

II-7-1 Telecommunications tariffs

(1) Domestic telecommunications tariffs

Charges for telecommunications within Japan continue to fall, especially for cellular and car phones.

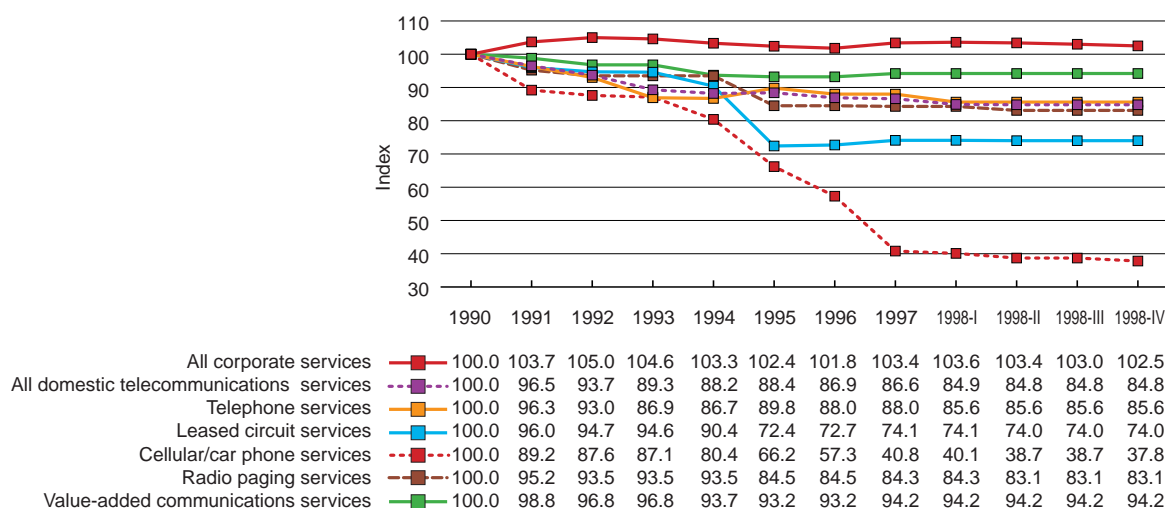
Taking the average Corporate Service Price Indexes (CSPI) for fiscal 1990, (compiled by the Bank of Japan), as the base value of 100, the price index for domestic telecommunications services in the last quarter of fiscal 1998 was 84.8, down 15.2 points from fiscal 1990. Compared with the average index of all corporate services, the price index for domestic telecommunications services has continued to drop for the past several years (Fig. 1).

Among all telecommunications services, the price index for cellular and car phones dropped significantly (Refer to Appendix 28).

Charges for domestic telephone and 64 kbps domestic leased circuits dropped dramatically after April 1985, when the Japanese telecommunications market was liberalized. Charges for phone calls between Tokyo and Osaka in fiscal 1998 dropped by about 84%, and charges for the use of leased circuits between the same areas dropped by about 87% compared with those charges in April 1985 (Fig. 2).

Domestic telecommunications charges were drastically reduced at a continuous pace in fiscal 1998 (Refer to Appendices 29 and 30).

Fig. 1 Trends in the Corporate Service Price Indexes, including for domestic telecommunications services (100 = average CSPI for 1990)

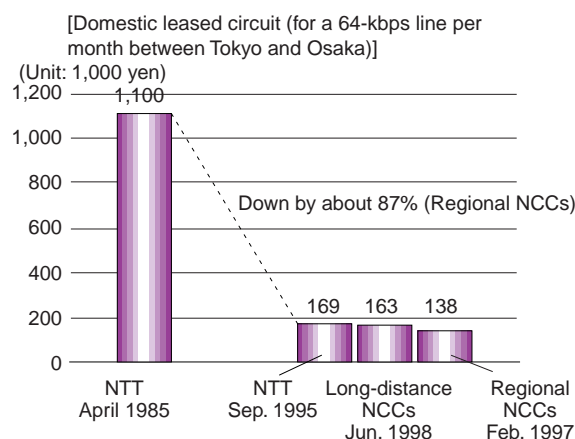
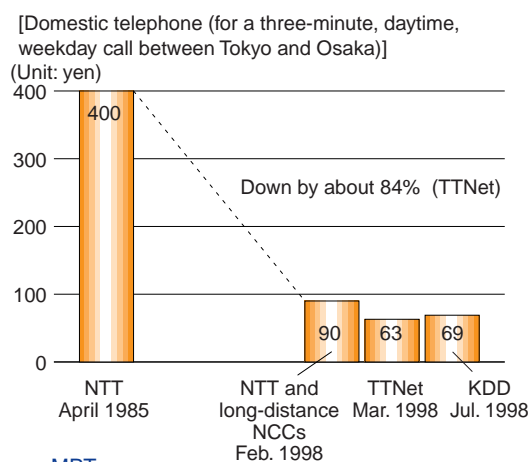


Notes: 1. I, II, III and IV indicate the quarter of 1998.

2. Value-added communications services include packet switching, circuit resale as well as e-mail and facsimile communications services.

Source: "Monthly Report on the Wholesale Price Indexes," the Bank of Japan

Fig. 2 Rate reductions for domestic telephone and leased circuit services



Source: MPT

(2) International telecommunications tariffs

International telecommunications charges have continuously decreased. In 1998, the price index for international telephone services dropped significantly.

Taking the average Corporate Service Price Indexes (CSPI) for fiscal 1990, (compiled by the Bank of Japan), as the base value of 100, the price index for international telecommunications services in the last quarter of 1998 was 74.4, down 25.6 points from 1990 (Fig. 1). As this figure shows, the price index for international telecommunications has continued to fall for the past several years compared with the average index of all corporate services (Fig. 1).

By type of service, the price index for international telephone services dropped significantly between the second and fourth quarters of 1998 (Refer to Appendix 31).

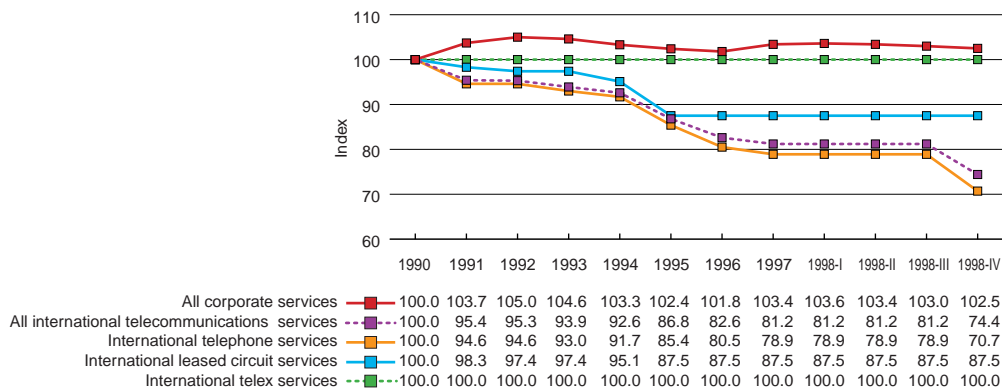
In addition, charges for international telephone and international leased circuits (64 kbps) dropped significantly after April 1985, when the Japanese

telecommunications market was liberalized.

In particular, charges for international telephone services have been reduced drastically since October 1998 due to new market entry by WorldCom Japan (WCJ) and DDI Corp. Users can now make international calls at almost the same charge level as Internet telephony services and international "Ko-Sen-Ko" services -- telephony and other telecommunications services made available through interconnection of international leased circuits with public switched telephone networks at both ends (Fig. 2).

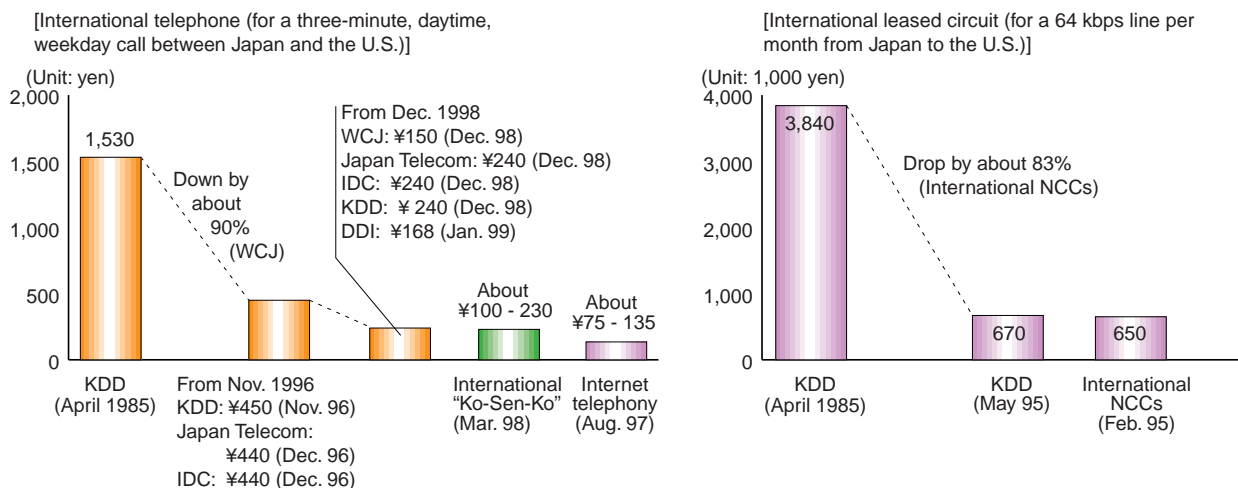
International telecommunications charges showed a continuous fall in fiscal 1998 (Refer to Appendix 32).

Fig. 1 Trends in the Corporate Service Price Indexes including for international telecommunications services (100 = average CSPI for 1990)



Note: I, II, III and IV indicate the quarter of each calendar year.
Source: "Monthly Report on the Wholesale Price Indexes," the Bank of Japan

Fig. 2 Rate reductions for international telephone and leased circuit services



Source: MPT

II-7-2 Comparison of telecommunications charges in Japan and foreign countries

(1) Domestic telephone charges

Initial subscription and basic monthly charges are higher in Tokyo, but local call charges are the lowest among five major cities.

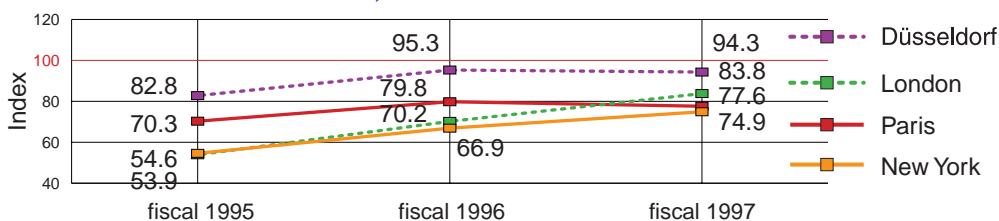
Using the OECD model (Refer to Endnote 13) to compare domestic telephone charges in Tokyo and four cities abroad (Düsseldorf, London, Paris and New York), it can be seen that in fiscal 1997, price levels in Tokyo for both home and business use were almost the same as those in Düsseldorf.

When comparing with three other cities -- New York, London and Paris -- the price level of Tokyo was still higher than those of the three cities although

the gaps have narrowed year by year (Figs. 1 and 2).

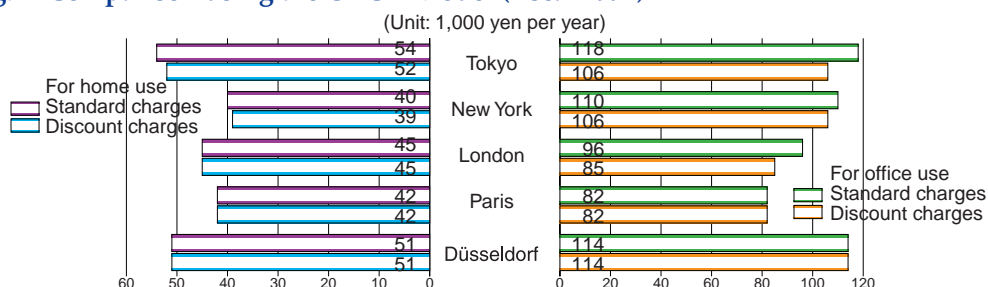
When charges for domestic home-use telephone services were compared, local call charges in Tokyo were revealed as the lowest among the five cities, but the initial charge for subscribing to a wired telephone line was 13 times higher than that of Paris, the lowest priced city. The basic monthly charge in Tokyo was about 1.5 times higher than that of Paris, again the lowest among the samples (Fig. 3).

Fig. 1 Comparison between home-use telephone call charges in Japan and abroad (Tokyo is set as the base value of 100)



Notes: 1. Comparison of standard charges using the OECD Model
2. Figures for fiscal 1995 are those of January 1996; figures for fiscal 1996 are those of March 1997 and figures for fiscal 1997 are those of February 1998.

Fig. 2 Comparison using the OECD Model (fiscal 1997)



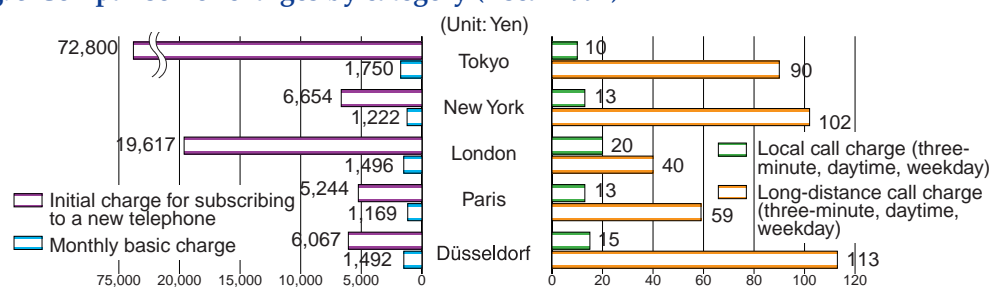
Notes: Discount packages

- (1) Tokyo: "Telechoice 10" and "Time Plus"
- (2) New York: "AT&T One Rate"
- (3) There were no discount packages in London, Paris and Düsseldorf that could be used for the calculation using the OECD Model.

Notes: Discount packages

- (1) Tokyo: "Telechoice 15" and "Time Plus" combined
- (2) New York: "small business advantage"
- (3) London: "Business Choice Level 1"
- (4) There were no discount packages in Paris and Düsseldorf that could be used for the calculation using the OECD Model.

Fig. 3 Comparison of charges by category (fiscal 1997)



Note: The basic charge for Tokyo referred to that for the third-grade home-use telephone office offered by NTT.

Note: 1. Local call charges

- (1) Local call rate for Tokyo indicated that of NTT's within an MA (massage area).
- (2) The size of local call areas differed by city.
- (3) The figure for New York indicated the charge per each local call.

Note: 2. Long-distance call charges

- (1) The figures for all five cities were for the longest distance calls.
- (2) The longest distance covered differed by country. In the U.S., flat rate systems have been introduced, in which the same charge is applied according to the call duration, regardless of call distance.

Source: MPT

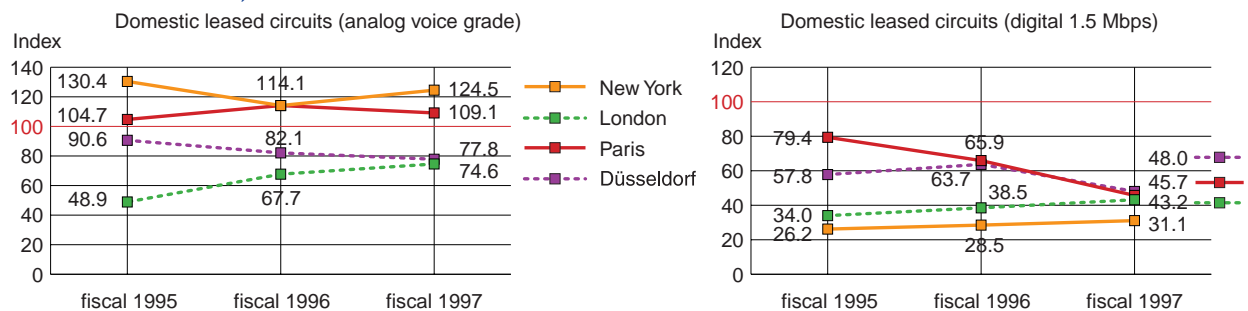
(2) Domestic leased circuit charges

Digital leased circuit charges in Tokyo are generally expensive, and the difference regarding 1.5-Mbps circuits has been widening.

According to the comparison made between domestic leased circuit charges in major world cities using the OECD model (Refer to Endnote 14), the level of charges for analog voice-grade circuits was highest in New York, while charges in Tokyo were average, at third highest.

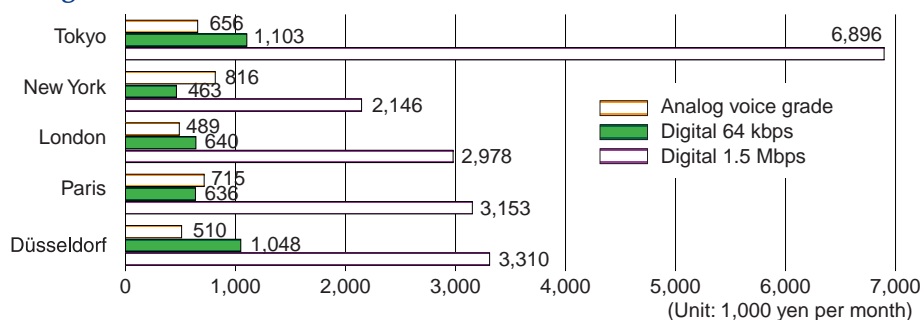
On the other hand, digital leased circuit charges in Tokyo for both 64 kbps and 1.5 Mbps lines were more expensive than those in other major foreign cities. In particular, charges in Tokyo for 1.5 Mbps services have been remarkably high since fiscal 1995, with the price gap growing wider (Figs. 1-3).

Fig. 1 Comparison of domestic leased circuit charges in Japan and abroad (Tokyo is set as the base value of 100.)



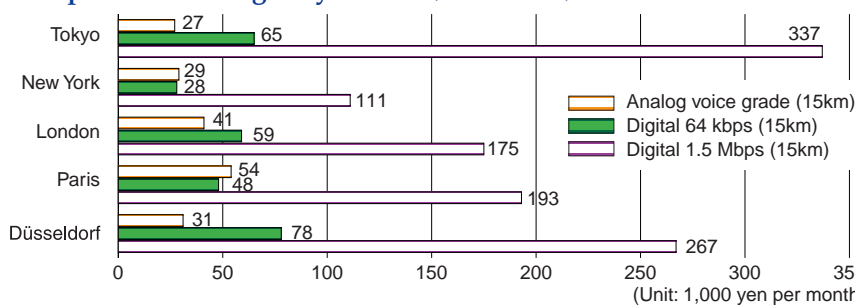
- Notes: 1. International comparison of standard charges using the OECD model
 2. Figures for fiscal 1995 are those of January 1996; figures for fiscal 1996 are those of March 1997 and figures for fiscal 1997 are those of February 1998.
 3. Service quality standards, such as for backup systems and fault repairs, may differ by year and by city.

Fig. 2 International comparison of domestic leased circuit charges using the OECD Model (fiscal 1997)



Note: The charges are those for one-year contracts, or for open-period contracts.

Fig. 3 Comparison of charges by service (fiscal 1997)



- Notes: 1. Analog voice-grade charge for Tokyo refers to NTT's standard leased circuit service using the 3.4-kHz frequency band.
 2. Digital 64-kbps and 1.5-Mbps charges for Tokyo refer to NTT's high-speed digital leased circuit service.
 3. Service quality standards, such as for backup systems and fault repairs, may differ by city.

Source: MPT

(3) Cellular and car phone charges

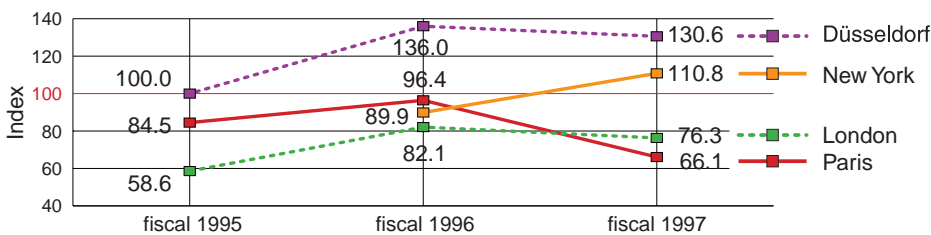
Cellular and car phone charges in Tokyo are average, while call charges are relatively cheap compared with those in other major cities.

In a comparison of prices in Tokyo, Düsseldorf, London, Paris and New York for cellular/car phone services using the Tokyo model (Refer to Endnote 15), in fiscal 1997 Düsseldorf was most expensive. Tokyo was ranked the third highest, an average level. In all the cities, (except New York, where the survey started in fiscal 1996), charges for these services rose between the fiscal years 1995 and 1996,

then began to fall (Figs. 1 and 2).

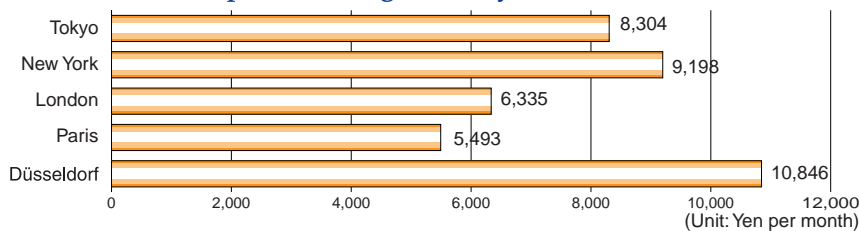
Looking separately at the various costs of using cellular/car phones, Tokyo ranked average among the cities as the third highest in the initial charge for subscribing to a cellular/car phone and the second highest in the monthly basic charge. With regard to call charges, Tokyo had the lowest fees compared with the four other cities (Fig. 3).

Fig. 1 Trends in digital cellular/car phone charges in Japan and abroad (Tokyo is set as the base value of 100.)



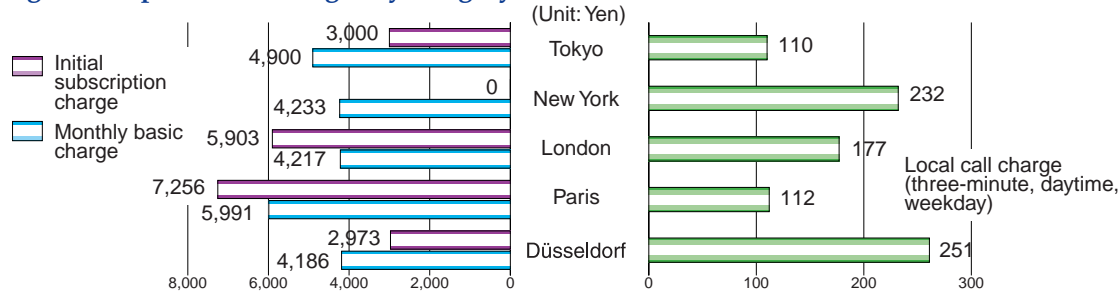
Notes: 1. Comparison using the Tokyo model
 2. Figures for fiscal 1995 are those of January 1996; figures for fiscal 1996 are those of March 1997 and figures for fiscal 1997 are those of February 1998.
 3. In New York, digital cellular and car phone services began in fiscal 1996.

Fig. 2 International comparison using the Tokyo Model (fiscal 1997)



Notes: 1. Tokyo figure refers to NTT DoCoMo's "Plan A" charge for 800-MHz digital system.
 2. New York figure refers to the "Digital Choice 60" charge.
 3. London figure refers to the charge of "Regular Caller Plus Inclusive."
 4. Paris figure refers to the "Evolution" charge.
 5. Düsseldorf figure refers to the charge of "Protel Basis."

Fig. 3 Comparison of charges by category (fiscal 1997)



Note: 1. Initial charge for subscribing to a mobile telephone
 (1) The charges for Tokyo, New York and London were those for the services used in the Tokyo Model. The figure for Paris indicates the "Itineris" (Affaire) charge and that for Düsseldorf shows the "Protel Standard" charge.
 (2) There was no initial subscription fee in New York, but some penalties were imposed on users who had canceled their contract in a short period of time.
 Note: 2. Monthly basic charge
 (1) Tokyo figure shows NTT DoCoMo's "Plan A" charge for 800-MHz digital system.
 (2) New York figure shows the "Digital Choice 60" charge, which included a 60-minute communications fee.
 (3) London figure indicates the "Regular Caller Plus" charge, which was bundled with 12.77-pound worth of communications hours.
 (4) Paris figure indicates the "Affaire" charge.
 (5) Düsseldorf figure indicates the "Protel Standard" charge.

Notes: 1. These communications fees were for a call made from a cellular/car phone to a fixed subscriber telephone.
 2. This graph is based on the same services used for the graph of the monthly basic charges.
 3. Figure for New York indicates the communications fee imposed per three-minute conversation after one used up the first 60 minutes included in the monthly basic charge.

Source: MPT

II-7-3 Effect of telecommunications tariff reductions

Telecommunications charges in Japan fell by 20.4% between 1985 and 1997.

According to the Corporate Service Price Indexes (CSPI) compiled by the Bank of Japan, telecommunications service charges in Japan fell by 20.4% between 1985 and 1997 (Refer to Endnote 16). The following is an analysis of how these lower charges contributed to a decrease in the overall prices for all industries in Japan, while pushing up real consumption (Refer to Endnote 17).

1. Price reductions each industry resulting from lower telecommunications charges

Decreased telecommunications charges can be a factor in pulling down the overall prices charged by other industries, since they allow businesses to reduce their costs. In Japan, the top 10 industries that saw a decrease in their prices due to lowered telecommunications charges between 1985 through

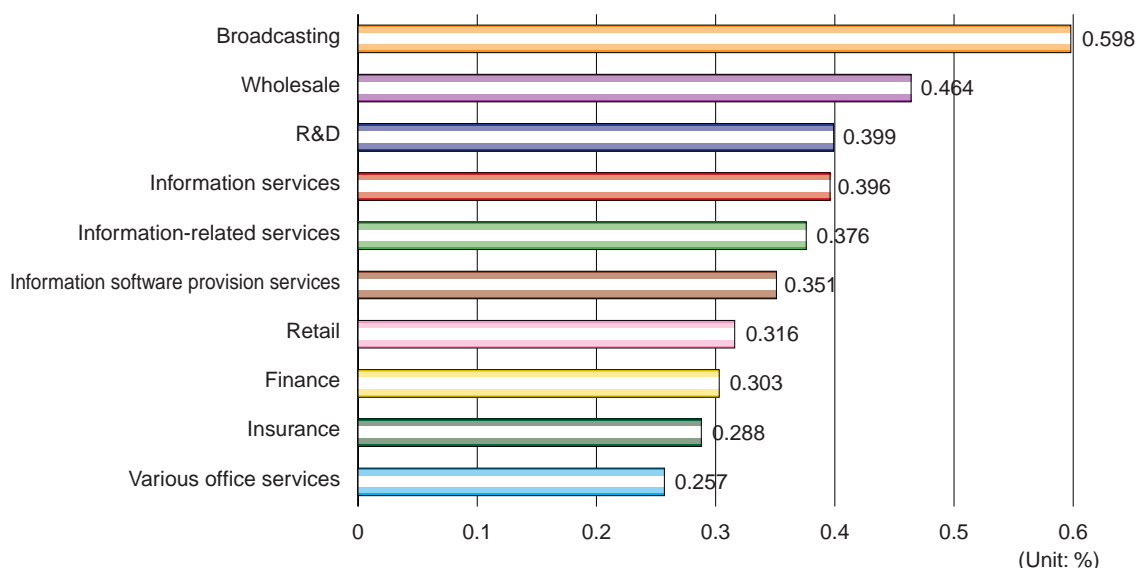
1997 include broadcasting, wholesale businesses and research and development (Fig.).

These results show how cheaper telecommunications can make a contribution to a reduction in prices by many industries, including those outside the info-communications sector.

2. Increased real consumption as a result of price reductions in all industries

Real consumption in Japan increased by 930 billion yen between 1985 through 1997, due to price reductions in all industries (Refer to Endnote 18). This in turn contributed to the expansion of real gross domestic expenditures (GDE). Of the real GDE growth rate of 2.64% posted between 1985 through 1997, 0.02% has been attributed to price reductions in all industries.

Fig. Rate of price reductions by industry due to decreased telecommunications charges



Sources: "Corporate Service Price Indexes," the Bank of Japan; "Input-Output Tables," Management and Coordination Agency; and "Input-Output Tables (linked tables)," MITI

II-7-4 Broadcasting receiving fees

Fees to receive public broadcasting in Japan are about the same as those in other industrialized countries.

Broadcasting receiving fees and subscription fees for terrestrial television and satellite broadcasting in Japan as of the end of March 1999 are shown in the Table.

Comparing the annual household receiving fees

in April 1998 for public terrestrial color television broadcasting in Japan, the U.K., France and Germany, that in Japan was at about the average level for all four countries (Fig.).

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Tariffs

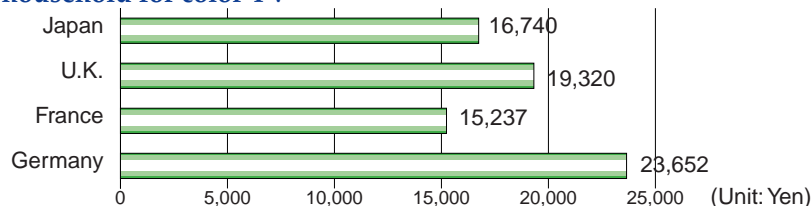
Table Broadcasting receiving and subscription fees (as of March 31, 1999)

Type of broadcasting		Supplier	Fee category	Monthly receiving or subscription fee	
Terrestrial broadcasting	TV broadcasting	NHK	Public broadcast receiving fee	¥1,395 (Note 1)	
		The University of the Air	Free of charge	--	
		127 commercial broadcasters	Free of charge	--	
	AM radio broadcasting	NHK and 47 commercial broadcasters	Free of charge	--	
	FM radio broadcasting	NHK, the University of the Air and 168 commercial broadcasters	Free of charge	--	
	FM teletext multiplex broadcasting	NHK and 44 commercial broadcasters	Subscription fee for some channels/programs	¥300 to ¥30,000 (Note 2)	
Satellite broadcasting	Short-wave radio broadcasting	NHK and 1 commercial broadcaster	Free of charge	--	
	BS broadcasting				
		TV broadcasting	NHK	Public broadcast receiving fee	¥2,340 (Note 1)
		TV sound multiplex broadcasting	1 program by 1 company	Subscription fee	¥600
		TV data multiplex broadcasting	1 program by 1 company	Free of charge	--
		Hi-Vision broadcasting	NHK and 7 commercial broadcasters (Note 3)	Free of charge	--
	CS analog broadcasting				
		PCM sound broadcasting	17 programs by 1 company	Subscription fee	¥600 to ¥800
		CS digital broadcasting			
			Standard TV broadcasting	306 programs by 115 companies (Note 4)	Subscription fee/Free of charge (Note 5)
VHF broadcasting			174 programs by 11 companies (Note 4)		
Data broadcasting	63 programs by 4 companies				

- Notes: 1. Regarding NHK, the fee for terrestrial broadcasting is that for color TV and the figure for BS broadcasting is that for satellite color TV. Both fees are collected through door-to-door visits.
 2. There is a variety of charging systems: some broadcasters charge fees upon purchase of a receiver; some charge initial subscription fees and some charge fees annually instead of monthly.
 3. Seven companies were granted a license for certain days in a week; one broadcaster was granted a license for a limited period.
 4. Including one University of the Air program.
 5. Some broadcasters provide programs free of charge.
 6. There is a variety of charging systems, including single program contracts, package program contracts and pay-per-view contracts.

Source: MPT

Fig. International comparison of annual public terrestrial broadcasting receiving fees per household for color TV



- Notes: 1. The figure for Japan was obtained through multiplying by 12 NHK's monthly receiving fee for color TV (door-to-door visit collection).
 2. The figure for the U.K. indicates the license fee; that for France indicates the TV terminal rental fee; and that for Germany indicates the broadcast receiving fee (for both radio and TV).
 3. There is no public broadcast receiving fee system in the U.S.
 4. Foreign currencies were converted into Japanese yen based on the 1997 yearly average exchange rates from the International Monetary Fund (IMF): 1 Pounds sterling = ¥198.15, 1 French franc = ¥20.73 and 1 German mark = ¥69.77

Source: NHK

II-7-5 Postal charges

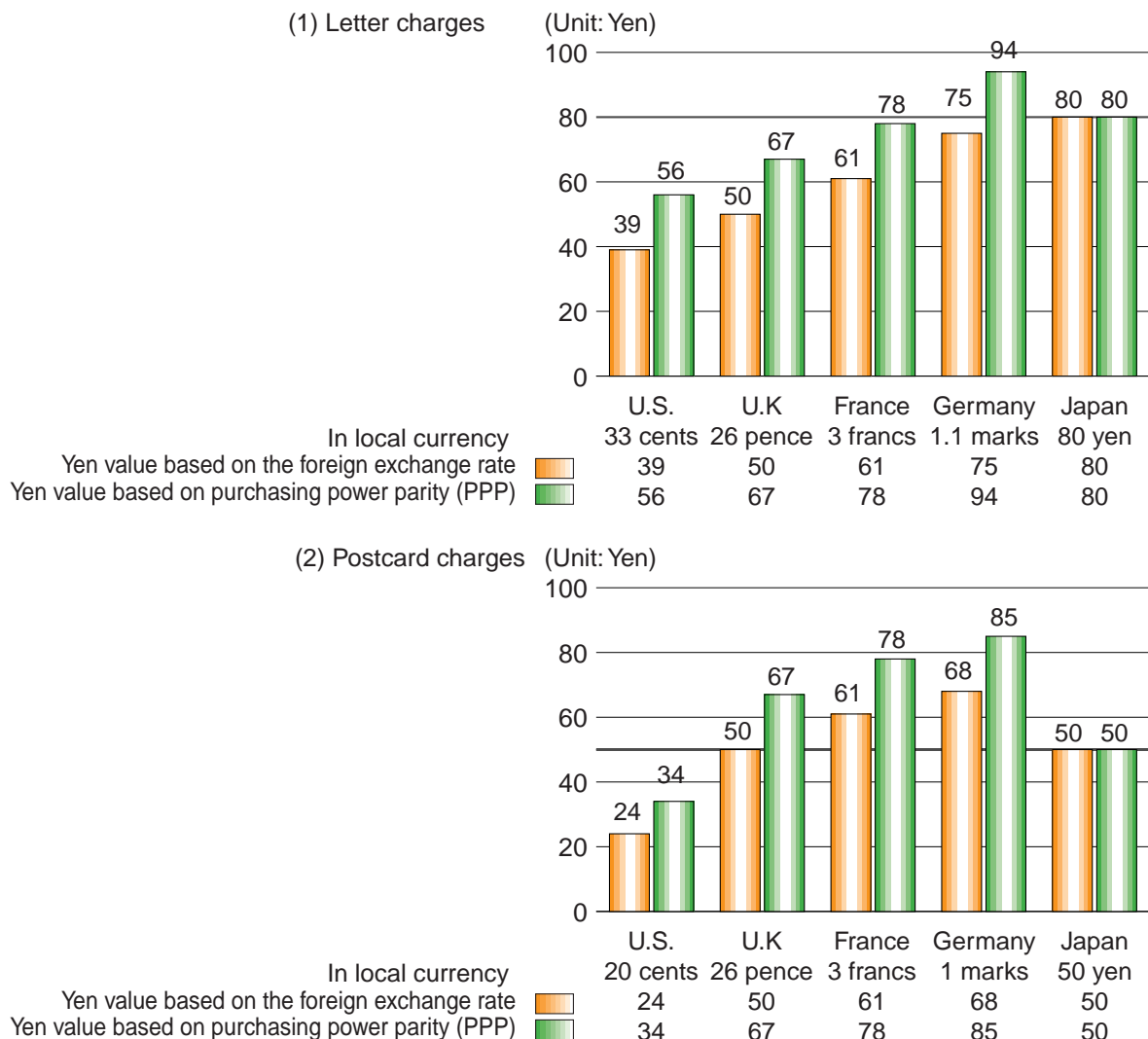
Postal charges for letters in Japan are higher, and for postcards lower, than in major foreign countries.

The charges for mailing letters in Japan in 1998 were higher than those in the U.K., France and Germany, (comparing yen values based on the relevant foreign exchange rates), while Japanese charges for postcards were lower.

Compared with the U.S., Japanese charges for

both letters and postcards were higher. However, delivery speeds differed between the two countries: in the U.S., mail was generally delivered in two or three days, while in Japan it was delivered in one or two days.

Fig. Postal rates in major countries (1998)



Notes: 1. Consumption tax is imposed on postal charges only in Japan.
 2. The foreign exchange rates used are Tokyo Mitsubishi Bank's TTS (telegraphic transfer selling) rates as of February 1999.
 3. The purchasing power parities (PPP) in Fig. are those for 1997.
 (Source: "Purchasing Power Parities for GDP" in the April 1998 edition of OECD Main Economic Indicators.)

	1 dollar (100 cents)	1 pound (100 pence)	1 franc	1 mark
Foreign exchange rate (yen)	117.69	194.19	20.21	67.79
Purchasing power parity (PPP)	169.00	256.84	25.96	85.35

Source: MPT