
How Tokyo Proposes to Fund the 2020 Olympic Games

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I. The decision to choose Tokyo as the host city for the 2020 Summer Olympic Games

At its meeting on 7 September 2013 the International Olympic Committee (IOC) chose Tokyo as the host city for the 2020 Summer Olympic and Paralympic Games (“2020 Tokyo Olympics”)¹.

As well as being of great interest to the Japanese people, the decision to hold the Olympic Games in Tokyo for the first time since 1964 (i.e., in 56 years) has attracted the attention of financial markets. Although the Olympics increase a host country’s economic growth potential as a result of developing and redeveloping the host city, they also pose a fiscal risk to the host country and host city if they go above budget. It will therefore be interesting to see how the 2020 Olympics affect the fiscal position of Japan and the Tokyo Metropolitan Government.

This report therefore looks at how the Tokyo Metropolitan Government manages its finances and how it plans to fund the 2020 Olympics. After looking at the plans for the 2020 Olympics and the state of the Tokyo Metropolitan Government’s finances, we look at some previous Olympic Games, including the 1964 Tokyo Olympics, and consider whether the Tokyo Metropolitan Government has made sufficient financial provision for the 2020 Olympics. We then look at three funding options, including that of issuing resident-participatory-type publicly offered local government bonds (what we propose to call “Tokyo Olympic bonds”).

II. Plans for 2020 Tokyo Olympic Games

Details of the plans for the 2020 Tokyo Olympics can be found in the candidature files submitted by the Tokyo Bid Committee to the IOC in January 2013². The overall concept was (1) that the games would be held in central Tokyo (“compact games”) and (2) that the concept would fully accord with *Tokyo Vision 2020* (see below). The

¹ International Olympic Committee, *IOC selects Tokyo as host of 2020 Summer Olympic Games*, 7 September 2013.

² Tokyo 2020 Bid Committee, *Candidature File (English/French)*, 7 January 2013.

main cost estimates in the candidature files are the Tokyo 2020 Organizing Committee (TOCOG)'s budget (totaling ¥301.3 billion), venue construction costs (totaling ¥455.4 billion), and transport infrastructure costs (totaling ¥639.2 billion). The following is a breakdown of each of these costs.

1. TOCOG budget and costs

TOCOG, which is due to be set up within five months of the decision on the host city, is required to bear the personnel and security costs. As TOCOG's budget (totaling ¥301.3 billion) covers costs out of revenues (e.g., from local sponsorships, broadcasting rights, and ticket sales), neither the host country nor the host city should have to bear any of those costs (e.g., in the form of subsidies)³. In addition, as TOCOG is expected to generate very little income in 2013–2015, it will have a bank line of credit (expected to be ¥4.0 billion) in case it faces any cashflow difficulties.

However, if, for any reason, TOCOG does face any cashflow difficulties, its budget is guaranteed, in the first instance, by the Tokyo Metropolitan Government and, should that not suffice, ultimately by the Japanese government. If, on the other hand, TOCOG should find itself with a surplus at the end of the games, it is obliged to use this for the promotion of sport in Japan.

2. Cost of constructing Olympic venues

The main costs other than those covered by TOCOG's budget are capital investment costs, namely those of constructing the Olympic venues⁴. The venues will be a combination of new and refurbished existing facilities. Of the total construction costs (¥455.4 billion), TOCOG is due to bear the cost of constructing temporary facilities and the use of the Olympic venues (¥72.3 billion), while the Tokyo Metropolitan Government and various other bodies (the Japan Sport Council, Nippon Budokan, and the private sector) are due to bear the cost of constructing permanent facilities (¥383.1 billion, see Figure 5). ¥153.8 billion of these costs are due to be borne by the Tokyo Metropolitan Government.

3. Transport infrastructure costs

It was agreed that no new transport infrastructure would need to be built for the 2020 Tokyo Olympics. In other words, the costs of transport infrastructure included in the candidature files are those of the transport infrastructure that was due to be built regardless of whether Tokyo's bid was successful rather than direct costs of the 2020

³ The following figures are as of 2012, when Tokyo's bid was still in preparation. Tokyo 2020 Bid Committee, *Candidature File (English/French)*, 7 January 2013, Vol. 1, p. 076 (English).

⁴ The non-OCOG budget (totaling ¥432.7 billion) includes the budget for operations (security, medical services, totaling ¥47.2 billion), some of which the Tokyo Metropolitan Government may have to cover.

Tokyo Olympics. Many transport infrastructure projects (e.g., the Shinagawa section of the Central Circular Route of the Tokyo Metropolitan (Shuto) Expressway) are due to be completed well before the 2020 Olympics. The responsibility for the construction of this infrastructure lies with the Ministry of Land, Infrastructure and Transport, the Tokyo Metropolitan Government, and the Metropolitan Expressway Company. The Tokyo Metropolitan Government will bear ¥225.2–435.2 billion of the total construction costs (¥639.2 billion, see Figure 6)⁵.

III. The Tokyo Metropolitan Government's fiscal management and approach to the Olympics thus far

1. The Tokyo Metropolitan Government's fiscal structure and fiscal consolidation

The Metropolis of Tokyo, the center of Japan's politics, public administration, and economy, has a gross domestic product (GDP) of some ¥91.1 billion (in nominal terms as of fiscal 2010) and accounts for some 18% of Japanese GDP. This puts it on a par with countries such as Australia and Korea⁶. It also has the biggest financial base of any local authority in Japan, with an initial budget of ¥12,083.8 billion as of fiscal 2013 (of which ¥6,264.0 billion is on the general account), comparable to Sweden's national budget⁷.

With a high population density and concentration of industry, it has very reliable sources of tax revenues, with some 70% of its revenue coming from prefectural tax, and has enjoyed considerable fiscal autonomy. As a result, since 1954, when the current system of revenue transfers to local governments was adopted, the Tokyo Metropolitan Government has been one of only a handful of local governments that do not receive any such transfers. However, the fact that roughly a third of prefectural tax revenue comes from two local corporate taxes (corporate enterprise tax and corporate inhabitant tax) (according to the initial budget for fiscal 2013) means that this revenue tends to fluctuate with the business cycle (Figure 1). Furthermore, the

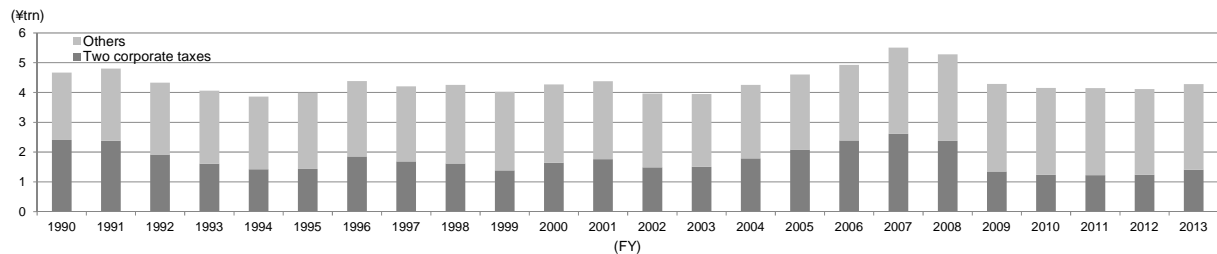
⁵ Since no breakdown is given of the proportion of the cost of the Shinagawa section of the Central Circular Route of the Tokyo Metropolitan (Shuto) Expressway (¥210.0 billion) borne by each of the Tokyo Metropolitan Government and the Metropolitan Expressway Company, the figures assume that the Tokyo Metropolitan Government bears anything from between none and all of the cost. (Tokyo 2020 Bid Committee, *Candidature File (English/French)*, 7 January 2013, Vol. 3, pp. 78 and 80 (English))

⁶ Australia's nominal GDP in 2010 was approximately \$1.2 trillion, Korea's approximately \$1.0 trillion. The Metropolis of Tokyo's nominal GDP in fiscal 2010, converted at the exchange rate on 31 March 2011 (\$1 = ¥83.13), was approximately \$1.1 trillion. (Department of National Accounts, Economic and Social Research Institute (ESRI), Cabinet Office, *Annual Report on Prefectural Accounts (Fiscal 2010)*, 29 May 2013, p. 2 (in Japanese); International Monetary Fund, *World Economic Outlook Database*, April 2013)

⁷ Sweden's national budget in 2012 was ¥11,295.5 billion (converted at the exchange rate on 15 January 2013). (Bureau of Finance, Tokyo Metropolitan Government, *Tokyo's Finances*, April 2013, p. 3 (in Japanese))

Tokyo Metropolitan Government used to have relatively high wage costs (for the police, fire brigade, etc.) as a result of having to administer a large city.

Figure 1 : Tokyo Metropolitan Government's tax revenue



Note: Based on the settlement of accounts figures for fiscal 2011, final supplementary budget for fiscal 2012, and initial budget for fiscal 2013.

Source: Nomura Institute of Capital Markets Research, based on Tokyo Metropolitan Government, *Tokyo Statistical Yearbook* for each fiscal year; Bureau of Taxation, Tokyo Metropolitan Government, *Tokyo Metropolitan Government Tax Statistics* (in Japanese); and Tokyo Metropolitan Government, *Overview of Tokyo Metropolitan Government's Draft Budget for Fiscal 2013*, 13 February 2013 (in Japanese).
<http://www.toukei.metro.tokyo.jp/tnenkan/tn-index.htm#h4>,
<http://www.tax.metro.tokyo.jp/tokei/index.html>,
<http://www.metro.tokyo.jp/INET/KEIKAKU/2013/02/70n2d100.htm>

In the late 1990s, following the collapse of the asset boom of the late 1980s, revenue from corporate taxes declined. As the Tokyo Metropolitan Government's tax structure initially failed to adapt to this, it recorded its largest effective fiscal deficit ever (¥106.8 billion) in fiscal 1998. Its response, in September 1998, was to declare a fiscal crisis. Following this, in July 1999, it published a *Fiscal Consolidation Plan* (for fiscal 2000–2003), while, in October 2003, it published a *Second Fiscal Consolidation Plan* (for fiscal 2004–2006). The aim of both plans was to achieve fiscal consolidation (e.g., by reducing wage costs, cutting investment expenditure (by changing policies), and increasing the prefectural tax take). As a result of these measures, the Tokyo Metropolitan Government succeeded in returning to a real surplus in fiscal 2005.

2. Preparations for the Olympics and new approach to fiscal management following fiscal consolidation

1) Bid to host 2016 Summer Olympic and Paralympic Games

In March 2006 the Tokyo Metropolitan Assembly voted to bid to host the 2016 Summer Olympic and Paralympic Games on the basis that half a century had passed since Tokyo had hosted the 1964 Olympics and that hosting the games in Tokyo would galvanize efforts to make Tokyo an eco-friendly, affluent, and mature city as well as demonstrate Japan's strong desire for world peace⁸. In response, the Tokyo

⁸ Tokyo Metropolitan Assembly, *Vote on Bid to Host 31st Olympic Games*, 8 March 2006 (in Japanese); Tokyo Metropolitan Assembly, *Vote for a Fulfilling Tokyo Paralympic Games*, 30 March 2006 (in Japanese).

Metropolitan Government set up a Hosting Reserve Fund in fiscal 2006 and began to accumulate funds to be used to pay for the infrastructure that would be needed for the Olympic and Paralympic Games⁹.

In addition, in July 2006, after recording a surplus the year before, the Tokyo Metropolitan Government published an outline of how it proposed to manage its finances in order to be able to deal with looming fiscal challenges such as rising social security costs and the cost of financing the infrastructure needed to host the Olympic Games¹⁰. Then, in December 2006, following the Japanese Olympic Committee's nomination of Tokyo as the city to bid to host the 2016 Summer Olympics and Paralympics, the Tokyo Metropolitan Government published a strategy for Tokyo in 10 years' time (*The 10-Year Plan*) with a view to preparing for the Olympics in earnest¹¹.

2) Bid to host 2020 Summer Olympic and Paralympic Games

In October 2009 the IOC voted for Rio de Janeiro to host the 2016 Summer Olympics and Paralympics. However, in September 2011 the Tokyo Metropolitan Government dusted down its plans to host the 2016 Olympics and put in another bid, this time to host the 2020 Summer Olympics and Paralympics¹².

Although its preparations to host the Games in 2020 have made steady progress, the plans are basically the same as those for the 2016 Olympics. In the four years from fiscal 2006, when the Hosting Reserve Fund was set up, the Fund accumulated some ¥400 billion and is expected to reach ¥411.6 billion, including interest income, by the end of fiscal 2013¹³.

The Tokyo Metropolitan Government also reviewed its longer-term plans with a view to hosting the 2020 Olympics, publishing, in December 2011, an updated version of *The 10-Year Plan (Tokyo Vision 2020 (fiscal 2011–2020))* with a view to Tokyo's redevelopment as a city fit for the 21st century¹⁴. *Tokyo Vision 2020* describes the process of creating a dynamic environment in which to enjoy sport and a better road network in Tokyo, starting with the three rings roads connecting Greater Tokyo.

⁹ Article 1 of *Rules Governing Tokyo Olympic and Paralympic Hosting Reserve Fund* (in Japanese).

¹⁰ Tokyo Metropolitan Government, *Future Fiscal Policy: Entering a New Stage*, July 2006 (in Japanese).

¹¹ Tokyo Metropolitan Government, *Tokyo's Big Change—The 10-Year Plan*, December 2006 (in Japanese).

¹² Tokyo Olympic and Paralympic Bid Headquarters and Tokyo 2020 Olympic and Paralympic Bid Committee, *Rio de Janeiro Chosen as Host City for 2016 Olympic and Paralympic Games*, 3 October 2009 (in Japanese); Bureau of Sports, Tokyo Metropolitan Government, *Governor Ishihara's Comments on International Olympic Committee's Announcement about Host City Candidates for 2020 Olympic and Paralympic Games*, 2 September 2011 (in Japanese).

¹³ Bureau of Finance, Tokyo Metropolitan Government, *Tokyo Metropolitan Government Bonds and Fiscal Position of Metropolis of Tokyo*, October 2013, p. 18 (in Japanese).

¹⁴ Tokyo Metropolitan Government, *Tokyo Vision 2020: Leading Japan's Recovery from the Earthquake*, December 2011 (in Japanese).

The approach to funding the Hosting Reserve Fund and the construction work described in *Tokyo Vision 2020* (and *The 10-Year Plan*) has been done while ensuring fiscal flexibility as well as maintaining the budget allocations at the same level. Partly because the Tokyo Metropolitan Government cut its coat according to its cloth when bidding to host the Olympic Games, its fiscal position has on the whole remained sound (Figure 7).

IV. Has the Tokyo Metropolitan Government done enough on the fiscal front to prepare for the Olympic Games?

1. Comparison of Tokyo Metropolitan Government's fiscal position in the run-up to the 1964 and 2020 Olympics

When Tokyo hosted the Olympic Games in 1964, the Tokyo Metropolitan Government bore 26% of the total costs, which consisted of (1) the direct costs, including the cost of constructing venues such as Komazawa Olympic Park and subsidies for TOCOG (altogether about ¥29.5 billion), and (2) the indirect costs, including the cost of building roads and the Tokaido Shinkansen Line, and the cost of water supply and sewerage charges (altogether about ¥957.9 billion). This amounted to ¥256.4 billion¹⁵. Although we have no breakdown of how the Tokyo Metropolitan Government financed this expenditure, we suspect that the costs may have been a considerable financial burden, representing, as they did, some 66% of its fiscal 1964 (general account) budget of ¥386.6 billion or about 4.8 times the outstanding amount of local government bonds for the same year (¥53.6 billion on the ordinary account, i.e., excluding public services).

In contrast, as was mentioned above, there is already a Hosting Reserve Fund of ¥411.6 billion to cover the Tokyo Metropolitan Government's share of the cost of hosting the 2020 Tokyo Olympic Games as well as an Infrastructure Construction Fund of ¥261.9 billion to cover the cost of new infrastructure¹⁶. As the two funds combined (¥673.5 billion) exceed the Tokyo Metropolitan Government's share of the combined venue construction costs and transport infrastructure costs (¥379.0–589.0 billion), we expect the Tokyo Metropolitan Government is likely to be able to cover its share of the cost of hosting the Olympics with plenty of margin to spare. If we take a conservative approach and compare the combined cost of the Olympic venues and transport infrastructure with the Tokyo Metropolitan Government's budget (¥6,265.0 billion on the initial general account budget for fiscal 2013) and the outstanding amount of local government bonds (¥5,782.6 billion on the ordinary account for fiscal 2011), we see that it amounts to only some 6–9% of the former and some 7–10% of the latter.

¹⁵ Shiina, Reiko, "The Role of an Olympic Host City," *Chihousai Geppou*, No. 327, Japan Local Government Bond Association, October 2006, p. 44 (in Japanese).

¹⁶ Estimated balance as of the end of fiscal 2013. Bureau of Finance, Tokyo Metropolitan Government, *Tokyo Metropolitan Government Bonds and Fiscal Position of Tokyo Metropolitan Government*, October 2013, p. 18 (in Japanese).

The main reason for the big reduction in the cost of the 2020 Tokyo Olympics (in proportion to the Tokyo Metropolitan Government's financial base) compared with that of the 1964 Olympics is probably that, whereas the lion's share of the cost of the 1964 Olympics went on acquiring sites for the Olympic venues at a time when the Japanese economy was growing rapidly and Japanese cities were in the midst of a wave of development and a surge in land prices, it is envisaged that the 2020 Olympics, as was pointed out above, will largely be held in existing venues as the aim is to make full use of existing stock.

2. Reasons why the Tokyo Metropolitan Government still needs to keep a tight rein on spending

We believe that the Tokyo Metropolitan Government not only has a wide fiscal safety margin when it comes to hosting the 2020 Tokyo Olympics but also has little need to change its existing fiscal approach. At the same time, however, we think that it still needs to keep a tight rein on its spending. This is because of the possibility that it might unexpectedly incur additional costs or face changes in external factors such as the economy or the system of local government finance.

As far as the first point (i.e., unexpected additional costs) is concerned, we have already mentioned that, if TOCOG does face any cashflow difficulties, its budget is guaranteed, in the first instance, by the Tokyo Metropolitan Government and, should that not suffice, ultimately by the Japanese government. Therefore, if TOCOG did face any cashflow difficulties (e.g., as a result of a significant overrun of its budget of ¥301.3 billion), the risk that the Tokyo Metropolitan Government could face significant additional costs, depending on the scale of the overrun, would not be zero.

In this connection it is perhaps worth mentioning that, according to Flyvbjerg and Stewart, the average cost overrun (i.e., the ratio of the final costs to the costs expected at the time of candidature) of OCOG costs and non-OCOG direct costs for the Olympics between 1960 and 2012 was 179%¹⁷. In the case of the largest overrun in this analysis (the Montreal Olympics of 1976, where the overrun was 796%), a large deficit and the absence of any private sponsors (a system that was only adopted later) forced the Quebec government and the City of Montreal to assume the debt, which was only repaid 30 years later, and to raise taxes. In the case of the Athens Olympics of 2004, the overrun was only 60%. However, high levels of spending on Olympic-related public works (such as a new airport) contributed to the deterioration in Greece's public finances that eventually led to the country's fiscal crisis.

As far as the second point (external factors) is concerned, the Tokyo Bid Committee estimated that the sensitivity of the Tokyo Metropolitan Government's tax revenue to economic factors would result in a positive knock-on effect on its finances

¹⁷ In real terms and on an original-currency basis, excluding figures for 2012 London Olympics. (Bent Flyvbjerg and Allison Stewart, "Olympic Proportions: Cost and Cost Overrun at the Olympics 1960-2012," *Saïd Business School Working Papers*, University of Oxford, June 2012, p. 10)

from the 2020 Olympics of ¥1,675.3 billion¹⁸. However, if a negative economic development that was too big for the Tokyo Metropolitan Government's fiscal adjustment fund to cope with occurred before 2020, the risk that its Olympic commitments could have a negative impact on its finances is not zero. Nor can we ignore the possibility that a major change in the system of local government finance could affect the Tokyo Metropolitan Government's fiscal structure. For example, as an interim measure to reduce the fiscal inequalities between local governments until the tax system, including the consumption tax, is overhauled, the tax reforms of fiscal 2008 made a portion of the corporate enterprise tax a national tax ("special corporate tax"), which is disbursed to the prefectures in proportion to their populations and number of employees ("special corporate transfer tax"). As a result, some 40% of what would have been the Tokyo Metropolitan Government's revenue from corporate enterprise tax became a national tax. The resulting loss of revenue through fiscal 2013 is estimated to be ¥780.6 billion¹⁹. This corresponds to some 12% of the Tokyo Metropolitan Government's initial budget for fiscal 2013. In view of all this, it is probably fair to say that the Tokyo Metropolitan Government needs to continue to manage its finances cautiously and efficiently in the run-up to the 2020 Olympics.

V. Raising funds for the 2020 Olympic Games

It is obvious that, as part of the task of managing its finances in the run-up to the 2020 Olympics, the Tokyo Metropolitan Government has to raise funds appropriately and efficiently. Generally speaking, Japanese local governments have a number of options for raising funds for the Olympics, including higher taxes, national subsidies and grants (e.g. infrastructure development integrated grants), financings (e.g., local government bonds and private finance initiatives (PFI)), and lotteries.

For the 2020 Olympics the Tokyo Metropolitan Government has the following options: (1) the issue of "Tokyo Olympic bonds," (2) the use of PFI and concessions, and (3) lotteries.

1. Resident-participatory-type publicly offered local government bonds ("Tokyo Olympic bonds")

The sheer size of the Tokyo Metropolitan Government's financial base and the fact that it raises some 90% of its funds from the private sector mean that it is a major presence on the Japanese local government bond market, with the largest amount

¹⁸ Tokyo 2020 Olympic and Paralympic Bid Committee and Bureau of Sports, Tokyo Metropolitan Government, *Economic Knock-on Effects of Hosting 2020 Olympic and Paralympic Games: ¥3 trillion and 150,000 Jobs*, 7 June 2012 (in Japanese).

¹⁹ Based on the settlement of accounts figures for fiscal 2008–2012 and on initial budget for fiscal 2013. (Bureau of Finance, Tokyo Metropolitan Government, *Tokyo Metropolitan Government Bonds and Fiscal Position of Tokyo Metropolitan Government*, October 2013, p. 14 (in Japanese))

(9%) of local government bonds outstanding²⁰. Furthermore, since fiscal 2002, it has issued ¥20–50 billion of so-called resident-participatory-type publicly offered local government bonds (three-year bonds for individual investors) each year²¹. Some ¥20 billion of the ¥850 billion in bonds that the Tokyo Metropolitan Government plans to issue in fiscal 2013 are three-year bonds for individual investors (issued once a year)²².

Issuance of participatory-type publicly offered local government bonds in terms of the issuance amount and the number of issuers increased gradually from their inception in April 2002 until the mid-2000s. More recently, however, issuance has been low: partly because their novelty has worn off, partly because their increasingly low coupons have fallen out of favor with individual investors, who tend to look for higher rates, and partly because local governments in Japan have been investing less.

However, the Tokyo Metropolitan Government's name value and relatively healthy fiscal position probably mean that its bonds are still relatively attractive to individual investors, who tend to prefer safe investments and hold them until maturity. Furthermore, the planned extension on 1 January 2016 to "specified bonds," including local government bonds, of the ability to offset capital losses against income and capital gains will make it easier for individual investors to choose financial products without having to concern themselves about the tax implications²³. As a result, we expect they will be more likely to invest in resident-participatory-type publicly offered local government bonds than before.

The Tokyo Metropolitan Government is required to use the proceeds from its issuance of three-year bonds for individual investors for projects that accord with the criteria set out in *Tokyo Vision 2020* (and, prior to that, *The 10-Year Plan*). Although there is no discrepancy between *Tokyo Vision 2020* and the concept for the 2020 Olympics, issuing "Tokyo Olympic bonds," the proceeds of which would be used to fund Olympic venues, as an addition to the Tokyo Metropolitan Government's existing brand of publicly offered local government bonds might be a good way to encourage more individuals to invest in its bonds as well to encourage Tokyoites to participate in local government or to raise their awareness of the Olympics.

In particular, most resident-participatory-type publicly offered local government bonds have relatively short maturities of five or three years, partly because most of

²⁰ As of end-May 2013. Based on figures for public offerings (including offerings of participatory-type bonds) and private placements by prefectures and government-designated cities. The amount of Tokyo Metropolitan Government bonds outstanding was ¥8,508.2 billion, while the total amount of local government bonds outstanding was ¥95,237.7 billion. (Japan Local Government Bond Association, *Chihousai*, No. 395, Japan Local Government Bond Association, August 2013, statistics pp. 19–20 (in Japanese))

²¹ Bureau of Finance, Tokyo Metropolitan Government, *Scheduled and Actual Issuance of Three-Year Bonds for Individual Investors* (issued once a year) (in Japanese).

²² Bureau of Finance, Tokyo Metropolitan Government, *Issuance Schedule* (in Japanese).

²³ Financial Services Agency, *Fiscal 2013 Tax Reforms—The Package of Tax Revisions Related to the FSA*, January 2013, p. 3 (in Japanese).

those who invest in them are senior citizens²⁴. However, if issuing “Tokyo Olympic bonds” succeeded in attracting a wider range of investors from the local community, such investors might very well welcome the issuance of six- or seven-year bonds timed to mature when the Tokyo Olympics are held in 2020.

Furthermore, although only those individuals who live or work, or those companies or organizations that have their main place of business, in the Metropolis of Tokyo, Saitama Prefecture, Chiba Prefecture, or Kanagawa Prefecture are eligible to invest in three-year bonds for individuals issued by the Tokyo Metropolitan Government²⁵, the fact that the 2020 Tokyo Olympics will be a national event suggests to us that it might be worth considering whether (1) to extend eligibility to investors all over Japan²⁶ and (2) to issue bonds jointly with the cities, towns, villages and wards within the Metropolis of Tokyo that are also entitled to issue local government bonds²⁷.

Another way of making such bonds more attractive might be to give investors perquisites related to the Olympics (e.g., tickets to events). An example of this is the 17th issue of ¥20 billion of three-year bonds for individual investors by the Tokyo Metropolitan Government in December 2012²⁸. Bondholders’ names were entered in a draw for the opportunity to take part in a boat trip round Tokyo Bay. Other local authorities have adopted a similar approach, giving investors the opportunity to make advance visits to the public facilities they have invested in or to receive free tickets to events. As well being good for public relations, this appears to encourage local residents to invest in these bonds (Figure 2)²⁹.

²⁴ Aoki, Seiichi, “Resident-participatory-type Publicly Offered Local Government Bonds,” *Chihousai*, No. 382, Japan Local Government Bond Association, June 2011, p. 54 (in Japanese); Aoki, Seiichi, “Resident-participatory-type Publicly Offered Local Government Bonds,” *Chihousai*, No. 383, Japan Local Government Bond Association, August 2011, p. 32 (in Japanese).

²⁵ Bureau of Finance, Tokyo Metropolitan Government, *Overview of Three-Year Bonds for Individual Investors (No. 17)* (in Japanese).

²⁶ For example, the “Miyazaki Ivy bonds” issued by Miyazaki City.

²⁷ For example, the bonds issued jointly by Miyagi Prefecture and towns in the same prefecture (“keyaki [zelnice] bonds”), the bonds issued jointly by Ibaraki Prefecture and towns in the same prefecture (“I love Ibaraki bonds”), and the bonds issued jointly by Hyogo Prefecture and towns in the same prefecture (“nojigiku [Chrysanthemum japonense] bonds”).

²⁸ Anyone who had invested in No. 17 Tokyo Metropolitan Government bonds was eligible. However, participants in the boat trip were chosen by lot (maximum of 100 couples (200 participants)). The boat trip was organized to make participants more aware of the Tokyo Metropolitan Government’s fiscal position, the features of its bonds, and its work to mitigate the impact of natural disasters. (Tokyo Metropolitan Government, *Boat trip for Investors in Tokyo Metropolitan Government Bonds*, 21 December 2012 (in Japanese))

²⁹ Of the 81 bond issues in fiscal 2012 (with an issue value of ¥202.83 billion), 12 (with an issue value of ¥58.15 billion) (i.e., 15% of the bond issues in terms of number and 29% in terms of value) came with perquisites. (Local Bond Division, Local Public Finance Bureau, Ministry of Internal Affairs and Communications, *Resident-participatory-type Publicly Offered Local Government Bonds: Features, Market Direction, and Challenges*, August 2013, p. 8 (in Japanese))

Figure 2 : Perquisites for holders of participatory-type publicly offered local government bonds

Local authority	Perquisites
Yamagata Prefecture	Present of rice to 50 bondholders chosen by lot
Tsuruoka City (Yamagata Prefecture)	Invitation to all bondholders to visit new aquarium before official opening (bondholders may bring up to two guests each). 50 bondholders chosen by lot will receive a present of a “jellyfish dream bag” [containing specimens of merchandise from Kamo Aquarium].
Metropolis of Tokyo	Invitation to bondholders to enter in a draw to take part in boat trip (limited to 100 couples or 200 individuals)
Kawasaki City (Kanagawa Prefecture)	Present of complimentary tickets for Symphony Hall to bondholders chosen by lot
Shizuoka City (Shizuoka Prefecture)	Entry to Shizuoka Municipal Nihondaira Zoo (free entry for two adults—limited to one visit)
Shiojiri City (Nagano Prefecture)	Present of bottle of Shiojiri wine to all bondholders Residents receive a guide to events in the local community center. Non-residents receive an invitation to the local wine festival (limited to two persons each)
Hyogo Prefecture	60 bondholders chosen by lot receive a present (e.g., night at a prefecture hotel)
Nanbu (Tottori Prefecture)	Free medical checkup
Fukuyama City (Hiroshima Prefecture)	Present of LED light bulb (one per person/company) * LED light bulbs are long-life, energy-saving light bulbs that enable people to help to prevent global warming at home
Tokushima Prefecture	Present of complimentary tickets to prefectural facilities
Fukuoka City (Fukuoka Prefecture)	Complimentary tickets (one per bondholder) to Fukuoka Asian Art Museum exhibitions. Free entry to and membership of Taraso Fukuoka sports club for first month
Miyazaki City (Miyazaki Prefecture)	Present of free tickets to Phoenix Zoo

Source: Nomura Institute of Capital Markets Research, based on Aoki, Seiichi, “Resident-participatory-type Publicly Offered Local Government Bonds,” *Chihousai*, No. 383, Japan Local Government Bond Association, August 2011, p. 34 (in Japanese); Local Bond Division, Local Public Finance Bureau, Ministry of Internal Affairs and Communications, *Resident-participatory-type Publicly Offered Local Government Bonds: Features, Market Direction, and Challenges*, August 2013, p. 8 (in Japanese); Tsuruoka City, “Kamo Aquarium Jellyfish Dream Bonds,” *Kouhou Tsuruoka*, No. 179, 1 March 2013, p. 6 (in Japanese); Tokyo Metropolitan Government, *Boat Trip for Investors in Tokyo Metropolitan Government Bonds*, 21 December 2012 (in Japanese). (http://www.chihousai.or.jp/05/pdf/05_03_01_01.pdf, <http://www.city.tsuruoka.lg.jp/koho-pdf/pdf130301/130301-all.pdf>, http://www.zaimu.metro.tokyo.jp/bond/tosai_news_topics/news_topics/saiseitosai230111.pdf)

The Tokyo Metropolitan Government is a key participant in the Japanese local government bond market and has made constant efforts to ensure a stable take-up of its bonds and to widen its investor base (e.g., by diversifying maturities, issuing foreign bonds, and using a combination of syndication and book-running)³⁰. We think consideration should be given to extending the role of participatory-type publicly offered local government bonds by issuing “Tokyo Olympic bonds” that might help to achieve a more stable take-up of Tokyo Metropolitan Government bonds as well as improve their brand image.

2. The use of PFI and concessions

We believe consideration should be given to the use of PFI and concessions as means of raising funds for the 2020 Olympics. For example, the construction of Stadium Australia, one of the venues of the 2000 Sydney Olympics, was funded by means of a concession under a private finance initiative.

³⁰ Combination of syndication and book-running: a method of issuing local government bonds that combines a book-running approach to marketing with the traditional approach to syndication.

PFI is a type of public-private partnership (PPP) that uses private-sector finance, management expertise, and technical know-how to construct, maintain, and operate public facilities. In the 1990s PFI was increasingly used in a number of foreign countries, including the United Kingdom, Australia and Korea. In Japan there was a total of 418 PFI projects worth a total of ¥4,247.7 billion between fiscal 1999, when the *Act on Promotion of Private Finance Initiative* was passed, and the end of March 2013³¹. It was the Tokyo Metropolitan Government that, in October 1999, commissioned Japan's first model PFI project to build emergency power-generation facilities at its Kanamachi Purification Plant. Since then, it has used PFI to commission projects in a number of areas, including education, water supply and sewerage, and hospitals³².

Concessions are build-transfer-operate (BTO) PFI projects that enable private-sector companies to charge for the use of the public facilities they operate on behalf of the project initiators, who retain their ownership of the facilities. In June 2011, the amended *Act on Promotion of Private Finance Initiative* introduced the concession system to Japan.

Under the Stadium Australia concession, the Olympic Coordination Authority (OCA), an agency of the New South Wales government, was the project initiator, while the Stadium Australia Group (SAG) was the project company, responsible for designing, building, financing, maintaining, and operating the project (Figure 3). Although the project initiator owns the facility, the project company grants exclusive use of the facility to the Olympics for the duration of the games and operates it on a reduced scale once the games are over. In the case of Stadium Australia, the concession agreement was signed in 1996 for a period of 32 years, and SAG began to operate the stadium in 1999. The cost of construction was some AUD465 million with a further AUD70 million worth of construction after the games. The project company raised a total of some AUD615 million. Nearly half of the project cost was covered by the sale of memberships, with the rest being covered by equity, bank debt, and government funding. Debt accounted for only 26% of the funds raised (Figure 4). It is probably fair to say that Stadium Australia was delivered in a way that was mutually convenient for the government and people of Sydney, who count tourism as one of their main industries, to achieve their common objective of a successful Olympic games³³. The debt of the project company mounted because the usage of the stadium was less than expected in the initial phase. However, these problems were overcome

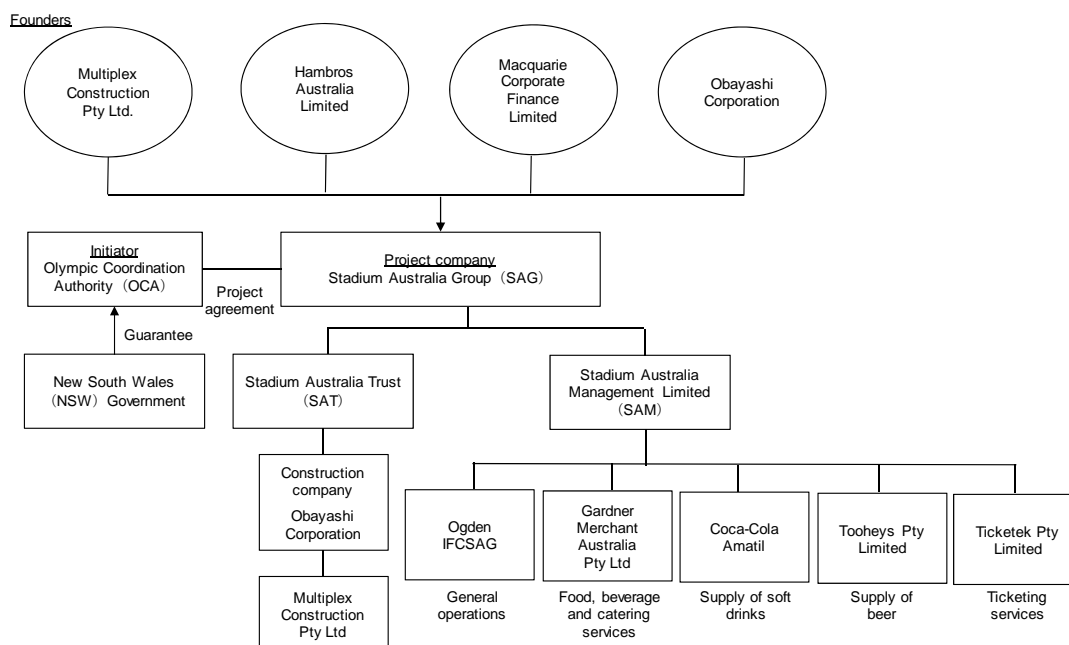
³¹ The number of projects is the number of projects officially announced and recorded by the Cabinet Office survey. It does not include projects that have been cancelled or whose contracts have been revoked during the service period. Nor does it include projects that have been cancelled after they have been officially announced but before the service period has begun. The project value is the total value recorded by the Cabinet Office survey of the initial contracts of those projects that have been officially announced and whose cost to the public purse has been decided following the choice of an operator. (PFI Promotion Office, Cabinet Office, *Current State of PFI in Japan*, September 2013, p. 4 (in Japanese))

³² Bureau of Finance, Tokyo Metropolitan Government, *PFI Projects by the Tokyo Metropolitan Government* (in Japanese).

³³ "Overseas Report: The Sydney Olympic Park—The Use of PFI to Fund a Future Tourist Attraction," *Nikkei Architecture*, No. 672, 7 August 2000, p. 119 (in Japanese).

(partly because the project company became part of the ANZ Banking Group), and the stadium has been on an even keel ever since³⁴.

Figure 3 : Schematic diagram of Stadium Australia concession



Note: The diagram shows the companies involved during the 2000 Sydney Olympics. As of December 2010, the stadium's operating company, SAG, was a wholly owned subsidiary of Stadium Investments Pty Ltd (SIPL), a company which is wholly owned by Diversified Infrastructure Trust (DIT). DIT is managed by ANZ Infrastructure Services Limited, and its responsible entity is ANZ Specialist Asset Management Limited.

Source: Nomura Institute of Capital Markets Research, based on PwC Japan, *Survey of Use of PFI/PPP (Concessions) in Other Countries*, 31 January 2011, pp. 210-212 (in Japanese). (<http://www8.cao.go.jp/pfi/pdf/concession22.pdf>)

Figure 4 : Breakdown of funding of Stadium Australia concession

Source of funding	Amount raised		Details
	AUD1bn	Share	
Sales of memberships	0.2944	48%	AUD65 million of the total membership sales of AUD364.4 million was paid to the Sydney Organizing Committee of the Olympic Games (SOCOG) for the Olympic rights.
Bank debt	0.161	26%	The main banks involved were ANZ Banking Group and ABN AMRO. This was reduced to AUD125 million (over 15 years) once the first stage of construction was completed in March 1999. These loans were secured by a lien on Stadium Australia Trust (SAT)'s lease of the stadium.
Government funding	0.115	19%	From the New South Wales (NSW) government
Sponsor equity	0.04	7%	Equity was committed to be subscribed by Ronnwin Pty Ltd, Gardner Merchant, Sodexho Alliance, Coca-Cola Amatil, and Ogden IFC as well as by some of the founders of the project (Multiplex Constructions, Macquarie Corporate Finance, and Obayashi Corporation).

Source: Nomura Institute of Capital Markets Research, based on PwC Japan, *Survey of Use of PFI/PPP (Concessions) in Other Countries*, 31 January 2011, pp. 219-221 (in Japanese); Sydney Olympic Park Authority, *Summary of Stadium Australia Contracts*, June 2002, p.1. (<http://www8.cao.go.jp/pfi/pdf/concession22.pdf>, http://www.treasury.nsw.gov.au/_data/assets/pdf_file/0007/19285/Stadium_Australia_updated_contracts_summary_June_2002.pdf)

³⁴ PwC Japan, *Survey of Use of PFI/PPP (Concessions) in Other Countries*, 31 January 2011, pp. 222-223 (in Japanese).

Concessions enable (1) private-sector companies to use their acumen to develop new income-generating businesses and to borrow against their operating rights and (2) project initiators to reduce their existing debt by having private-sector companies operate their facilities efficiently and effectively, assume market risk, and pay them (the project initiators) for this while they (the project initiators) retain ownership of the facilities and a say in how they are managed.

While the Japan Sport Council is in charge of the construction of the Olympic Stadium for the 2020 Tokyo Olympics, the Tokyo Metropolitan Government is in charge of the construction of some Olympic venues, including the Ariake Arena (Figure 5). In our view, it might make sense to consider the use of PFI/concession schemes for the delivery and subsequent use of some of the venues.

3. Lotteries

In Japan, prefectures and government-designated cities are permitted to sell lottery tickets in accordance with the *Local Finance Act and Lottery Ticket Act*. In fiscal 2010, sales amounting to ¥918.9 billion generated a profit of ¥359.0 billion³⁵. There are six authorized sellers of lottery tickets³⁶, including one for all local governments and one for the Tokyo Metropolitan Government, and three different types.

Lottery tickets in support of the Olympics have been sold in Japan for each of the Olympic Games that have been held there (the 1964 Tokyo Olympics, the 1972 Winter Olympics in Sapporo, and the 1998 Winter Olympics in Nagano), and the profits have been used to fund the games³⁷.

There are plans to sell Olympic lottery tickets in the four years running up to the 2020 Olympics (2017–2020), and it is expected that this will generate a total of ¥10 billion in profits. The tickets are due to be sold through the national network of local authority outlets. As the profits from the sale of lottery tickets have to be used for public works, the profits from the sale of the Olympic lottery tickets will be used to fund the cost of constructing and upgrading Olympic facilities.

As of the end of September 2013, the Tokyo Metropolitan Government does not have any plans to issue lottery tickets specifically for the 2020 Tokyo Olympics. However, if it were to use the Tokyo Olympics to market ordinary lottery tickets (just as it used the Tokyo 2020 Candidate City emblem in July 2013, when it was bidding to host the 2020 Olympics, as a motif for its 2222nd issue of lottery tickets), it might

³⁵ All-Japan Local Government Lottery Association, *The Lottery Today* (in Japanese).

³⁶ The six distributors of lottery tickets are (1) the All-Japan Local Government Lottery Association (jumbo lottery tickets, conventional lottery tickets, and choose-your-own-number tickets), (2) the Tokyo Metropolitan Lottery, (3) the Kanto-Chubu-Tohoku Local Government Lottery, (4) the Kinki Lottery, (5) the West Japan Lottery, and (6) the Local Medical Care Promotion Lotteries.

³⁷ “Solidarity lottery tickets” are lottery tickets that are sold nationwide to help support a particular cause in a particular area. Other local governments help by selling a proportion of the tickets locally. Shiina, Reiko, “The Role of an Olympic Host City,” *Chihousai Geppou*, No. 327, Japan Local Government Bond Association, October 2006, pp. 46-47 (in Japanese).

help to widen the range of people who purchase lottery tickets as well as increase interest in sport and awareness of the Olympics among Tokyoites. Furthermore, if something could be done to stimulate interest in and improve the image of lottery tickets in general, sales of which have been languishing in recent years, they might become a more reliable source of funding for both the Tokyo Metropolitan Government and other local authorities.

VI. Conclusion

Partly because it will have been more than fifty years since the Olympics were last held in Tokyo, the 2020 Olympic Games have attracted considerable interest, both at home and abroad, for economic, financial, and fiscal reasons.

In this report we have seen from the Tokyo Metropolitan Government's approach to fiscal management and its attitude to the Olympics thus far that the fiscal burden placed on it by the 2020 Tokyo Olympics has not only been less than that of the 1964 Olympics (as a result of the administrative and fiscal support provided partly by its long-term strategy for the capital, which it has pursued with disregard to the success or failure of its bid to host the 2020 Olympics, and partly by the Hosting Reserve Fund), but also that it is now in a strong position to cover the costs it is expected to incur as a result of the games. However, it is also clear from both the experience of other countries (e.g., the Montreal Olympics and the Athens Olympics) as well as possible external risks that the Tokyo Metropolitan Government will have to continue to keep tight control of its finances, including its cost of borrowing.

As it raises funds in the run-up to the 2020 Olympics, it may be able to make good use of (1) resident-participatory-type publicly offered local government bonds ("Tokyo Olympic bonds"), (2) PFI projects and concessions, and (3) lotteries. In particular, we believe it would do well to consider issuing "Tokyo Olympic bonds": not only to increase Tokyoites' involvement in and awareness of local politics but also to widen its individual investor base and achieve a more stable take-up of Tokyo Metropolitan Government bonds in general. In any event, its ability to manage its finances, including how it raises funds, is likely to be one of the keys to the success of the 2020 Tokyo Olympics.

VII. Appendix

Figure 5 : Cost of constructing Olympic venues (¥1bn)

Venue	State of construction	Construction of permanent facilities				Charges for use of temporary facilities & venues	Total
		Japan Sport Council	Nippon Budokan	Tokyo Metropolitan Government	Private sector	TOCOG	
Olympic Stadium	Planned	130.0	–	–	–	3.8	133.8
Tokyo Metropolitan Gymnasium	Existing	–	–	–	–	0.2	0.2
Yoyogi National Stadium	Existing	–	–	–	–	1.5	1.5
Nippon Budokan	Existing (includes construction of permanent facilities)	–	3.9	–	–	0.4	4.3
Imperial Palace Garden	Temporary	–	–	–	–	0.6	0.6
Tokyo International Forum	Existing	–	–	–	–	0.1	0.1
Kokugikan Arena	Existing	–	–	–	–	0.4	0.4
Ariake Arena	New	–	–	17.6	–	0.1	17.7
Olympic BMX Course	Temporary	–	–	–	–	6.5	6.5
Olympic Velodrome	Temporary	–	–	–	–	6.5	6.5
Olympic Gymnastic Centre	Temporary	–	–	–	–	8.9	8.9
Ariake Tennis Park	Existing (includes construction of permanent facilities)	–	–	5.9	–	0.5	6.4
Odaiba Marine Park	Temporary	–	–	–	–	1.5	1.5
Shiokaze Park	Temporary	–	–	–	–	1.2	1.2
Tokyo Big Sight Hall A	Existing	–	–	–	–	2.6	2.6
Tokyo Big Sight Hall B	Existing	–	–	–	–	2.6	2.6
Seaside Park Hockey Stadium	New	–	–	2.5	–	2.1	4.6
Sea Forest Cross-Country Course	Temporary	–	–	–	–	2.0	2.0
Sea Forest Waterway	New	–	–	6.9	–	2.0	8.9
Sea Forest Mountain Bike Course	Temporary	–	–	–	–	1.3	1.3
Wakasu Olympic Marina	New	–	–	9.2	–	0.8	10.0
Kasai Slalom Course	New	–	–	2.4	–	0.8	3.2
Youth Plaza Arena A	New	–	–	36.4	–	0.5	36.9
Youth Plaza Arena B	New	–	–	36.4	–	0.5	36.9
Dream Island Archery Field	New	–	–	1.4	–	1.4	2.8
Dream Island Stadium	Existing	–	–	–	–	3.5	3.5
Olympic Aquatics Centre	New	–	–	32.1	–	7.6	39.7
Waterpolo Arena	Temporary	–	–	–	–	7.6	39.7
Musashino Forest Sport Centre	Planned	–	–	25.0	–	0.6	25.6
Tokyo Stadium	Existing	–	–	–	–	–	–
Musashino Forest Park	Temporary	–	–	–	–	1.3	1.3
Asaka Shooting Range	Temporary	–	–	–	–	4.4	4.4
Kasumigaseki Country Club	Existing	–	–	–	–	0.9	0.9
Sapporo Dome	Existing	–	–	–	–	0.3	0.3
Miyagi Stadium	Existing	–	–	–	–	0.3	0.3
Saitama Stadium	Existing	–	–	–	–	0.3	0.3
International Stadium Yokohama	Existing	–	–	–	–	0.3	0.3
Olympic Village	New	–	–	–	95.4	10.3	105.7
MPC & IBC	Existing (includes construction of permanent facilities)	–	–	14.4	0	3.3	17.7
Totals		130.0	3.9	153.8	95.4	72.3	455.4

Note: These details are subject to change, depending on how planning progresses.

Source: Nomura Institute of Capital Markets Research, based on Tokyo 2020 Bid Committee, *Candidature File (English/French)*, 7 January 2013, Vol. 2, pp. 035-038.
(http://tokyo2020.jp/jp/plan/candidature/dl/tokyo2020_candidate_entire_2_jp.pdf)

Figure 6 : Cost of building/upgrading transport infrastructure

Transport infrastructure		Body responsible/Cost (¥1bn)			Start (FY)	End (FY)
		Ministry of Land, Infrastructure and Transport	Tokyo Metropolitan Government	Metropolitan Expressway Co., Ltd.		
Existing transport infrastructure (includes improvement work)						
Major urban arterial network	National Route No.14	24.0	–	–	1972	2020 (partially not available)
Major urban arterial network	National Route No.357	4.0	–	–	1996	2013
Major urban arterial network	Ring Road No.5-1	–	39.0	–	2005	2016
Major urban arterial network	Ring Road No.6	–	10.0	–	2000	2016
Subway	Kachidoki Station	–	10.0	–	2000	2015
Planned transport infrastructure						
Motorways	Central Circular Shinagawa Route, Metropolitan Expressway	–	210.0	–	2005	2013
Motorways	Harumi Route, Metropolitan Expressway	–	–	25.0	2001	2015
Major urban arterial network	National Route No.357	151.0	–	–	2010	2015 (two lanes available)
Major urban arterial network	Ring Road No.2	–	126.0	–	2003	2016
Major urban arterial network	Auxiliary Road No.314	–	2.4	–	2012	2014
Major urban arterial network	Auxiliary Road No.315	–	20.0	–	1997	2016
Major urban arterial network	Ring Road No.3	–	11.0	–	1995	2016
Major urban arterial network	Radial Road No.5	–	6.0	–	2005	2016
Major urban arterial network	Mitaka City Planning Road No.3.2.2	–	0.8	–	2000	2016
Additional transport infrastructure						
		N/A				
Total		639.2				

Source: Nomura Institute of Capital Markets Research, based on Tokyo 2020 Bid Committee, Candidature File (English/French), 7 January 2013, Vol. 3, pp. 078-080 (English). (http://tokyo2020.jp/jp/plan/candidature/dl/tokyo2020_candidate_entire_3_jp.pdf)

Figure 7 : Tokyo Metropolitan Government: key financial indicators (¥1bn)

(FY)	2007	2008	2009	2010	2011
Economic indicators					
GDP	99,270.1	96,550.9	91,534.1	91,139.3	–
Per capita GDP (¥mn)	7.73	7.45	7.00	6.93	–
Population (million)	12.84	12.97	13.08	13.16	13.19
Revenues					
Revenues	7,143.6	7,077.4	6,658.3	6,170.7	6,247.4
Local taxes	5,497.3	5,293.3	4,256.1	4,190.1	4,149.8
Local allocation tax grants	–	–	–	–	3.5
Subsidies	348.6	404.4	584.0	452.8	440.0
Local government bonds	157.3	303.9	475.3	352.3	457.2
Expenditures					
Mandatory expenditures	2,461.2	2,501.3	2,317.6	2,192.0	2,141.6
of which, personnel costs	1,605.9	1,575.5	1,529.6	1,513.6	1,487.9
of which, debt service costs	752.8	820.6	675.0	557.4	527.0
Investment expenditure	704.3	741.8	791.7	741.5	776.1
Local government bonds outstanding, provisional commitments to future expenditure, and provisions outstanding					
Local government bonds outstanding (on ordinary account)	6,292.6	5,895.6	5,834.4	5,742.7	5,782.6
Local government bonds outstanding (on all accounts)	11,599.9	11,130.3	10,866.0	10,637.0	10,602.9
Contingent liabilities (planned expenditures from following fiscal year)	957.0	978.7	955.3	935.0	830.4
Provisions outstanding	1,349.6	1,773.3	1,663.3	1,557.2	1,367.4
Current balance in reserve fund Key financial indicators					
Effective fiscal balance	95.6	0.8	0.6	0.5	0.4
Standard fiscal size	4,053.4	4,274.3	3,459.9	2,885.9	2,813.5
Financial strength index	1.319	1.406	1.341	1.162	0.961
Own-source revenue ratio	91.9%	88.9%	81.8%	83.7%	81.9%
Current account ratio	80.2%	84.1%	96.0%	94.5%	95.2%
Effective fiscal deficit ratio	–	–	–	–	–
Consolidated effective fiscal deficit ratio	–	–	–	–	–
Effective public debt service ratio	8.7%	5.5%	3.1%	2.2%	1.5%
Future burden ratio	82.9%	63.8%	77.0%	93.6%	92.7%

Note: Unless otherwise indicated, the figures are on an ordinary account basis. Population is as of 1 October each year.

Source: Nomura Institute of Capital Markets Research, based on Department of National Accounts, Economic and Social Research Institute (ESRI), Cabinet Office, Annual Report on Prefectural Accounts (in Japanese); Statistics Division, Tokyo Metropolitan Government, Population of Metropolis of Tokyo (in Japanese); Tokyo Metropolitan Government, Financial Indicators (in Japanese); Publicly Offered Local Government Bond Issuers, Japan Local Government Bond Association, Fiscal Position of 52 Authorities Issuing Publicly Offered Local Government Bonds: Eleventh Joint Investor Briefing by Publicly Offered Local Government Bond Issuers, 26 October 2012 (in Japanese).
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