

# INTRODUCTION

## THE JAPANESE ECONOMY AND THE 2005 INPUT-OUTPUT TABLES

The economic status quo of a particular economy for a particular period of time (normally on a yearly duration basis) may be inferred from the input-output tables (I-O tables) by analyzing the inter-industrial good and service transactions as recorded under the matrix column. As an illustration, a straightforward overall picture of the 2005 I-O tables for Japan with 13 sectors is depicted in Table 1 and the economic structure as inferred from the aforesaid tables is shown in Chart 1.

The values of domestic production as well as the input components (for goods and services) of the individual sector may be inferred from the figures as appeared in the column sector of the I-O Tables. Moreover, the sales amount of domestic production as well as import of the respective good and service demanded may be inferred from the row sector of the tables.

To begin with, as deduced from the said tables, the Total supply of goods and services in 2005 is 1,044.50 trillion yen out of which the Domestic production amounted to 972.01 trillion yen (93.1% of the Total supply value) while the Imports valued at 72.48 trillion yen (6.9% of the Total supply value). As compared to 2000, the values of Total supply and Domestic production have increased by 3.1% and 1.4% respectively while the value of Imports has increased by 33.8% greatly.

For Domestic production, the production values for Transportation equipment and Iron and steel increased significantly due to a significant increase in exports to China and the United States, while production values for Medical service, health and social security and nursing care continued to increase due to the progression of the aging of society, etc. However, overall, the value of Domestic production increased only by a small margin due to (1) a decrease in the production value for Construction caused by a continued decline in public works projects, (2) a decrease in the production values for Information and communication electronics equipment and Electrical machinery due to the migration of production bases to other Asian regions such as China, and (3) a decrease in the production value for Personal services caused by declines in Hotels and Amusement and recreational services.

At the same time, there was an increase in the value of Imports as demonstrated by (1) a significant increase in the value of imports for Mining due to steep rises in the cost of crude oil starting at the end of 2004, (2) an increase in Petroleum and coal products caused by an increase in the value of imports for Chemical products and Naphtha that was in turn caused by an increase in the import value of Medicaments, etc. and (3) increases in the values of imports for Transportation equipment, General machinery, Electronic components and Electrical machinery. As a result, the ratio of the value of Imports as against the value of Total supply was 6.9% in 2005, indicating a 1.6-point increase as compared to the ratio of 5.3% in 2000.

When looking at the breakdown of the cost structure for Domestic production, Intermediate inputs of goods and services used in production such as raw materials and fuels accounted for 466.1406 trillion yen. The Ratio of intermediate input, which represents the ratio of Domestic production accounted for by Intermediate inputs, increased from 45.8% in 2000 to 48.0% in 2005 due to increases in the costs of crude oil and materials since 2004.

Gross value added, which is another structural element for Domestic consumption, amounted to 505.87 trillion yen, and the Ratio of gross value added, which represents the ratio accounted for

by gross value added in Domestic production, was 52.0%. In addition, Gross value added is broken down into Compensation of employees (51.2%), Operating surplus (19.7%) and Depreciation of fixed capital (19.1%). As compared to 2000 (Compensation of employees: 53.1%, Operating surplus: 18.6% and Depreciation of fixed capital (18.0%)), Compensation of employees decreased, while Operating surplus and Depreciation of fixed capital increased.

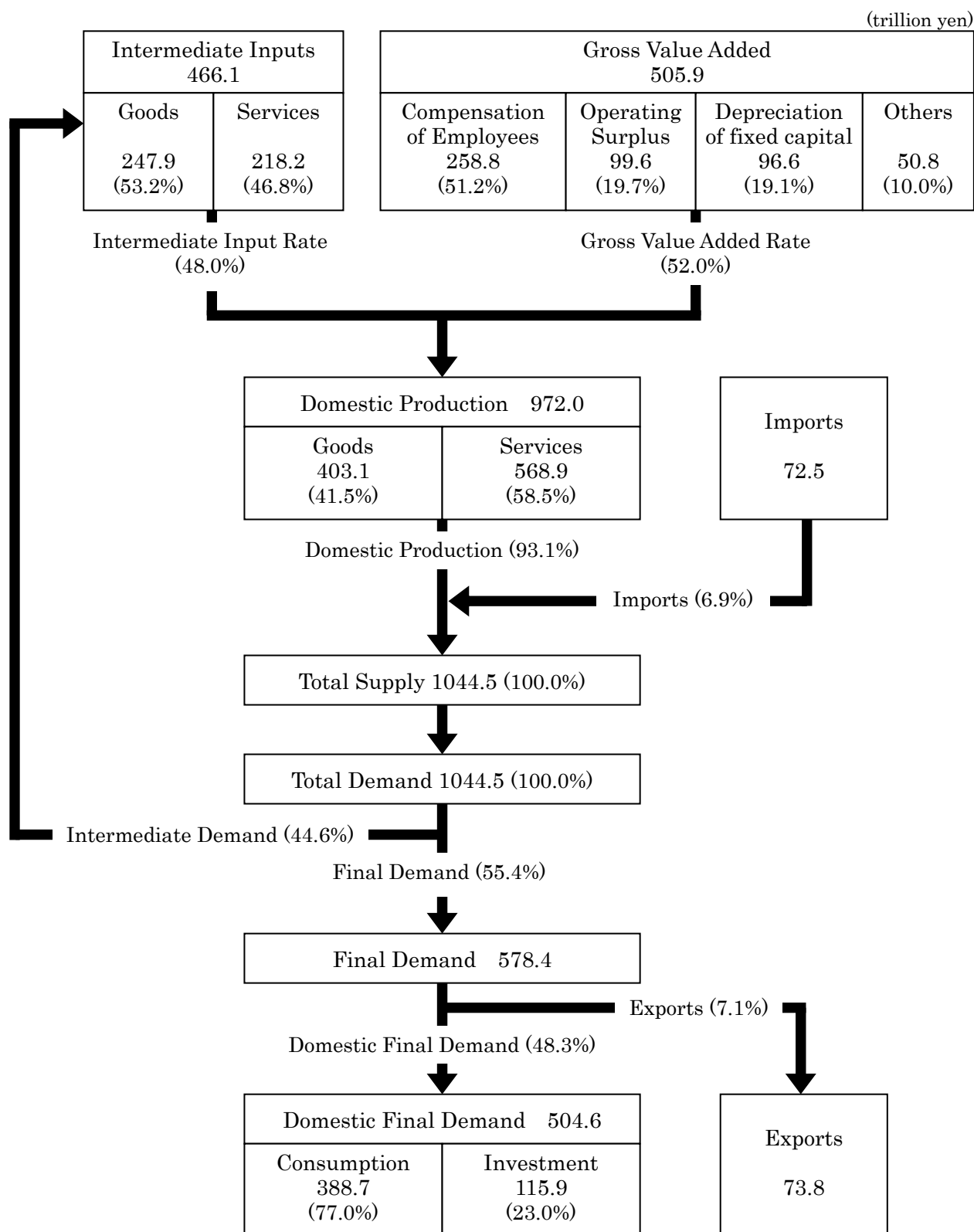
Furthermore, looking from the demand side, the total amount of goods and services demanded in 2005 is 1,044.50 trillion yen out of which the value of intermediate demand in production amounted to 466.1 trillion yen (44.6% of the Total demand value) and the value of Final demand totaled at 504.59 trillion yen (48.3% of the Total demand value), while the value of Exports totaled at 73.77 trillion yen (7.1% of the Total demand value).

As compared to 2000, the values for Total demand and Intermediate demand increased by 3.1% and 6.1%, respectively. Within the value for Final demand, Consumption increased by 0.7%, but Investments decreased significantly by 11.1% due to a decline in Gross domestic fixed capital formation (public) as a result of a decrease in public works projects. Exports continued increasing significantly by 28.3%, caused by vigorous demand from foreign countries such as China and the US. Consequently, the ratio of the value of Exports as part of the value of Total demand has increased by 1.4 points, from 5.7% in 2000 to 7.1% in 2005.

Notes:

1. The figures in the 2000 and 1995 tables are nominal values which are rearranged according to sector classifications in the 2005 table.
2. As there have conceptual and methodological differences for estimation among 1995, 2000 and 2005 tables, it is difficult to compare three tables in the strict sense.

Chart 1. Flow of Goods and Services According to the 2005 Input-Output Tables



Notes:

- 1: 'Goods' refers to sector 01 to 20 and 33 of the 34 sector classification, while 'Services' refers to sector 21 to 32 and 34.
- 2: 'Consumption' refers to sector 37, 38 and 39, while 'Investment' refers to sector 40, 41 and 42.
- 3: Component figures may not add up to the total, because of rounding.

Table 1. Input-Output Table Valued at Producers' Prices (13 Sectors)

		Intermediate demand											
		1	2	3	4	5	6	7	8	9	10	11	12
Intermediate Inputs	01 Agriculture, forestry and fishery	16430	5	77982	879	0	93	0	1	19	0	21	13078
	02 Mining	6	30	126381	5027	33070	0	0	0	1	0	4	54
	03 Manufacturing	25636	697	1324270	179675	19302	34959	13057	1386	67814	27466	28788	260366
	04 Construction	657	65	11980	1439	12779	6517	1640	30477	5058	2334	5882	12369
	05 Electricity, gas and water supply	1128	390	55742	4049	16761	20399	2460	2198	9684	4802	12653	51779
	06 Commerce	5434	260	174323	41233	5529	18261	2528	723	16652	7145	5815	89560
	07 Finance and insurance	2263	700	38440	9378	7101	57076	44789	37985	22202	6362	1263	44065
	08 Real estate	45	78	6207	1604	1800	28797	5698	3780	7494	8976	363	17452
	09 Transport	6332	2760	84042	33434	7877	54584	8197	1509	59196	11067	11957	42615
	10 Information and communications	372	113	24856	7571	5968	42238	23287	1379	6050	47636	13387	93112
	11 Public administration	0	0	0	0	0	0	0	0	0	0	0	0
	12 Services	2039	557	210581	51278	26357	65224	48095	14576	67910	67514	21199	153066
	13 Activities not elsewhere classified	1689	91	9837	4877	1164	6481	1100	2358	2696	4790	156	11063
	Sub-total		62032	5746	2144640	340445	137708	334630	150851	96373	264774	188090	101489
Gross Value Added	Consumption expenditure outside households	661	516	43132	9584	4625	23861	10799	1818	8546	22614	5449	36244
	Compensation of employees	13689	1862	469015	223097	47132	420688	115771	21292	147416	123674	161814	841658
	Operating surplus	37550	486	142065	6242	23325	186764	85589	290078	27337	47685	0	161136
	Depreciation of fixed capital	13275	830	137634	34076	43474	59474	44957	216488	39333	61340	115561	195650
	Indirect taxes	5726	665	137096	21949	16161	38062	19015	36772	21825	16033	1066	60495
	(Less) Current subsidies	-1387	-20	-2874	-3019	-2588	-734	-11114	-761	-1787	-77	0	-10698
	Sub-total		69514	4338	926069	291929	132129	728115	265017	565686	242670	271270	283890
Domestic production		131546	10084	3070709	632373	269836	1062745	415868	662059	507444	459360	385379	2073064
(Ref.)	Net domestic product at factor cost	51239	2348	611080	229338	70457	607452	201360	311370	174752	171360	161814	1002794
	Gross domestic product	68852	3822	882936	282345	127504	704254	254218	563868	234124	248656	278441	1248241



Table 2. Input-Output Table Valued at Purchasers' Prices (13 Sectors)

		Intermediate demand											
		1	2	3	4	5	6	7	8	9	10	11	12
Intermediate Inputs	01 Agriculture, forestry and fishery	17280	6	95874	1483	0	163	0	1	30	0	34	20988
	02 Mining	12	42	135562	7859	38216	0	0	0	1	0	8	64
	03 Manufacturing	32988	965	1520555	233027	23357	45845	15544	2092	85841	35004	34284	348707
	04 Construction	657	65	11980	1439	12779	6517	1640	30477	5058	2334	5882	12369
	05 Electricity, gas and water supply	1128	390	55742	4049	16761	20399	2460	2198	9684	4802	12653	51779
	06 Commerce	0	0	0	0	0	7046	0	0	0	0	0	0
	07 Finance and insurance	2263	700	38440	9378	7101	57076	44789	37985	22202	6362	1263	44065
	08 Real estate	45	78	6207	1604	1800	28797	5698	3780	7494	8976	363	17452
	09 Transport	3458	2717	32405	17545	4046	52396	7568	1402	57346	9183	10937	30086
	10 Information and communications	398	130	27026	7690	6076	44400	23909	1399	6395	48891	14702	98188
	11 Public administration	0	0	0	0	0	0	0	0	0	0	0	0
	12 Services	2039	557	210581	51278	26357	65224	48095	14576	67910	67538	21201	153329
	13 Activities not elsewhere classified	1764	95	10269	5093	1215	6767	1149	2462	2815	5001	162	11552
	Sub-total		62032	5746	2144640	340445	137708	334630	150851	96373	264774	188090	101489
Gross Value Added	Consumption expenditure outside households	661	516	43132	9584	4625	23861	10799	1818	8546	22614	5449	36244
	Compensation of employees	13689	1862	469015	223097	47132	420688	115771	21292	147416	123674	161814	841658
	Operating surplus	37550	486	142065	6242	23325	186764	85589	290078	27337	47685	0	161136
	Depreciation of fixed capital	13275	830	137634	34076	43474	59474	44957	216488	39333	61340	115561	195650
	Indirect taxes	5726	665	137096	21949	16161	38062	19015	36772	21825	16033	1066	60495
	(Less) Current subsidies	-1387	-20	-2874	-3019	-2588	-734	-11114	-761	-1787	-77	0	-10698
	Sub-total		69514	4338	926069	291929	132129	728115	265017	565686	242670	271270	283890
Domestic production		131546	10084	3070709	632373	269836	1062745	415868	662059	507444	459360	385379	2073064

(unit : 100 million Yen)

		Final demand											
13	Sub-Total	a	b	c	d	e	f	Sub-total	g	h	i	j	k
0	135858	1558	61371	0	1978	7305	854	73066	208925	-22418	-46253	-8708	131546
18	181781	-71	-77	0	-84	-662	360	-533	181248	-153602	-5447	-12115	10084
4931	2383139	46285	1010235	3401	479714	14166	651721	2205522	4588661	-440352	-960058	-117543	3070709
0	91197	0	0	0	541176	0	0	541176	632373	0	0	0	632373
747	182791	79	80208	6345	0	0	444	87075	269866	-30	0	0	269836
0	7046	0	7490	0	2483	0	7473	17445	24491	-7046	1045300	0	1062745
23270	294894	3	119417	0	0	0	6546	125965	420860	-4992	0	0	415868
133	82426	0	579084	371	0	0	193	579648	662074	-15	0	0	662059
1625	230713	3810	122654	-784	0	0	45747	171427	402140	-36673	0	141977	507444
961	280165	2783	128313	406	84284	-115	3424	219095	499259	-7141	-30024	-2735	459360
11097	11097	0	7866	366416	0	0	0	374282	385379	0	0	0	385379
3268	731953	113579	691901	534260	28466	0	20437	1388643	2120596	-45209	-2231	-92	2073064
0	48346	0	271	0	0	0	489	760	49106	-7353	-1288	-784	39680
46049	4661406	168027	2808733	910416	1138016	20694	737687	5783572	10444978	-724831	0	0	9720146
177	168027	Column Codes are:											
1068	2588175	a : Consumption expenditure outside households											
		b : Consumption expenditure (private)											
-12410	995846	c : Consumption expenditure of general government											
		d : Gross domestic fixed capital formation											
4356	966448	e : Increase in stocks											
		f : Exports											
447	375311	g : Total demand											
		h : (Less) Imports											
		i : (Less) Trade margin											
-6	-35067	j : (Less) Transportation fee											
		k : Domestic production											
-6369	5058741	Notes:											
		1. Component figures may not add up the total because of rounding.											
39680	9720146	2. Treatment of consumption tax is the same as Table Valued at Producers' Price.											

Table 3. Sector Classification

13 Sector Classification	34 Sector Classification
1 Agriculture, forestry and fishery	1 Agriculture, forestry and fishery
2 Mining	2 Mining
3 Manufacturing	3 Beverages and Foods 4 Textile products 5 Pulp, paper and wooden products 6 Chemical products 7 Petroleum and coal products 8 Ceramic, stone and clay products 9 Iron and steel 10 Non-ferrous metals 11 Metal products 12 General machinery 13 Electrical machinery 14 Information and communication electronics equipment 15 Electronic parts 16 Transportation equipment 17 Precision instruments 18 Miscellaneous manufacturing products 33 Office supplies
4 Construction	19 Construction
5 Electricity, gas and water supply	20 Electricity, gas and heat supply 21 Water supply and waste disposal business
6 Commerce	22 Commerce
7 Finance and insurance	23 Finance and insurance
8 Real estate	24 Real estate
9 Transport	25 Transport
10 Information and communications	26 Information and communications
11 Public administration	27 Public administration
12 Services	28 Education and research 29 Medical service, health, social security and nursing care 30 Other public services 31 Business services 32 Personal services
13 Activities not elsewhere classified	34 Activities not elsewhere classified