

## Analysis of Trends in Technology Imports (1995 Fiscal Year)

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## 1. Objectives

This survey aimed to summarize Japan's foreign technology import reports for FY 1995 based on the conclusion (revision) of technology import agreements made under the "Foreign Exchange and Foreign Trade Control Law", as well as analyzing Japan's recent technology import trends. (The technology forms targeted in this survey are "software" and "trademark".)

## 2. Survey Target

Technology imports surveyed 3,901

Period covered April 1, 1995–March 31, 1996

## 3. Outline of Survey Results

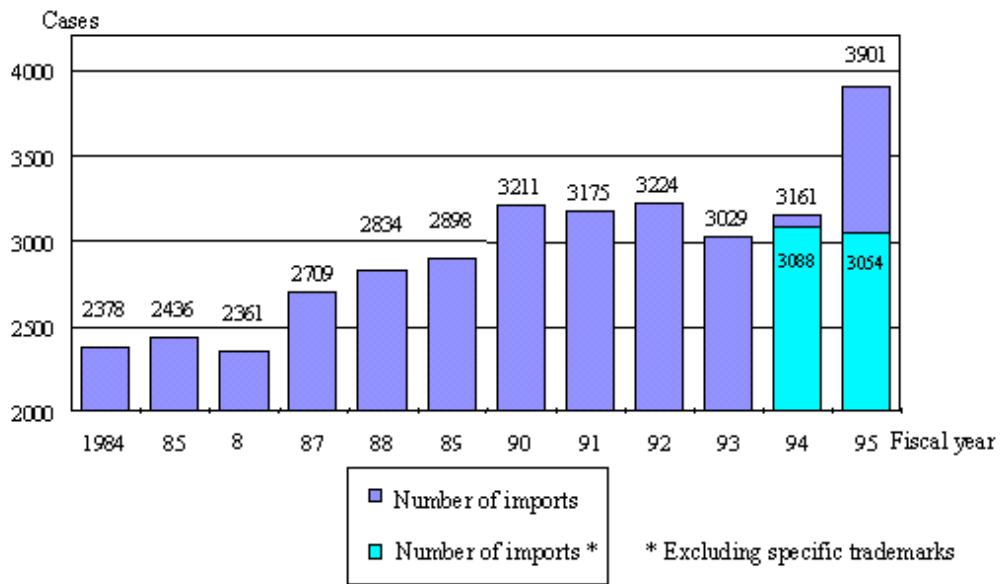
The following are some of the noteworthy trends observed in recent years and covered in this report:

- Technology imports from the U.S. are dominant, accounting for 60–70% of the total for both software and hardware technology.
- With software, technology imports made by companies capitalized at 10 billion yen or more are on the increase.
- Technology imports aimed at acquiring rights have risen with software and declined with hardware.
- The proportion of technology imports featuring an agreement term of "1 year to less than 5 years" is increasing.

## (1) Number of new technology imports

The number of new technology imports stands at 3,901, which represents an increase of 23% (740) over the previous fiscal year. However, this is solely due to some existing agreements on specific textile trademarks introduced from the U.K which were terminated in FY 1994 and counted as new agreements in the FY 1994–5 period. If this is excluded, the total number of new technology imports comes to 3,054, approximately the same level as the previous fiscal year (3,088).

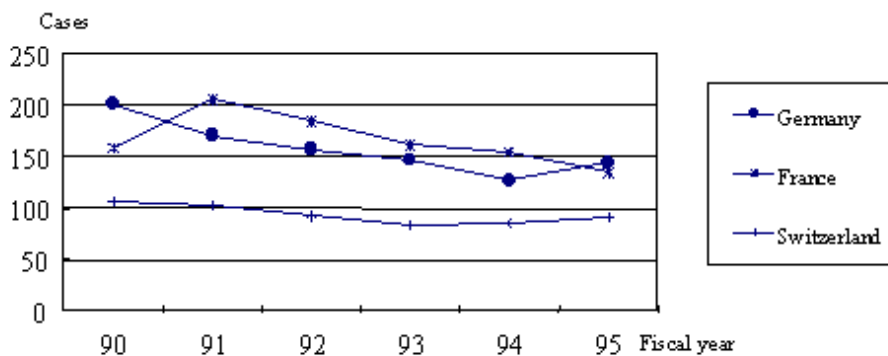
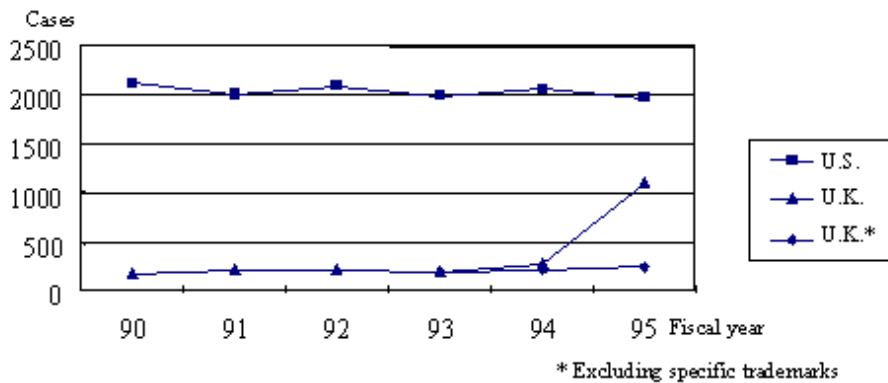
<Trends in Number of Technology Import Agreements>



(2) Number of technology imports by country

Technology imports from the U.S. have fallen by 3.8% to 1981 from the previous fiscal year's level (2,056), but still account for half the total. The second ranking country is the U.K., whose share tripled to 1,099 over the previous year's level (283), accounting for more than 30% of the total. However, this figure is inflated by the special factor mentioned in (1) above, and, if this is excluded, the U.K. share comes to 252 or 1.2 times the previous year's level (210).

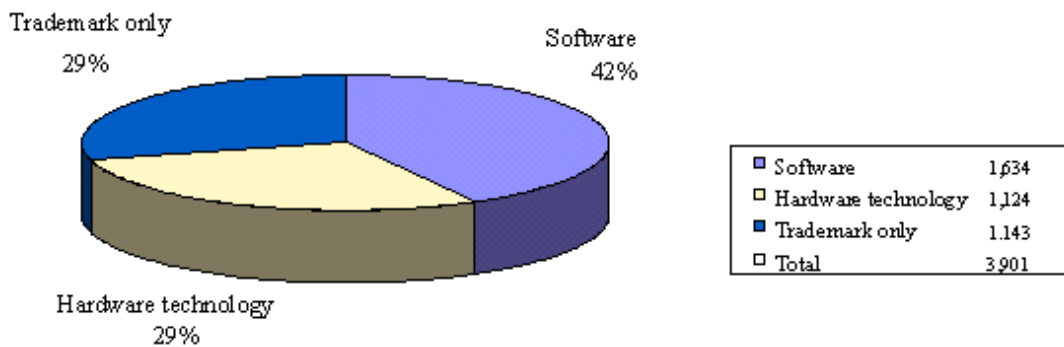
<Trends in Main Countries Shares of Technology Imports>



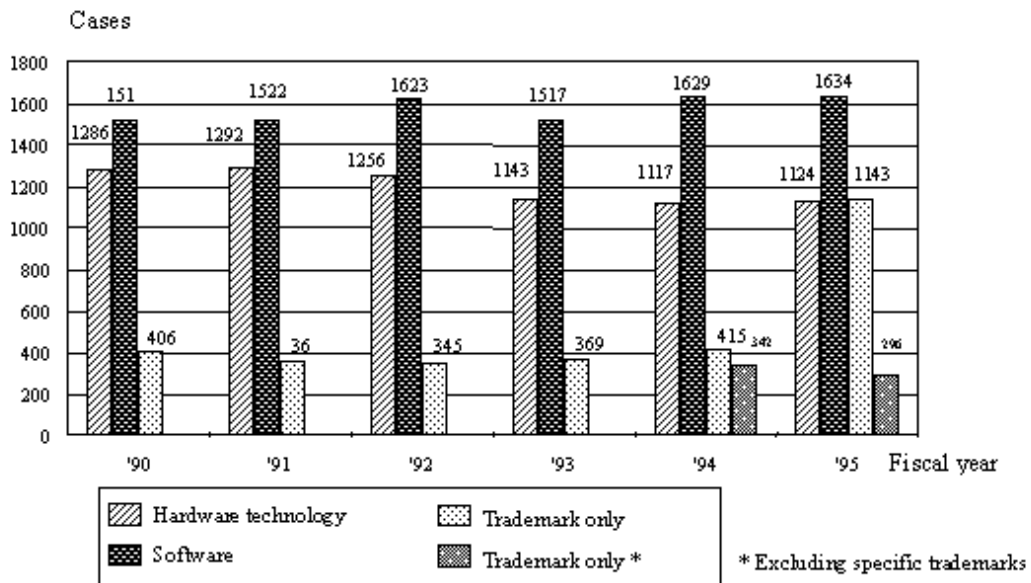
(3) Number of technology imports by technology form

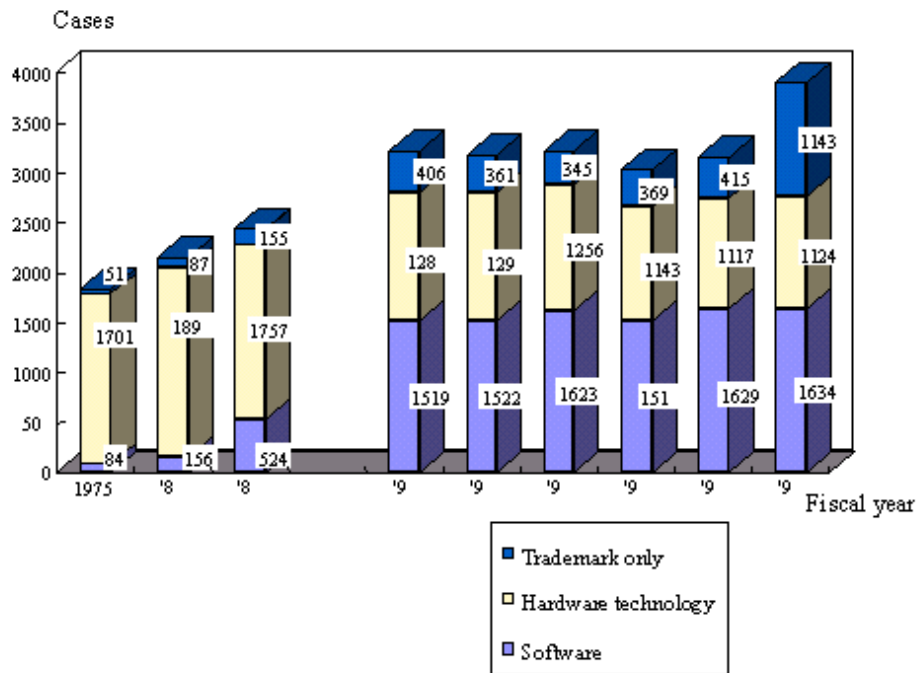
By technology form (hardware technology, software or trademark only), "software" accounts for 1,634 technology imports or about 40% of the total, and exhibits a modestly increasing trend over the last three years. On the other hand, "hardware technology" accounts for 1,124 technology imports or a little under 30% of the total, with little change occurring to the trend over the last three years.

<Breakdown of Technology Imports by Technology Form>



<Trends in Number of Imports>





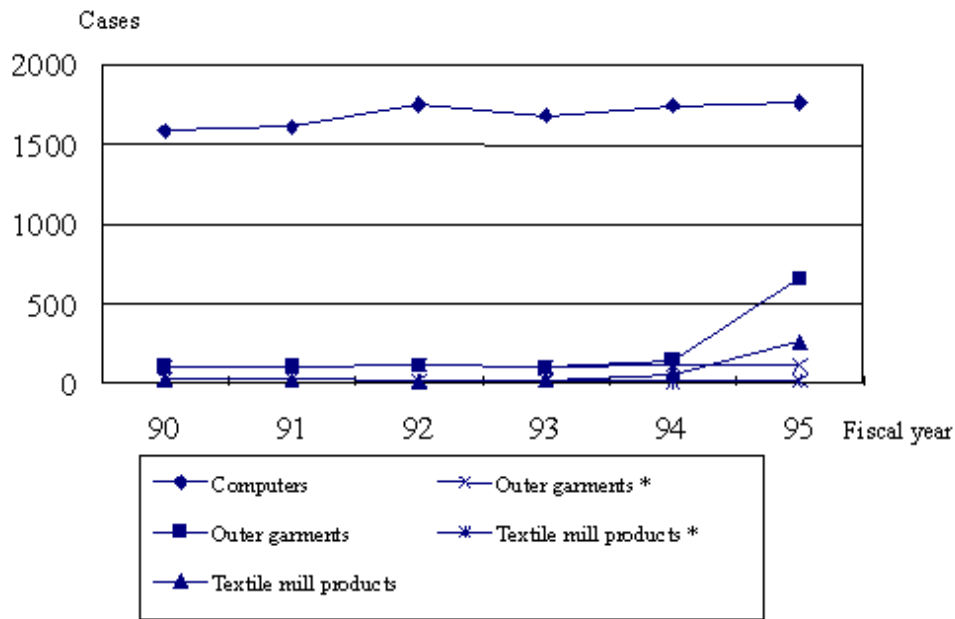
(4) Breakdown of technology imports by technological category

“Computers” account for 40% of the total, and the “computer”-led technology import trend continues. Notably, imports from the U.S. make up 70% of the total, and the U.S. share has stayed at this high level for some time. Most computer-related technology imports involve software.

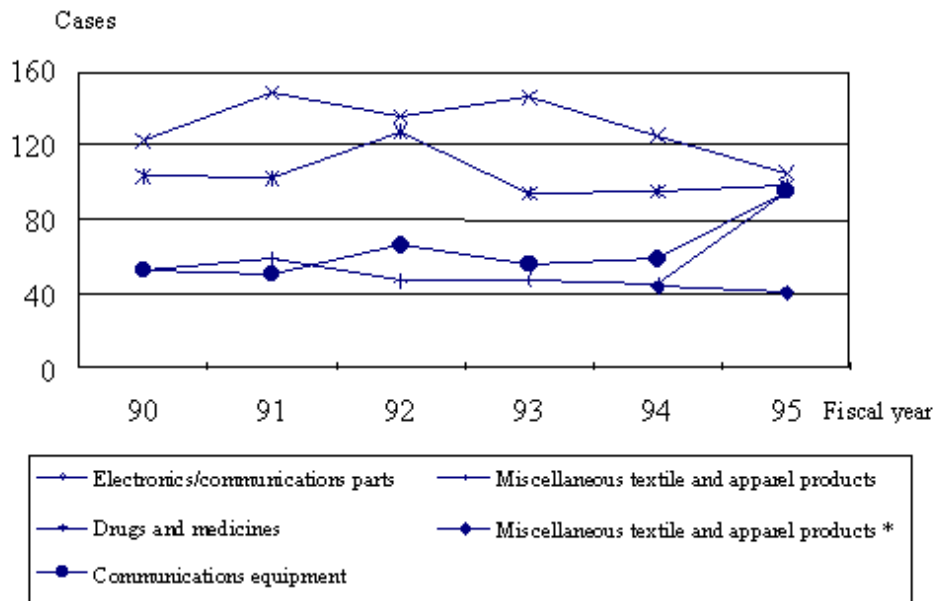
<Trends in Technology Imports in Top Seven Technological Categories>

Technological category (detailed classification)	1995	Excluding specific trademarks	Share	Percentage change to previous year's figure	1994	1990	1985
Computers	1764		45.2	1.4	1740	1588	597
Outer garments	658	113	16.9	344.6	148	106	135
Textile mill products	265	17	6.8	349.2	59	32	59
Electronics/communications parts	105		2.7	-16.0	25	122	101
Drugs and medicines	98		2.5	3.2	95	103	81
Communications equipment	95		2.4	61.0	59	53	30
Miscellaneous textile and apparel products	95	41	2.4	111.1	45	53	68

<Technology Imports in Major Technological Categories>



\* Excluding specific trademarks

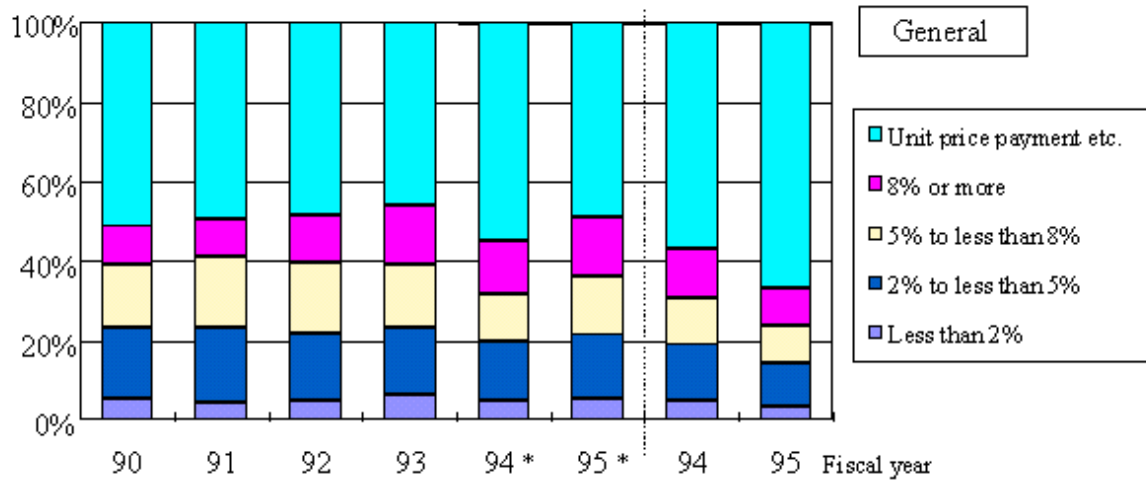


\* Excluding specific trademarks

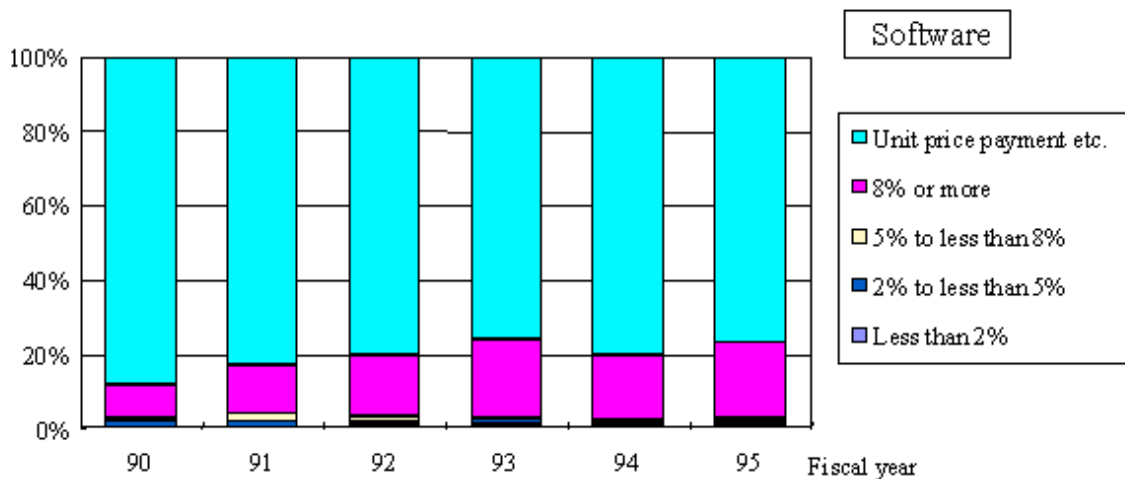
#### (5) Compensatory payment conditions by technological category

With electrical machinery, equipment and supplies, etc. account for 69%, followed by running royalties set at 8% or more (16%). This is attributable to the fact that unit price payment and high-rate running royalties are common with technology imports involving software, which accounts for almost 80% of the total in this category.

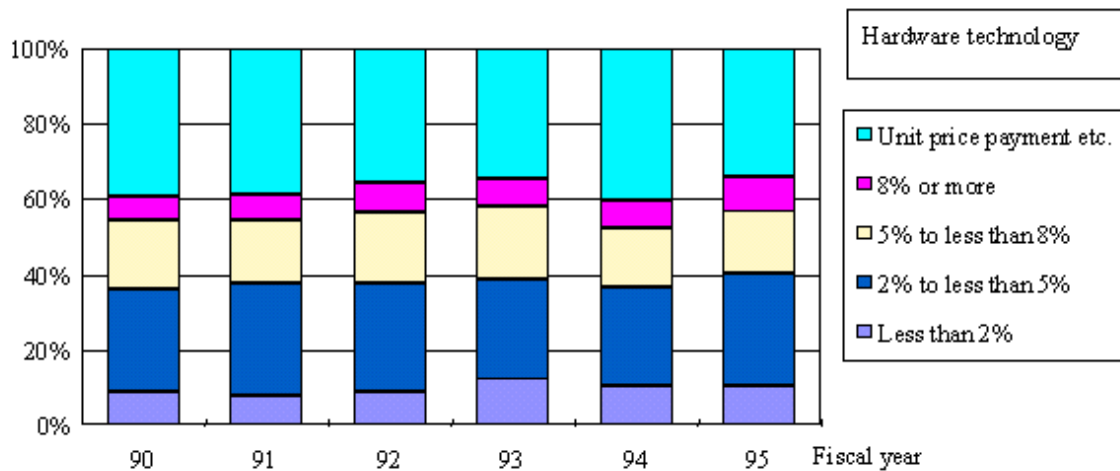
<Running Royalty Rates>



Note: Percentage ratio to the overall number of agreements featuring running royalties  
 \* Excluding specific trademarks



Note: Figures represent percentage ratios to the overall number of agreements featuring running royalties.



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<Running Royalties in Main Technological Categories>

Royalty rate	Electrical machinery, equipment and supplies	Apparel and other finished textile products	Textile mill products	General machinery	Industrial chemicals	Other manufactured products
Less than 2%	49 (11.4)	2 (-66.7)	2 (-)	9 (12.5)	5 (25.0)	3 (-40.0)
2% to less than 5%	67 (4.7)	32 (-30.4)	2 (-50.0)	36 (24.1)	37 (-9.8)	13 (-31.6)
5% to less than 8%	27 (8.0)	76 (26.7)	4 (-20.0)	22 (0.0)	35 (29.6)	24 (26.3)
8% or more	150 (2.0)	15 (-25.0)	1 (-66.7)	4 (-50.0)	28 (40.0)	9 (28.6)
Unit price payment etc. (Excluding specific trademarks)	649 (-20.0)	618 (1484.6)	250 (443.5)	51 (-3.8)	12 (-20.0)	11 (37.5)
Total	942 (-12.9)	743 (334.5)	259 (346.6)	122 (1.7)	117 (9.3)	60 (3.4)

Figures in brackets represent percentage ratios to previous years' figures.

(6) Agreement term

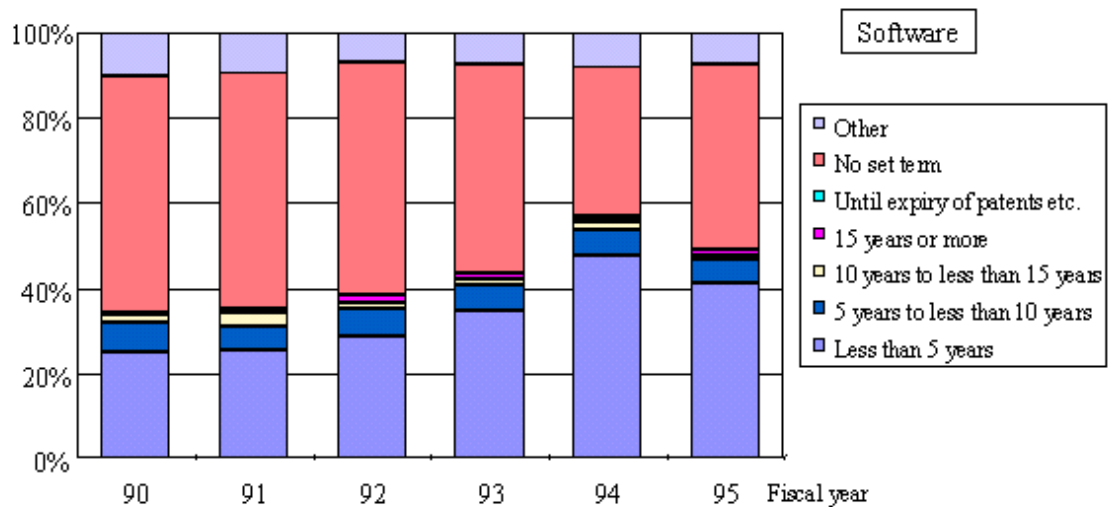
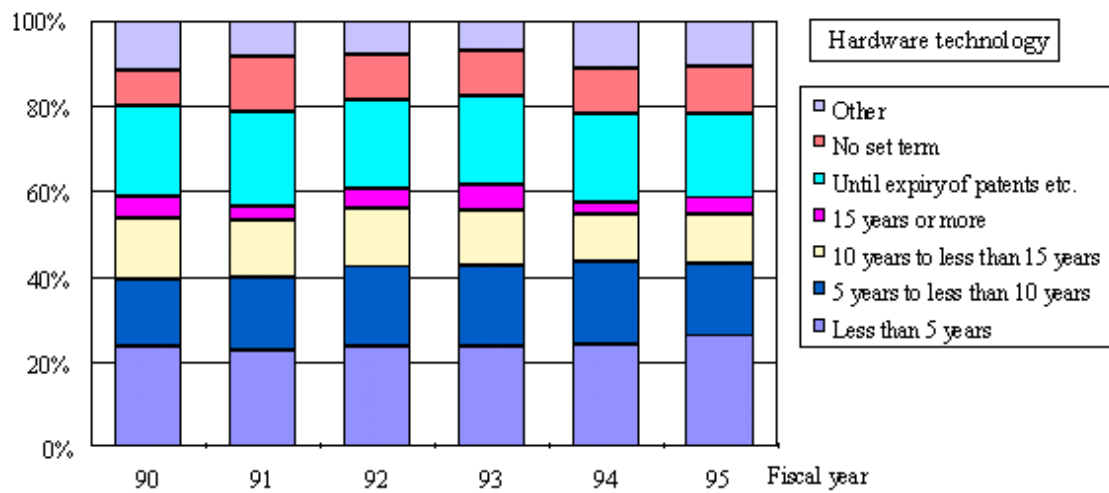
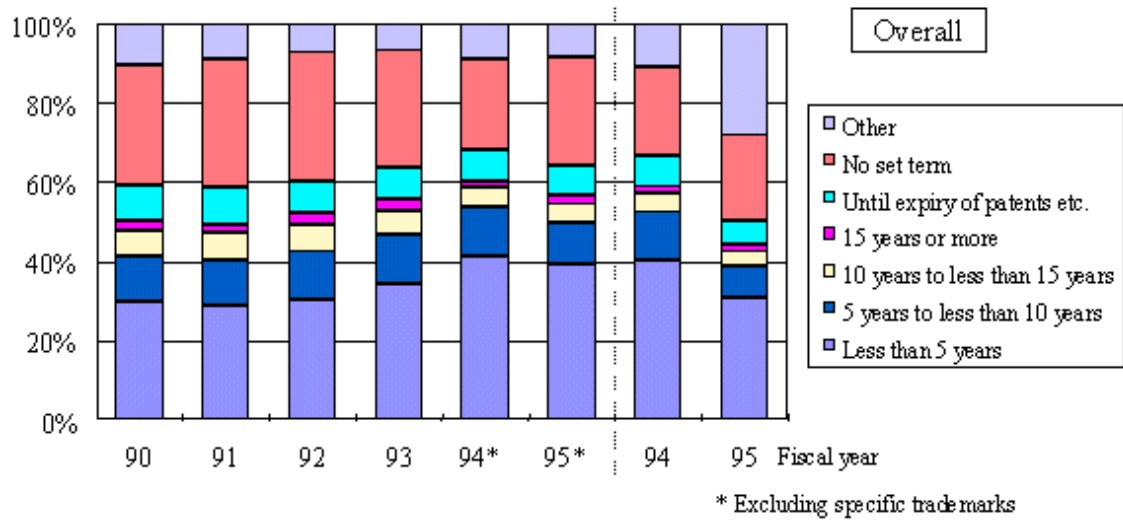
The most common range of agreement terms is "1 year to less than 5 years". It accounts for 28% of the total, and has experienced a 1.3-fold increase over the last five years.

A notable change has occurred to the trend in the share of the "1 year to less than 5 year" bracket such that it has remained more or less the same in the FY 1992-3 period, after registering a substantial increase over the preceding few years.

<Trends in Agreement Terms>

Breakdown of agreement terms	1995	Share (%)	Percentage change over previous year (%)	1994	1990
Less than 1 year	129	3.3	9.3	118	144
1 year to less than 5 years	1073	17.6	-7.6	1163	811
5 years to less than 10 years	308	7.9	-18.1	376	367
10 years to less than 15 years	149	3.8	-3.9	155	213
15 years or more	67	1.7	39.6	48	72
Until expiry of patents etc.	226	5.8	-5.8	240	289
No set term	845	21.7	18.8	711	978
Other	1102	28.2	214.9	350	337
Other (Excluding specific trademarks)	255	6.5	-7.9	277	337
Total	3901	100.0	23.4	3161	3211

<Trends in Agreement Terms>



(7) Breakdown of technology imports by capitalization level and industrial category



This year, the share of small companies capitalized at less than 50 million and dealing with apparel and other finished textile products or textile mill products experienced a dramatic rise, reaching close to 50% of the total, due to the special factor described in (1) above.

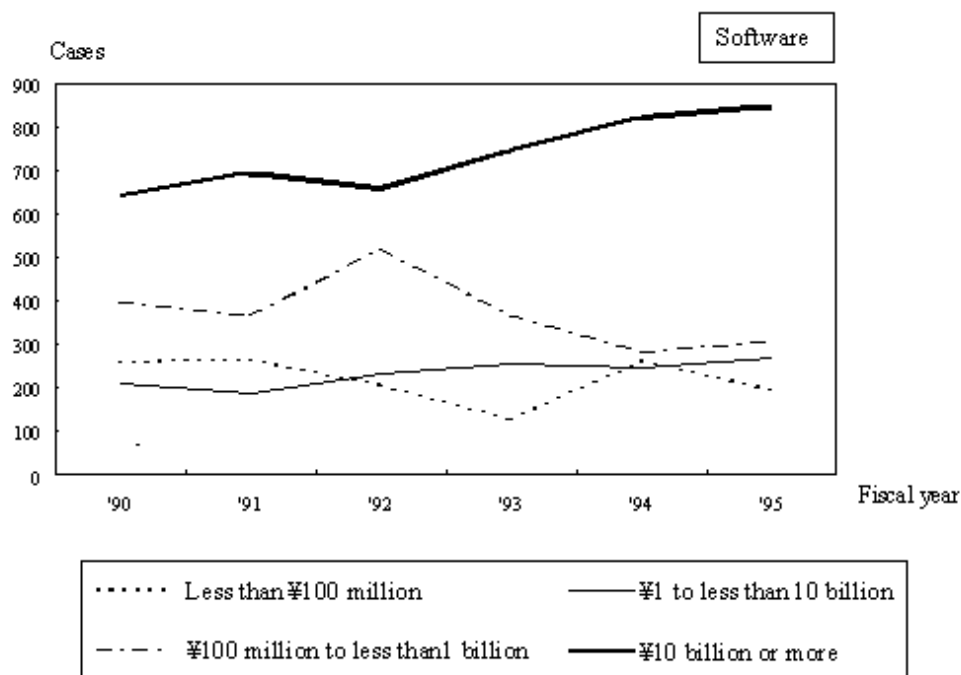
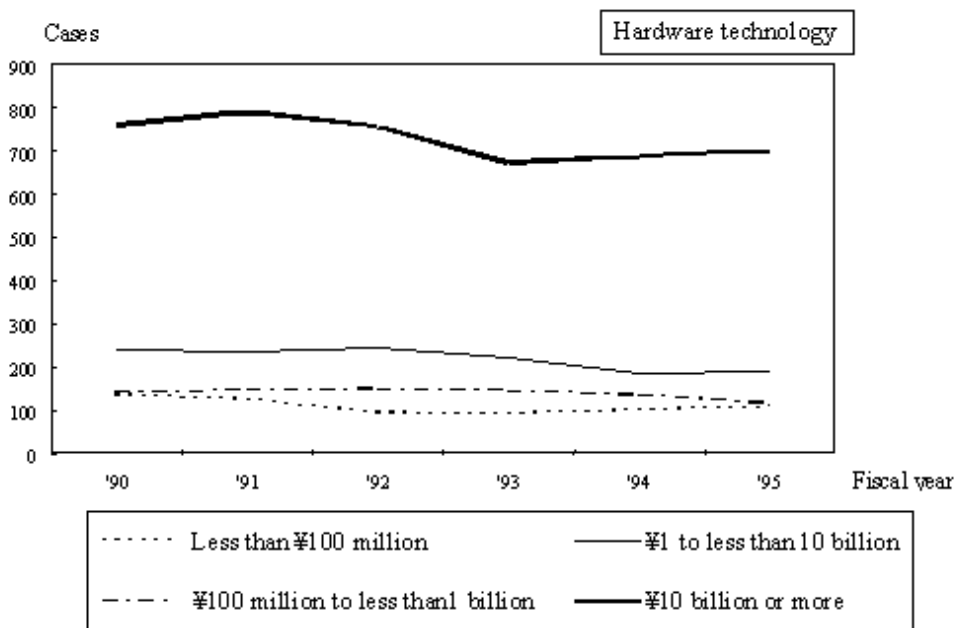
<Breakdown of Technology Imports by Capitalization Level and Industrial Category>

Classification	Manufacturing					Non-manufacturing	
	Textile mill product manufacturing	Textiles mill product manufacturing (excluding specific trademarks)	Communication equipment, electronic appliance and electric measuring instrument manufacturing	Electrical machinery, equipment and supplies manufacturing	Machinery manufacturing	Machinery and equipment wholesaling	Information services and research services
Less than ¥50 million	480	29	15	3	4	57	86
¥50 to less than 100 million	125	13	9	2	8	14	22
¥100 to less than 500 million	108	10	48	5	11	127	113
¥500 million to less than 1 billion	5	1	13	1	10	2	4
¥1 to less than 5 billion	56	13	27	5	17	92	91
¥5 to less than 10 billion	15	1	49	7	10	13	15
¥10 to less than 50 billion	43	20	104	32	101	15	18
¥50 billion or more	0	0	422	196	24	0	0
Unknown	1	0	0	0	0	0	1
Total	813	87	687	251	185	320	350

(8) Breakdown of technology imports by capitalization level and technology form

With hardware technology, the number of technology imports has not changed much over the last few years for all capitalization levels. With software, on the other hand, technology imports by companies capitalized at 10 billion yen or more have been on the rise over the last few years.

<Trends in Number of Technology Imports by Capitalization Level>



(9) Breakdown of acquisitions of rights by technology form

With software, the number of technology imports accompanying the acquisition of rights (exclusive rights or sublicense rights) has been increasing over the last few years, while, with hardware technology, it has been falling.

<Trends in Number of Rights Acquisitions>

