potential way to secure transportation services for regional life.

Local public entities benefit from diminished burden through utilization of transportation business knowhow, and users gain access to safe and reliable transportation service.

To accomplish this, transportation businesses (taxi businesses, etc.) need to cooperate with paid passenger transportation in personal-use vehicles utilizing their own knowhow. Specifically, the government needs to prepare a legal framework for consignments to transportation businesses and participating by transportation businesses in implementing entities. A system premised on participation by businesses is likely to simplify the consensusbuilding process in the local area. This approach should promote provision of safe and reliable transportation service and lighten burden on implementing entities. The government intends to submit the necessary bill to the National Diet's 2020 Ordinary Session.

(Clarification of transportation scope to support tourism needs)

Recruitment of inbound activity is a key perspective that has become vital to regional stimulation. Paid passenger transportation in personal-use vehicles must address tourism needs too. To ensure support for tourists, similar to buses and taxis, the law must clarify scope as not just local residents, but also visitors.

(Clarification of transportation blank zones)

At this point, multiple views exist about regions that should be covered by paid passenger transportation in personal-use vehicles. The government hence needs to clarify its stance that serves as the basis for review of system adoption by local public entities. It intends to survey and analyze existing implementations, present an image, and formulate guidelines for the decision framework in order to simplify local consensus formation in light of actual life situations.

(Promotion of broad regional initiatives)

The government needs to simplify procedures for cases of adopting paid passenger transportation in personal-use vehicles in regional public transportation network formation plans (prepared autonomously or jointly by prefectures and municipalities based on the Act on Revitalization and Rehabilitation of Local Public Transportation Systems).

② Adoption of taxi ride-sharing service

Given the inefficiency of paying subsidies for operation of large buses in isolated regions, it is necessary to optimize mobility service that fits actual transportation demand.

Additionally, in an era of IT advances, consideration should be given to digital transformation of the business model with passenger matching using an app, selection of ideal routes that reflect real-time vehicle requests, and adoption of cashless payment service.

Implementation of ride sharing in taxis offers usage at a lower fee for customers and improves the productivity of taxi businesses. Taxi ride- sharing service should be generally adopted without restrictions on regions and conditions because it provides access to cheap mobility to as many people as possible with limited transportation entities. The government plans to prepare the environment with a Road Transportation Act notice and other adjustments¹.

③ Realization of Mobility As A Service (MaaS)

Convenient services that support integrated arrangement of multiple modes of transportation, reservations of destination lodgings and services, and other plans over a smartphone, utilize cashless payment, and support smooth mobility without wasted waiting time (MaaS : Mobility as a Service) are becoming a global trend. In Japan, MaaS offers a way of generating latent demand from not only local residents, but also tourists and thereby contributing to revitalization of regional transportation.

The government aims to foster various good examples of this service, give assistance to initiatives by business and local public entities in regional areas, and expand MaaS nationwide.

¹ Provision of an ease-to-use environment with app-based matching, split charges based on distance traveled (on-demand route selection; confirmed ahead of time), and cashless payment.

(3) Drone flights beyond line of sight in populated areas

① Current situation

While drones are permitted to conduct flights beyond the line of sight in unpopulated areas and businesses providing cargo transportation services have registered, the government must allow flights beyond the line of sight in populated areas in order to realize deliveries in regional areas that are difficult to reach, assess agricultural crop growth conditions, inspect aging infrastructure, and conduct wide-area patrol security for towns with advanced aging.

Potential applications of drones in populated areas include (a) delivery of daily life goods, drugs, and other items to regions that are difficult to access through ground transport, (b) widearea confirmation from the air of crop development and pest and disease conditions on sparse agricultural land, (c) wide-area inspections of bridges, buildings, and streets in towns that are difficult to confirm just with people, and (d) wide-area patrols and security in towns with advanced aging.

② Direction of government actions

The government plans to prepare a detailed roadmap, including a decision on fundamental policy for system design during the current fiscal year, for realization of drone flights beyond the line of sight in populated areas premised on safe flight routes (excluding zones with flight prohibitions) by fiscal 2022.

4. Corporate governance

Summary

The Abe administration has been promoting corporate governance reforms, and these reforms have steadily delivered results, including selection of at least two independent outside directors at 91% of TSE-1 listed firms. Global investors are reacting favorably to the reforms.

Meanwhile, Japanese companies need to strengthen corporate governance further in adherence with the global standard in order to enhance their competitiveness and reliability. Investors are critical of lack of action regarding governance of listed subsidiaries with controlling parent companies, and this situation might undermine Japanese market trust.

In response, the government plans to formulate new guidelines that call on parent companies to explain relationships and encourage subsidiaries to raise the percentage of outside directors who are independent of the controlling shareholder. It also intends to encourage revisions to the TSE standards and other rules.

(1) Current situation

Japan currently has 628 listed companies with controlling shareholders² (listed subsidiaries), or 17.2% of all listed companies, and 311 of these companies are joint parent and subsidiary listing, or 8.5% of all listed companies. The number of parent and subsidiary listings in Japan and percentage within the overall market are significantly higher than in the US and European countries.

² TSE's current listing rules define a controlling shareholder as (1) holding more than 50% of voting rights or (2) holding 40% or more of voting right + dispatching a majority of directors or either having a contract that controls decisions on important financial and business policies or other arrangement that implies control of decisions on financial and business policies.

Provisional Translation

The governance framework at listed subsidiaries should be independent of the controlling shareholder (parent company) and protect general shareholders and needs to be even more robust than at normal listed companies in order to ensure autonomous decisions. Nevertheless, numbers of independent outside directors and auditors at listed subsidiaries are currently lower than at normal listed companies (Figure 39).

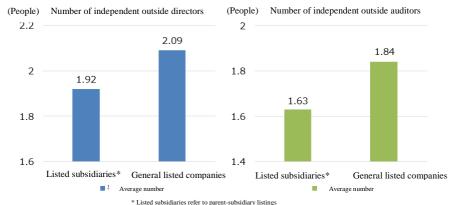


Figure 39. Comparison of independent outside directors and auditors at listed subsidiaries and general listed companies

(2)Direction of government actions

The government intends to formulate rules on governance at listed subsidiaries, requiring parent companies to explain the significance of having listed subsidiaries in reorganization of business portfolios and clarifying an appropriate governance format to boost utilization at listed subsidiaries.

(1) Practical guidelines

The government plans to newly formulate "practical guidelines on the group governance system" that present a listed-subsidiary governance format and encourage compliance by companies.

(Listed subsidiary action)

- Support a core role for independent outside directors in protection of general shareholders and ensuring autonomous decisions
- Given the importance of independence from the controlling shareholder to ensure the efficacy of governance at the listed subsidiary, at least include not selecting a person with ties to the controlling shareholder (person who worked at the controlling shareholder over the past decade) in criteria for determining the autonomy of independent outside directors
- Aim to increase the percentage of independent outside directors on the board of the listed subsidiary (at least one-third or a majority)
- In specific cases of transactions with conflicts of interest, investigate and review from the standpoint of protecting the interests of general shareholders via a committee comprised of only or a majority of independent outside directors (or independent outside auditors) and built a board framework that respects investigation results
- Disclose information to investors, etc. on the type of governance framework built by the listed subsidiary to ensure the interests of general shareholders

(Parent company action)

• The parent company should provide a good reason for maintaining the subsidiary as a listed entity from the standpoint of maximizing group enterprise value. It should also

exercise rights to select and remove directors of the listed subsidiary as the controlling shareholder in a manner that protects the efficacy of subsidiary governance and fulfill an obligation to explain the suitability of actions to investors, etc. through disclosure of information.

② TSE action

The Tokyo Stock Exchange should take additional measures to enhance the independence of listed subsidiaries from the controlling shareholder, such as revising its autonomy standards in accordance with the direction of the guidelines in order to raise the efficacy of "practical guidelines on the group governance system."

5. Smart public services

(1) Building a new infrastructure for national life and economic policies utilizing the My Number card

The government aims to build a cashless payment platform for joint use by administrative services and private-sector services and enhance cloud services utilizing the individual authentication function of My Number cards from the standpoint of expanding use of My Number cards, while rigorously protecting personal information, as a national platform for Society 5.0.

Specifically, public- and private-sectors utilize the My key platform and local government point management cloud which store user ID through strict personal authentication. Making full use of private-sector dynamism, enabling residents purchase Jichitai Point with cashless payments. And government considers to exchanges Jichitai Point with private-sector points in the future. This initiative will allow residents to use Jichitai Point to pay local mobility service, shopping assistance, care support, and other services and facilitate policies that contribute to stimulation of local shopping districts.

Furthermore, the government will consider with related ministries and local governments about providing various allowance, such as child allowance provided by the national and local government, with points instead of cash. And it aims to achieve effective policy execution by enabling careful responses that truly address citizen needs, prevent fraudulent receipt, and lowering administrative costs through this initiative.

The government prepares to issue Jichitai Point using the My Number card for the consumption leveling at the time of consumption tax hike. Furthermore, based on the above, it considers specific measures, such as formation of a task force consisting of public- and private-sector members, with the aim of establishing a platform as a national system with future expandability and compatibility.

Additionally, the government is targeting full-fledged usage of My Number card as a health insurance card in March 2021 with the aim of boosting efficiency of medical insurance administration and enhancing patient convenience through definite confirmation of personal identity and insurance qualifications when giving treatment. It plans to provide sufficient assistance for promptly deployment of terminals and systems at medical entities with a goal of coverage at almost all medical entities to ensure the quickest and smoothest response possible at medical entities nationwide. It also intends to formulate specific My Number card acquisition promotion measures by insurance recipients for the respective insurance providers and promote acquisition of My Number card by national and local government officials during the current fiscal year.

From the point of view of realizing a digital society that is safe, reliable, and highly convenient, The government envisions almost all residents having My Number cards during

fiscal 2022 and plans to strongly promote My Number cards by accelerating formulation of My Number card facilitation plans at each local government, periodic follow-up and giving necessary assistance. The government will promote of improvement of convenience and utilization of My Number card. And also it aims to utilize My Number to realize fair social security and enhance administrative convenience and efficiency.

(Automation of individual and corporate procedures)

The service that can apply child care procedures including vaccinations and child allowance from pregnancy to starting schools with one button will start at some local governments from next fiscal year and aim for nationwide development from 2023. It will will begin one-time acquisition of necessary documents and automated input and attachment to various reports for year-end adjustment procedures of tax return via data linkage using Mynaportal from fiscal 2020.

(Installation of ICT infrastructure in schools)

The government intends to set goals and formulate a roadmap for the necessary ICT environment at elementary schools, middle schools, and high schools.

6. Next-generation infrastructure

(1) Improvement the sophistication and efficiency of infrastructure maintenance and management work

The government intends to accelerate nationwide deployment of an ICT database that improves the sophistication and efficiency of infrastructure maintenance and management work handled by local public entities with centralized management of inspection and maintenance repair data. It also aims to accelerate use of drones and other new technologies in bridge inspections and other front-line sites. For a period of five years, it will provide regional fiscal measures to support related initiatives by local public entities. Additionally, the government is taking the lead in use of building information modeling (BIM) in construction projects with orders placed by the national government and local public entities and aims to promote horizontal application to private-sector projects.

(2) Accelerated rollout of PPP and PFI formats

The Cabinet Office aims to prepare a specific action plan through fiscal 2022 during the current fiscal year that focuses on medical and health, care, and repeat offense protection, which are already fleshing out initiatives in Japan, as priority areas for proliferation of Pay for Success. Related ministries and agencies will promote Pay for Success in three focus areas based on the action plan. The government will also apply these results to other areas besides the three priorities.

7. Aiming for realization of a decarbonized society

(1) Formulation of a long-term strategy under the Paris Agreement and promotion of SDGs and ESG investments

Change are advancing on a global scale. This should be called "a virtuous cycle of environment and growth" in which companies challenging actively for environmental problem raise capital from the world and in turn enable further growth and actions. Based on the "Long-Term strategy as a Growth Strategy Under the Paris Agreement (Cabinet Decision on June 11, 2019)," the government intends to implement the following initiatives with proclaiming a

decarbonized society as the ultimate goal and aiming to accomplish it ambitiously as early as possible in second half of this century, while boldly taking measures towards the reduction of GHGs emissions by 80% by 2050, and realizing a business-led virtuous cycle of environment and growth in accordance that both global efforts and disruptive innovation will be essentioal. Toward this end, the government intends to implement the following initiatives:

- ① Formulate "Progressive Environment Innovation Strategy" in this year to set ambitious goals and accelerate progressive innovations in energy and environmental areas involving the public and private sector. In this strategy, set a target of reduction of hydrogen production costs to one-tenth of the current level by 2050 and a detailed roadmap indicating the steps to commercialize the artificial photosynthesis and other CCU technologies that seeks effective utilization of CO2.
- ⁽²⁾ Host RD20(Research and Development 20 for clean energy technologies) this autumn, inviting the leaders of top research institutes from 20 countries to Japan, and lead global cooperation towards progressive innovations through continuing this RD20 process next year and thereafter.
- ③ Stimulate green finance by promoting disclosure and visualization, rather than traditional regulations, to drive ESG funds that are increasing worldwide into innovations. At the TCFD (Task Force on Climate-related Financial Disclosures) consortium launched in May 2019 as a venue for dialogue between companies and financial institutions, revise the world's first TCFD (Task Force on Climate-related Financial Disclosures) Guidance by government for companies released at the end of last year and release guidance on green investments for financial institutions. Hold a TCFD Summit in autumn 2019 that brings together leading companies and financial institutions from around the world. Through these activities, promote integrating SDGs into corporate management strategies and formulate a guide that compiles perspectives and messages of leading companies in SDG business management and disseminate it in Japan and globally.
- (4) Promote proliferation of innovation results worldwide through development of business environments and market creation. For this goal, work forward establishing public and private sector initiatives in ASEAN led by Japan.

(2) Large-scale deployment of renewable energy and realization of a carbon-free society

The government plans to put utmost efforts into maximum deployment of renewable energy with the aim of making it the main power source. In this process, it intends to implement electric power network reforms aimed at promoting lower costs and overcoming grid constraints in order to limit burden placed on the general population and achieve maximum deployment.

To accomplish this, the government promotes innovative technology development to support Japanese companies with technological superiority in the renewable energy field and aims to strengthen the electric power network to facilitate deployment of renewable energy, including regional interconnection line reinforcement, and formation of a framework to secure electric power investments, including preparation of necessary supply and adjustment capacities, toward realization of a carbon-free society. It also intends to supplement adjustment capacity that is a bottleneck for expansion of renewable energy by seeking higher performance and lower costs for storage batteries, hydrogen, and other energy storage technologies and to promote wider use of advanced energy management that harnesses digital technology and conversion to a next-generation electric power network.

In nuclear power, Japan plans to resume operation of nuclear reactors, on the premise that safety comes before everything else , in cases where the Nuclear Regulatory Authority has confirmed that the world's toughest regulatory standards are met and with understand and cooperation of local public entities and related parties at the locations. The government also intends to implement initiatives to maintain technology and human resources for further enhancement of safety and response to smooth decommissioning activities.

The government aims to cultivate and stimulate the non-fossil value trading market created in 2018, looking ahead to a future without FIT, and utilize these efforts to expand non-fossil energy using a market mechanism. In ocean-based wind power, which is experiencing rapid cost reduction in Europe, the government plans to apply sea area utilization rules that contribute to wider deployments. It also aims to promote deployments of geothermal power and other low-cost, stable power sources and biomass and other regionally unique renewable energy sources jointly with local areas and revitalize local areas and strengthen resilience through deployment of distributed regional energy systems, such as local output and consumption of competitive renewable energy.

Chapter 3 Reforms to Social Security System for All Generations

- Summary

Reforms to the social security system for all generations is one of the most important policy challenges of the Abe Cabinet.

First, to increase the age for continued employment after retirement to over 65 years of age, opportunities for employment up to the age of 70 will be secured and diverse options will be made available based on seniors' desires and qualifications.

The expanded hiring of mid-career and experienced personnel and review of the bulk hiring of new graduates will be promoted. At the same time, companies will be asked to review their own personnel evaluation and compensation systems. In addition, the government will request large companies to disclose information about their ratio of midcareer and experienced personnel hires.

Second, insurer incentives for disease prevention and nursing care prevention will be enhanced. Until now, public insurance has mainly covered the costs of treating people who have fallen ill and the costs of nursing care services for seniors in need. However, the role of disease prevention and nursing care prevention is growing as we have entered the era of the 100-year life. Prevention is important for many reasons, including extending healthy life expectancy, improving quality of life, and promoting the active role of seniors.

Therefore, in addition to the efforts of individuals, it is important for insurers such as local governments and health insurance associations to work on prevention. Specifically, for disease prevention, this will include fundamental improvements and more varied allocations under insurer incentive programs of National Health Insurance (NHI). It will also be important to utilize private-sector services in this process. Through this, efforts will be made to increase the uptake rate of health checkups and to prevent lifestyle diseases from increasing in severity. As for nursing care prevention, fundamental improvements will be made to the nursing care incentive subsidy. Community gathering places for seniors will be developed and the employment of seniors encouraged.

1. Securing employment opportunities up to the age of 70

(1) Current situation

Figure 40. Trends in Senior's Physical

Japan's population is expected to decline to around 100 million people by the year 2050. However, the physical stamina and motor abilities of seniors have been rolled back by five years of age during the course of the past 10 plus years (Figure 40). In addition, walking speed has been rolled back by 10 years of age over the past decade (Figure 41). Therefore, analyzing people's health condition alone indicates there is still room to significantly increase the employment rate of seniors compared to today.

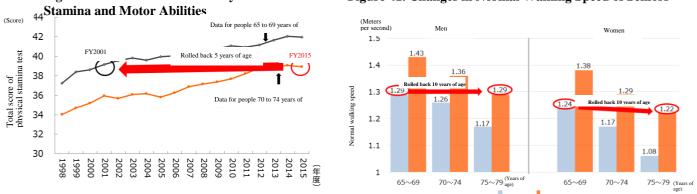


Figure 41. Changes in Normal Walking Speed of Seniors

Provisional Translation

Given such conditions, 80% of seniors who are age 60 and older desire to work until after the age of 70. Meanwhile, the employment format desired by seniors shows that a little under 40% of men and 70% of women desire part-time work (Figure 42), indicating there are needs for diverse working styles. Furthermore, for seniors 60 to 64 years of age, there is little difference in terms of the indicators of employment rate and work inclination, but significant differences are observed for seniors over 65 years of age (Figure 43).

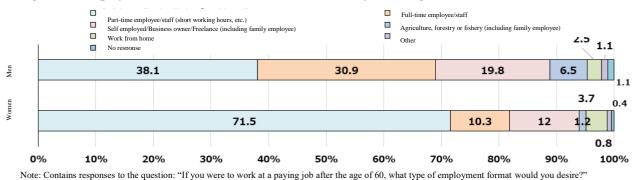
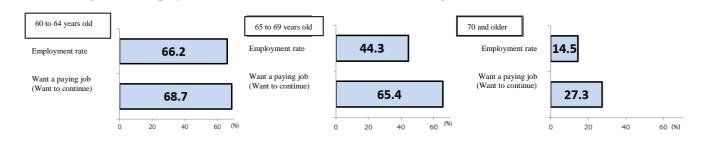




Figure 43. Employment Rate and Work Inclinations after the Age of 60



(2) Direction of government action

① Securing employment opportunities up to the age of 70

(Diverse options)

In ushering in the era of the 100-year life, it is necessary to develop places for seniors with a desire to work to play an active role so that they can fully contribute their skills.

To secure hiring and employment opportunities for seniors, the possible options for seniors to play an active role based on their own characteristics need to be expanded, unlike the situation up to the age of 65, while securing employment opportunities up to the age of 70.

Therefore, to secure employment opportunities from 65 to 70 years of age, diverse options will be set out in legislation and consideration will be given to a framework where companies determine which options to offer based on discussions between labor and management. Consideration will also be given to a framework where companies will consult with individuals about which option to use and then make this option available.

The options for legislation include the following:

- (a) Eliminate mandatory retirement age
- (b) Extend mandatory retirement age to 70
- (c) Introduce continuous employment system (including continuous employment at a subsidiary or affiliate, similar to the current system up to the age of 65)
- (d) Re-employment at another company other than a subsidiary or affiliate
- (e) Provide funding for freelance contracts with individuals
- (f) Support start-ups by individuals; and

(g) Provide funding for participation in social contribution activities by individuals

Companies will determine which of the options (a) to (g) to adopt based on discussions between labor and management. In detailed reviews of each option, careful consideration will be given to the extent of company responsibilities in these options and the detailed approaches to company involvement.

(Stage 1 Legislation)

Legislation will be developed in two stages to smoothly move ahead with securing employment opportunities up to the age of 70, with stage one legislation developed first.

In stage one legislation, options such as (a) to (g) above will be specified and provisions will require efforts to secure employment opportunities up to age 70. In addition, when deemed necessary, the Minister of Health, Labour and Welfare will require labor and management of individual companies to formulate a plan and to ensure that the company follows through on the formulation of this plan.

(Stage 2 Legislation)

Based on progress of stage one, in stage two amendments to laws will be considered to secure compliance (requirement) by announcing names of individual companies not in compliance as with current laws. As with previous legislative precedents, consideration will be given to establishing exclusion provisions in cases agreed upon by labor and management, such as a worker's poor health or poor attendance record, etc.

(Submission Timing and points to consider)

To avoid confusion, amendments to current legislation up to the age of 65 (currently 63; completion of enforcement in 2025) will not be considered.

Procedurally, after deliberations by the Labor Policy Council, the bill for stage one legislation will be submitted to the ordinary session of the Diet in 2020.

(Relationship with pension system)

The pensionable age, which is currently 65 years of age, will not be raised, as a result of securing employment opportunities up to age 70. Meanwhile, the timing for when a person can start to draw old-age pension benefits, which currently is between the ages of 60 and 70, will be expanded after the age of 70. In addition, the old-age pension system for current workers will be reviewed after discussions by the Social Security Council, leaving open the possibility the system could be eliminated in the future, from the perspective of not inhibiting people's desire to work and with fairness in mind.

Through these efforts, all barriers to work will be removed and the transition will be made to a framework that does not affect people's desire to work.

(Development of various environments)

An environment will be developed in which seniors can contribute their skills and play an active role safely. This will include support for building evaluation and compensation systems focused on skills and results considering senior motivation and persuasion, initiatives to promote work mainly by local governments, promotion of career development support and recurrent education, and securing the safety and health of seniors.

In addition, job assistance will be provided to women in middle to old age groups, which will include strengthening the offerings of the Silver Human Resources Center, such as expanding female membership.

2. Promotion of mid-career hiring and experienced personnel hiring

(1) Current situation

Large companies that employ 5,000 or more workers have a high ratio of new graduate hiring and hire employees in bulk in the spring. At the same time, their ratio of mid-career and experienced personnel hiring is low (Figure 44).

		No. of companies	Ratio of new graduate hiring (2018 graduates)	Ratio of mid-career hiring (FY2017)
Total		4,055	34.7%	65.3%
By size	5 to 299 employees	2,084	23.3%	76.7%
	300 to 999 employees	1,071	58.5%	41.5%
	1,000 to 4,999 employees	710	59.6%	40.4%
	5,000 and more employees	190	62.6%	37.4%

Figure 44. Ratio of New Graduate / Mid-Career Hiring

(2) Direction of government action

Considering the era of the 100-year life, it is important to move ahead with hiring system reforms so that workers with a desire to work can fully contribute their skills. In particular, a necessary review of the hiring system of large companies traditionally focused on the bulk hiring of new graduates must beconducted , and at the same time, mid-career and experienced personnel hiring must be expanded by adopting year-round hiring.

For this reason, companies must review their own hiring system as well as evaluation and compensation systems

. The government will respond in such ways as requiring large companies to disclose information about their ratio of mid-career and experienced personnel hiring.

3. Prevention of disease and nursing care

(1) Current situation

More than half of all people in Japan cited "my own health" as something that "troubles and concerns" them, and compared to the concern of "livelihood in old age", the ratio of these responses is rising in recent years.

Medical care expenditure for general practice totals 30.1853 trillion yen. More than onethird of this is related to lifestyle diseases (Figure 45), which includes diseases that can be prevented.

However, the percentage of preventive healthcare programs in public medical insurance ("Health Program Costs") is 0.8%, or 0.1 trillion yen, for municipal programs for NHI (Figure 46). Preventive healthcare programs in nursing care insurance ("Nursing Care Prevention/Lifestyle Support Services Programs") amount to 1.1% in total, or 0.1 trillion yen (Figure 47).

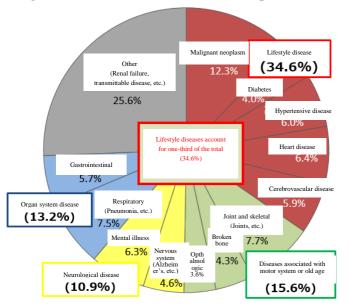
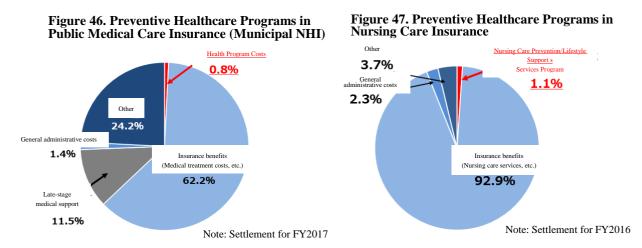


Figure 45. Breakdown of Medical Care Expenditure for General Practice



(Prevent Severity of diabetes and specific health guidance)

The annual medical costs of diabetes patients increase sharply as the disease becomes more severe. Prevention of severity through early intervention is effective. In Kure City, Hiroshima Prefecture, a local venture company carries out health guidance intervention for people with high risk of diabetes severity by estimating the health condition of NHI enrollees using medical practitioners' receipts for health insurance claims. As a result, the city was able to reduce the number of new dialysis patients by 60 percent over six years.

Viewed regionally, there are differences in the extent of municipal NHI initiatives concerning prevention of diabetes severity (Figure 48).

In addition, while the implementation rate of specific health guidance³ by insurers is increasing, but it remains below the target level (Figure 49).

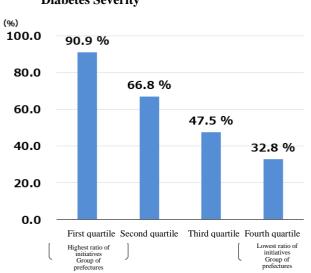
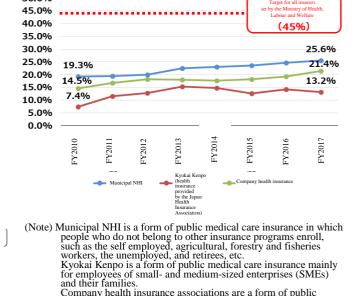


Figure 48. Ratio of Insurers Working to Prevent Diabetes Severity





medical care insurance mainly for employees of large companies and their families.

The first quartile has the highest percentage of initiatives by prefecture (12 prefecture), followed by the second quartile (

(Note) Results for 1,716 municipalities.

prefecture (12 prefectures), followed by the second quartile (12 prefectures), third quartile (12 prefectures), and fourth quartile (11 prefectures). The top is 100%, while the bottom is 21.1%.

(Granting of healthcare points)

Only around half of all insurers grant what is known as 'healthcare points' (see note) to individual enrollees to encourage changes in behavior. Horizontally rolling out best practices for healthcare points bears significance.

(Dental checkups and cancer screening)

When left untreated, serious gum disease has been pointed out as a possible cause for the onset of diabetes. The percentage of people receiving dental checkups is on the rise, but it remains at only half.

Cancer screenings, too, have seen an increase in the uptake rate, but this rate remains at around 40 to 50% only. The uptake rate for both dental checkups and cancer screenings must be increased.

(Nursing care prevention)

In terms of nursing care prevention, survey results indicate that seniors who participated in salons (community gatherings) saw: ① their certification rate of nursing care needs cut in half and ② their risk of dementia lowered by 30% (Figure 50). Additionally, Mie Prefecture is implementing an initiative where seniors are hired as nursing care helpers and placed in charge of periphery services on the front-lines of nursing care. Horizontally rolling out best practices bears significance in terms of nursing care prevention.

⁽Note) The healthcare point program is a preventive healthcare program in which insurers grant points to enrollees for health promotion activities, such as participation in health checkups, walking, exercise of health events. These points can be exchanged for e-money or gift certificates for local products, etc.

³ A system where a public health nurse assists in improving the living habits of persons between the ages of 40 and 74 who received a specific health checkup and were determined to have a high risk of onset of lifestyle disease.

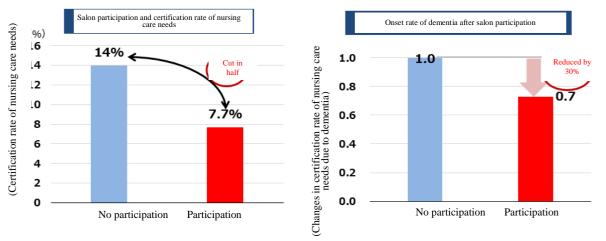


Figure 50. Effects of Nursing Care and Dementia Prevention by Salon (Community Gathering Place)

(Note) Example of hiring of seniors as nursing care helpers in Mie Prefecture

- Mie Prefecture was the first in Japan to hire seniors as nursing care helpers with an eye toward nursing care prevention.
- There are three levels of nursing care helper based on job difficulty and a framework is in place where helpers can increase their level through experience, qualifications or on-the-job training.
- The effects from this hiring are: ① nursing care prevention by social participation of seniors; ② reduction in overtime work of nursing care staff; ③ one nursing care helper increases the time of direct nursing care provided by nursing care staff by 190 minutes per day on average; and ④ allows for one-on-one care for users with dementia.

(2) Direction of government action

Health is the foundation for people's sense of security in the era of the 100-year life. Reforms must be pursued with regard to medical care and nursing care to build a social security system for all generations.

Prevention and health promotion are significant in many dimensions. This includes: ① improving quality of life and alleviating future concerns by improving health; ② extending healthy life expectancy and increasing people working in good health, and increasing the bearers of social security; and ③ seniors support important community infrastructure, preventing the growing divide of health disparities. In addition, better living habits, early prevention, and prevention of nursing care and dementia are expected to prove effective toward alleviating medical care demand related to lifestyle disease and growing demand for nursing care. As a result, in certain ways this can lead to the sustainability of the social security system.

Prevention and health promotion must be promoted for all generations and community members, including those indifferent to health. In addition to individual efforts, the role of companies, insurers and local governments supporting individuals is also important. In recent years, Japan has seen the diversification of work styles and changes in family composition due to the increase in single member households. For this reason, the preventive healthcare programs of insurers in the community and at work are particularly important. To promote prevention and health promotion, the key will be whether bold incentive measures can be provided to insurers engaging in such programs. The evaluation of the success or failure of these programs should be carried out using evidence-based evaluation.

Prevention and health promotion comprises two stages: ① primary prevention and health

promotion that prevents disease and the need for nursing care; and ② secondary prevention that involves early treatment after disease onset or preventing a disease from becoming more severe. Initiatives will be promoted based on the characteristics and effects of each stage.

(1) Promotion of disease prevention

The role of community and company insurers in disease prevention is important. As such, efforts will be made to increase preventive healthcare incentives for insurers.

(Support system for efforts by insurers [NHI])

The support system for efforts by insurers involves evaluations of the initiatives of insurers (prefectures and municipalities) towards prevention and health promotion and the granting of subsidies to insurers.

Increasing preventive healthcare incentives for insurers is needed for horizontally rolling out the progressive models of local governments. To boost consideration for disease prevention in the public insurance system, fundamental improvements will be made to the support system for efforts by insurers. At the same time, initiatives contributing to disease prevention will be evaluated, and the variety of allocation standards will be increased using such forms as (a) increasing the point allotment ratio for incentives granted to individuals and prevention of severity of lifestyle diseases and for boosting the uptake rate of dental checkups and cancer screenings; and (b) increasing the point allotment ratio based on results of prevention and health promotion to encourage introduction of excellent private-sector services.

(Late-stage senior support funds adjustment system [Company Health Insurance Associations])

The late-stage senior support funds adjustment system involves evaluations of prevention and health promotion initiatives of company health insurance associations for the late-stage senior support funds borne and contributed by the medical care insurance of workers, such as company health insurance associations, to the late-stage senior medical care system, and the provision of an addition (penalty) or subtraction (incentive) of contributions.

The range of adjustment in the late-stage senior support funds will be increased from 0.23% in FY2017 to a maximum of 10% on both sides in FY2020, which will increase preventive healthcare incentives for insurers (company health insurance associations).

② Promotion of nursing care prevention

Insurers (municipalities) and the prefecture of the municipality play an important role in nursing care prevention, too. As such, preventive healthcare incentives will be increased for insurers and prefectures.

(Nursing care incentive subsidy [subsidy for promoting increased functions of insurers])

The nursing care incentive subsidy involves evaluation of initiatives toward nursing care prevention of insurers or prefectures, and the granting of subsidies to insurers or prefectures.

Increasing incentives of insurers and prefectures is needed to horizontally roll out the nursing care prevention models of progressive local governments. As such, fundamental improvements in the nursing care incentive subsidy will be made to increase consideration for nursing care prevention in the public insurance system. At the same time, initiatives contributing to nursing care prevention will be evaluated, and the variety of allocation standards for grant issuance will be increased based on: (a) for nursing care prevention, using private-sector services that make seniors more active mentally and physically through exercise, expanding and enhancing community gathering places where seniors in the community can

gather and interact, and using points; and (b) for promotion of senior work and involvement, granting points to volunteers and nursing care helpers, and the number of participants as senior nursing care helpers.

③ Promotion of evidence-based policy

When implementing the reforms in ① and ② above and promoting initiatives that contribute to nursing care prevention, it will be important to reflect evidence-based evaluations in initiatives. Therefore, verification programs will be implemented to confirm and build evidence to confirm the effects of health improvement from prevention and health promotion using data.

To ensure statistical accuracy, the government will establish a fundamental direction on target fields and verification methods for verification programs, and, based on the results, encourage insurers and others to implement appropriate preventive healthcare programs.

④ Promote Changes in individual behavior using nudge theory

To ensure the results of health checkups and notifications change individual behavior and increase the uptake rate, knowledge theory will be used while enhancing information, such as comparison with the entire population and averages and future predictions, in order to provide to individuals health checkup data that is easy to comprehend.

(5) Promotion of private-sector preventive healthcare services

During the process of promoting comprehensive social security reforms, excellent privatesector services that utilize data and wearable devices in preventive healthcare programs will be employed. Positive reforms from three directions will be implemented that energize the economy and society at the same time. These three reforms are: (a) individual health improvement, (b) increase in bearers, and (c) development of growth industries.

(Promotion of health management and health investment by companies)

The health scorecard that visualizes preventive healthcare initiatives of company health insurance associations will be used to encourage cooperation between company health insurance associations and companies. The visualization of companies' health investments will make it possible for capital markets to appropriately evaluate a company's health and productivity management.

(Improve quality of healthcare services)

Guidelines will be prepared to improve the quality of healthcare services. In addition, efforts will be made to promote standardization of healthcare data.

Chapter 4 Reinforcement of Regional Measures under Population Decline 1. Maintenance of Community Infrastructure and Competition Policy

Summary

Regional banks and bus service operators provide fundamental services to local communities as 'local infrastructure companies', whose bankruptcies would likely have serious impacts on the communities. Maintaining services of the companies is a national priority.

Nevertheless, companies in these two fields are seeing a rapid downturn in business amid the declining birthrate and declining population. Improving business for maintaining the infrastructure function is an urgent issue and one option could be management integration or joint management.

Therefore, special measures should be taken only for these local infrastructure companies in regard to management integration to maintain local communities. It is vital that the ultimate purpose of the Anti-Monopoly Act of protecting the "interests of general consumers" be achieved by preventing adverse effects on consumers and users arising from management integration and by using the fruits of management integration for maintaining regional infrastructure and economic development. This will require the close collaboration of the Japan Fair Trade Commission and the competent government agencies so that the knowledge of both is fully employed.

First, bus services are an important mode of transport in local communities and these services must be maintained for the seniors living there. There are many voices of concern about the current state. As a typical example, if joint management of bus service operators is permitted and if high frequency services in town centers rationalized, the revenue increase from the rationalization can be utilized to maintain low demand routes. This will result in greater convenience for local residents. A new scheme will be developed, and the scheme requires stakeholder councils set up in the community.

Second, regional banks underpin local economies by serving as the main bank to between 70% and 80% of the companies in several particular regions. If their business performance weakens, the negative impacts, including reduced lending, could affect depositors and borrowers as well as hinder smooth financial intermediation in the communities. In order to improve the operations of regional banks at an early stage of declining profitability, special exceptions will be granted for management integration even if the resulting market share is high, under the assumption that efforts will be made to maintain services in regions based on capacity arising from the management integration. For these purposes, a law on special measures will be established.

(1) Current situation

① Bus services

There is a particularly strong concern in regions about cutbacks in public transportation forcing people to rely on their own vehicles for daily transportation (Figure). In addition, there is a growing need to maintain bus services because more and more seniors have had to return their driver's licenses to authorities. In particular, in rural locations, the use of bus services increases dramatically as users' age increases (Figure).

Yet, two-thirds of bus service operators (general passenger automobile carrier business) are unable to generate a profit. In particular, operators of bus services in regions outside of big cities have seen a significant decline in revenue (Figure 53).

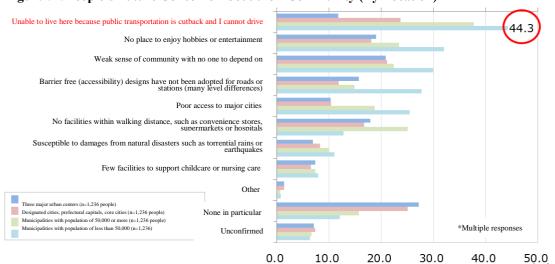
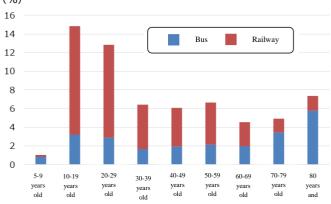
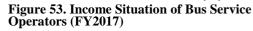
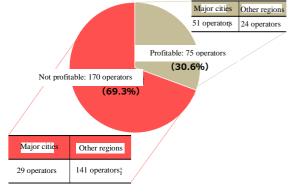


Figure 51. People's Future Concerns About their Community (By Location)

Figure 52. Utilization of Railway/Bus Services as mode of (%) Transport in Rural Areas







(%)

② Regional banks

Regional banks underpin the local economy as the main bank for 70 to 80% of the companies, particularly in rural areas (Figure). However, the net interest margin (difference between interest paid and interest received) of regional banks (regional banks, second-tier regional banks, Saitama Resona Bank) continues to decline (Figure), resulting in weak financial position.

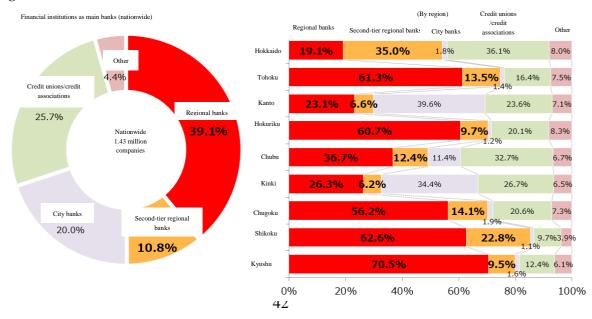
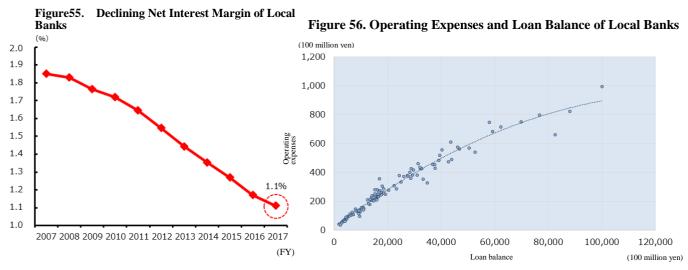


Figure 54: Role of Local Banks as Main Bank

Provisional Translation

On the other hand, banks have the advantage of economies of scale (scale merits) because of the vast fixed costs that arise from IT system expenses among other things. In other words, even if the size of a bank's loan book doubles, IT system costs do not necessarily double as well (Figure 56). For this reason, there is ample room for cost cutting through management integration, which is presumed to have a positive effect on bank sustainability.



Note: The figure covers regional banks, second-tier regional banks, and Saitama Resona Bank



(2) Direction of government actions

① Bus services (and local public transportation competing with bus services)

As a typical example, in the center of towns, routes with excessive frequency are operated by multiple bus service operators and local public transportation competing with these bus service operators.

By allowing joint managements between these operators, the number of services on these high frequency routes can be rationalized, while the revenue increase from the rationalization can be used to maintain a network of bus services in low demand areas among other areas. This will ensure convenience for all residents across a broad area and thereby secure the interest of general consumers, which is the ultimate goal of competition policy.

For bus services, stakeholder councils have been set up under the Act on Revitalization and Rehabilitation of Local Public Transportation Systems, and local public transportation network formation plans are formulated and implemented by the councils. However, even under such councils, detailed discussions among operators about fares, pricing, operation frequency and routes were viewed as a possible breach of the Anti-Monopoly Act and this has been pointed out as an obstacle to plan formulation and implementation. Therefore, based on the framework of such councils, there is a need to exempt joint managements involving the routes, service intervals, and fares of bus service operators from the Anti-Monopoly Act and develop a clear framework for operators and communities. Specifically, there is a need to: (a) permit joint management of bus operators including utilization of fare pool to maintain a network of bus services including services in low demand areas; (b) require maintaining a network of bus services including services in low demand areas be a condition of approval of joint management, and the approval of joint management be rescinded should this condition be not maintained after the approval,; and (c) ensure the predictability of these rules for relevant operators.

A requirement will be the establishment of a council based on the Act on Revitalization and Rehabilitation of Local Public Transportation Systems for communities where it is possible to ensure core service provision as a network by carrying out coordinated initiatives among operators.

Operators will determine the area to be served, the plan for maintaining and improving convenience for the entire community, and the goal of services to be ensured. A framework will be developed, which ensures convenience for local residents based on a variety of situations in the regions.

The areas covered in the plan will not only be areas where rationalization of services will be undertaken among operators, but also areas in the entire network including unprofitable routes in mountainous regions whose operation is secured as a result. The approval requirements of joint management would be, for example, that it is deemed difficult to continue service provision and maintain the entire network including the unprofitable routes without joint management because of unprofitability.

②Regional banks

Regional banks play an important role in local communities. Their services need to be maintained in an appropriate manner even in regions with a declining population.

If the downturn in business performance of regional banks persists, the negative effects, such as reduced lending, will extend broadly to depositors and borrowers. Banks establish relationships of trust with borrowers and use the relationships as a basis for determining credit and supporting management of local companies. Therefore, there are concerns that, due to the persistent downturn, banks will no longer be able to provide sufficient financial intermediation functions.

A bank experiencing a downturn in business performance should make operational improvements. For this reason, as a special measure, a management integration among regional banks, even if the resulting market share is high, will be permitted in order to facilitate their operational improvements at an early stage of downturn. But the application of the measure will be limited to situations where the persistent downturn may affect smooth financial intermediation in the local community.

In other words:

- (a) Financial institutions pursuing management integration will submit an application to the Financial Services Agency for exemption from the Anti-Monopoly Act pursuant to the law on special measures. When an application is submitted, the Financial Services Agency will check whether the following requirements under the law on special measures apply. Discussions will be held by the Japan Fair Trade Commission about the applicability of these requirements (if no application is submitted, merger reviews will be carried out pursuant to the Anti-Monopoly Act).
- (b)Screenings will be carried out mainly by the Financial Services Agency for i) to iv) below and by the Japan Fair Trade Commission for v). Only when each requirement is fulfilled will an exemption be granted.
 - i) A local community is expected to see a continuous decline in demand for loans and feebased services for SMEs, and as a result, regional banks could find it difficult to provide the abovementieoned services to the local community in a sustained manner into the future.
 - ii) The applicant bank is, on a continuous basis, unable to cover expenses to sustain the network of the abovementioned services from the revenue generated from the services.

iii) Management integration is acknowledged to considerably improve business and maintain functions.

iv) Capacity arising as a result of iii) above is expected to be utilized in a way which contribute to the local economy.

v) Management integration will benefit the interests of users (general consumers) (even if competition is reduced).

- (c) If the requirements i) to iv) will be satisfied, the Financial Services Agency will consult with the Japan Fair Trade Commission and the Financial Services Agency will respect the opinion of the Japan Fair Trade Commission including applicability of requirement v).
- (d) After approval, when conformity with the requirements of i) to v) is no longer acknowledged, the Financial Services Agency will order the regional bank to take corrective actions. In addition, the Japan Fair Trade Commission can require the Financial Services Agency to take measures.

③ Limitation of scope of law on special measures

The scope of the law on special measures must be restricted to fields where management integration or joint management is expected to offer the greatest effect toward improving business by firms providing core services in the community and where competent government agencies can monitor and supervise actions taken after management integration or joint management. For the time being, the law will be limited to the above two fields. the law will be in effect for a period of 10 years.

Additionally, the bill for the law on special measures will be submitted to the ordinary session of the Diet in 2020.

④ Other

For the financial field, a separate review will be conducted simultaneously on other policy means for regulatory reforms in order to promote the entry of new players, including those from other industries, using new technologies, from the standpoint of user convenience and maintaining and developing the local economy.

Reviews shall be conducted on approaches to financial administration of local finance across prefectural borders, including the relationship with the Anti-Monopoly Act sometime in the future.

2. Supplying human resources to regions

To increase productivity across Japan, more flexible options must be available for occupations nationwide both regionally and by industry.

In particular, in regions facing decline, securing professional and management resources to raise the level of company management locally bears great significance. Meanwhile, as we have entered the era of the 100-year life, there will be a growing trend requiring places for occupation changes or freelancing and side businesses and places for retirees to play an active role post mandatory retirement. These two needs mutually complement one another and strategically matching them represents one critical task for promoting the active role of human resources and increasing productivity in the future.

Often, however, SMEs and micro businesses in regions have yet to clarify what type of human resources they lack and what functions human resources should fulfill. This indicates that currently they cannot provide proper job offers and do not provide appropriate compensation to talent they acquire.

As a result, the labor market in regions is immature. This is why employee placement businesses are reluctant to expand in regions and the inflow of human resources there is limited.

Considering the current situation, efforts will be focused and concentrated on the following: ① reinforce functions for supporting local companies to clarify their management strategy and human resource requirements (promote involvement of local financial institutions, etc.); ②

fundamentally improve matching functions with human resources in major urban centers; and ③ build a framework for promoting the supply of human resources from major urban centers to regions and immediately speed up the flow of professional and management human resources from major urban centers to regions.

3. Revitalization of communities with rapidly declining populations

In regions with rapidly declining populations, the shortage of bearers of local industry, such as agricultural, forestry and fisheries and commerce, has become serious, and, given that difficulties are arising in maintaining local communities and economies, human resources for community development will be secured and their active roles promoted.

4. Promotion of Tourism-oriented Country

Tourism is the decisive factor towards achievement of regional revitalization and the pillar of the growth strategy. The Government will continue to promote efforts toward the realization of a world-class tourism destination.

5. National Strategic Special Zones

From the standpoint of fostering a sound competition environment, legislation based on the National Strategic Special Zone System will be quickly established that will promote multiple unique regulatory reforms within regions based on the consensus of local residents simultaneously and uniformly, aimed at the realization of the Super City concept that seeks to achieve "whole future cities" that are pioneers in the use of AI and big data. Also, the technology groundwork for "Society 5.0" will be laid urgently.

Additionally, efforts will be made to create a 'sandbox system' exclusive to local communities in order to speed up and facilitate demonstration testing on technologies of the near future.

6. Increase productivity of SMEs and micro businesses

Promoting globalization of local economy will result in a positive cycle that increases the productivity of SMEs and micro businesses, increases added value, supports the consumption of employees and families, and contributes to the local economy. Such a positive cycle is vital to growth of the whole of Japan.

(1) Support for implementing digitalization

To improve productivity through universal digitalization, we will continue to support using Subsidy for Manufacturing and Service of SMEs and IT Introduction Subsidy, and consider the expansion of the scope of subsidies which make use of digital tool such as cloud accounting an additional factor for adoption and the spread of digital tools such as crowdfunding at the time of establishment. In addition to the digitalization of individual companies, we will consider to supporting the spread of data lending, bridge financing services using subsidy approval as electronically recorded receivable, EDI services, and the promotion of digitalization using supporting institutions.

(2) Promotion of management resource succession

Existing business succession subsidies will be expanded and focused on second start-ups and venture business succession, in order to promote new business growth on occasion of business succession. Efforts will also be made to back management resource succession-type start-ups and third-party succession, including fundamentally expanding the business succession support database and business successor bank.

③ Personal guarantee provided by business owners

Special provisions of "Guidelines for Personal Guarantee Provided by Business Owners" that specify, in principle, guarantees cannot be sought from both the old and new business owner, will be established before the end of the year, to ensure personal guarantees do not become a hurdle that blocks business succession. In addition, a system will be put into place where the confirmation and support of specialists can be received so that SMEs do not require a personal guarantee as a condition. Furthermore, a new credit guarantee menu that does not require personal guarantee of the successor at the time of business succession will be created and policy promoted that reduces the cost burden of guarantees to as low as zero. In addition, along with further promoting the efforts of government financial institutions and credit guarantee corporations, such as the Shoko Chukin Bank becoming non-guaranteed in principle, we will further promote loans that do not rely on personal guarantee provided by business owners by private financial institutions through these measures.

④ Rationalization of close business relationships in each industry

Given that pressure from the main subcontracting entrepreneur to lower costs could be a factor behind why SMEs serving as subcontractors cannot increase the level of their wages and capital investments, we will identify the issues of business relations according to each industry and work on fine improvement utilizing the competition law and the SME law system: we will conduct a survey focusing on the actual situation of subcontractors by subcontract G-Men especially in industries where the gap between parent and subcontractors is particularly large, after analyzing the situation of profit, added value, distribution of labor and capital by industry, sector and company size.

As a result, within the entire supply chain, large companies and SMEs to fairly share the burden of cost increases and large companies to support SMEs in digital technology implementation, which in turn will build harmonious mutual prosperity that supports the increased productivity of SMEs and increases the added value of the whole economy.

<Works Cited>

Figure 1: Annual average growth rate of real labor productivity per hour (2001-07) Figure 2: Annual average growth rate of real labor productivity per hour (2011-17) Figure 3: Real labor productivity per hour in comparison to the United States (2017) Figure 4: Trends in markup rates of companies in developed Figure 5: Distribution of markup rates in US companies Figure 6: Distribution of markup rates in companies in developed countries Figure 7: Distribution of markup rates in Japanese companies Figure 8: Change in worker share by occupation in the US (ages 16-64) Figure 9: Change in worker share by occupation in the US (15 and older) Figure 10: Increase in lifetime wages for graduates in the United States (per department) Figure 11: Trends in people who want or have side jobs Figure 12: Percentage of type of side job by industry Figure 13: Influence on main business by side jobs Figure 14: Impact of side job experience on main business wages Figure 15: Breakdown of high-tech industry entrepreneurs in Sweden Figure 16: Change in employment ratio due to Gig Economy (1995-2015) Figure 17: Age distribution of "freelancers" in Japan Figure 18: Comparison of the level of satisfaction between individual business owners, freelancers, and company employees Figure 19: Number of newly listed companies by market Figure 20: Number of venture company IPOs and M&A deals Figure 21: Factor analysis of labor productivity (US) Figure 22: Factor analysis of labor productivity (Japan) Figure 23: Corporate age distribution Figure 24: Relationship between corporate age and profitability (ROA) Figure 25: Operating income ratio by size and degree of diversification of Japanese and US companies (2000-2012 annual average) Figure 26: Productivity (TFP) differences in US manufacturing Figure 27: Comparison of management scores for Japanese and US companies Figure 28: Open innovation implementation rate and partner comparison Figure 29: Digital platform company benefits and problems Figure 30: Current financial legal system Figure 31: Transaction trends for fund transfer service providers Figure 32: Financial transaction regulations Figure 33: Auto reliance in regional areas (besides the three major urban areas) Figure 34: Effective job openings ratio for vehicle drivers Figure 35: Trends in the number of taxi drivers Figure 36: Local mobility transportation methods Figure 37: Percentages of the number of people in charge of local public transportation by populations Figure 38: Full-fledged deployment of ride-sharing taxis Figure 39: Comparison of independent outside directors and auditors at listed subsidiaries and general listed companies Figure 40: From MEXT (2015). Figure 41: Prepared based on "Report from the Working Group on Definition Review Concerning Seniors" by The Japan Gerontological Society and The Japan Geriatric Society. Figure 42: Compiled based on "FY 2013 Awareness Survey on 'Preparation' for the Elderly Period" (2013) from the Cabinet Office. Men (n=287), women (n=242). Figure 43: Prepared based on the "Labor Force Survey" (2017) by the Ministry of Internal Affairs and Communications and the "8th International Comparison Survey on Senior Living and Awareness" (2015) by the Cabinet Office. Survey targeting men and women 60 years and older (excluding those living in facilities) (n=1,105). The percentage for want a paying job (want to continue) is the total for both men and women. Figure 44: Prepared based on the "Survey on the Actual Situation of Mid-career Hiring" conducted in FY2017 by the Recruit Works Institute. Targets were private-sector companies with 5 or more employees. Tabulation includes companies that carried out new graduate hiring and mid-career hiring and companies that did not. The number of persons per company is the average calculated using the number of companies, including those that did not carry out hiring. In addition, shows the weighted back figure based on number of employees. Figure 45: Prepared based on the "FY2016 Outlook on National Medical Care Spending" by the Ministry of Health, Labour and Welfare. Figure 46: Prepared based on the "FY2017 National Health Insurance Annual Report" by the Ministry of Health, Labour and Welfare. Figure 47: Prepared based on the "FY2016 Nursing Care Insurance Program Report" by the Ministry of Health, Labour and Welfare. Nursing Care Prevention/Lifestyle Support Services Program costs represent the total of "Nursing Care Prevention/Lifestyle Support Services Program Costs" (people requiring assistance), "General Nursing Care Prevention Program Costs" (people who can go about their daily

life without hindrance), "Nursing Care Prevention Program Costs" (from previous system that existed up to FY2017 due to deferment to new program), and "Health and Welfare Program Costs" Other includes "comprehensive support programs and voluntary programs" of community support programs and "other".

Figure 48: Prepared based on the "Census on Insurer Health Data" by Nippon Kenko Kaigi.

Figure 49: Prepared based on the "FY2017 Implementation Status of Specific Health Checkups and Specific Health Guidance" by the Ministry of Health, Labour and Welfare.

Figure 50: Left: Prepared based on "Establishing 'community salons' for seniors to interact has the potential to cut the certificate rate for nursing care needs in half. Press Release No: 056-15-01" by Hiroyuki Hikichi. Right: Prepared based on "Dementia risk reduced 30% by participation in 'relaxation salons' -- 7-year follow-up survey--. Press Release No:095-16-25" by Hiroyuki Hikichi.

Figure 51: Prepared based on the "National Public Awareness Survey" by the Ministry of Land, Infrastructure, Transport and Tourism.

Figure 52: Prepared based on the "National Urban Transportation Characteristics Survey 2015" by City Bureau, Ministry of Land, Infrastructure, Transport and Tourism. Percentage other than for railway and bus service include transport by private automobile or walking, etc.

Provisional Translation

- Figure 53: Prepared based on the "FY2017 Revenue Situation of the Bus Service Business" by the Ministry of Land, Infrastructure, Transport and Tourism. General bus service operators with 30 or more buses in operation. Income does not include subsidies. In addition, does not include side business income. Major cities includes Chiba, Buso (Tokyo San-Tama region, Saitama Prefecture and Kanagawa Prefecture), Keihin (Tokyo's special wards, Mitaka City, Musashino City, Chofu City, Komae City, Kawasaki City), Tokai (Aichi Prefecture, Mie Prefecture, Gifu Prefecture), Keihanshin (Osaka Prefecture, Kyoto Prefecture [regions next to Osaka Prefecture including Kyoto City]), and Hyogo Prefecture (regions next to Osaka Prefecture including Kobe City and Akashi City).
- Figure 54: Financial institutions extracted and tabulated based on recognition as a main bank using company data recorded in COSMOS2, a corporate database researched and maintained independently by Teikoku Databank. In cases where a single company has more than one main bank, the financial institution recognized as having the top share by the company is tabulated as the main bank.

Figure 55: "Summary Points from For Providing Better Financial Services in the Era of Transition" by the Financial Services Agency (published on September 26, 2018)

Figure 56: The report entitled "Issues facing Local Finance and Approaches to Competition" by the Review Committee for Improving Financial Intermediation, Financial Services Agency (published on April 11, 2018)