Analysis of TMG's Finances

○ The TMG's financial condition in FY2015 was studied through analyses of conventional government accounting and financial statements.

○ This section applies a familiar household finances analogy in relation to the TMG's finances, provides explanations of the features and considers efforts made by the TMG to date and future financial management.

TMG's Finances - Seen through a household finances analogy -

○ When the TMG's FY2015 fiscal results are substituted into a household finances analogy based on the average annual wage given in the Ministry of Health, Labor and Welfare survey (*), the results are as shown in Figure 1.

[Figure 1] TMG's Household Accounts (FY2015)

Income	
Salary (basic salary) Metropolitan tax	**365 ten-thou yen** (+30)
Salary (bonus) Local transfer taxes, national treasury disbursements, etc.	**46 ten-thou yen** (-7)
Part-time work income Fees, shares and charges	**77 ten-thou yen** (-3)
Loans from financial institutions TMG bonds	**11 ten-thou yen** (-1)
Withdrawals from savings Funds Transferred	**9 ten-thou yen** (+4)
Total	**508 ten-thou yen** (+24)

Expenditure	
Living expenses Personnel cost, subsidizing expenses, etc. investment expenses, etc.	**311 ten-thou yen** (+5)
(Breakdown)	
Food/medical, etc. Personnel cost, subsidizing expenses, etc.	**250 ten-thou yen** (+4)
Home extension/alteration Maintenance/repair expenses, investment expenses, etc.	**62 ten-thou yen** (+1)
Loan repayments Expenses for public bonds	**37 ten-thou yen** (-4)
Savings for the future Fund reserves	**41 ten-thou yen** (+16)
Taxes/social insurance fees Fixed & allocation of taxes to wards/towns, etc.	**100 ten-thou yen** (+10)
Total	**490 ten-thou yen** (+27)

* The 18 ten-thou yen difference between income and expenditure is carried forward to the next fiscal year.

Account balance Fund reserves balance	160 ten-thou yen (+33)
Of which, balance of savings Fiscal adjustment fund balance	44 ten-thou yen (+4)

Loans balance TMG bonds balance	346 ten-thou yen (-20)

Values given in ( ) indicate change from the previous fiscal year.

* Metropolitan tax revenues of approx. 5.2 trillion yen treated as the FY2015 average annual wage of 365 ten-thou yen (excl. part-time workers). Average annual wage is based on figures given in the "Outline of the FY2015 Basic Survey on Wage Structure", by the Ministry of Health, Labor and Welfare.

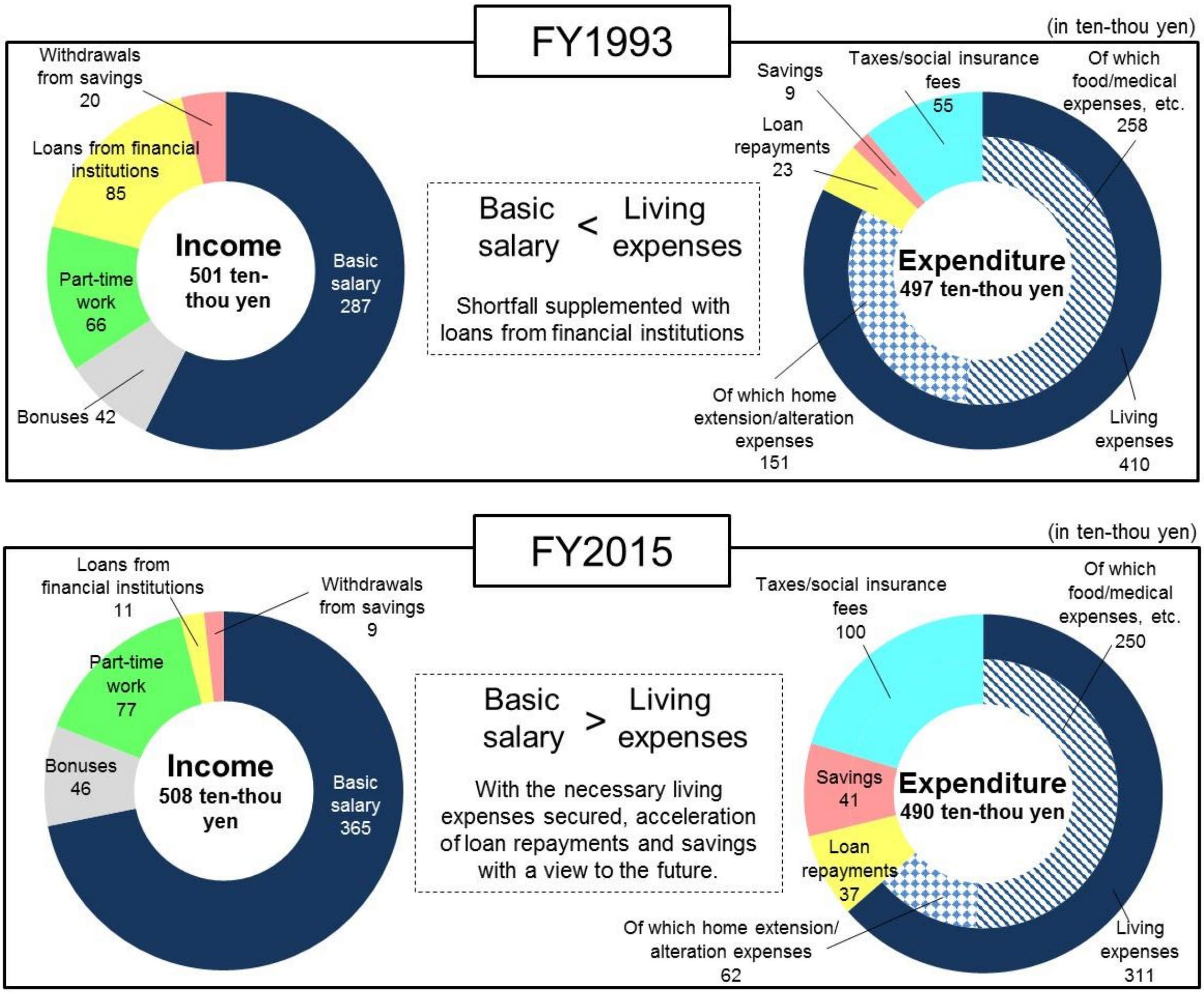
○ In the FY2015 fiscal results, the basic salary (metropolitan tax), which accounts for a high proportion of income, increased by nearly 10%, resulting in a 24 ten-thou yen increase in income from the previous fiscal year.
Meanwhile, with increases in living expenses (administrative services expenses) of 5 ten-thou yen and savings for the future (fund reserves) of 16 ten-thou yen, expenditure increased by 27 ten-thou yen from the previous year.

In addition, efforts to secure the balance in relation to savings (funds) resulted in an increase of 33 ten-thou yen to 160 ten-thou yen, while new loans (TMG bonds) were controlled and loan repayments (expenses for public bonds) were accelerated, bringing the loans balance down 20 ten-thou yen to 346 ten-thou yen, a level lower than the one years' basic salary for FY2015.

○ From here on, the conditions of the FY2015 fiscal results are inspected through comparison with past fiscal results.

First, we take a look at a breakdown of revenues and expenses, comparing FY2015 to FY1993, which had a financial scale almost identical to FY2015 (Figure 2).

[Figure 2]　Condition of Household Finances in FY1993 and FY2015



order to cover living expenses of 410 ten-thou yen.

On the other hand, living expenses in FY2015 were 311 ten-thou yen, which were managed within the basic salary of 365 ten-thou yen, and on top of this, loan repayments and savings with a view to the future were also conducted.

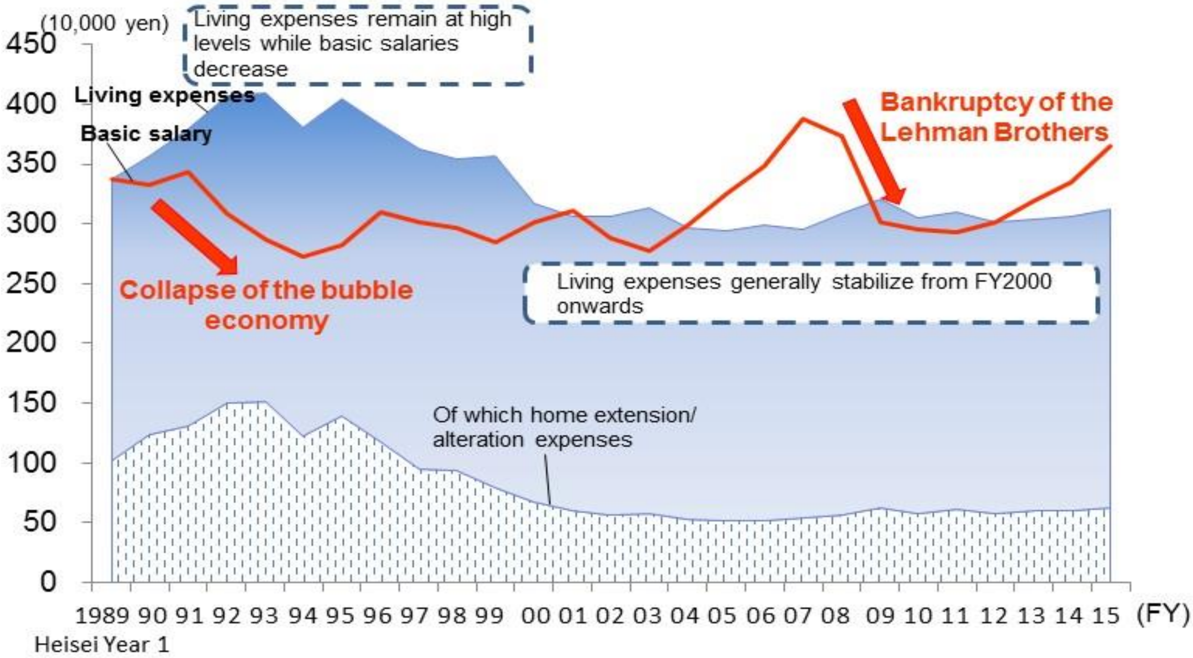
In addition, when looking at the breakdown of living expenses, the decrease in home extension/alteration expenses (investment expenses, etc.) from 151 ten-thou yen to 62 ten-thou yen has had a big impact on the decrease in living expenses.

○ As is apparent, while the scale of income and expenditure for FY1993 and FY2015 is similar, the content differs significantly.

○ Continuing on, the reasons behind such differences are considered while looking at changes in the main items from the early Heisei era (1989 onwards) to the present day.

○ First, we take a look at basic salaries and living expenses (Figure 3).

[Figure 3] Changes in basic salaries and living expenses



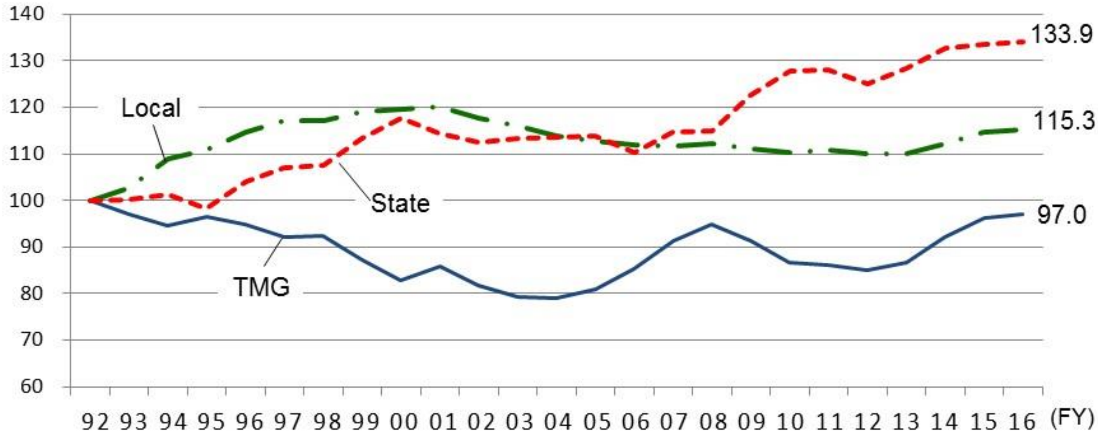
○ As can be seen from the significant decreases that occurred with the collapse of the bubble economy and the bankruptcy of the Lehman Brothers, the effects of economic fluctuations can cause basic salaries to change significantly.
Meanwhile, regarding living expenses, even as basic salaries fell rapidly following the collapse of the bubble economy, living standards remained high as a result of large loans taken out to sustain home extension/maintenance expenses, and household finances were severely stretched. Since FY2000, living expenses reviews have been promoted and the status of household finances has been improved, resulting in the sustained general stabilization of living expenses.

○ In terms of actual TMG finances, with metropolitan tax revenues decreasing sharply following the collapse of the bubble economy, economic measures focusing on public investment, etc. were implemented, and with huge deficits recorded as a result of sustaining the scale of expenses at high levels, finances were severely stretched. Subsequently, with thorough internal efforts, such as the reduction of personnel numbers, etc. (personnel reduced by over 30,000 from FY1989 to FY2015), and the review/redesign of measures, regardless of whether such measures related to administrative activity expenses or investment expenses, efforts working towards financial reconstruction were promoted. By continuing such review efforts in the form of business evaluation efforts, even after successful financial reconstruction with FY2005 fiscal results showing a return to the black, etc. the general stabilization of expenses has been sustained from FY2000 onwards, with the exception of expenses for public bonds and funds reserved.

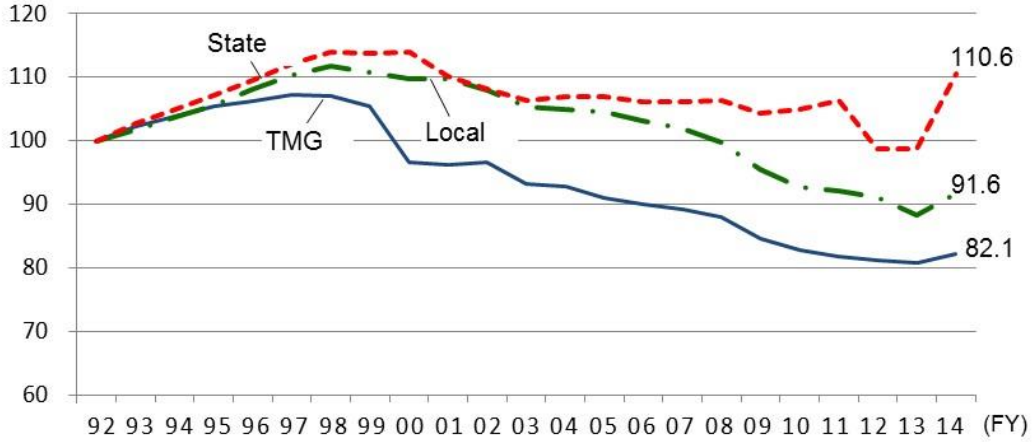
○ Regarding each item related to review efforts undertaken by the TMG to date, Figure 4 draws comparisons with state and other local governments, and shows how the TMG undertook efforts towards fiscal consolidation ahead of the state and other local governments.

[Figure 4] Comparisons between TMG, the State and other Local Governments

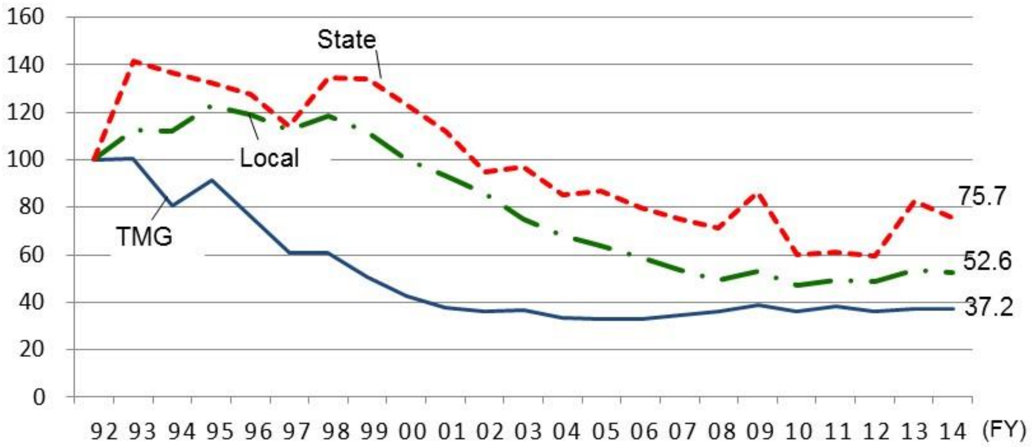
■State, Local and TMG Financial Scale (1992 = 100)



■State, Local and TMG Salary Expenses (1992 = 100)



■State, Local and TMG Investment Expenses (1992 = 100)



*In each graph, values have been index converted with values for FY1992 set as 100.

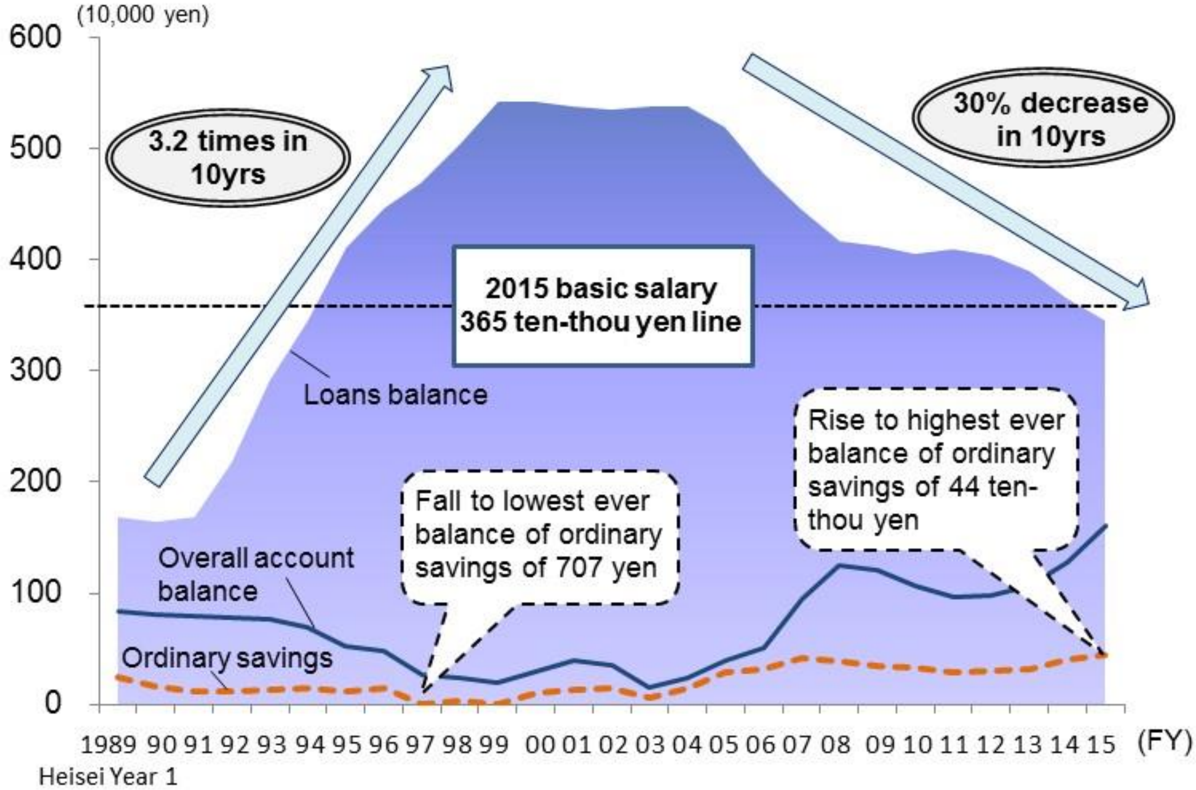
*In “State, Local and TMG Financial Scale”, state and TMG values are from general accounts (original budget), while local government values are from local financing programs (ordinary balance).

*In “State, Local and TMG Salary Expenses”, values for the state are from the revised budget (general accounts), while for local governments (simple totals for 46 prefectures) and the TMG, values are from fiscal results (ordinary accounts).

*In “State, Local and TMG Investment Expenses”, all indicators are from fiscal results, public works expenses for the state (general accounts), while for local governments (simple totals for the 46 prefectures) and the TMG, values are from ordinary accounts.

○ Next, we look at account balances and loans balances (Figure 5).

[Figure 5] Changes in Account Balances and Loans Balances



○ Although the loans balance increased rapidly from FY1991 onwards, as previously stated, this is mainly because of sustained high living standards even while basic salaries decreased due to the collapse of the bubble economy.

While the loans balance multiplied by about 3.2 times over the first ten years of the Heisei era from 1989 onwards, over a period of ten years from FY2005 onwards, after household finances were improved, this went down by about 30%, with levels falling below basic salary in FY2015.

Meanwhile, with regards to ordinary savings (fiscal adjustment funds), following continuous withdrawals to cover living expenses in the early Heisei era, the balance almost bottomed out in FY1997, falling to its lowest ever level of 707 yen.

Subsequently, together with the promotion of living expense reviews from FY2000 onwards, efforts were made to secure account balance, especially over the period when basic salaries increased after household finances were rebuilt, and in FY2015, the balance of ordinary savings reached its highest ever level of 44 ten-thou yen.

○ As we have seen thus far, there was a period in the past when the TMG's finances had become severely stretched. However, along with efforts to promote financial reconstruction based on two rounds of financial reconstruction promotion plans, continuous untiring work through efforts such as business evaluation, which involved the constant review of measures even after achieving financial reconstruction, wasteful aspects of business activities were eliminated, and this in turn enabled financial management with a view to the future through efforts such as the reduction of the balance of TMG bonds and the securing of the balance of fund reserves.

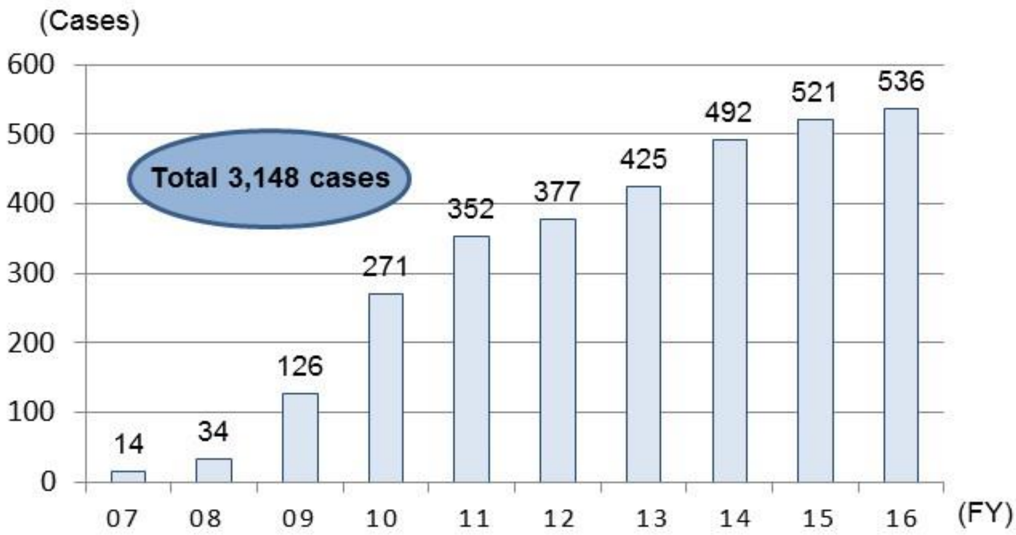
○ When compared to the past, the quality of the TMG's current finances has changed significantly, and the TMG's finances as of the FY2015 settlement can be considered healthy.

○ From here on, we look at the efforts undertaken in business evaluation, which are the main factors that enabled the qualitative changes to the TMG's finances.

○ Business evaluation involves the rigorous inspection of business results and financial status for each business activity, followed by efforts to direct such activities towards review and redesign or expansion and enrichment in order to allow business activities to be implemented more efficiently and effectively, with the results accurately reflected in the budget for the next fiscal year, etc.

The TMG implemented business evaluation as a part of the formation of the budget for FY2007, and every fiscal year since then, evaluation methods have been enriched with the TMG steadily establishing a performance record, and as shown in Figure 6, the TMG has published the results of 3,148 evaluations to date.

[Figure 6] Changes in Numbers of Publications



*Fiscal year is the budget year.

○ We now take a look at an example of business evaluation.

○ First, the following shows an example of business evaluation explained using an analogy based on familiar circumstances.

Your car is old. Buy a replacement? Car sharing?

<Current status/Issues>

- Household-A owns one car, but it is getting old and a replacement is being considered.
- Recently, the car is only used once a week to go shopping to the local supermarket, so car-sharing (an arrangement whereby a car is shared by multiple individual “members” or companies, who share in its use) is also being considered as an option.

<Actions>

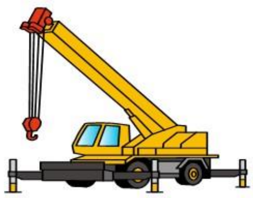
- Cost simulations were developed for a replacement car scenario and a car-sharing scenario.
- With the results of comparing running costs (motor vehicle tax, insurance, parking costs, fuel costs totalling 34 ten-thou yen per year) and car-sharing fees (18 ten-thou yen per year), Household-A realized that if the car is only going to be used for local shopping once a week, the car-sharing option would be more economical.
- Consequently, Household-A disposed of the car they owned, and opted for car-sharing.

○ An actual example of an evaluation undertaken by the TMG for the formation of the FY2016 budget is given below.

Renewal of directly operated dredging truck-cranes (FY2016 budget formation)

<Current status/Issues>

- The TMG owns truck-cranes used to load materials and equipment onto dredging boats (boats that dredge sediment accumulating on the sea-floor while traversing the sea).
- The trucks have exceeded their service life, and as repair expenses are high, renewal is considered.



<Actions>

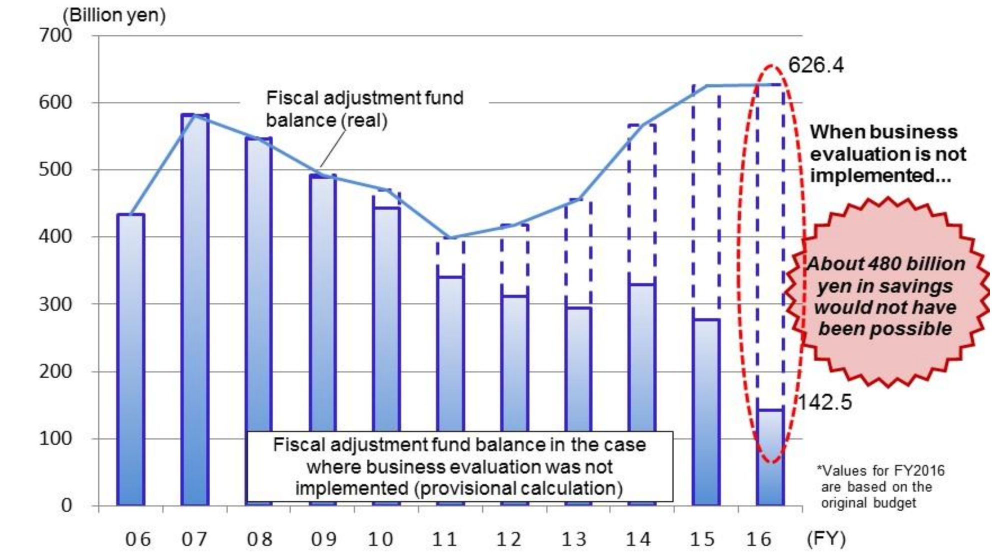
- Cost comparisons were made for a continued ownership scenario and a leasing scenario.
- With the results of comparing maintenance expenses incurred through continued ownership (33.3 ten-thou yen per year) against leasing fees incurred through leasing (21.6 ten-thou yen per year), it became clear that leasing would allow costs to be reduced by 11.7 ten-thou yen per year.
- In view of past usage records and economic efficiency, the decision was taken to switch from ownership to leasing.

○ As can be seen from this example, with business evaluation, the issues faced by the business are first analyzed, and then the business is examined from the perspectives of how it can be performed more efficiently and/or whether the business can be implemented more effectively for the same costs, while maintaining existing levels of service.

○ Thorough efforts to improve the efficiency and effectiveness of individual business activities in this way led to the securing of about 30 billion yen in financial resources in the FY2016 budget formation, and a cumulative amount of about 480 billion yen over ten years.
As well as utilization in new business and for business activities requiring priority implementation, etc. the financial resources secured through business evaluation efforts are utilized for TMG bond redemption and preparations for the future such as in fund reserves, etc.

○ If business evaluations had not been conducted, then new financial resources would have been required in order to provide the administrative services implemented up to now at the same levels.
Figure 7 shows the results when the balance of fund reserves is calculated for the case in which these financial resources were covered by the financial adjustment funds, which correspond to ordinary savings in terms of household finances.

[Figure 7] In the case where sources of revenue had been secured through fiscal



○ By implementing business evaluation efforts in unison with budget formation, the TMG established a management cycle that promptly reflects the results of evaluations in the budget for the following fiscal year, and this has proved highly effective.

○ Heightening the efficiency and effectiveness of individual business activities through business evaluation efforts has enabled the stable provision of necessary administrative services using limited financial resources, while at the same time allowing the generated financial resources to be utilized for flexible responses to new financial needs, to control TMG bond issuance and to bolster fund reserves.

○ Through such efforts, the TMG's finances of recent years have been without waste, achieving a transformation to a lean physique that has maintained financial soundness.

Financial Management for the Future

○ Thus far, we have looked at TMG's financial management applying the household finances analogy. Just as "a society with declining population, aging population, and decreasing birthrate" implies, when we turn our eyes towards the future, our social environment is changing more and more. With that in mind, in the next section, we will focus on the fiscal demands TMG faces in the future.

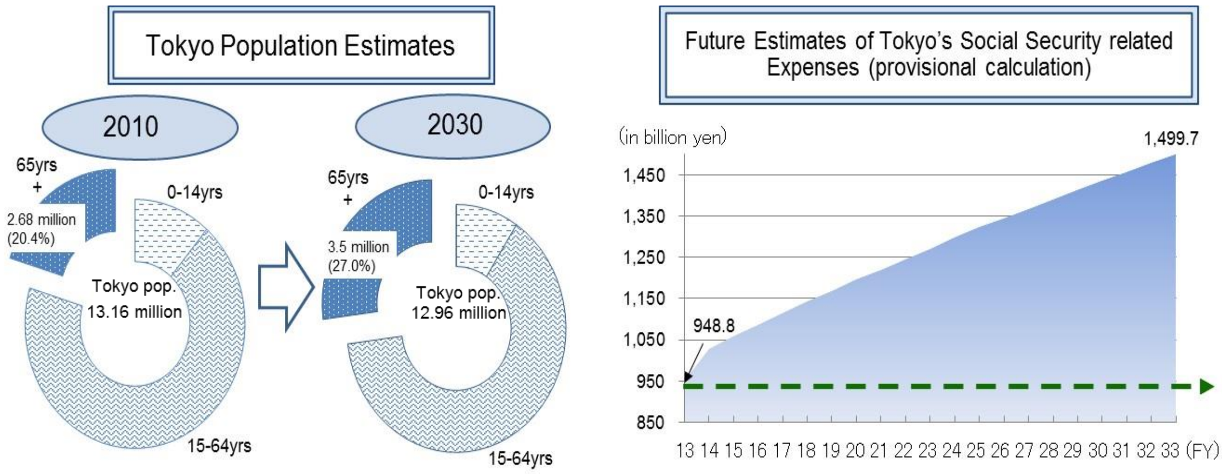
<Social Security related Expenses>

○ Figure 8 shows future projections relating to TMG's social security.

○ First, looking at the difference in population, the elderly population of ages 65 and above will increase by about 820,000 while the total population will decrease by about 200,000 over the 20 years from 2010.
This amount of elderly population increase is almost equivalent to the total population of Yamanashi Prefecture. As for the age composition of Tokyo's population, the proportion of the elderly population to the total population rises from one-fifth to one-fourth. These figures indicate that the trend of aging population, declining birthrate, or decreasing population will continue.

○ Consequently, social security related expenses, such as medical and nursing care, are expected to increase. In fact, these expenses are estimated to increase by over 500 billion yen over the 20 years from 2013.

[Figure 8] Estimates related to TMG's Social Security



While the population decreases, the 65yrs+ elderly population increases by about 820,000.

About 30 billion yen a year, increasing by **over 500 billion yen** over 20 years.

* Population estimates are derived from "Regional Population Projections for Japan (March 2013 estimates)", National Institute of Population and Social Security Research.

* The estimates of future costs were calculated by EY ShinNihon LLC.

* The estimates were calculated in the following way. The premise is the continuation of business. Figures from fiscal results were employed. Set a coefficient (variation factors such as fluctuations of the population) for each type and content of business related to social securities and multiply it with each cost and reflect matters such as a rise of prices.

* The FY 2013 figure is the amount of fiscal results in the breakdown of expenditures by purpose "Welfare and Public Health."

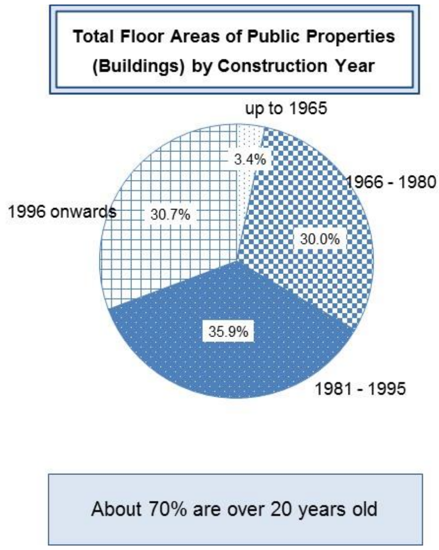
<Costs for Maintaining and Renewing Social Capital Stock>

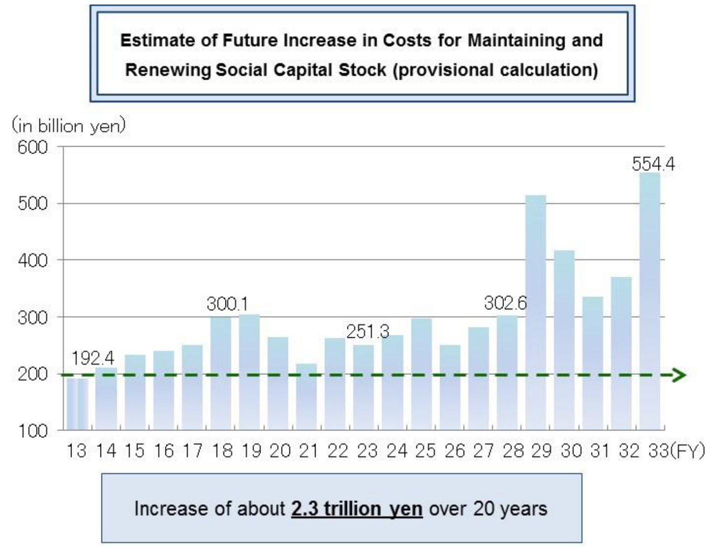
○ As shown in Figure 9, about 70% of public properties (buildings) owned by the TMG are over 20 years old, and responses to deterioration are becoming important issues.

○ According to future estimates of maintenance and renewal costs for TMG's social capital stock, produced by a third party mainly on the basis of TMG's public-sector accounting information, over the next 20 years, the cumulative amount of increase in costs is estimated to be about 2.3 trillion yen.

○ TMG needs to implement planned maintenance and improvement in order to prevent the malfunction and declining safety of facilities, and to attempt to level out/reduce costs over the mid- and long term period through measures including the extension of operational life.

[Figure 9] Estimates related to the TMG's Social Capital Stock, etc.





* As of the end of March 2016, calendar years are used.

* The figures exclude public properties owned by Bureau of Waterworks, Bureau of Sewerage, and Bureau of Transportation.

* The estimates of future costs were calculated by EY ShinNihon LLC.

* The estimates were calculated in the following way. Based on public accounting information, assume that social capital stock is renewed altogether when its legal operational life expires. Multiply the acquired price with factors including construction cost deflators and inflation rates.

* The FY 2013 figure is the amount of fiscal results, extracted from costs of maintaining and renewing social capital stock.

○ In future, sound TMG finances must be maintained in order to respond appropriately to efforts towards a new future for Tokyo and the hosting of the 2020 Olympic and Paralympic Games, etc. as well as to medium to long-term financial needs such as social security related expenses and costs for maintaining and renewing social capital stock, and for the strategic deployment of timely measures.

○ To achieve this, it is necessary to enhance functions for the implementation of business evaluation nurtured up to now and further strengthen PDCA cycles, etc. by setting term endings for all business projects and creating opportunities to stand back and conduct examinations into business review / redesign, and to further promote reform from the "Tokyo citizens first" perspective.

○ On top of such efforts, TMG will adopt a medium to long-term perspective that maintains awareness of future changes in the socio-economic situation, such as population structure, etc. and will continue to sustain a robust and flexible fiscal foundation through the strategic utilization of TMG bonds and funds.