

Revision of Compilation Methodology for Balance of Payments Statistics on Travel in Japan

I. Introduction

The Ministry of Finance (MOF) and the Bank of Japan (BOJ) reviewed the methodology compiling balance of payments (BOP) statistics on travel in Japan mainly in order to enhance coverage on the consumption of foreign travelers. The new method reflects results of a newly conducted survey of visitors from abroad on the amount of yen brought into and taken out of Japan and so forth. We introduced the new methodology for final figures from the January-March quarter of 2003 and preliminary figures for May 2003. The background and details of the revision are explained in this paper.

II. Background of the Revision

The *Balance of Payments Manual* (fifth edition) reads, “travel covers primarily the goods and services acquired from an economy by travelers¹ during visits of less than one year in that economy”(Passenger fares are recorded under transportation). In other words, credit in Japan’s travel equals the amount of money spent by visitors from abroad on goods and services in Japan. Due to the difficulty of collecting data directly from retailers, accommodation facilities, and other providers of goods and services, data used to compile travel credit was previously limited to the following: (1) cash transfers between travel agencies from inbound package tours <hereafter A>,² (2) turnover on credit cards during visitors’ stays in Japan <hereafter B>³, and (3) the amount of foreign currency visitors

¹ According to the *Manual*, a traveler is “an individual staying, for less than one year, in an economy of which he is not a resident” but, “the one-year rule does not apply to students and medical patients, who remain residents of their economies of origin even if the length of stay in another economy is one year or more”, and “all the expenditures made by students and patients are recorded under travel”. In Japan, however, the number of people staying in Japan for less than one year is not available. Moreover, spending of international students and medical patients from abroad are not fully available. As a result, Travel in Japan’s BOP reflects expenditures of visitors staying in Japan and Japanese travelers going overseas for one year or less, both of which can be calculated from available statistics.

² In accordance with Article 55-1 of the Foreign Exchange and Foreign Trade Law, travel agencies submit reports on payments and receipts (using reporting forms number one to number four as specified by the ministerial ordinance on reporting of foreign exchange transactions, (hereafter ministerial ordinance)).

³ Credit card companies submit reports on payments and receipts using reporting forms number one to number four mentioned in Footnote 2.

exchanged for yen in Japan <hereafter C>⁴.

The amount of foreign currency exchanged for yen in Japan, or C from above, is used to compile the amount of cash spent by visitors from abroad. A significant amount of yen, however, seems to be spent, without exchange in Japan, by visitors from abroad because yen brought into Japan especially by visitors from Asia (a popular traveling destination for the Japanese) has been increasing. Yen withdrawn by visitors from cash dispensers (CDs) or automated teller machines (ATMs) situated in Japan also has not been reflected in the statistics. The previous method could not reflect yen brought into and withdrawn in Japan and, therefore, statistics do not reflect the actual amount spent by visitors from abroad. In 2002, consumption per visitor from abroad was 102 thousand yen, according to calculations using travel figures from Japan's BOP. On the other hand, consumption per Japanese traveler going overseas was double this amount at 204 thousand yen. The large gap between the two figures seems to show that they do not accurately describe the real state, especially considering (1) that the average stay for visitors from abroad and that for Japanese travelers going overseas are almost the same⁵ and (2) that accommodation fees and other necessary traveling costs in Japan are relatively expensive compared to those in other countries.⁶

The conceptual framework of travel credit is shown in Chart 1 on the next page. To increase the accuracy of travel credit, previously compiled as $A+B+C$, X should be added. The components of X are (1) yen brought into Japan by visitors from abroad<D>, (2) yen withdrawn in Japan from CDs or ATMs<E>, (3) travel expenses paid through income gained in Japan<F>, and (4) yen not spent in Japan (yen exchanged for foreign currency in Japan<G> and yen taken out of Japan<H>) as a deduction amount. Using these data, X ($D+E+F-G-H$) is added to $A+B+C$.

Meanwhile, yen brought into Japan by visitors from abroad is considered either (1) brought and spent overseas by Japanese travelers or (2) taken back by visitors from abroad to their

⁴ Financial institutions submit reports through reporting forms number 29 (reports on sales/purchases of foreign currency and travelers' checks) and number 44 (reports on purchases of foreign currency and travelers' checks) as specified by ministerial ordinance.

⁵ In 2001, the average length of stay for visitors from abroad was 8.5 days (Japan National Tourist Organization), and that for Japanese travelers going overseas was 8.7 days (Japan Tourism Marketing Institute).

⁶ Prices in Tokyo are 1.15 times as expensive as those in New York and 1.67 times as expensive as those in Singapore, according to the *Report on International Price Differentials in Consumer Goods and Services* (the Ministry of Economy, Trade and Industry, 2002).

home countries.⁷ Calculations of D (yen brought into Japan) should also improve the accuracy of travel debit⁸. The previous method only reflected yen inflow via financial institutions⁹. Of course, yen cash inflows via visitors from abroad should be reflected in travel debit. The new method makes it possible.

Chart 1: Conceptual Chart of Travel Credit

Items recorded using the previous method	A. Traveling expenditures paid via travel agencies	Expenditure
	B. Turnover on credit cards	
	C. Foreign currency exchanged for yen in Japan	
D. Yen brought into Japan (+)	X	
E. Yen withdrawn from CDs and ATMs in Japan (+)		
F. Travelling expenses in Japan paid through income gained in Japan (+)	G. Yen exchanged for foreign currency in Japan (-)	
	H. Yen taken out of Japan (-)	

⁷ Financial institutions usually do not send yen banknotes and coins to foreign countries because of small demands for them overseas.

⁸ Travel debit was estimated as the total of the following 4 items: (1) travel expenditures paid by Japanese travelers via travel agencies, (2) turnover on credit cards during Japanese travelers' overseas stays, (3) foreign currency and travelers' checks bought in Japan (excluding those taken back to Japan), and (4) yen that flowed into Japan via financial institutions.

⁹ The amount of yen flowing into Japan via financial institutions is the total amount reported to the MOF via the BOJ through reporting form number 30 (reports on the repatriated amount of yen) as specified by the ministerial ordinance.

III. Survey Given to Visitors from Abroad

The BOJ planned a survey of visitors from abroad and conducted it in cooperation with the MOF in 2002¹⁰. The survey results provide data for D through H in Chart 1 and, thus, enabled the calculation of X in the same chart. As a result, we can compile travel data in BOP, both for credit and debit, more accurately.

Based on the survey results, consumption per visitor from abroad (travel credit) is estimated at 252 thousand yen as shown in Chart 2. Meanwhile, consumption per Japanese overseas traveler (travel debit) is estimated at 237 thousand yen.¹¹ It seems reasonable for the two figures to be around the same level, considering the average stays for both sides are almost the same length.

Chart 2: Spending Per Visitor from Abroad Compiled Using the Survey Results (Travel Credit)

		A + B + C =	¥101,843	Expenditure ¥252,094
D	¥156,714	X =	¥150,251	
E	¥11,604	G	- ¥1,828	
F	¥618	H	- ¥16,857	

$$\underline{X = D + E + F - G - H} \quad \text{Expenditures} = A + B + C + X,$$

where,

A = Travel expenditures paid via travel agencies

B = Turnover on credit cards

C = Foreign currency exchanged for yen in Japan

D = Yen brought into Japan

E = Yen withdrawn from CDs and ATMs in Japan

F = Travel expenses paid through income gained in Japan

G = Yen exchanged for foreign currency in Japan

H = Yen taken out of Japan

} Calculated based on
travel credit in 2002

} Survey results
(average per visitor)

¹⁰ The Mizuho Research Institute, funded by the MOF, carried out the survey from November through December 2002. The Institute interviewed 8,539 visitors from abroad and received 8,279 valid responses. The survey included questions on attributes of the visitors and the amount of yen brought into Japan and so on.

¹¹ Specifically, it adds “D – H” in Chart 2 to the amount of spending estimated using the previous method. The calculations are explained in Chapter IV, Section B.

IV. Revision of Compilation Methodology

The following explains in detail the revisions in compiling travel credit and debit.

A. Travel Credit

Travel credit is the total amount compiled using the previous method (A+B+C in charts 1 and 2) and that calculated using formula 1 below.

Formula 1:

$$\underbrace{\text{Average spending per visitor (D + E + F - G - H)}}_{(1)} \times \underbrace{\text{Number of visitors entering Japan and staying for one year or less (in relevant month)}}_{(2)}$$

- (1) Average spending per visitor comes from the survey results.

D = Yen brought into Japan

E = Yen withdrawn from CDs or ATMs in Japan

F = Travel expenses paid through income gained in Japan

G = Yen exchanged for foreign currency in Japan

H = Yen taken out of Japan

- (2) Preliminary monthly figures for overall visitors entering Japan¹² are available when compiling preliminary BOP statistics, but those of visitors staying one year or less are not. Monthly figures of visitors staying one year or less are, thus, estimated using the ratio of the previous year's number of visitors staying one year or less to the previous year's number of overall visitors (see the formula below).¹³

$$\text{Number of } \textit{overall} \text{ visitors entering Japan (in relevant month; } \textit{preliminary}) \times \frac{\text{Number of visitors staying for one year or less (annual; previous year)}}{\text{Number of } \textit{overall} \text{ visitors entering Japan (annual; previous year)}}$$

¹² In principle, the Ministry of Justice (MOJ)'s monthly statistics are used to determine the number of travelers because they use a subcomponent of "short-term stay" (the number of visitors including those staying for one year or less). These figures, however, are not released when compiling preliminary BOP statistics. Therefore, preliminary monthly figures on the number of overall visitors entering Japan are based on estimates made by the Japan National Tourist Organization (JNTO). Specifically, JNTO figures are multiplied by the ratio of MOJ figures to JNTO figures for the same month a year ago to calculate preliminary figures for overall visitors entering Japan that month.

¹³ See Footnote 1. The *Annual Report of Statistics on Legal Migrants* issued by the MOJ every June is the only source of data for the number of visitors from abroad staying one year or less. Monthly figures on such visitors are not available. Annual figures used to calculate travel credit and debit, the latter of which is mentioned in Chapter IV, Section B, are updated every year using the latest report.

Final BOP statistics are compiled using monthly figures for “short-term visitors” taken from the most current statistics compiled by the Ministry of Justice (MOJ). “Short-term visitors” in the MOJ statistics, however, includes visitors staying in Japan more than one year. Therefore, just as done above, these figures are multiplied by the ratio of the previous year’s total of those staying in Japan for one year or less to the previous year’s total of short-term visitors (see the formula below).

$$\text{Number of } \textit{short-term} \text{ visitors entering Japan (in relevant month; } \textit{final}) \times \frac{\text{Number of visitors staying one year or less (annual; previous year)}}{\text{Number of } \textit{short-term} \text{ visitors (annual; previous year)}}$$

B. Travel Debit

Travel debit is the total amount compiled using the previous method (see Footnote 8) and the amount calculated using formula 2 below on this page. First, total yen brought into and spent in Japan by visitors per year is calculated based on the survey results (the numerator enclosed in the curly braces in formula 2). This is then divided by the annual figure for Japanese travelers going overseas for one year or less. This yields the average spent in Japanese currency, which is not repatriated by financial institutions, but brought to Japan by visitors, per Japanese overseas traveler. Finally, this figure is multiplied by the number of Japanese travelers going overseas for one year or less in that month.

Formula 2:

$\left\{ \frac{\text{Yen brought into and spent in Japan per visitor (D - H; <1>)} \times \text{Number of visitors staying one year or less (annual; previous year)}}{\text{Number of Japanese going overseas for one year or less (annual; previous year; <2>)}} \right\}$
$\times \text{Number of Japanese going overseas for one year or less (in relevant month; <3>)}$

<1>Average yen brought into and spent in Japan per visitor from abroad is labelled “D – H” in survey results.

D = Yen brought into Japan per visitor

H = Yen taken out of Japan per visitor

<2>Number of Japanese travelers returning from overseas after one year or less.

<3>Preliminary BOP statistics are compiled using monthly figures for Japanese travelers going overseas for one year or less, which is calculated by multiplying preliminary monthly figures of overall Japanese going abroad by the ratio of the previous year's Japanese travelers staying overseas for one year or less to the previous year's number of Japanese travelers reentering Japan (see the formula below). Final BOP statistics are compiled using final monthly figures for the number of overall Japanese going overseas.

$$\begin{array}{l} \text{Number of overall} \\ \text{Japanese going abroad} \\ \text{(in relevant month;} \\ \text{preliminary or final)} \end{array} \times \frac{\begin{array}{l} \text{Japanese staying overseas for one year or less} \\ \text{(annual; previous year)} \end{array}}{\begin{array}{l} \text{Number of Japanese returning from overseas} \\ \text{(annual; previous year)} \end{array}}$$

D. Comparison of the Results using the Previous and New Methods

Chart 3 compares the previous and new methods of estimating travel. According to the chart, there is no major disparity between travel compiled using either method for both final figures from January-March 2003 and preliminary figures for May 2003. It should be noted, however, that gross totals for both credit and debit are significantly larger using the new method versus the previous one, because omitted expenditures, mainly with yen brought into Japan and its origin, are reflected.

Chart 3: Comparison of Compiled Travel Figures using the Previous and New Methods

100 million yen

	January-March 2003 (final)		
	Previous method (a)	New method (released figures;)	(b)/(a)
Credit	956	2,442	2.6
Debit	7,710	8,924	1.2
Travel (credit – debit)	– 6,754	– 6,482	-

100 million yen

	May 2003 (preliminary)		
	Previous method (a)	New method (released figures;)	(b)/(a)
Credit	283	644	2.3
Debit	1,666	1,875	1.1
Travel (credit – debit)	– 1,383	– 1,231	–

V. Conclusion

As explained above, data for travel credit and debit have become more accurate by incorporating new data such as yen brought into Japan by visitors. Plans for further improvement, however, should be pointed out. For example, yen brought into Japan per visitor as captured by the survey assumes a fixed value. The amount, however, may fluctuate in the long run depending on (1) visitors' incomes, (2) price levels in Japan, (3) foreign exchange rates, (4) prevalence of credit cards and so forth. In view of this, we plan to (1) conduct surveys on a regular basis and (2) verify and, if necessary, revise travel data. Moreover, studies will continue in order to establish a method for estimating travel that more accurately reflects consumption behavior of travelers, in order to refine BOP statistics.