

Overview of Japan's Economic Structure in 2012

1. Japan's economic structure in 2012 (market valuation)

The following are the characteristics of Japan's economic structure in 2012 as viewed in the 2012 Simple Updated Input-Output Table (across 53 sectors), which was constructed based on 2012 price evaluations (or market valuations; hereafter, they are referred to as "nominal values"):

(1) Gross supply and gross demand

The value of gross supply (which matches gross demand) in 2012 amounted to 992.9 trillion yen, of which domestic production, representing the supply side, accounted for 907.0 trillion yen, with its composition ratio relative to gross supply at 91.3%, and imports accounted for 85.9 trillion yen, with its composition ratio at 8.7%.

On the demand side, intermediate demand accounted for 443.9 trillion yen, with its composition ratio relative to gross demand at 44.7%, domestic final demand accounted for 478.1 trillion yen, with its composition ratio at 48.1%, and exports accounted for 70.9 trillion yen, with its composition ratio at 7.1%.

1) Comparisons with 2011

The composition ratio of domestic production in relation to gross supply decreased, while that of imports increased.

The composition ratio of intermediate demand in relation to gross demand increased, while that of both domestic final demand and exports decreased (Table 1-1).

2) Comparisons with 2005

The composition ratio of domestic production in relation to gross supply decreased, while that of imports increased.

The composition ratio of domestic final demand in relation to gross demand increased, while that of both intermediate demand and exports decreased (Table 1-1).

(2) Domestic final demand

On the demand side, dividing domestic final demand into consumption and investment shows that consumption accounted for 374.7 trillion yen, with its composition ratio relative to gross demand at 37.7%, and investment accounted for 103.4 trillion yen, with its composition ratio at 10.4%.

1) Comparisons with 2011

The composition ratio of consumption in relation to gross demand decreased, while that of investments increased (Table 1-1).

2) Comparisons with 2005

The composition ratio of consumption in relation to gross demand increased, while that of investments decreased (Table 1-1).

(3) Intermediate inputs and gross value added

Dividing domestic production into intermediate inputs and gross value added shows that intermediate inputs accounted for 443.9 trillion yen, with its composition ratio relative to domestic production at 48.9%, and gross

value added accounted for 463.1 trillion yen, with its composition ratio at 51.1%.

1) Comparisons with 2011

The composition ratio of intermediate inputs in relation to domestic production decreased, while that of gross value added increased (Table 1-1).

2) Comparisons with 2005

The composition ratio of intermediate inputs in relation to domestic production increased, while that of gross value added decreased (Table 1-1).

Table 1-1. Flow of goods and services as viewed in the 2012 Simple Updated Input-Output Table
(market value evaluation table)

Major item (Market evaluation)	Value by calendar year (billion yen)			Growth rate (%)			Degree of contribution to growth rate compared to 2011	Composition ratio (%)			Difference in composition ratio compared to 2005		Difference in composition ratio compared to 2011
	2005	2011	2012	2011 vs. 2005	2012 vs. 2005	2012 vs. 2011		2005	2011	2012	2011	2012	
	Basic table	Updated table	Simple table										2012
Domestic production	947,702	899,568	906,966	-5.1	-4.3	0.8	0.8	92.9	91.6	91.3	-1.3	-1.5	-0.2
Intermediate input								48.1	49.0	48.9	0.9	0.8	-0.1
= Intermediate demand	456,180	441,197	443,903	-3.3	-2.7	0.6	0.3	44.7	44.9	44.7	0.2	-0.0	-0.2
Gross value added	491,522	458,371	463,063	-6.7	-5.8	1.0	0.5	51.9	51.0	51.1	-0.9	-0.8	0.1
Total final demand	564,006	541,194	548,947	-4.0	-2.7	1.4	0.8	55.3	55.1	55.3	-0.2	0.0	0.2
Domestic final demand	490,237	468,760	478,056	-4.4	-2.5	2.0	0.9	48.1	47.7	48.1	-0.3	0.1	0.4
Consumption	374,366	370,770	374,660	-1.0	0.1	1.0	0.4	36.7	37.7	37.7	1.0	1.0	-0.0
Consumption expenditure outside households (column)	16,803	15,504	16,408	-7.7	-2.3	5.8	0.1	1.6	1.6	1.7	-0.1	0.0	0.1
Consumption expenditure (private)	280,873	274,407	277,853	-2.3	-1.1	1.3	0.4	27.5	27.9	28.0	0.4	0.5	0.1
Consumption expenditure of general government	76,690	80,859	80,399	5.4	4.8	-0.6	-0.0	7.5	8.2	8.1	0.7	0.6	-0.1
Investment	115,871	97,989	103,395	-15.4	-10.8	5.5	0.6	11.4	10.0	10.4	-1.4	-0.9	0.4
Capital formation (public)	23,818	19,160	20,503	-19.6	-13.9	7.0	0.1	2.3	2.0	2.1	-0.4	-0.3	0.1
Capital formation (private)	89,984	77,815	80,473	-13.5	-10.6	3.4	0.3	8.8	7.9	8.1	-0.9	-0.7	0.2
Increase in stocks	2,069	1,015	2,420	-0.5	0.2	1.4	0.1	0.2	0.1	0.2	-0.1	0.0	0.1
Exports	73,769	72,435	70,892	-1.8	-3.9	-2.1	-0.2	7.2	7.4	7.1	0.1	-0.1	-0.2
Imports	72,483	82,824	85,884	14.3	18.5	3.7	0.3	7.1	8.4	8.7	1.3	1.5	0.2
Gross supply value = Gross demand value	1,020,185	982,392	992,851	-3.7	-2.7	1.1	1.1	100.0	100.0	100.0	-	-	-

* Numbers in parentheses are composition ratios in relation to domestic production.

Notes: 1. The 2005 basic table used as a reference of comparison is a recomposed 2005 Input-Output Table originally published by the Ministry of Internal Affairs and Communications with a revision made to no longer categorize the provisional sector dealing with private transportation (e.g., passengers and freight) and to exclude the natural deterioration of infrastructure.

2. In conducting a time-series comparison, it is preferable to use updated input-output tables, unless the latest table is available. Because the 2009 Simple Table, the 2008 Updated Table, and tables created thereafter are based on the 2005 standard, and the 2007 or prior tables were constructed based on the 2000 standard, the newer and older tables are not consistent with each other (for more details, see "Reference 5: Overview of 2005 standard revision").

3. The terms "exports" and "imports" used in the Input-Output Table include customs duties, duty on imported goods, and adjustment categories in addition to ordinary trade, non-ordinary trade, and direct purchase.

4. Due to the rounding of figures, there are cases in which the sum of breakdowns does not match the total (the same applies to all the tables below).

2. Japan's economic structure in 2012 (2005 fixed price evaluation)

The following are trends of Japan's economic structure in 2012 (based on real value) as viewed in the 2012 Simple Updated Input-Output Table (across 53 sectors), which was based on 2005 fixed prices, (hereafter, referred to as "real value") replacing the 2012 nominal value using a deflator (all simple updated input-output tables used in this Section I are based on 2005 fixed prices and represent 53 sectors):

(1) Structure of gross supply and gross demand

The value of gross supply (which matches gross demand) in 2012 amounted to 980.6 trillion yen, of which domestic production, representing the supply side, accounted for 900.2 trillion yen, with its composition ratio relative to gross supply at 91.8%, and imports accounted for 80.4 trillion yen, with its composition ratio at 8.2%.

On the demand side, intermediate demand accounted for 421.7 trillion yen, with its composition ratio relative to gross demand at 43.0%, domestic final demand accounted for 480.0 trillion yen, with its composition ratio at 49.0%, and exports accounted for 78.9 trillion yen, with its composition ratio at 8.0% (Table 2-1).

1) Comparisons with 2011

The value of gross supply (which matches gross demand) increased by 1.5% from 2011.

Breaking down gross supply, domestic production increased by 1.2% from 2011 (1.1% increase in degree of contribution to growth rate), while imports increased by 4.6% (0.4% increase in degree of contribution to growth rate); in terms of composition ratio, domestic production decreased by 0.2 points, while imports increased by 0.2 points.

Breaking down gross demand, intermediate demand (0.5% increase in degree of contribution to growth rate) and domestic final demand (1.0% increase in degree of contribution to growth rate) increased by 1.2% and 2.2%, respectively, from 2011, while exports decreased by 0.9% (0.1% decrease in degree of contribution to growth rate); in terms of composition ratio, intermediate demand and exports decreased by 0.1 and 0.2 points, respectively, while domestic final demand increased by 0.3 points (Table 2-1).

2) Comparisons with 2005

The value of gross supply (which matches gross demand) decreased by 3.9% from 2005.

Breaking down gross supply, domestic production decreased by 5.0%, while imports increased by 11.0%; in terms of composition ratio, domestic production decreased by 1.1 points, while imports increased by 1.1 points.

Breaking down gross demand, intermediate demand and domestic final demand decreased by 7.6% and 2.1%, respectively, while exports increased by 6.9%; in terms of composition ratio, intermediate demand decreased by 1.7 points, while domestic final demand and exports increased by 0.9 and 0.8 points, respectively (Table 2-1).

Table 2-1. Flow of goods and services as viewed in the 2012 Simple Updated Input-Output Table
(fixed price evaluation table)

Major item (Fixed price evaluation)		Value by calendar year (billion yen)			Growth rate (%)			Degree of contribution to growth rate compared to 2011	Composition ratio (%)			Difference in composition ratio compared to 2005		Difference in composition ratio compared to 2011
		2005	2011	2012	2011 vs. 2005	2012 vs. 2005	2012 vs. 2011		2005	2011	2012	2011	2012	
		Basic table	Updated table	Simple table										
Domestic production		947,702	889,147	900,195	-6.2	-5.0	1.2	1.1	92.9	92.0	91.8	-0.9	-1.1	-0.2
Intermediate input		456,180	416,519	421,671	-8.7	-7.6	1.2	0.5	48.1	46.8	46.8	-1.3	-1.3	-0.0
= Intermediate demand									44.7	43.1	43.0	-1.6	-1.7	-0.1
Gross value added		491,522	472,628	478,524	-3.8	-2.6	1.2	0.6	51.9	53.2	53.2	1.3	1.3	0.0
Total final demand		564,006	549,532	558,966	-2.6	-0.9	1.7	1.0	55.3	56.9	57.0	1.6	1.7	0.1
Domestic final demand		490,237	469,932	480,072	-4.1	-2.1	2.2	1.0	48.1	48.6	49.0	0.6	0.9	0.3
Consumption		374,366	372,154	371,637	-0.6	-0.7	-0.1	-0.1	36.7	38.5	37.9	1.8	1.2	-0.6
Consumption expenditure outside households (column)		16,803	15,874	16,690	-5.5	-0.7	5.1	0.1	1.6	1.6	1.7	-0.0	0.1	0.1
Consumption expenditure (private)		280,873	277,398	278,850	-1.2	-0.7	0.5	0.2	27.5	28.7	28.4	1.2	0.9	-0.3
Consumption expenditure of general government		76,690	78,882	76,097	2.9	-0.8	-3.5	-0.3	7.5	8.2	7.8	0.6	0.2	-0.4
Investment		115,871	97,778	108,435	-15.6	-6.4	10.9	1.1	11.4	10.1	11.1	-1.2	-0.3	0.9
Capital formation (public)		23,818	18,354	20,816	-22.9	-12.6	13.4	0.3	2.3	1.9	2.1	-0.4	-0.2	0.2
Capital formation (private)		89,984	79,198	84,765	-12.0	-5.8	7.0	0.6	8.8	8.2	8.6	-0.6	-0.2	0.4
Increase in stocks		2,069	226	2,855	-0.9	0.4	11.6	0.3	0.2	0.0	0.3	-0.2	0.1	0.3
Exports		73,769	79,600	78,894	7.9	6.9	-0.9	-0.1	7.2	8.2	8.0	1.0	0.8	-0.2
Imports		72,483	76,905	80,442	6.1	11.0	4.6	0.4	7.1	8.0	8.2	0.9	1.1	0.2
Gross supply value = Gross demand value		1,020,185	966,052	980,637	-5.3	-3.9	1.5	1.5	100.0	100.0	100.0	-	-	-

* Numbers in parentheses are composition ratios in relation to domestic production.

(2) Structure of domestic production

Domestic production in 2012 amounted to 900.2 trillion yen, of which goods accounted for 351.4 trillion yen, with its composition ratio at 39.0%, and services accounted for 548.8 trillion yen, with its composition ratio at 61.0% (Table 2-2).

1) Comparisons with 2011

Domestic production increased by 1.2% from 2011.

Dividing domestic production into goods and services reveals that goods increased by 3.4% from 2011 (1.3% increase in degree of contribution to growth rate) but services decreased by 0.1% (0.0% decrease in degree of contribution to growth rate). Among goods sectors, "primary products" (0.2% increase in degree of contribution to growth rate), "manufactured products" (0.6% increase in degree of contribution to growth rate) and "construction" (0.5% increase in degree of contribution to growth rate) all increased by 14.5%, 2.0% and 8.5%, respectively. Breaking down "manufactured products" shows that "raw material products" (0.0% increase in degree of contribution to growth rate) and "processed and assembled products" (0.6% increase in degree of contribution to growth rate) increased by 0.4% and 4.2%, respectively, from 2011, but "other products" decreased by 0.0% (0.0% decrease in degree of contribution to growth rate).

Among service sectors, "finance and real estate" (0.1% decrease in degree of contribution to growth rate) and "public services" (0.3% decrease in degree of contribution to growth rate) decreased by 0.9% and 1.7%, respectively, from 2011, while "commerce" (0.0% increase in degree of contribution to growth rate), "transport and information and communications" (0.0% increase in degree of contribution to growth rate) and "other services" (0.3% increase in degree of contribution to growth rate) increased by 0.2%, 0.1% and 2.5%, respectively.

In terms of composition ratio, goods increased by 0.8 points from 2011, while services decreased by 0.8 points. Among goods sectors, "primary products," "manufactured products," and "construction" all increased by 0.2, 0.2, and 0.4 points, respectively. Breaking down "manufactured products" shows that "raw material products" and "other products" decreased by 0.1 and 0.1 points, respectively, from 2011 but "processed and assembled products" increased by 0.4 points.

Among service sectors, "commerce," "finance and real estate," "transport and information and communications," and "public services" decreased by 0.1, 0.2, 0.1, and 0.5 points, respectively, while "other services" increased by 0.2 points (Table 2-2).

Table 2-2. Domestic production

	Domestic production (billion yen)			Growth rate (%)			Degree of contribution to growth rate compared to 2011	Composition ratio (%)			Difference in composition ratio compared to 2005	Difference in composition ratio compared to 2011
	2005	2011	2012	2011 vs. 2005	2012 vs. 2005	2012 vs. 2011		2005	2011	2012	2012	2012
Total	947,702	889,147	900,195	-6.2	-5.0	1.2	1.2	100.0	100.0	100.0	-	-
Goods	382,952	339,910	351,355	-11.2	-8.3	3.4	1.3	40.4	38.2	39.0	-1.4	0.8
Primary products	14,163	12,799	14,656	-9.6	3.5	14.5	0.2	1.5	1.4	1.6	0.1	0.2
Manufactured products	305,552	278,579	284,020	-8.8	-7.0	2.0	0.6	32.2	31.3	31.6	-0.7	0.2
Raw material products	109,209	93,509	93,864	-14.4	-14.1	0.4	0.0	11.5	10.5	10.4	-1.1	-0.1
Processed and assembled products	130,173	121,539	126,629	-6.6	-2.7	4.2	0.6	13.7	13.7	14.1	0.3	0.4
Other products	66,170	63,531	63,527	-4.0	-4.0	-0.0	-0.0	7.0	7.1	7.1	0.1	-0.1
Construction	63,237	48,531	52,679	-23.3	-16.7	8.5	0.5	6.7	5.5	5.9	-0.8	0.4
Services	564,750	549,237	548,840	-2.7	-2.8	-0.1	-0.0	59.6	61.8	61.0	1.4	-0.8
Commerce	106,275	97,410	97,575	-8.3	-8.2	0.2	0.0	11.2	11.0	10.8	-0.4	-0.1
Finance and real estate	107,793	101,911	100,965	-5.5	-6.3	-0.9	-0.1	11.4	11.5	11.2	-0.2	-0.2
Transport and information and communications	86,716	90,536	90,603	4.4	4.5	0.1	0.0	9.2	10.2	10.1	0.9	-0.1
Public services	142,710	146,644	144,173	2.8	1.0	-1.7	-0.3	15.1	16.5	16.0	1.0	-0.5
Other services	121,257	112,736	115,525	-7.0	-4.7	2.5	0.3	12.8	12.7	12.8	0.0	0.2

Note 1: 53 sectors of goods and services (the same applies to all the tables below).

- 1) Goods: Primary products: agriculture, forestry and fishery; mining; coal mining, crude petroleum and natural gas
 Raw material products: textile products; timber, wooden products and furniture; pulp, paper and processed paper products; chemical basic products; synthetic resins; petroleum and coal products; plastic products; ceramic, stone and clay products; iron and steel; non-ferrous metals; metal products; reuse and recycling
 Processed and assembled products: general machinery; machinery for offices and service industry; electrical devices and parts; other electrical machinery; household electric appliances; household electronics equipment; electronic computing equipment and its accessories; electronic components; passenger motor cars; other cars; motor vehicle parts and accessories; other transport equipment; precision instruments
 Other products: beverages and foods; wearing apparel and other textile products; printing, plate making and book binding; final chemical products; medicaments; miscellaneous manufacturing products

- Construction: construction
- 2) Services: Commerce: commerce
- Finance and real estate: finance and insurance; real estate; house rent (imputed house rent)
- Transport and information and communications: transport; other information and communications; information services
- Public services: electricity; gas and heat supply; water supply and waste disposal business; public administration; education and research; medical services, health, social security and nursing care
- Other services: advertising services; goods rental and leasing services; other business services; personal services; others

Note 2: Years 2005, 2011 and 2012 refer to the 2005 Input-Output Table, 2011 Updated Input-Output Table, and 2012 Simple Updated Input-Output Table, respectively (the same applies to all the tables below).

Looking at goods sectors in terms of their growth rate, sectors that recorded an increase in their growth rate include: "passenger motor cars," "motor vehicle parts and accessories" (e.g., motor vehicle bodies, internal combustion engines for motor vehicles and parts), "agriculture, forestry and fishery" (e.g., wheat (domestic), vegetables, miscellaneous cereals). Sectors that recorded a decline in their growth rate include: "household electronics equipment" (e.g., radio and television sets, electric audio equipment), "machinery for offices and service industry" (e.g., other office machines, other machinery for service industry), "synthetic resins" (e.g., polyethylene (low density), vinyl chloride resins).

Looking at service sectors in terms of their growth rate, sectors that recorded a decline in their growth rate include: "education and research" (e.g., school education (public) **, school education (private) *), "house rent (imputed house rent)," "public administration (local) **," and "public administration (central) **." Sectors that recorded an increase in their growth rate include: "goods rental and leasing services" (e.g., electronic computing equipment rental and leasing, industrial equipment and machinery rental and leasing (except construction machinery)), "advertising services" (e.g., newspaper, magazine and other advertising services), and "other business services" (e.g., worker dispatching services, civil engineering and construction services) (Figure 2-1).

Looking at goods sectors in terms of their contribution to growth, sectors that contributed to growth include: "motor vehicle parts and accessories" (e.g., motor vehicle parts and accessories, internal combustion engines for motor vehicles and parts), "construction" (e.g., public construction of rivers, drainage and others, residential construction (wooden), residential construction (non-wooden)), and "passenger motor cars." Sectors that made a negative contribution to growth include: "general machinery" (e.g., semiconductor making equipment, textile machinery), "electronic components" (e.g., other electronic components, liquid crystal elements), and "household electronics equipment" (e.g., radio and television sets, electric audio equipment).

Looking at service sectors in terms of their contribution to growth, sectors that made a negative contribution to growth include: "education and research" (e.g., school education (public) **, school education (private) *, research and development (intra-enterprise)), "house rent (imputed house rent)," and "transport" (e.g., road freight transport (except self-transport by private cars), hired car and taxi transport). Sectors that contributed to growth include: "other business services" (e.g., worker dispatching services, civil engineering and construction services), "other information and communications" (e.g., fixed telecommunication, image information production and distribution industry), and "goods rental and leasing services" (e.g., electronic computing equipment rental and leasing, industrial equipment and machinery rental and leasing (except construction machinery)) (Figure 2-2).

Figure 2-1. Growth rates of domestic production by sector (in comparison with 2011)

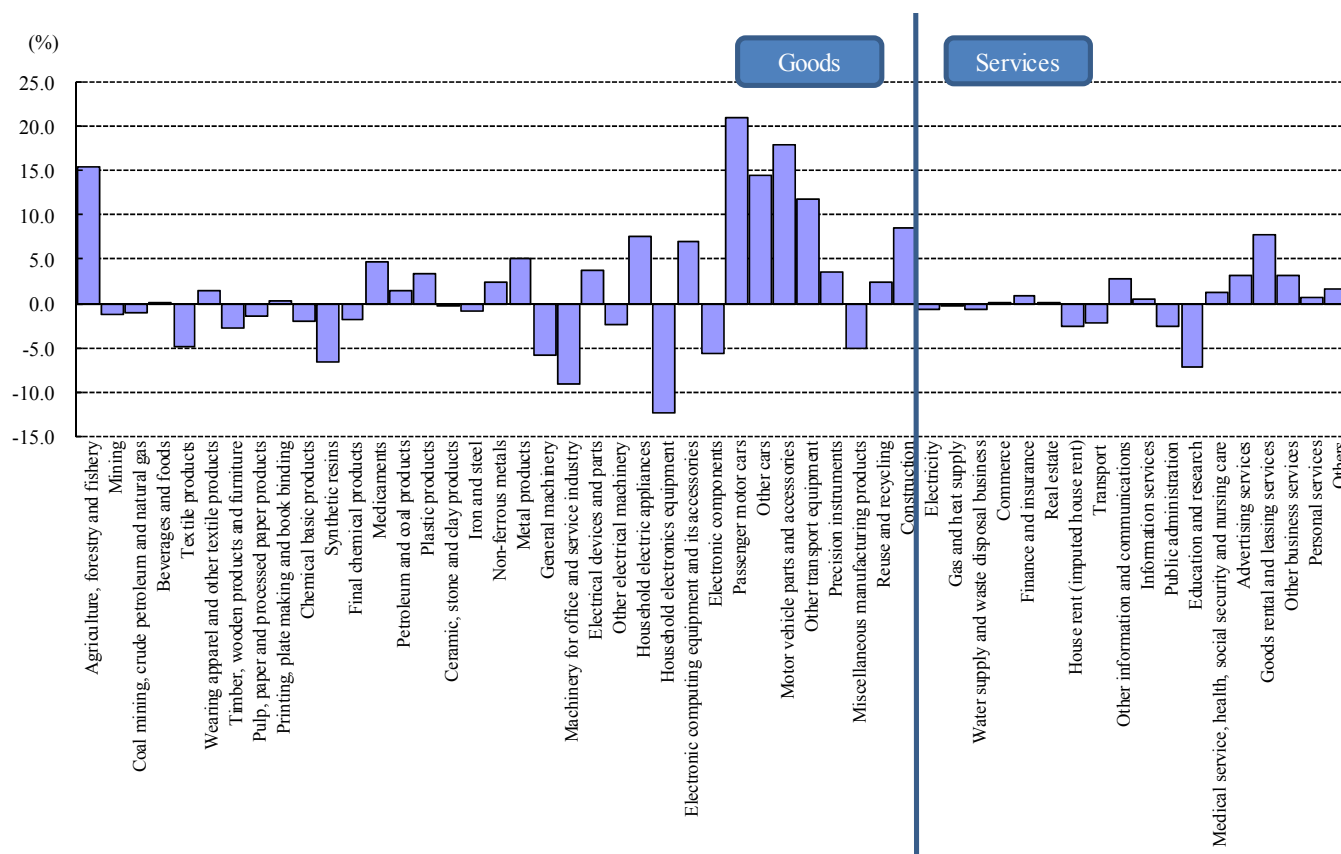
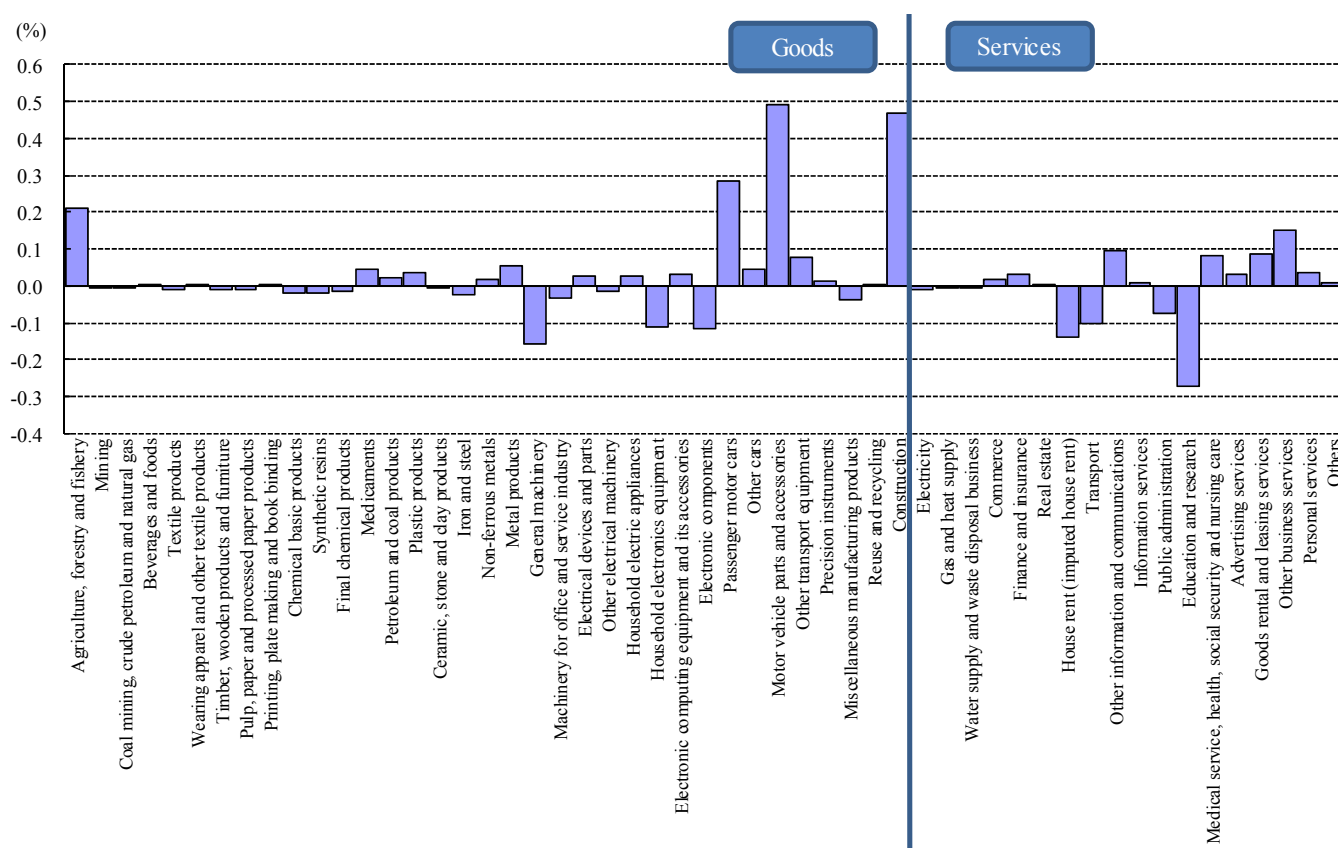


Figure 2-2. Degree of contribution to growth rates of domestic production by sector (in comparison with 2011)



2) Comparisons with 2005

Domestic production decreased by 5.0% from 2005.

Dividing domestic production into goods and services reveals that both goods and services decreased by 8.3% and 2.8%, respectively, from 2005.

Among goods sectors, "primary products" increased by 3.5%, while "manufactured products" and "construction" decreased by 7.0% and 16.7%, respectively, from 2005. Breaking down "manufactured products" shows that "raw material products," "processed and assembled products" and "other products" all decreased by 14.1%, 2.7% and 4.0%, respectively, from 2005.

Among service sectors, "transport and information and communications" and "public services" increased by 4.5% and 1.0%, respectively, from 2005, while "commerce," "finance and real estate" and "other services" decreased by 8.2%, 6.3% and 4.7%, respectively.

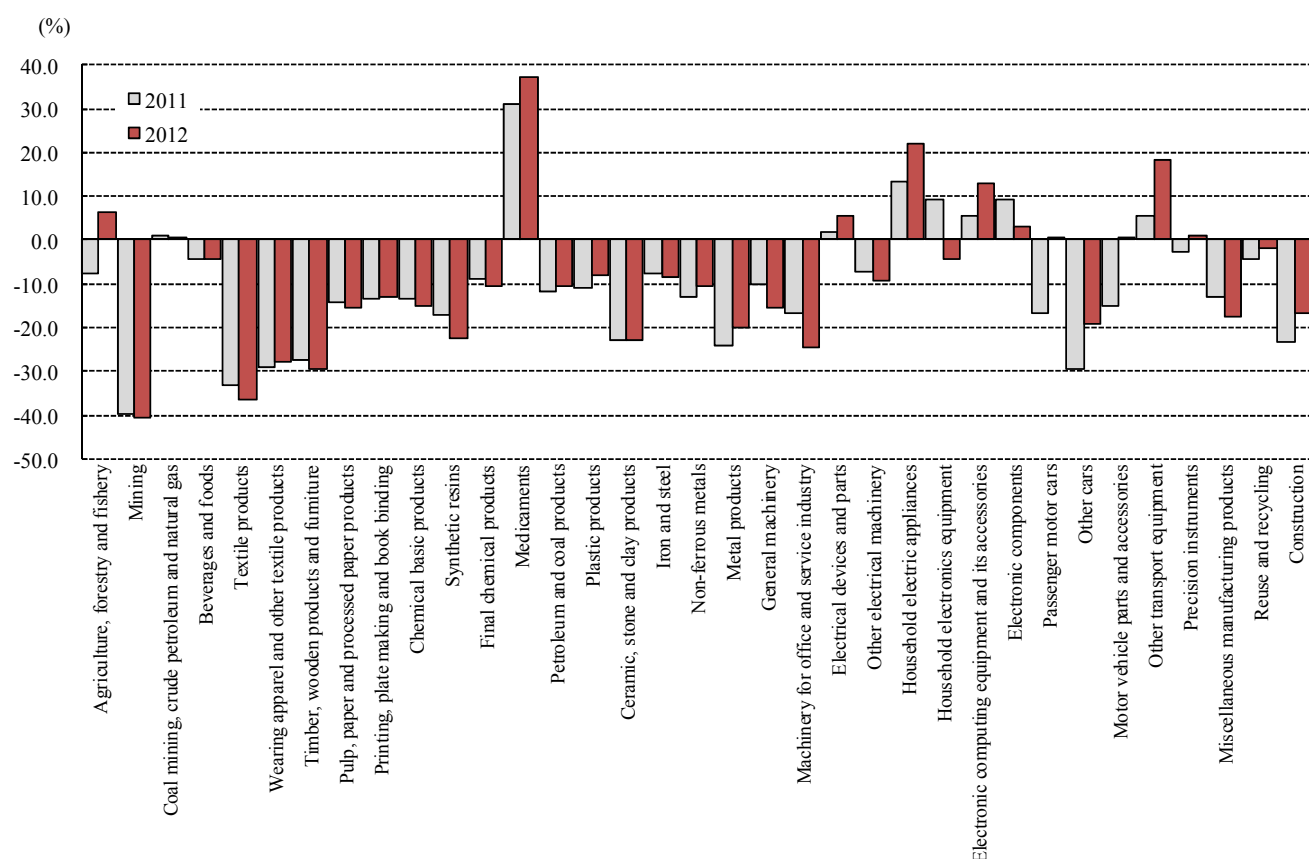
In terms of composition ratio, goods decreased by 1.4 points from 2005, while services increased by 1.4 points.

Among goods sectors, "primary products" increased by 0.1 points from 2005, while "manufactured products" and "construction" decreased by 0.7 and 0.8 points, respectively. Breaking down "manufactured products" shows that "raw material products" decreased by 1.1 points from 2005, while "processed and assembled products" and "other products" increased by 0.3 and 0.1 points, respectively.

Among service sectors, "commerce" and "finance and real estate" decreased by 0.4 and 0.2 points, respectively, from 2005, while "transport and information and communications," "public services" and "other services" increased by 0.9, 1.0 and 0.0 points, respectively (Table 2-2).

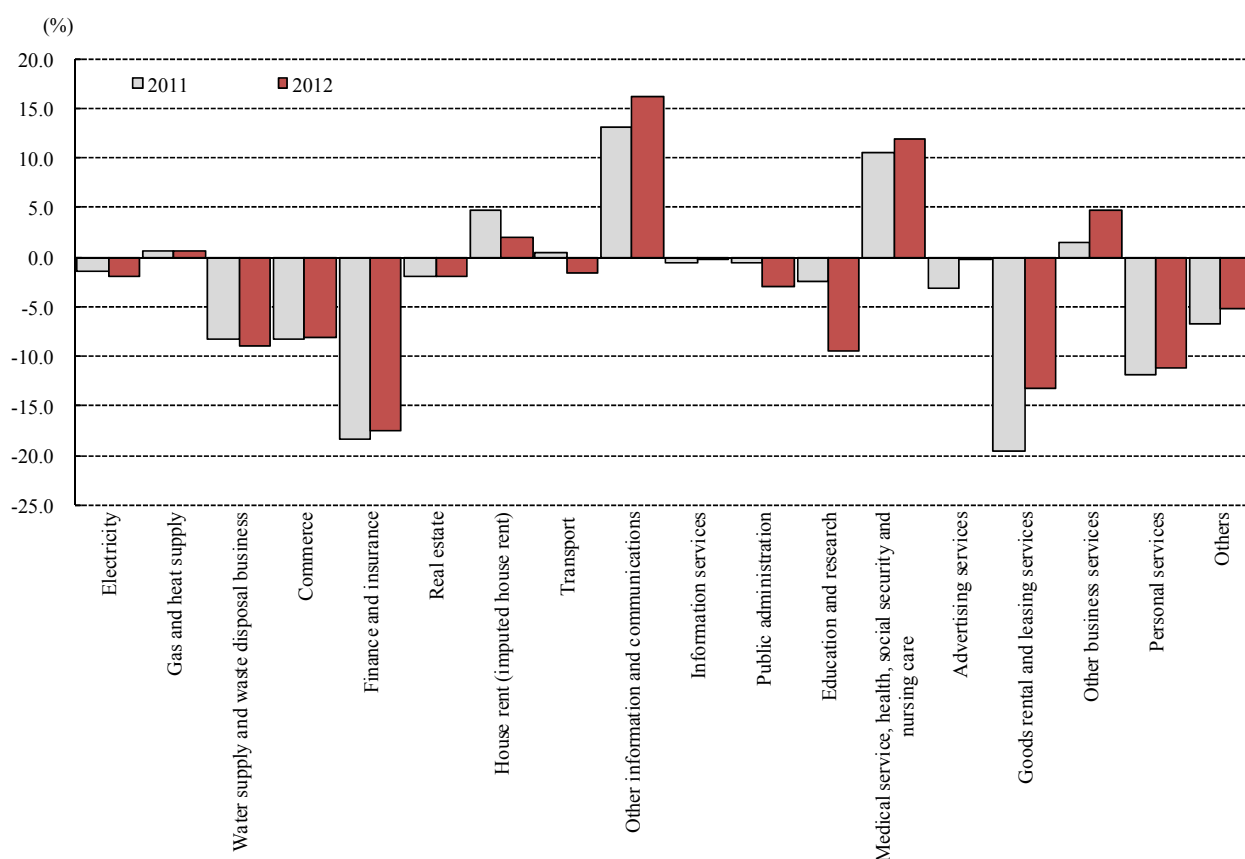
Looking at goods sectors in terms of their growth rate, sectors that recorded a decline in their growth rate include: "mining" (e.g., iron ores, gravel and quarrying), "textile products" (e.g., cotton and staple fiber fabrics (inc. fabrics of synthetic spun fibers), fiber yarns), and "timber, wooden products and furniture" (e.g., veneer and plywood, metallic furniture). Sectors that recorded an increase in their growth rate include: "medicaments", "household electric appliances" (household air conditioners), and "other transport equipment" (e.g., aircrafts, bicycles) (Figure 2-3).

Figure 2-3. Growth rates of domestic production (goods) by sector (in comparison with 2005)



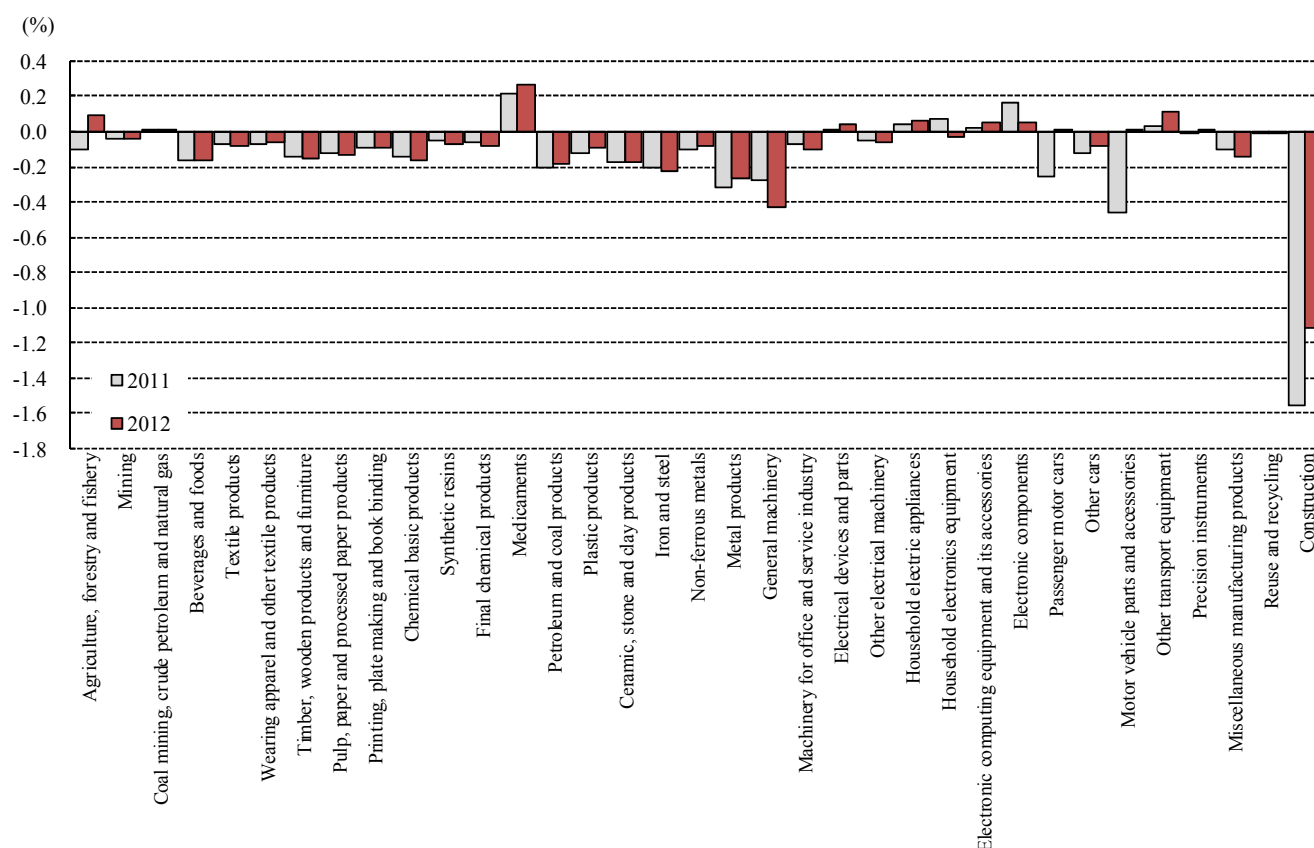
Looking at service sectors in terms of their growth rate, sectors that recorded a decline in their growth rate include: "finance and insurance" (e.g., financial services (imputed interest) public, financial services (commission) public), "goods rental and leasing services" (e.g., industrial equipment and machinery rental and leasing (except construction machinery), car rental and leasing), and "personal services" (e.g., game halls, photographic studios). Sectors that recorded a decline in their growth rate include: "other information and communications" (e.g., Internet-based services, cable broadcasting), "medical services, health, social security and nursing care" (nursing care (in-home), social welfare (private, non-profit) *), and "other business services" (e.g., worker dispatching services, building maintenance services) (Figure 2-4).

Figure 2-4. Growth rates of domestic production (services) by sector (in comparison with 2005)



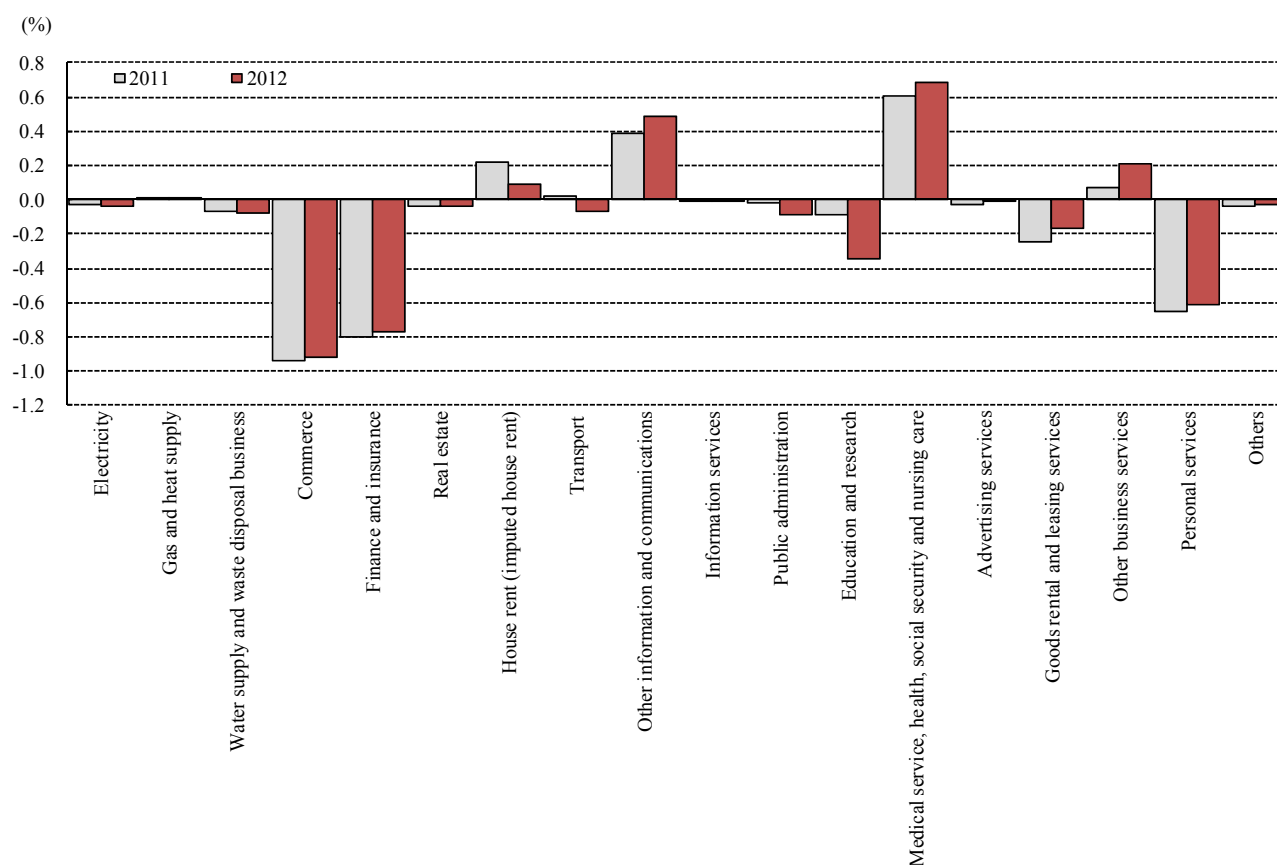
Looking at goods sectors in terms of their contribution to growth, sectors that made a negative contribution to growth include: "construction" (e.g., residential construction (non-wooden), non-residential construction (non-wooden)), "general machinery" (e.g., semiconductor making equipment, molds), and "metal products" (e.g., metal products for construction, metal products for architecture). Sectors that contributed to growth include: "medicaments", "other transport equipment" (e.g., aircrafts, bicycles), and "agriculture, forestry and fishery" (e.g., vegetables, beef cattle) (Figure 2-5).

Figure 2-5. Degree of contribution to growth rates of domestic production (goods) by sector
(in comparison with 2005)



Looking at service sectors in terms of their contribution to growth, sectors that made a negative contribution to growth include: "commerce" (wholesale trade), "finance and insurance" (e.g., financial services (imputed interest) public, financial services (commission) private), and "personal services" (e.g., game halls, hotel business). Sectors that contributed to growth include: "medical services, health, social security and nursing care" (e.g., medical services (medical corporations, etc.), medical services (non-profit foundations, etc.)), "other information and communications" (mobile telecommunication, Internet-based services), and "other business services" (e.g., worker dispatching services, building maintenance services) (Figure 2-6).

Figure 2-6. Degree of contribution to growth rates of domestic production (services) by sector
(in comparison with 2005)



(3) Input structure

1) Amounts and ratios of intermediate inputs

Intermediate inputs across all industries in 2012 amounted to 421.7 trillion yen and the intermediate input ratio (= intermediate input value / domestic production value) was 46.8%.

Dividing industries into goods and service sectors reveals that intermediate inputs used by goods industries was 225.0 trillion yen and those by service industries was 196.7 trillion yen. The intermediate input ratio for goods industries was 64.0% and that for service industries was 35.8% (Table 2-3).

Looking at the shares of goods and services in the intermediate input amounts across all industries (46.8%), goods accounted for 23.9% and services accounted for 23.0%. Dividing industries into goods and service sectors reveals that in the intermediate input ratio for goods industries (64.0%), goods accounted for 44.9% and services accounted for 19.1%. In the intermediate input ratio for service industries (35.8%), goods accounted for 10.4% and services accounted for 25.5% (Table 2-4).

Breaking down further the share of services in the intermediate input ratio (23.0%) by sector, "other business services" accounted for 4.3%, followed by "commerce" at 3.1%, and "finance and insurance" at 2.7% (Figure 2-7).

i) Comparisons with 2011

Intermediate inputs across all industries increased by 1.2% from 2011 (Table 2-1), while the intermediate input ratio decreased by 0.0 points.

Dividing industries into goods and service sectors reveals that the intermediate input ratio for goods industries decreased by 0.6 points from 2011 but that for service industries increased by 0.0 points.

Among goods sectors, "primary products," "manufactured products," and "construction" all decreased by 4.4, 0.2, and 0.5 points, respectively, from 2011.

Among service sectors, "commerce," and "other services," decreased by 0.1 and 1.2 points, respectively, from 2011, while "finance and real estate," "transport and information and communications," and "public services" increased by 0.4, 0.6, and 0.3 points, respectively (Table 2-3).

Table 2-3. Input structure

		Total (All industries)														
		Goods industries								Service industries						
				Primary products	Manufactured products				Construction		Commerce	Finance and real estate	Transport and information and communications	Public services	Other services	
						Raw material products	Processed and assembled products	Other products								
Domestic production (billion yen)	2005	947,702	382,952	14,163	305,552	109,209	130,173	66,170	63,237	564,750	106,275	107,793	86,716	142,710	121,257	
	2011	889,147	339,910	12,799	278,579	93,509	121,539	63,531	48,531	549,237	97,410	101,911	90,536	146,644	112,736	
	2012	900,195	351,355	14,656	284,020	93,864	126,629	63,527	52,679	548,840	97,575	100,965	90,603	144,173	115,525	
	Intermediate input (billion yen)	2005	456,180	253,768	6,778	212,946	76,472	95,975	40,499	34,044	202,411	33,463	24,722	35,326	54,960	53,940
		2011	416,519	219,726	5,978	187,362	67,165	82,808	37,389	26,386	196,793	30,728	22,678	35,789	58,936	48,663
		2012	421,671	224,969	6,199	190,416	66,101	87,419	36,896	28,354	196,702	30,649	22,882	36,319	58,352	48,500
	Gross value added (billion yen)	2005	491,522	129,184	7,385	92,606	32,737	34,198	25,671	29,193	362,339	72,811	83,070	51,390	87,750	67,317
		2011	472,628	120,183	6,821	91,217	26,344	38,731	26,142	22,145	352,444	66,682	79,234	54,747	87,709	64,073
		2012	478,524	126,386	8,458	93,603	27,763	39,210	26,631	24,325	352,138	66,925	78,083	54,284	85,821	67,025
Intermediate input ratio (%)	2005	48.1	66.3	47.9	69.7	70.0	73.7	61.2	53.8	35.8	31.5	22.9	40.7	38.5	44.5	
	2011	46.8	64.6	46.7	67.3	71.8	68.1	58.9	54.4	35.8	31.5	22.3	39.5	40.2	43.2	
	Difference from 2005	-1.3	-1.6	-1.1	-2.4	1.8	-5.6	-2.4	0.5	-0.0	0.1	-0.7	-1.2	1.7	-1.3	
	2012	46.8	64.0	42.3	67.0	70.4	69.0	58.1	53.8	35.8	31.4	22.7	40.1	40.5	42.0	
	Difference from 2005	-1.3	-2.2	-5.6	-2.6	0.4	-4.7	-3.1	-0.0	-0.0	-0.1	-0.3	-0.7	2.0	-2.5	
	Difference from 2011	-0.0	-0.6	-4.4	-0.2	-1.4	0.9	-0.8	-0.5	0.0	-0.1	0.4	0.6	0.3	-1.2	
Rate of gross value added (%)	2005	51.9	33.7	52.1	30.3	30.0	26.3	38.8	46.2	64.2	68.5	77.1	59.3	61.5	55.5	
	2011	53.2	35.4	53.3	32.7	28.2	31.9	41.1	45.6	64.2	68.5	77.7	60.5	59.8	56.8	
	Difference from 2005	1.3	1.6	1.1	2.4	-1.8	5.6	2.4	-0.5	0.0	-0.1	0.7	1.2	-1.7	1.3	
	2012	53.2	36.0	57.7	33.0	29.6	31.0	41.9	46.2	64.2	68.6	77.3	59.9	59.5	58.0	
	Difference from 2005	1.3	2.2	5.6	2.6	-0.4	4.7	3.1	0.0	0.0	0.1	0.3	0.7	-2.0	2.5	
	Difference from 2011	0.0	0.6	4.4	0.2	1.4	-0.9	0.8	0.5	-0.0	0.1	-0.4	-0.6	-0.3	1.2	

Notes: 1. Intermediate input ratio = intermediate input value / domestic production value; rate of gross value added = gross value added / domestic production value

2. Goods and service sectors are listed in the upper row.

Looking at the shares of goods and services in the intermediate input ratio across all industries, the share of goods increased by 0.3 points from 2011 and the share of services decreased by 0.3 points.

Dividing industries into goods and service sectors reveals that the shares of goods in the intermediate input ratio for goods industries increased by 0.0 points from 2011, but the share of services decreased by 0.7 points. In the intermediate input ratio for service industries, the share of goods increased by 0.1 points but the share of services decreased by 0.1 points (Table 2-4).

Table 2-4. Intermediate input ratios categorized by goods and services

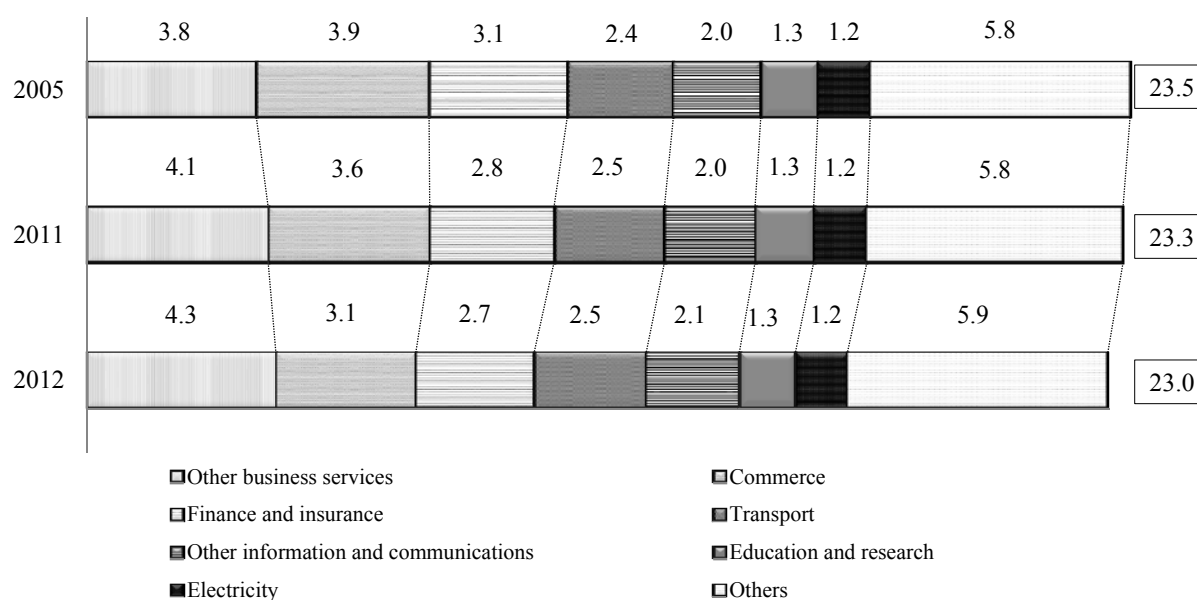
			Total (All industries)													
			Goods industries							Service industries						
			Primary products	Manufactured products				Construction		Commerce	Finance and real estate	Transport and information and communications	Public services	Other services		
Raw material products	Processed and assembled products	Other products														
Ratios of intermediate inputs (%)	2005	Total	48.1	66.3	47.9	69.7	70.0	73.7	61.2	53.8	35.8	31.5	22.9	40.7	38.5	44.5
		Goods	24.7	46.2	32.1	50.1	53.0	53.5	38.7	30.3	10.1	4.6	4.3	8.2	15.6	14.8
		Services	23.5	20.1	15.8	19.6	17.0	20.2	22.5	23.5	25.8	26.8	18.7	32.5	22.9	29.6
	2011	Total	46.8	64.6	46.7	67.3	71.8	68.1	58.9	54.4	35.8	31.5	22.3	39.5	40.2	43.2
		Goods	23.5	44.9	31.5	48.3	53.7	50.2	36.6	28.8	10.3	4.4	4.5	7.3	17.1	14.3
		Services	23.3	19.8	15.2	19.0	18.1	17.9	22.2	25.6	25.5	27.2	17.8	32.2	23.1	28.8
	Difference from 2005	Total	-1.3	-1.6	-1.1	-2.4	1.8	-5.6	-2.4	0.5	-0.0	0.1	-0.7	-1.2	1.7	-1.3
		Goods	-1.1	-1.3	-0.6	-1.8	0.7	-3.3	-2.0	-1.5	0.2	-0.3	0.2	-0.9	1.5	-0.5
		Services	-0.2	-0.3	-0.6	-0.6	1.1	-2.3	-0.3	2.1	-0.3	0.3	-0.9	-0.3	0.2	-0.8
	2012	Total	46.8	64.0	42.3	67.0	70.4	69.0	58.1	53.8	35.8	31.4	22.7	40.1	40.5	42.0
		Goods	23.9	44.9	27.5	48.9	53.5	51.6	36.7	28.3	10.4	4.2	4.9	7.0	17.7	13.9
		Services	23.0	19.1	14.8	18.2	16.9	17.5	21.4	25.5	25.5	27.2	17.8	33.1	22.7	28.1
	Difference from 2005	Total	-1.3	-2.2	-5.6	-2.6	0.4	-4.7	-3.1	-0.0	-0.0	-0.1	-0.3	-0.7	2.0	-2.5
		Goods	-0.8	-1.3	-4.6	-1.2	0.5	-1.9	-2.0	-2.0	0.3	-0.4	0.6	-1.2	2.2	-0.9
		Services	-0.5	-1.0	-1.0	-1.4	-0.1	-2.8	-1.1	2.0	-0.3	0.4	-0.9	0.6	-0.2	-1.6
	Difference from 2011	Total	-0.0	-0.6	-4.4	-0.2	-1.4	0.9	-0.8	-0.5	0.0	-0.1	0.4	0.6	0.3	-1.2
		Goods	0.3	0.0	-4.0	0.6	-0.2	1.4	0.1	-0.5	0.1	-0.2	0.4	-0.3	0.7	-0.4
		Services	-0.3	-0.7	-0.4	-0.8	-1.2	-0.5	-0.8	-0.1	-0.1	0.0	-0.0	0.9	-0.4	-0.7

Notes: 1. Intermediate input ratio = intermediate input value / domestic production value

2. Goods and service sectors are listed in the upper row; intermediate input ratios by goods and services are listed in the left column.

Breaking down by sector the share of services in the intermediate input ratio, "commerce" and "finance and insurance" lost their share compared to 2011, while "other business services," "transport," "other information and communications" increased their share, and "education and research" and "electricity" remained almost unchanged in their share. (Figure 2-7).

Figure 2-7. Breakdown of services in the intermediate input ratio across all industries (in percent)



* "Others" summed up sectors with their intermediate input ratio changed less than 0.1 points ("gas and heat supply," "water supply and waste disposal business," "real estate," "house rent (imputed house rent)," "public administration," "medical services, health, social security and nursing care," "advertising services," "goods rental and leasing services," "personal services" and "others").

ii) Comparisons with 2005

Intermediate inputs decreased by 7.6% from 2005 (Table 2-1) and the intermediate input ratio decreased by 1.3 points.

Dividing industries into goods and service sectors reveals that the intermediate input ratio for goods industries decreased by 2.2 points from 2005 and that for service industries decreased by 0.0 points.

Among goods sectors, "primary products," "manufactured products," and "construction" all decreased from 2005 by 5.6, 2.6, 0.0 points, respectively.

Among service sectors, "finance and real estate," "other services," "commerce," and "transport and information and communications" decreased by 0.3, 2.5, 0.1, and 0.7 points, respectively, from 2005, while "public services" increased by 2.0 points (Table 2-4).

Looking at the shares of goods and services in the intermediate input ratio across all industries, the share of goods decreased by 0.8 points from 2005 and the share of services also decreased by 0.5 points.

Dividing industries into goods and service sectors reveals that both the shares of goods and services in the intermediate input ratio for goods industries decreased by 1.3 and 1.0 points, respectively, from 2005. In the intermediate input ratio for service industries, the share of goods increased by 0.3 points from 2005, while that of services decreased by 0.3 points (Table 2-4).

Breaking down by sector the share of services in the intermediate input ratio, "commerce" and "finance and insurance" lost their share compared to 2005, while "other business services," "transport," and "other information and communications" increased their share, and "education and research" and "electricity" remained almost unchanged in their share (Figure 2-7).

2) Gross value added and the rate of gross value added

Gross value added in 2012 amounted to 478.5 trillion yen and the rate of gross value added (= gross value added / domestic production value) across all industries was 53.2%.

Dividing industries into goods and service sectors reveals that the gross value added for goods industries was 126.4 trillion yen and that for service industries was 352.1 trillion yen. The rate of gross value added for goods industries was 36.0 % and that for service industries was 64.2% (Table 2-3).

i) Comparisons with 2011

Gross value added increased by 1.2% from 2011 (Table 2-1) and the rate of gross value added across all industries increased by 0.0 points.

Dividing industries into goods and service sectors reveals that the rate of gross value added for goods industries increased by 0.6 points from 2011 but that for service industries decreased by 0.0 points (Table 2-3).

ii) Comparisons with 2005

Gross value added decreased by 2.6% from 2005 (Table 2-1) and the rate of gross value added across all industries increased by 1.3 points.

Dividing industries into goods and service sectors reveals that the rate of gross value added for goods industries increased by 2.2 points from 2005 and that for service industries increased by 0.0 points (Table 2-3).

(4) Structure of domestic final demand

Domestic final demand in 2012 amounted to 480.1 trillion yen.

Dividing domestic final demand into consumption and investment shows that consumption accounted for 371.6 trillion yen and investment accounted for 108.4 trillion yen. Their composition ratios relative to domestic final demand were 77.4% for consumption and 22.6% for investment. Breaking down domestic final demand further, "private consumption expenditure" accounted for the largest proportion at 58.1%, followed by "private capital formation" at 17.7% and "consumption expenditure of general government" at 15.9% (Table 2-5).

1) Comparisons with 2011

Domestic final demand increased by 2.2% from 2011.

Dividing domestic final demand into consumption and investment shows that consumption decreased from 2011 (0.1% decrease in degree of contribution to growth rate) and investment increased by 10.9% from 2011 (2.3% increase in degree of contribution to growth rate). Breaking down consumption, "consumption expenditure outside households (column)" (0.2% increase in degree of contribution to growth rate) and "private consumption expenditure" (0.3% increase in degree of contribution to growth rate) increased by 5.1% and 0.5%, respectively, from 2011 but "consumption expenditure of general government" decreased by 3.5% (0.6% decrease in degree of contribution to growth rate). Breaking down investment, "public capital formation" (0.5% increase in degree of contribution to growth rate) and "private capital formation" (1.2% increase in degree of contribution to growth rate) both increased from 2011 by 13.4% and 7.0%, respectively.

In terms of composition ratio relative to domestic final demand, consumption decreased by 1.8 points from 2011 but investment increased by 1.8 points. Breaking down consumption, "consumption expenditure outside households (column)" increased by 0.1 points from 2011, while "private consumption expenditure" and "consumption expenditure of general government" both decreased by 0.9 points. Breaking down investment, "public capital formation," "private capital formation" and "increase in stocks" all increased by 0.4, 0.8, and 0.5 points, respectively, from 2011 (Table 2-5).

Table 2-5. Domestic final demand

	Demand (billion yen)			Growth rate (%)			Degree of contribution to growth rate (%)	Composition ratio (%)			Difference in composition ratio compared to 2005 2012	Difference in composition ratio compared to 2011 2012
	2005	2011	2012	2011 vs. 2005	2012 vs. 2005	2012 vs. 2011		2005	2011	2012		
Domestic final demand	490,237	469,932	480,072	-4.1	-2.1	2.2	2.2	100.0	100.0	100.0	-	-
Consumption	374,366	372,154	371,637	-0.6	-0.7	-0.1	-0.1	76.4	79.2	77.4	1.0	-1.8
Consumption expenditure outside households (column)	16,803	15,874	16,690	-5.5	-0.7	5.1	0.2	3.4	3.4	3.5	0.0	0.1
Consumption expenditure (private)	280,873	277,398	278,850	-1.2	-0.7	0.5	0.3	57.3	59.0	58.1	0.8	-0.9
Consumption expenditure of general government	76,690	78,882	76,097	2.9	-0.8	-3.5	-0.6	15.6	16.8	15.9	0.2	-0.9
Investment	115,871	97,778	108,435	-15.6	-6.4	10.9	2.3	23.6	20.8	22.6	-1.0	1.8
Capital formation (public)	23,818	18,354	20,816	-22.9	-12.6	13.4	0.5	4.9	3.9	4.3	-0.5	0.4
Capital formation (private)	89,984	79,198	84,765	-12.0	-5.8	7.0	1.2	18.4	16.9	17.7	-0.7	0.8
Increase in stocks	2,069	226	2,855	-	-	-	0.6	0.4	0.0	0.6	0.2	0.5

2) Comparisons with 2005

Domestic final demand decreased by 2.1% from 2005.

Dividing domestic final demand into consumption and investment shows that both consumption and investment decreased by 0.7% and 6.4%, respectively, from 2005. Breaking down consumption, "consumption expenditure outside households (column)" "private consumption expenditure" and "consumption expenditure of

general government" all decreased by 0.7%, 0.7% and 0.8%, respectively, from 2005. Breaking down investment, both "public capital formation" and "private capital formation" decreased by 12.6% and 5.8%, respectively.

In terms of composition ratio relative to domestic final demand, consumption increased by 1.0 points from 2005 but investment decreased by 1.0 points. Breaking down consumption, "consumption expenditure outside households (column)," "private consumption expenditure," and "consumption expenditure of general government" all increased by 0.0, 0.8, and 0.2 points, respectively, from 2005. Breaking down investment, "public capital formation" and "private capital formation" decreased by 0.5 and 0.7 points, respectively, from 2005 but "increase in stocks" increased by 0.2 points (Table 2-5).

(5) Structure of exports

Exports in 2012 amounted to 78.9 trillion yen, of which goods accounted for 78.3% and services accounted for 21.7% (Table 2-6).

The 2012 export ratio (= export value / domestic production) across all industries was 8.8%. The export ratio for goods was 17.6% and that for services was 3.1% (Figure 2-9).

A breakdown by sector of "processed and assembled products," which marked the highest export ratio among goods, shows that "passenger motor cars," "other electrical machinery" and "electronic components" recorded high export ratios (Figure 2-10).

1) Comparisons with 2011

Exports decreased by 0.9% from 2011. Dividing exports into goods and services reveals that goods decreased by 1.0% from 2011 (0.8% decrease in degree of contribution to growth rate) and services decreased by 0.3% (0.1% decrease in degree of contribution to growth rate).

A further breakdown shows that all goods sectors decreased except for "processed and assembled products," which increased by 0.2% from 2011 (0.1% increase in degree of contribution to growth rate). Among service sectors, all sectors decreased except for "transport and information and communications," which increased by 7.5% from 2011 (0.5% increase in degree of contribution to growth rate), and "other services," which increased by 2.9% (0.1% increase in degree of contribution to growth rate).

In terms of composition ratio, goods decreased by 0.1 points from 2011, while services increased by 0.1 points.

Among goods sectors, "primary products" and "manufactured products" both decreased by 0.0 and 0.1 points, respectively, from 2011. Breaking down "manufactured products" shows that "raw material products" and "other products" decreased by 0.5 and 0.2 points, respectively, from 2011, while "processed and assembled products" increased by 0.7 points.

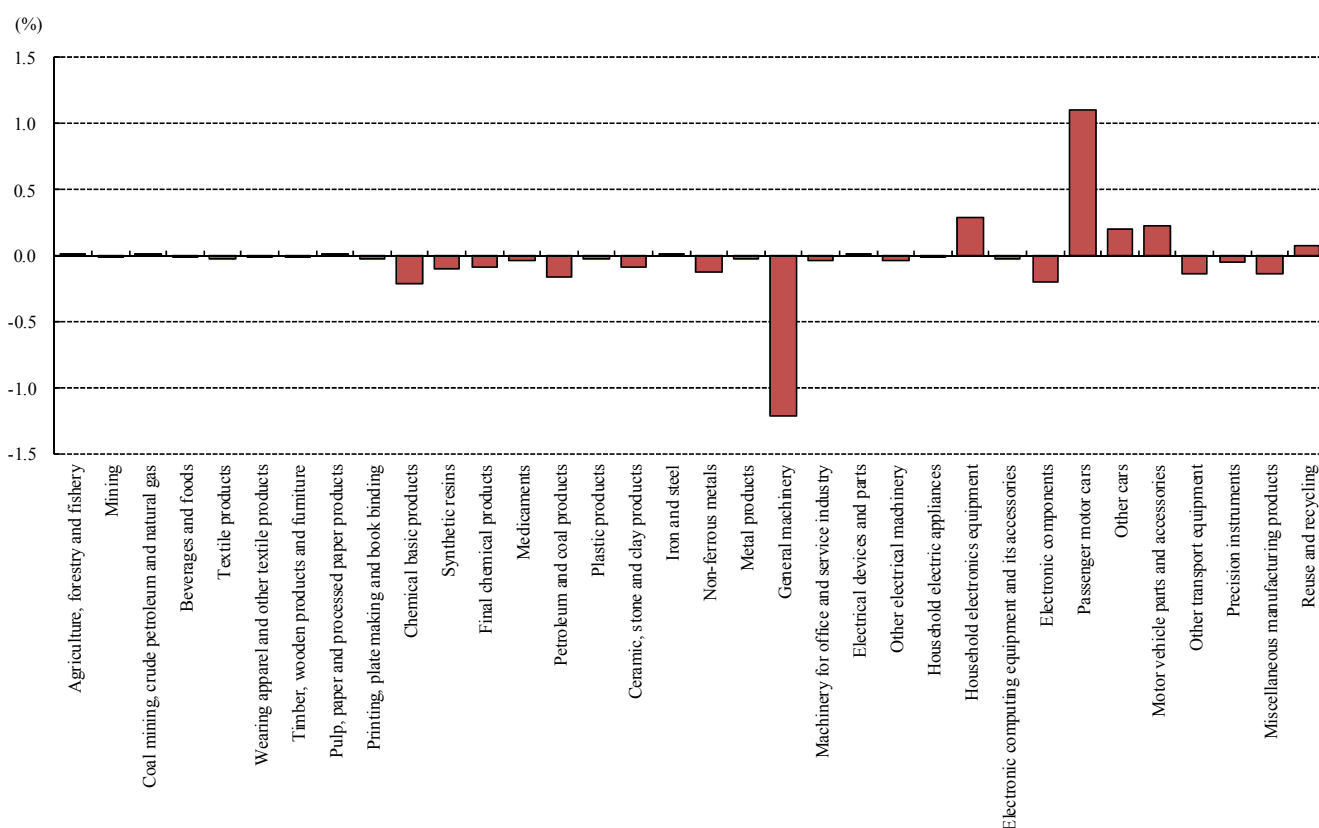
Among service sectors, "transport and information and communications" and "other services" increased by 0.6 and 0.1 points, respectively, from 2011, while "commerce," "finance and real estate" and "public services" decreased by 0.5, 0.0, and 0.0 points, respectively. (Table 2-6).

Table 2-6. Export values

	Exports (billion yen)			Growth rate (%)			Degree of contribution to growth rate (%)	Composition ratio (%)			Difference in composition ratio compared to 2005	Difference in composition ratio compared to 2011
	2005	2011	2012	2011 vs. 2005	2012 vs. 2005	2012 vs. 2011	2012 vs. 2011	2005	2011	2012	2012	2012
Total	73,769	79,600	78,894	7.9	6.9	-0.9	-0.9	100.0	100.0	100.0	-	-
Goods	56,343	62,410	61,763	10.8	9.6	-1.0	-0.8	76.4	78.4	78.3	1.9	-0.1
Primary products	94	94	90	0.3	-3.4	-3.7	-0.0	0.1	0.1	0.1	-0.0	-0.0
Manufactured products	56,249	62,316	61,673	10.8	9.6	-1.0	-0.8	76.3	78.3	78.2	1.9	-0.1
Raw material products	11,546	13,346	12,815	15.6	11.0	-4.0	-0.7	15.7	16.8	16.2	0.6	-0.5
Processed and assembled products	41,259	45,318	45,430	9.8	10.1	0.2	0.1	55.9	56.9	57.6	1.7	0.7
Other products	3,444	3,652	3,427	6.0	-0.5	-6.1	-0.3	4.7	4.6	4.3	-0.3	-0.2
Construction	-	-	-	-	-	-	-	-	-	-	-	-
Services	17,426	17,190	17,131	-1.4	-1.7	-0.3	-0.1	23.6	21.6	21.7	-1.9	0.1
Commerce	8,621	8,720	8,214	1.2	-4.7	-5.8	-0.6	11.7	11.0	10.4	-1.3	-0.5
Finance and real estate	674	487	480	-27.7	-28.7	-1.4	-0.0	0.9	0.6	0.6	-0.3	-0.0
Transport and information and communications	6,003	5,572	5,988	-7.2	-0.3	7.5	0.5	8.1	7.0	7.6	-0.5	0.6
Public services	449	409	390	-8.8	-13.1	-4.7	-0.0	0.6	0.5	0.5	-0.1	-0.0
Other services	1,680	2,002	2,059	19.2	22.6	2.9	0.1	2.3	2.5	2.6	0.3	0.1

Looking at goods sectors in terms of their contribution to growth, sectors that made a negative contribution to growth include: "general machinery" (e.g., semiconductor making equipment, engines), "chemical basic products" (e.g., other cyclic intermediates, other aliphatic intermediates), and "electronic components" (e.g., semiconductor devices, other electronic components). Sectors that contributed to growth include: "passenger motor cars," "household electronics equipment" (e.g., video recording and playback equipment, radio and television sets), and "motor vehicle parts and accessories" (e.g., motor vehicle parts and accessories, internal combustion engines for motor vehicles and parts) (Figure 2-8).

Figure 2-8. Degree of contribution to growth of export values (goods) by sector (in comparison with 2011)



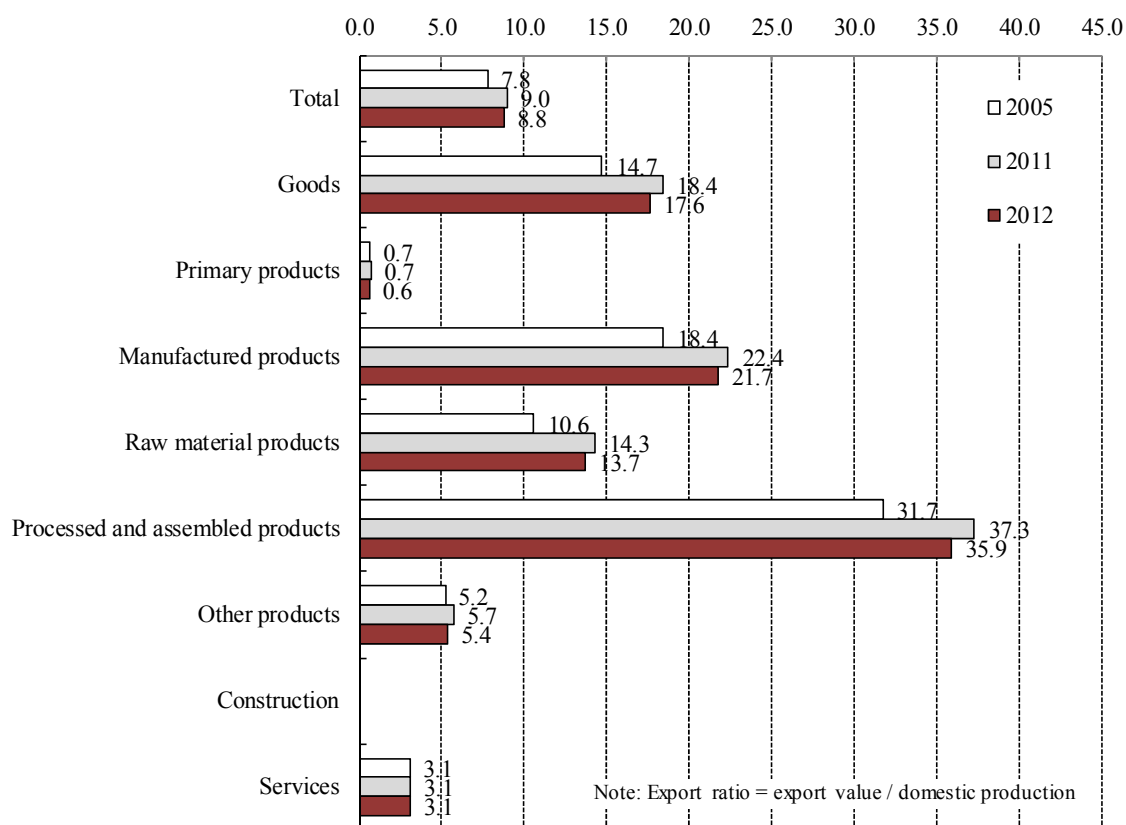
The export ratio declined by 0.2 points from 2011.

Both the export ratio for goods and that for services declined.

Among goods sectors, export ratios declined both in "primary products" and "manufactured products."

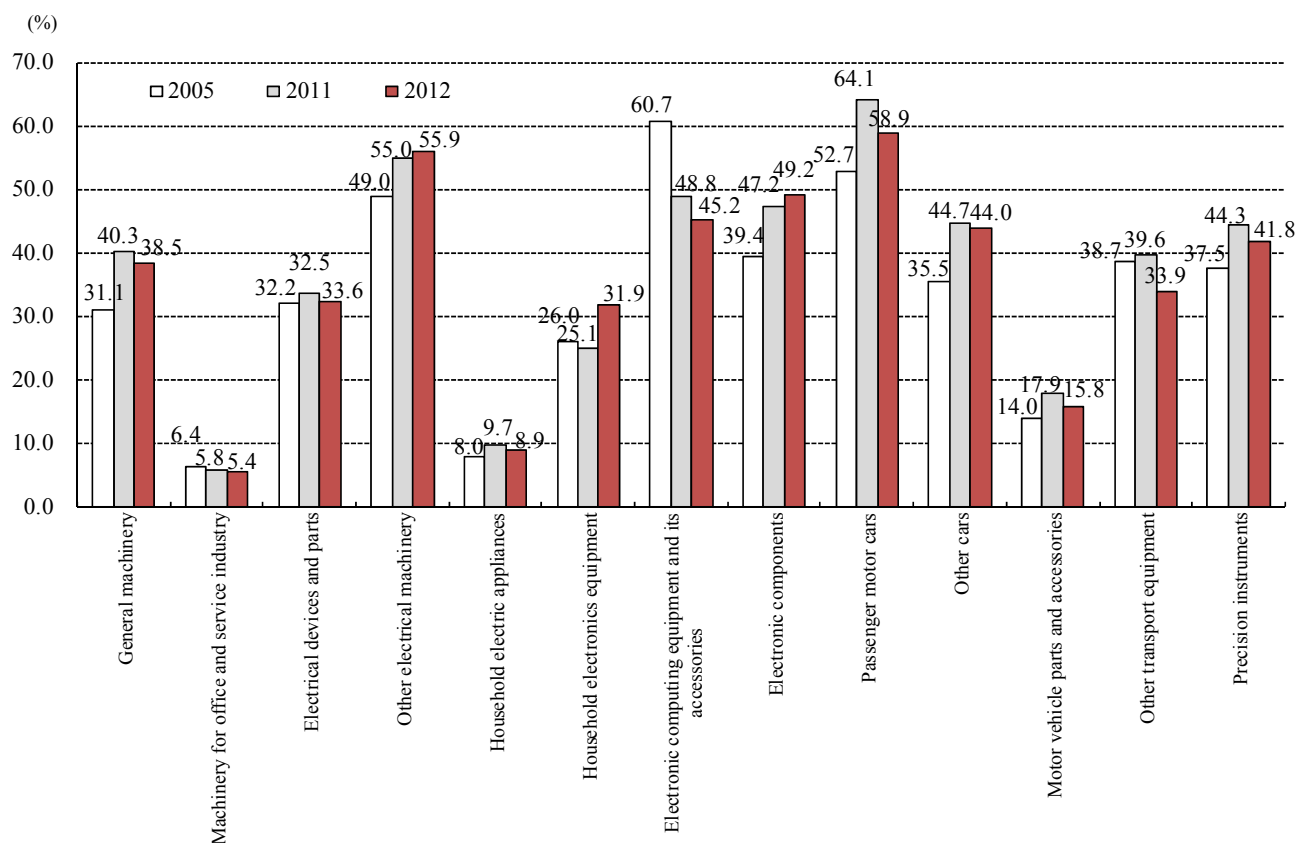
Breaking down "manufactured products," export ratios declined all in "processed and assembled products," "raw material products" and "other products" (Figure 2-9).

Figure 2-9. Export ratios by type of goods and services



A breakdown by sector of "processed and assembled products," which marked the highest export ratio among "manufactured products," shows that sectors including "passenger motor cars," "electronic computing equipment and its accessories" (e.g., electronic computing equipment (except personal computers)), and "other transport equipment" (e.g., aircrafts) recorded lower export ratios compared to 2011. In contrast, "other electrical machinery" (electrical measuring instruments, and applied electronic equipment), "electronic components" (e.g., electron tubes, integrated circuits), and "household electronics equipment" (e.g., radio and television sets, video recording and playback equipment) recorded higher export ratios compared to 2011 (Figure 2-10).

Figure 2-10. Export ratios by sector (processed and assembled products)



2) Comparisons with 2005

Exports increased by 6.9% from 2005. Dividing exports into goods and services reveals that goods increased by 9.6% from 2005 but services decreased by 1.7%. A further breakdown shows that all goods sectors increased except for "primary products" and "other products," which decreased by 3.4% and 0.5%, respectively, from 2005. Among service sectors, "other services" increased by 22.6%, but all the other sectors decreased.

In terms of composition ratio, goods increased by 1.9 points from 2005, while services decreased by 1.9 points.

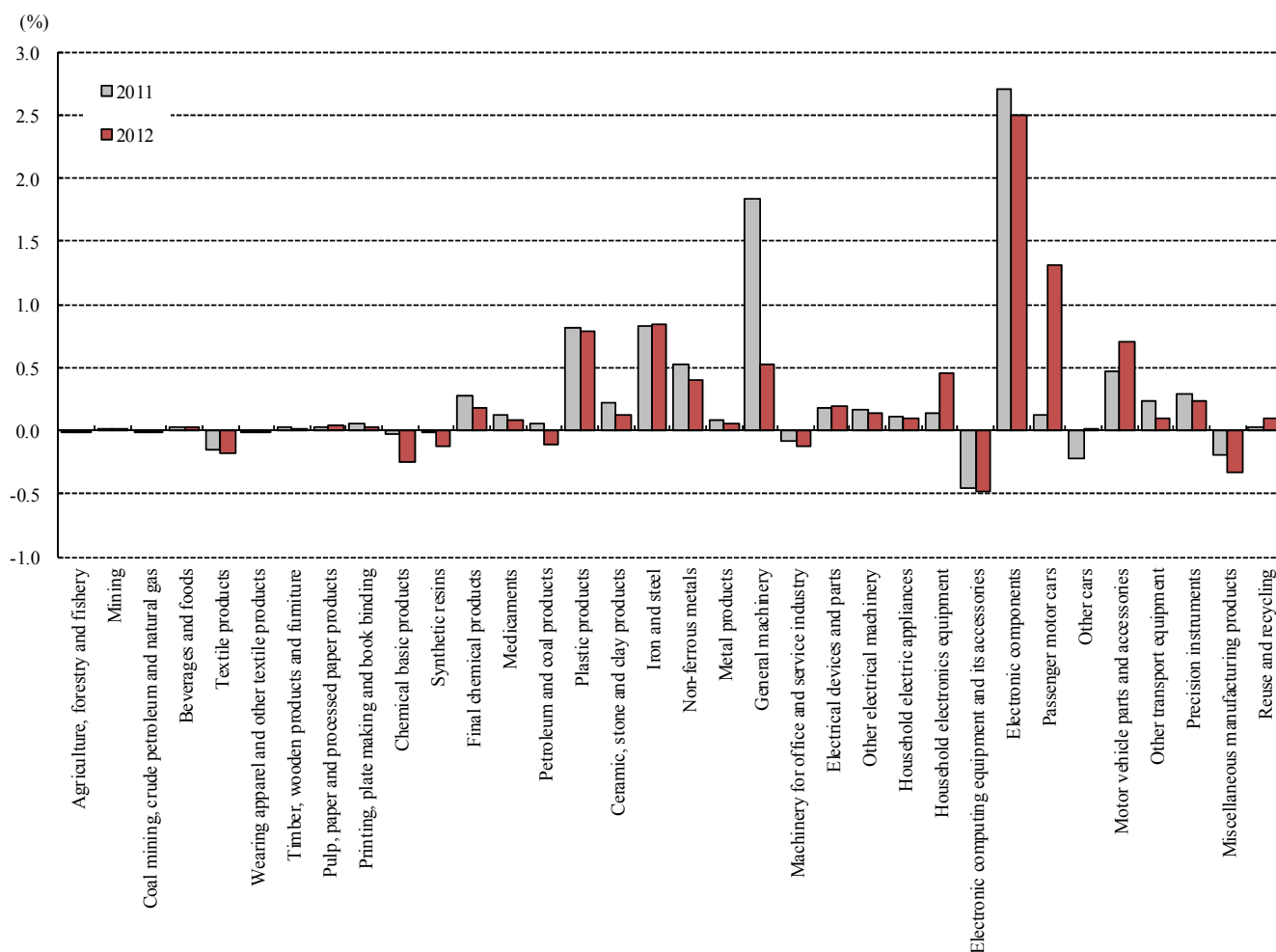
Among goods sectors, "primary products" decreased by 0.0 points from 2005, while "manufactured products" increased by 1.9 points. Breaking down "manufactured products" shows that "raw material products" and "processed and assembled products" increased by 0.6 and 1.7 points, respectively, from 2005 but "other products" decreased by 0.3 points.

Among service sectors, "other services" increased by 0.3 points from 2005 but "commerce," "finance and real estate," "transport and information and communications" and "public services" decreased by 1.3, 0.3, 0.5 and 0.1 points, respectively (Table 2-6).

Looking at goods sectors in terms of their contribution to growth, sectors that contributed to growth include: "electronic components" (e.g., integrated circuits, liquid crystal elements), "passenger motor cars," and "iron and steel" (e.g. steel strip (ordinary steel), hot rolled steel (special steel)). Sectors that made a negative contribution to growth include: "electronic computing equipment and its accessories" (e.g., personal computers, electronic computing equipment (accessory equipment)), "miscellaneous manufacturing products" (e.g., toys and games,

tires and inner tubes), and "chemical basic products" (e.g., other cyclic intermediates, other aliphatic intermediates) (Figure 2-11).

Figure 2-11. Degree of contribution to growth of export values (goods) by sector (in comparison with 2005)



The export ratio rose by 1.0 points from 2005.

The export ratios for goods and services both increased.

Among goods sectors, export ratios decreased in "primary products" and rose in "manufactured products."

Breaking down "manufactured products," export ratios declined in all categories: "raw material products," "processed and assembled products" and "other products" (Figure 2-9).

A breakdown by sector of "processed and assembled products," which marked the highest export ratio among "manufactured products," shows that sectors including "electronic components" (e.g., integrated circuits, liquid crystal elements), "passenger motor cars" and "other cars" (e.g., trucks, buses and other cars) recorded higher export ratios compared to 2005. In contrast, sectors including "electronic computing equipment and its accessories" (e.g., personal computers, electronic computing equipment (except personal computers)), "other transport equipment" (e.g., bicycles, rolling stock), and "machinery for offices and service industry" (e.g., copy machines, vending machines) recorded lower export ratios compared to 2005 (Figure 2-10).

(6) Structure of imports

Imports in 2012 amounted to 80.4 trillion yen, of which goods accounted for 86.9% and services accounted for 13.1% (Table 2-7).

The 2012 import ratio (= import value / domestic demand [domestic production + import value – export value]) across all industries was 8.9%. The import ratio for goods was 19.5% and that for services was 1.9% (Figure 2-13).

Among goods sectors, a breakdown of "manufactured products" by sector shows that "electronic computing equipment and its accessories," "wearing apparel and other textile products" and "precision instruments" recorded higher import ratios (Figure 2-14).

1) Comparisons with 2011

Imports increased by 4.6% from 2011. Dividing imports into goods and services reveals that goods (4.1% increase in degree of contribution to growth rate) and services (0.5% decrease in degree of contribution to growth rate) both increased by 4.7% and 4.1%, respectively, from 2011.

A further breakdown shows that all goods sectors increased except for "raw material products," a subsection of "manufactured products," which decreased by 3.8% from 2011 (0.7% decrease in degree of contribution to growth rate). Among service sectors, "commerce" decreased by 16.4% (0.2% decrease in degree of contribution to growth rate), but all the other sectors increased.

In terms of composition ratio, goods increased by 0.1 points from 2011, while services decreased by 0.1 points.

Among goods sectors, "primary products" decreased by 0.4 points from 2011, while "manufactured products" increased by 0.4 points. Breaking down "manufactured products" shows that "processed and assembled products" increased by 2.2 points from 2011, while "raw material products" and "other products" decreased by 1.4 and 0.3 points, respectively.

Among service sectors, "commerce" decreased by 0.3 points from 2011, while "other services" increased by 0.2 points (Table 2-7).

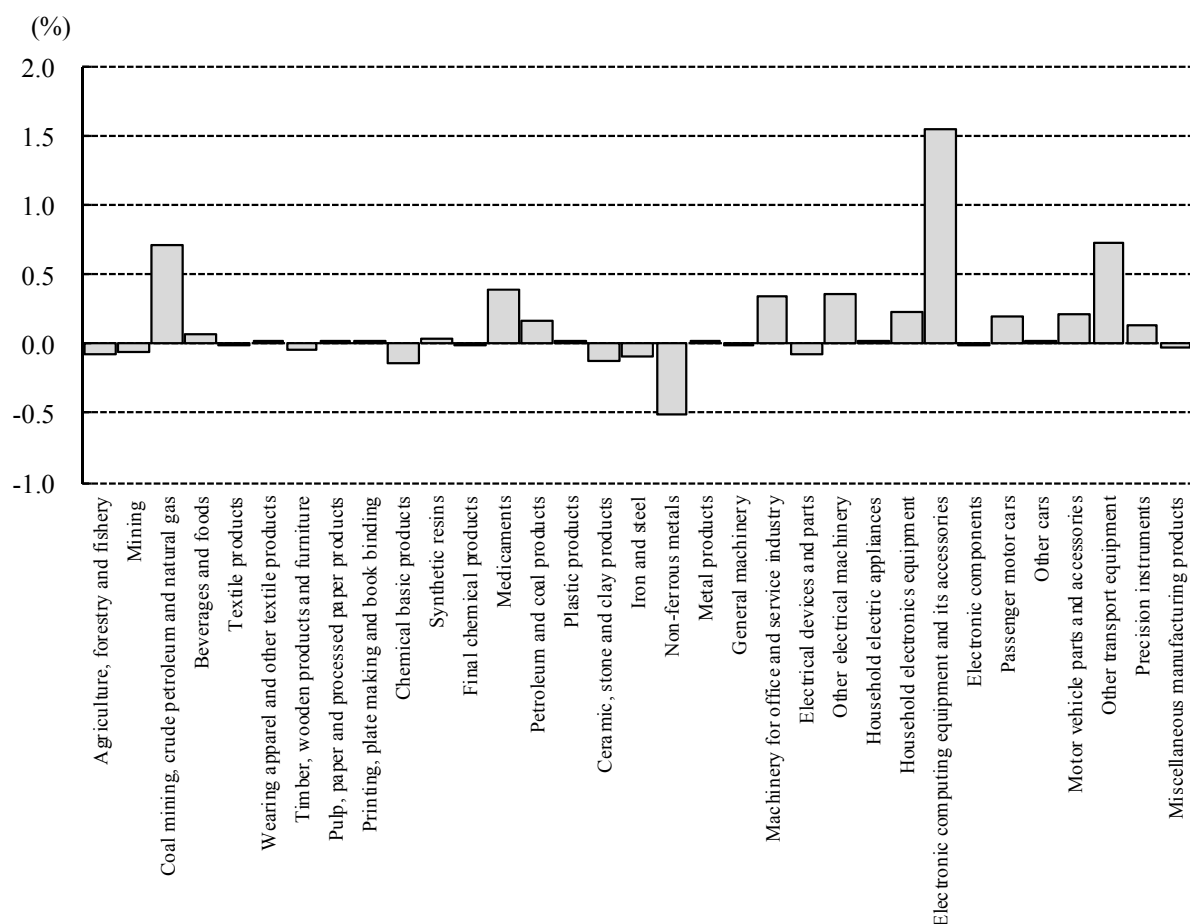
Table 2-7. Import values

	Imports (billion yen)			Growth rate (%)			Degree of contribution to growth rate (%)	Composition ratio (%)			Difference in composition ratio compared to 2005	Difference in composition ratio compared to 2011
	2005	2011	2012	2011 vs. 2005	2012 vs. 2005	2012 vs. 2011	2012 vs. 2011	2005	2011	2012	2012	2012
Total	72,483	76,905	80,442	6.1	11.0	4.6	4.6	100.0	100.0	100.0	-	-
Goods	61,637	66,817	69,938	8.4	13.5	4.7	4.1	85.0	86.9	86.9	1.9	0.1
Primary products	17,602	16,220	16,669	-7.9	-5.3	2.8	0.6	24.3	21.1	20.7	-3.6	-0.4
Manufactured products	44,035	50,598	53,268	14.9	21.0	5.3	3.5	60.8	65.8	66.2	5.5	0.4
Raw material products	12,740	13,697	13,182	7.5	3.5	-3.8	-0.7	17.6	17.8	16.4	-1.2	-1.4
Processed and assembled products	17,759	23,350	26,177	31.5	47.4	12.1	3.7	24.5	30.4	32.5	8.0	2.2
Other products	13,536	13,551	13,909	0.1	2.8	2.6	0.5	18.7	17.6	17.3	-1.4	-0.3
Construction	-	-	-	-	-	-	-	-	-	-	-	-
Services	10,846	10,088	10,504	-7.0	-3.2	4.1	0.5	15.0	13.1	13.1	-1.9	-0.1
Commerce	705	1,028	859	45.9	21.9	-16.4	-0.2	1.0	1.3	1.1	0.1	-0.3
Finance and real estate	501	809	839	61.7	67.6	3.6	0.0	0.7	1.1	1.0	0.4	-0.0
Transport and information and communications	4,381	3,650	3,825	-16.7	-12.7	4.8	0.2	6.0	4.7	4.8	-1.3	0.0
Public services	680	703	718	3.4	5.5	2.1	0.0	0.9	0.9	0.9	-0.0	-0.0
Other services	4,579	3,897	4,263	-14.9	-6.9	9.4	0.5	6.3	5.1	5.3	-1.0	0.2

Looking at goods sectors in terms of their contribution to growth, sectors that contributed to growth include: "electronic computing equipment and its accessories" (e.g., personal computers, electronic computing equipment (accessory equipment)), "other transport equipment" (e.g., aircrafts, steel ships), and "coal mining,

crude petroleum and natural gas" (e.g., natural gas, crude petroleum). Sectors that made a negative contribution to growth include: "non-ferrous metals" (e.g., other non-ferrous metals, copper), "chemical basic products" (e.g., other industrial inorganic chemicals, other aliphatic intermediates), and "ceramic, stone and clay products" (e.g., other glass products, n.e.c., miscellaneous ceramic, stone and clay products) (Figure 2-12).

Figure 2-12. Degree of contribution to growth of import values (goods) by sector (in comparison with 2011)



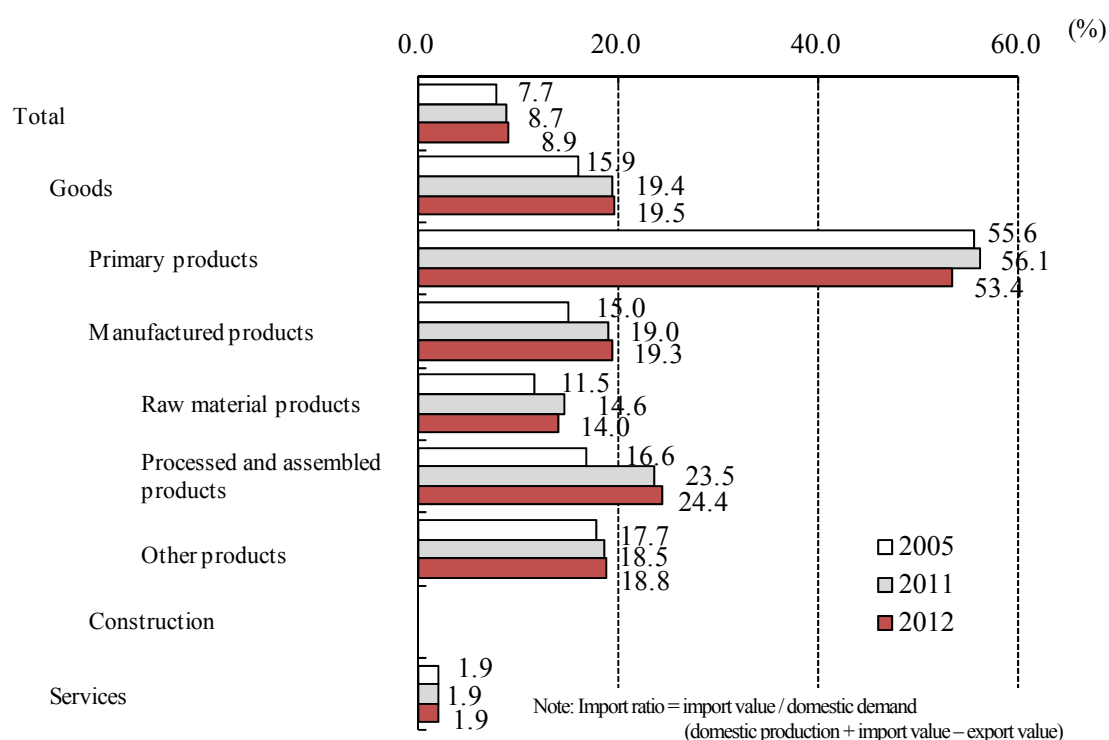
The import ratio rose by 0.2 points from 2011.

The import ratio for goods rose but that for services remained the same level.

Among goods sectors, import ratios rose in "manufactured products" but fell in "primary products."

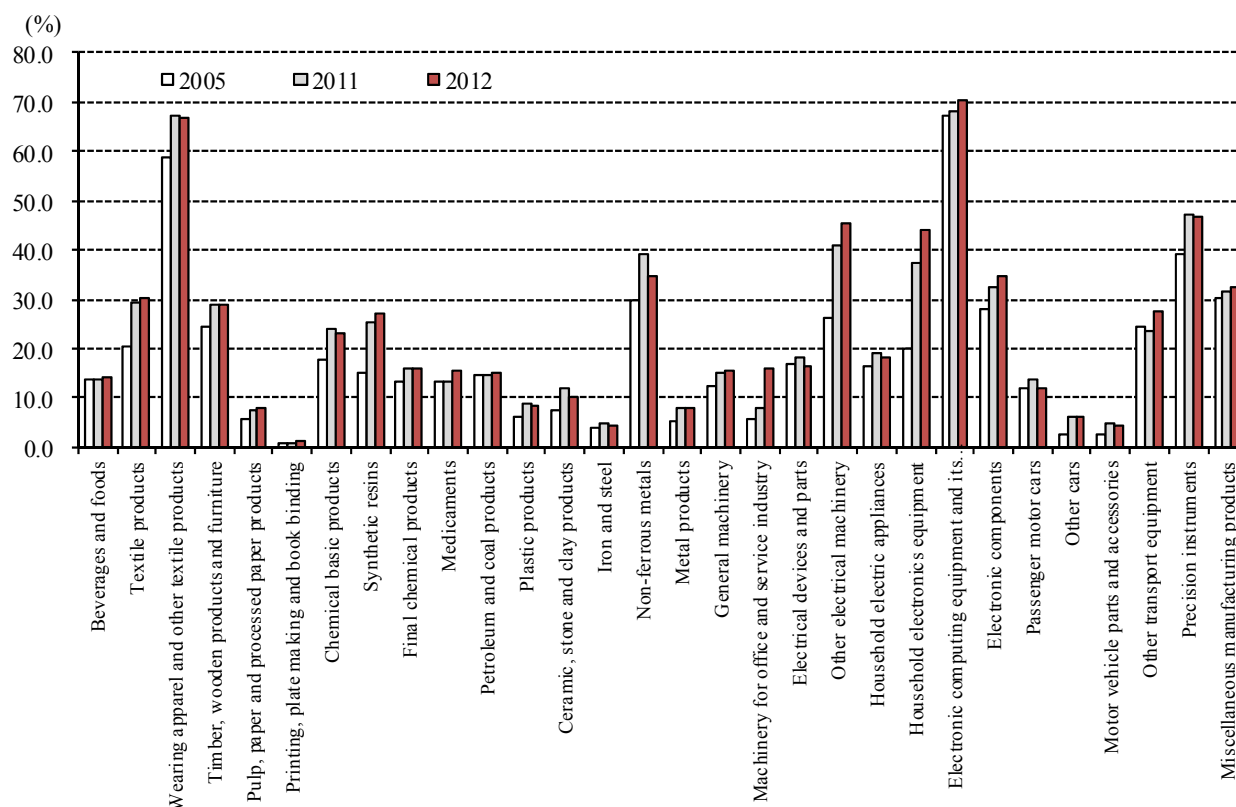
Breaking down "manufactured products," import ratios rose in "other products" and "processed and assembled products," but fell in "raw material products" (Figure 2-13).

Figure 2-13. Changes in import ratios over time by type of goods and services



Breaking down "manufactured products" by sector, sectors that recorded higher import ratios compared to 2011 include: "machinery for offices and service industry" (e.g., amusement machinery, other office machines), "household electronics equipment" (e.g., radio and television sets, radio communication equipment (except cellular phones)), and "other electric machinery" (e.g., electrical measuring instruments, applied electronic equipment). Sectors that recorded lower import ratio compared to 2011 include: "non-ferrous metals" (e.g., other non-ferrous metal products, copper), "agriculture, forestry and fishery" (e.g., edible industrial crops, n.e.c., other livestock), and "ceramic, stone and clay products" (miscellaneous ceramic, stone and clay products, sheet glass) (Figure 2-14).

Figure 2-14. Changes in import ratios (manufactured products) over time



2) Comparisons with 2005

Imports increased by 11.0% from 2005. Dividing imports into goods and services reveals that goods increased by 13.5% from 2005 but services decreased by 3.2%.

Among goods sectors, "primary products" decreased by 5.3% from 2005, while "manufactured products" increased by 21.0%. Breaking down "manufactured products" shows that "raw material products," "processed and assembled products" and "other products" all increased by 3.5%, 47.4% and 2.8%, respectively, from 2005. Among service sectors, "transport and information and communications" and "other services" decreased by 12.7% and 6.9%, respectively, from 2005, while "commerce," "finance and real estate" and "public services" increased by 21.9%, 67.6% and 5.5%, respectively.

In terms of composition ratio, goods increased by 1.9 points from 2005, while services decreased by 1.9 points.

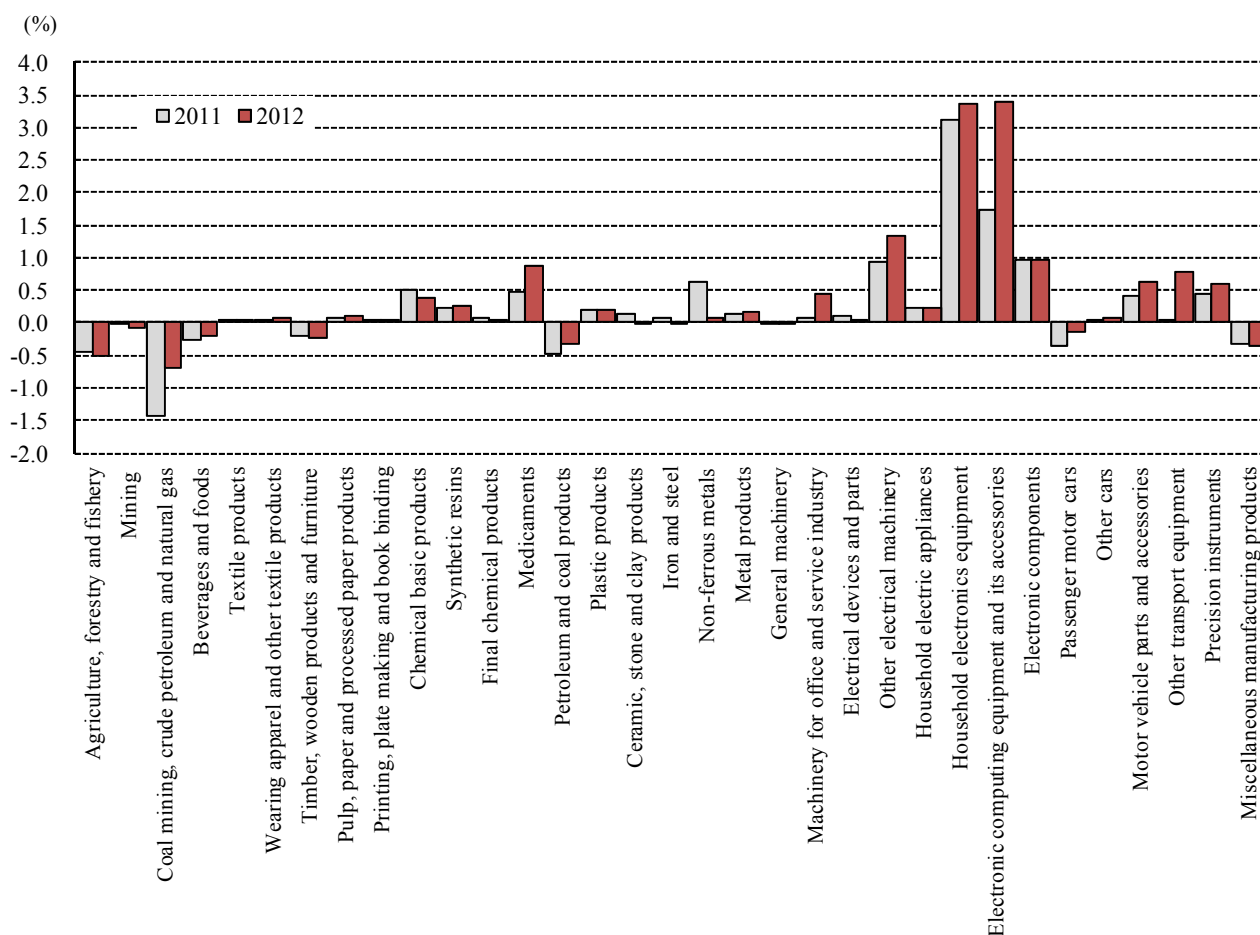
Among goods sectors, "manufactured products" increased by 5.5 points from 2005, while "primary products" decreased by 3.6 points. Breaking down "manufactured products" shows that "processed and assembled products" increased by 8.0 points from 2005, but "raw material products" and "other products" decreased by 1.2 and 1.4 points, respectively.

Among service sectors, both "transport and information and communications" and "other services" decreased by 1.3 and 1.0 points, respectively, from 2005, while both "commerce" and "finance and real estate" increased by 0.1 and 0.4 points, respectively. "Public services" remained the same level (Table 2-7).

Looking at goods sectors in terms of their contribution to growth, sectors that contributed to growth include: "household electronics equipment" (e.g., cellular phones, radio communication equipment (except cellular

phones)), "machinery for offices and service industry" (e.g., amusement machinery, other machinery for service industry), and "other electrical machinery" (e.g., other electrical devices and parts, applied electronic equipment). Sectors that made a negative contribution to growth include: "agriculture, forestry and fishery" (e.g., hen eggs, inland water fisheries and culture), "passenger motor cars" and "timber, wooden products and furniture" (e.g., other wooden products, n.e.c., wood) (Figure 2-15).

Figure 2-15. Degree of contribution to growth of import values (goods) by sector (in comparison with 2005)



The import ratio rose by 1.2 points from 2005.

The import ratio for goods rose but that for services remained the same level.

Among goods sectors, import ratios declined in "primary products" but rose in "manufactured products."

Breaking down "manufactured products," import ratios rose in all categories: "raw material products," "processed and assembled products" and "other products" (Figure 2-13).

Breaking down "manufactured products" by sector, sectors that recorded higher import ratios compared to 2005 include: "household electronics equipment" (e.g., radio and television sets, wired communication equipment), "other electrical machinery" (e.g., other electrical devices and parts, applied electronic equipment), and "synthetic resins" (e.g., other resins, polyethylene (high density)). Sectors that recorded lower import ratios compared to 2005 include: "electrical devices and parts" (e.g., generators, other electrical devices and parts), and "coal mining, crude petroleum and natural gas" (crude petroleum) (Figure 2-14).

(7) Changes in price structure

A deflator, calculated using nominal or real values, is a measure of price changes with respect to a reference year; its value becomes greater than 1 when a price becomes higher than the reference year price, and its value becomes less than 1 when a price becomes lower than the reference year price. Referring to the major economic items of 2012, the domestic production deflator was 1.0075, the export deflator was 0.8986, the import deflator was 1.0677, and the gross domestic supply deflator was 1.0224 (Table 2-8).

Table 2-8. Deflators

	Nominal value (billion yen)		Real value (billion yen)		Deflator		Difference from 2005		Difference from 2011
	2011	2012	2011	2012	2011	2012	2011	2012	2012
Domestic production	899,568	906,966	889,147	900,195	1.0117	1.0075	0.0117	0.0075	-0.0042
Exports	72,435	70,892	79,600	78,894	0.9100	0.8986	-0.0900	-0.1014	-0.0114
Imports	82,824	85,884	76,905	80,442	1.0770	1.0677	0.0770	0.0677	-0.0093
Gross domestic supply	909,957	921,959	886,452	901,743	1.0265	1.0224	0.0265	0.0224	-0.0041

Note: Gross domestic supply = domestic production + imports – exports

1) Comparisons with 2011

i) Domestic production deflator

The domestic production deflator decreased by 0.0042 points from 2011.

Dividing domestic production into goods and services reveals that the domestic production deflator for goods decreased by 0.00259 points from 2011, while that for services increased by 0.0090 points.

Among goods sectors, "primary products," "manufactured products" and "construction" all decreased by 0.0344, 0.0191, and 0.0613 points, respectively, from 2011.

Breaking down "manufactured products" shows that "raw material products," "processed and assembled products" and "other products" all declined by 0.0379, 0.0072, and 0.0067 points, respectively, from 2011 (Table 2-9).

By sector, "petroleum and coal products," "iron and steel" and "coal mining, crude petroleum and natural gas" recorded a significant decrease.

ii) Export deflator

The export deflator decreased by 0.0114 points from 2011.

Dividing exports into goods and services reveals that the export deflator for goods decreased by 0.0184 points from 2011, while that for services increased by 0.0134 points.

Among goods sectors, both "primary products" and "manufactured products" decreased by 0.0682 and 0.0183 points, respectively, from 2011.

Breaking down "manufactured products" shows that "raw material products" and "processed and assembled products" decreased by 0.0241 and 0.0169 points, respectively, from 2011, but "other products" increased by 0.0261 points (Table 2-9).

By sector, "petroleum and coal products," "textile products" and "gas and heat supply" recorded a significant decrease.

iii) Import deflator

The import deflator decreased by 0.0093 points from 2011.

Dividing imports into goods and services reveals that both the import deflator for goods and that for services decreased by 0.0094 and 0.0089 points, respectively, from 2011.

Among goods sectors, "manufactured products" decreased by 0.0244 points from 2011, while "primary products" increased by 0.0510 points.

Breaking down "manufactured products" shows that "raw material products" and "processed and assembled products" decreased by 0.0017 and 0.0338 points, respectively, from 2011, while "other products" increased by 0.0140 points (Table 2-9).

By sector, "machinery for offices and service industry," "medicaments" and "mining" recorded a significant decrease.

iv) Gross domestic supply deflator

The gross domestic supply deflator decreased by 0.0041 points from 2011.

Dividing gross domestic supply into goods and services reveals that the gross domestic supply deflator for goods decreased by 0.0254 points from 2011, while that for services increased by 0.0085 points.

Among goods sectors, "primary products," "manufactured products" and "construction" all decreased by 0.0039, 0.0222 and 0.0613 points, respectively, from 2011.

Breaking down "manufactured products" shows that "raw material products," "processed and assembled products" and "other products" all decreased by 0.0349, 0.0145, 0.0039, respectively, from 2011 (Table 2-9).

By sector, "other transport equipment," "iron and steel" and "mining" recorded a significant decrease.

Table 2-9. Changes in deflator values in relation to economic items

	2012 values (difference from 2005 base value [1.0000])				2012 values (difference from 2011 base value [1.0000])			
	Domestic production	Exports	Imports	Gross domestic supply	Domestic production	Exports	Imports	Gross domestic supply
Total	0.0075	-0.1014	0.0677	0.0224	-0.0042	-0.0114	-0.0093	-0.0041
Goods	0.0213	-0.1211	0.0827	0.0577	-0.0259	-0.0184	-0.0094	-0.0254
Primary products	0.0162	0.0180	0.6606	0.3601	-0.0344	-0.0680	0.0510	-0.0039
Manufactured products	0.0254	-0.1213	-0.0981	0.0343	-0.0191	-0.0183	-0.0244	-0.0222
Raw material products	0.1950	0.0626	0.1085	0.2009	-0.0379	-0.0241	-0.0017	-0.0349
Processed and assembled products	-0.0803	-0.1878	-0.3003	-0.0885	-0.0072	-0.0169	-0.0338	-0.0145
Other products	-0.0146	0.0734	0.0866	0.0003	-0.0067	0.0261	0.0140	-0.0039
Construction	0.0007	-	-	0.0007	-0.0613	-	-	-0.0613
Services	-0.0013	-0.0307	-0.0327	-0.0010	0.0090	0.0134	-0.0089	0.0085

2) Comparisons with 2005

i) Domestic production deflator

The domestic production deflator increased by 0.0075 points from 2005.

Dividing domestic production into goods and services reveals that the domestic production deflator for

goods increased by 0.0213 points from 2005 but that for services decreased by 0.0013 points.

Among goods sectors, "primary products," "manufactured products" and "construction" all increased by 0.0162, 0.0254, 0.0007 points, respectively, from 2005.

Breaking down "manufactured products" shows that "raw material products" increased by 0.1950 points from 2005 but "processed and assembled products" and "other products" decreased by 0.0803 and 0.0146 points, respectively (Table 2-9).

By sector, "gas and heat supply," "coal mining, crude petroleum and natural gas" and "petroleum and coal products" recorded a significant increase.

ii) Export deflator

The export deflator decreased by 0.1014 points from 2005.

Dividing exports into goods and services reveals that both the export deflator for goods and that for services decreased by 0.1211 and 0.0307 points, respectively, from 2005.

Among goods sectors, "manufactured products" decreased by 0.1213 points from 2005, while "primary products" increased by 0.0180 points.

Breaking down "manufactured products" shows that "processed and assembled products" decreased by 0.1817 points from 2005, but "raw material products" and "other products" increased by 0.0626 and 0.0734 points, respectively (Table 2-9).

By sector, "household electronics equipment," "electronic components" and "printing, plate making and book binding" recorded a significant decrease.

iii) Import deflator

The import deflator increased by 0.0677 points from 2005.

Dividing imports into goods and services reveals that the import deflator for goods increased by 0.0827 points from 2005 but that for services decreased by 0.0327 points.

Among goods sectors, "primary products" increased by 0.6606 points from 2005, while "manufactured products" decreased by 0.0981 points.

Breaking down "manufactured products" shows that "processed and assembled products" decreased by 0.3003 points from 2005, but "raw material products" and "other products" increased by 0.1085 and 0.0866 points, respectively (Table 2-9).

By sector, "mining," "coal mining, crude petroleum and natural gas" and "petroleum and coal products" recorded a significant increase.

iv) Gross domestic supply deflator

The gross domestic supply deflator increased by 0.0224 points from 2005.

Dividing gross domestic supply into goods and services reveals that the gross domestic supply deflator for goods increased by 0.0577 points from 2005 but that for services decreased by 0.0010 points.

Among goods sectors, both "primary products," "manufactured products" and "construction" increased by 0.3601, 0.0343 and 0.0007 points, respectively, from 2005.

Breaking down "manufactured products" shows that "raw material products" and "other products" increased by 0.2009 and 0.0003 points, respectively, from 2005 but "processed and assembled products"

decreased by 0.0885 points (Table 2-9).

By sector, "coal mining, crude petroleum and natural gas," "mining," and "gas and heat supply" recorded a significant increase.

(8) Skyline charts

Take a look at the skyline charts that visually illustrate the 2012 industrial structure as well as trade structure.

In the skyline chart representing all industries, along the horizontal axis, it shows that service sectors including "commerce" and "medical services, health, social security, and nursing care" accounted for a large share of domestic production. Along the vertical axis, it shows that service self-sufficiency rates amounted to nearly 100%, with small percentages being represented by exports and imports (as indicated by short shaded bars), indicating that most services are produced and consumed domestically.

Among manufacturing industries, which account for larger proportions of imports and exports than other industries, sectors including "beverages and foods," "iron and steel," "general machinery," and "motor vehicle parts and accessories" represented a large share of domestic production as indicated by their wide widths along the horizontal axis.

Along the vertical axis, it shows that sectors including "passenger motor cars," "other cars" and "other electrical machinery" are represented by self-sufficiency rates much higher than 100% with large percentages being accounted for exports. On the other hand, large proportions of production rates for sectors including "wearing apparel and other textile products" and "electronic computing equipment and its accessories" are accounted for imports as indicated by tall shaded bars. With regard to the "electronic computing equipment and its accessories" sector, its large export ratio as well as large import ratio may be explained by the implementation of product differentiations and international division of labor (Figure 2-16).

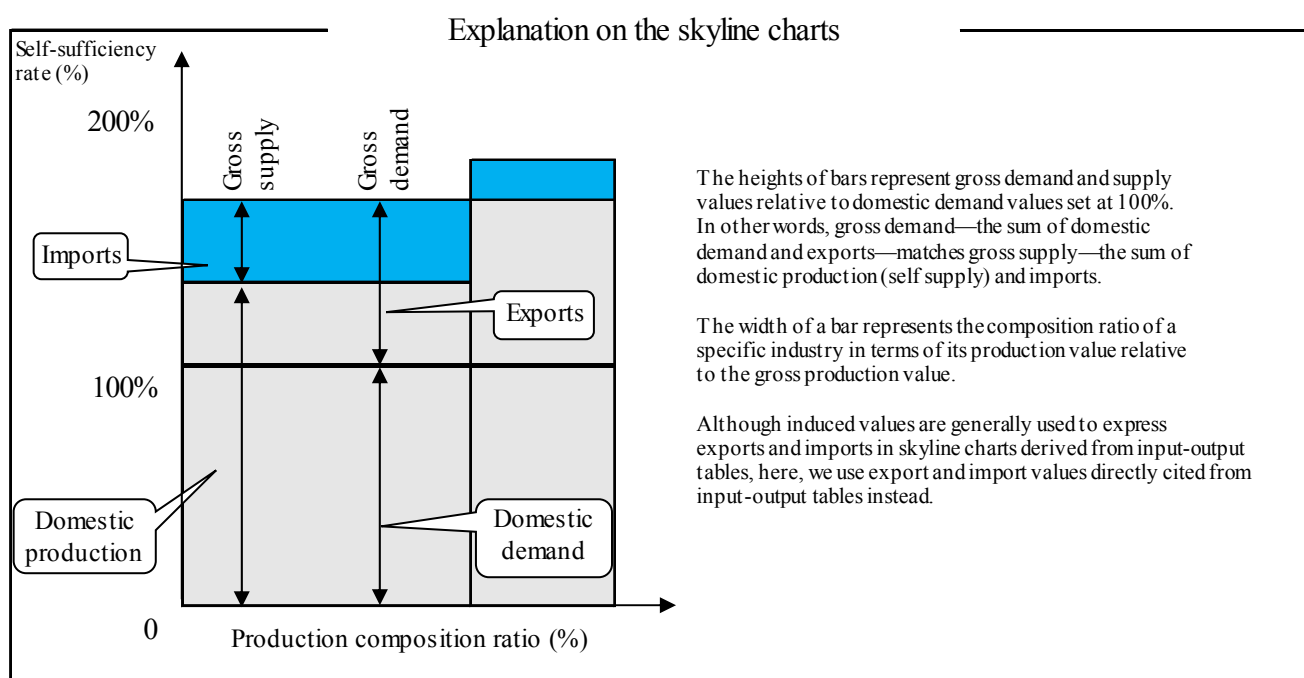
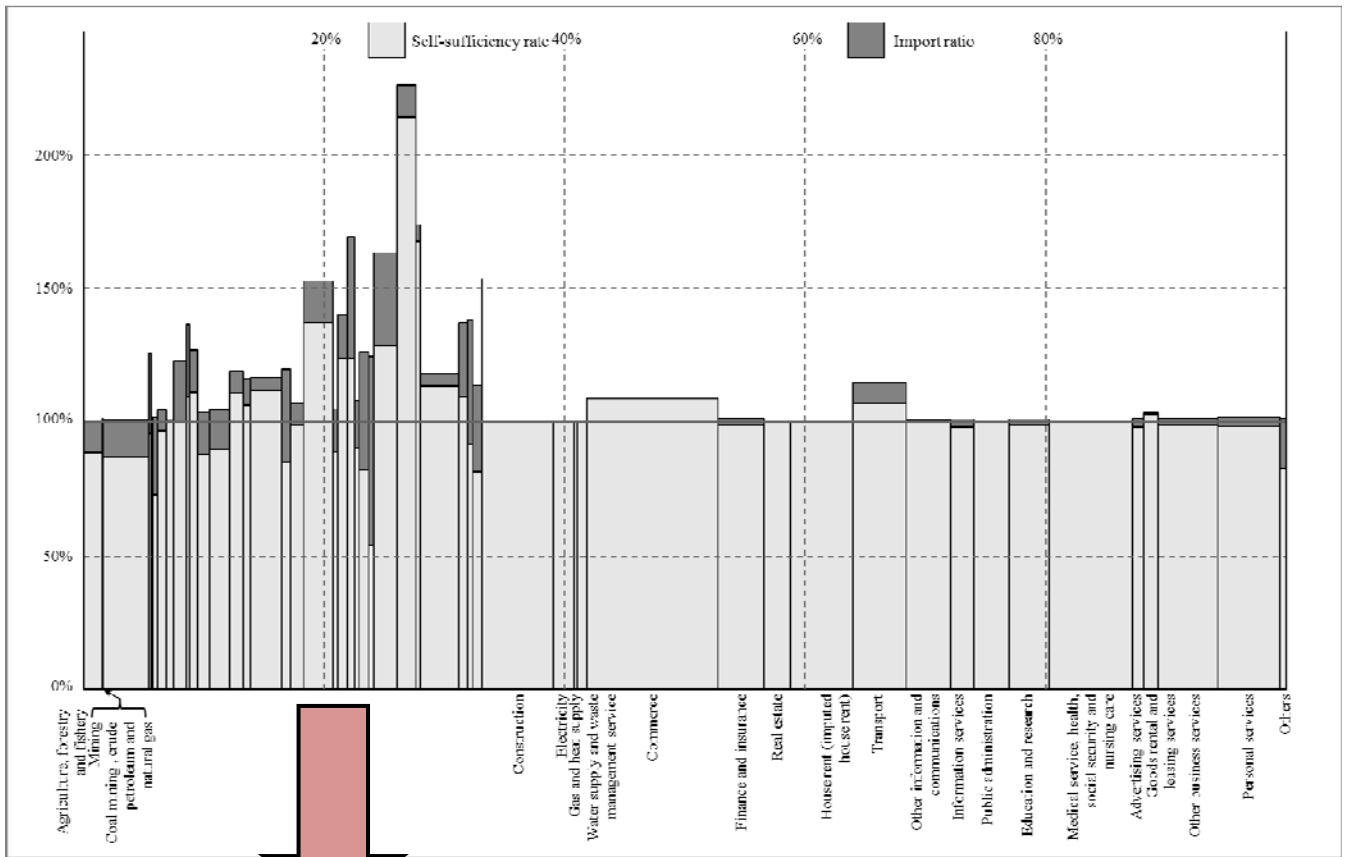
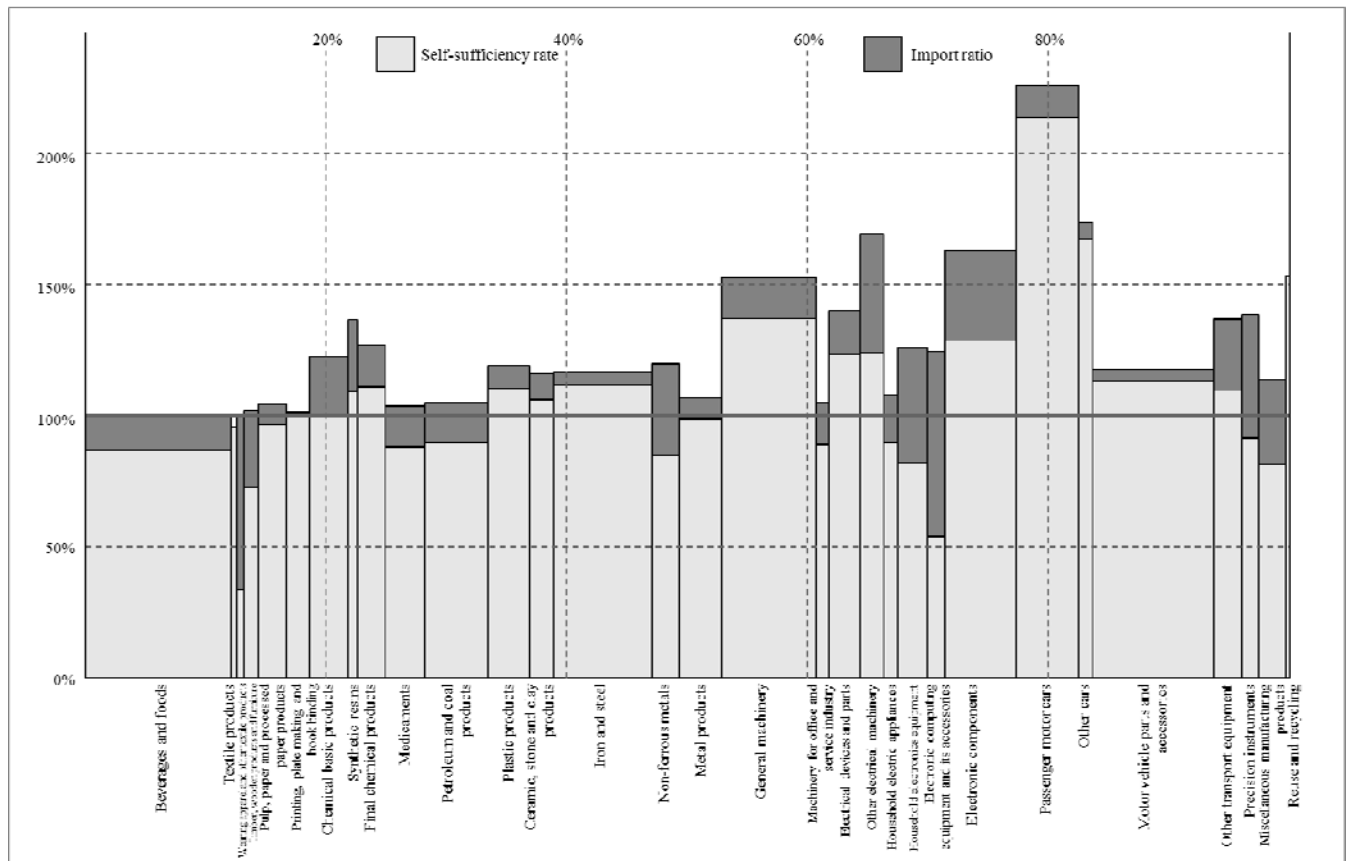


Figure 2-16. Skyline chart
(2012 Simple Updated Input-Output Table based on fixed prices) (All industries)



(Manufacturing industries)

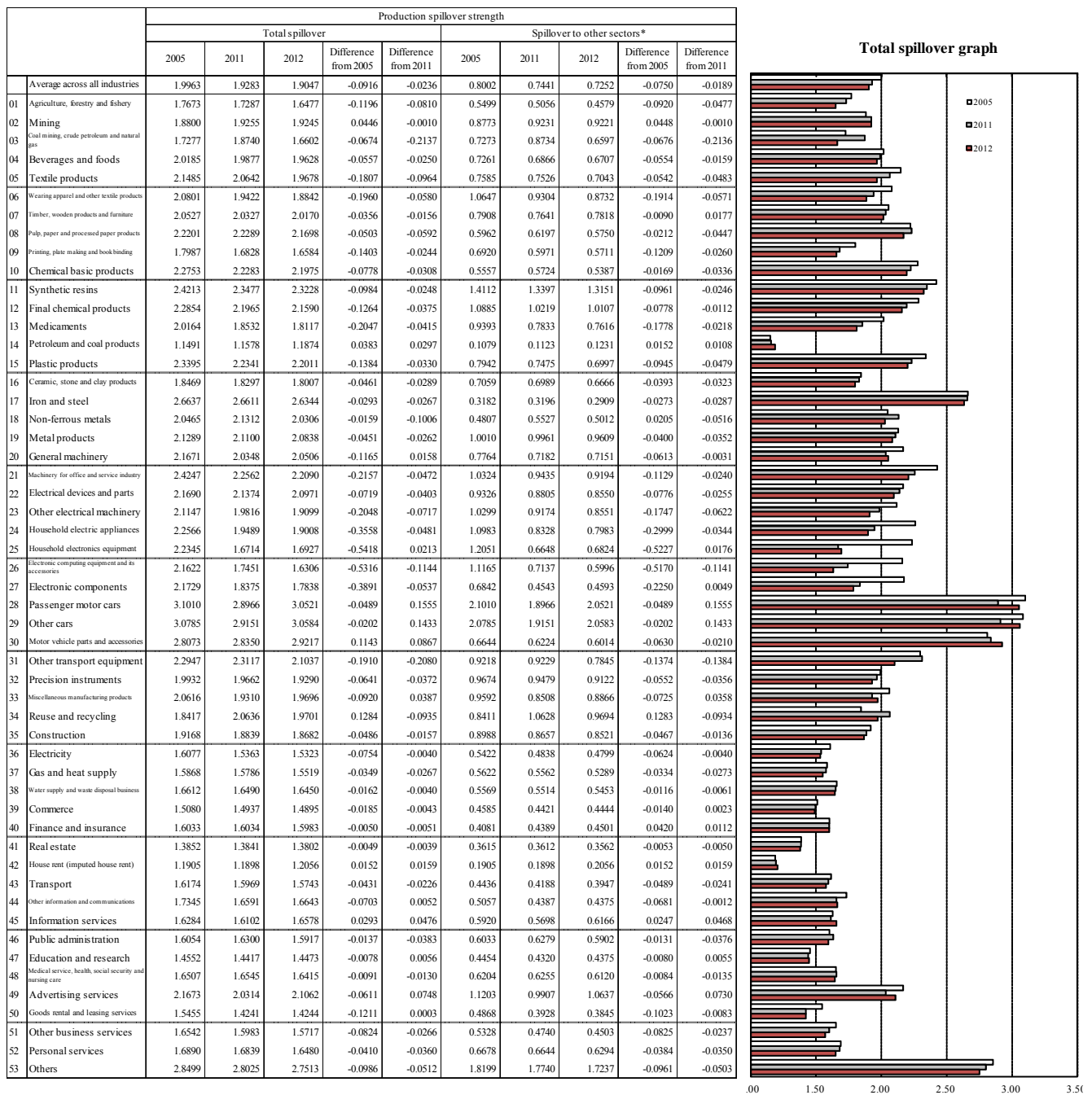


3. Structure of production spillover as being analyzed in the 2012 Input-Output Table

(1) Measure of production spillover strengths

Manufacturing activities of each industry spill over to other sectors successively through the purchasing of raw materials and services. With this principle in mind, take a look at changes in the strength of production spillover exerted toward the domestic products of each industry in terms of the Leontief inverse matrix (hereafter, this is referred to as "production spillover strength"), a measurement of gross effects on production of the same or different sector induced directly or indirectly when final demand in one industry increases by one unit.

Figure 3-1. Measure of production spillover strengths (in real terms)



* "Spillover to other sectors" in Figure 3-1 is calculated by the following steps: divide the inverse of the coefficient matrix by intersection point values representing the focal sector; the intersection point value is subtracted from each sum of the columns in the inverse matrix coefficient table; and column totals are summed up..

Among production spillover strengths, the average 2012 total spillover across all industries was 1.9047 times that of initial demand.

By sector, the total spillover was high in "other cars" (3.0584 times), "passenger motor cars" (3.0521 times), "motor vehicle parts and accessories" (2.9217 times), and "iron and steel" (2.6344 times). Industries dealing with "other cars," "passenger motor cars" and "motor vehicle parts and accessories" purchase raw materials and such with high production spillover strengths, and purchases are made from many industries, extending production spillover strengths. The iron and steel industry also has high production spillover strength toward the same sector because of the input of steel products such as pig iron and crude iron, but has low production spillover strength toward other sectors.

The average spillover to other sectors across all industries was 0.7252 times that of initial demand. By sector, the spillover to other sectors was high in "other cars" (2.0583 times), "passenger motor cars" (2.0521 times), and "synthetic resins" (1.3151 times) (Figure 3-1).

1) Comparisons with 2011

The total spillover decreased by 0.0236 points from 2011.

By sector, the total spillover decreased in 40 of 53 sectors, including "coal mining, crude petroleum and natural gas," "other transport equipment," and "electronic computing equipment and its accessories", while it increased in 13 of 53 sectors, including "passenger motor cars," "other cars," and "motor vehicle parts and accessories."

The spillover to other sectors decreased by 0.0189 points from 2011.

By sector, the spillover to other sectors decreased in 40 of 53 sectors, including "coal mining, crude petroleum and natural gas," "other transport equipment," and "electronic computing equipment and its accessories" while it increased in 13 of 53 sectors, including "passenger motor cars," "other cars," and "advertising services" (Figure 3-1).

2) Comparisons with 2005

The total spillover decreased by 0.0916 points from 2005.

By sector, the total spillover decreased in 47 of 53 sectors, including "household electronics equipment," "electronic computing equipment and its accessories," and "electronic components," while it increased in six of 53 sectors, including "reuse and recycling," "motor vehicle parts and accessories," and "mining."

The spillover to other sectors decreased by 0.0750 points from 2005.

By sector, the spillover to other sectors decreased in 46 of 53 sectors, including "household electronics equipment," "electronic computing equipment and its accessories," and "household electric appliances," while it increased in seven of 53 sectors, including "reuse and recycling," "mining," and "finance and insurance" (Figure 3-1).

Production spillovers generally decrease in response to:

- 1) lowered ratios of intermediate inputs (higher ratios of value added) by industries,
- 2) increased rates of import goods inputs (decreased rates of domestic goods inputs), or
- 3) increases in service industries.*

* The strengths of production spillovers by service industries are generally lower than those by goods

industries; consequently, increases in ratios of services (= decreases in ratios of goods) in intermediate inputs result in decreases in spillover strengths.

The 2012 production spillover strengths were lower than those in 2011. The decline is thought to be partly due to the fact that although the share of services in intermediate inputs decreased, and the processed and assembled products sector (with high spillover effects) showed an increase in their intermediate input ratio, each sector's intermediate input ratio declined, and in particular the primary products showed a relatively large decline .

(2) Final demand and production inducement

Looking at domestic production in 2012 in terms of the values induced by individual final demand items shows that domestic production induced by consumption, investment and exports amounted to 557.5, 178.0, and 164.7 trillion yen, respectively.

Looking at how much of domestic production in 2012 was induced by demand in individual final demand items, using production inducement dependency (composition of domestic production induced by individual final demand items), the production inducement dependency on consumption was 61.9%, followed by investment at 19.8% and exports at 18.3%. In a shift from 2011, the dependency on consumption and export decreased, while that on investment increased.

The 2012 production inducement coefficient—an index that indicates the level of domestic production induced per unit of demand in individual final demand items—for exports was 2.0878, followed by investment at 1.6411 and consumption at 1.5002 (Table 3-1).

1) Comparisons with 2011

Domestic production induced by individual final demand items shows that domestic production induced by consumption decreased by 0.5% from 2011, that by investment increased by 8.6%, and that by exports decreased by 0.3%.

The production inducement dependency on investment increased by 1.3% from 2011, while that on consumption and exports decreased by 1.1% and 0.3%, respectively.

The production inducement coefficient for exports increased by 0.0129 points from 2011, while that for consumption and investment decreased by 0.0049 and 0.0349 points, respectively (Table 3-1).

2) Comparisons with 2005

Domestic production induced by individual final demand items shows that domestic production induced by consumption decreased by 3.2% from 2005, but that by investment and exports increased by 15.6% and 2.2%, respectively.

The production inducement dependency on consumption and exports increased by 1.2% and 1.3%, respectively, from 2005, while that on investment decreased by 2.5%.

Production inducement coefficients decreased in all final demand items from 2005 levels (Table 3-1).

Table 3-1. Trends by year of induced domestic production, production inducement coefficients, and production inducement dependency

	Induced domestic production (billion yen, %)									
	2005	2011	2012	Difference from 2005	Growth rate compared to 2005	Difference from 2011	Growth rate compared to 2011			
Consumption	575,746	560,102	557,518	-18,228	-3.2	-2,583	-0.5			
Consumption expenditure outside households	27,092	24,668	25,231	-1,861	-6.9	563	2.3			
Consumption expenditure (private)	426,398	408,962	411,499	-14,899	-3.5	2,537	0.6			
Consumption expenditure of general government	122,256	126,472	120,788	-1,468	-1.2	-5,684	-4.5			
Investment	210,740	163,884	177,958	-32,782	-15.6	14,074	8.6			
Capital formation (public)	44,468	32,883	36,995	-7,474	-16.8	4,111	12.5			
Capital formation (private)	162,122	130,150	138,585	-23,537	-14.5	8,435	6.5			
Increase in stocks	4,150	850	2,379	-1,771	-42.7	1,528	179.7			
Exports	161,216	165,162	164,719	3,502	2.2	-443	-0.3			
Total final demand	947,702	889,147	900,195	-47,507	-5.0	11,048	1.2			
	Production inducement coefficient					Production inducement dependency (%)				
	2005	2011	2012	Difference from 2005	Difference from 2011	2005	2011	2012	Difference from 2005	Difference from 2011
Consumption	1.5379	1.5050	1.5002	-0.0378	-0.0049	60.8	63.0	61.9	1.2	-1.1
Consumption expenditure outside households	1.6124	1.5540	1.5118	-0.1006	-0.0422	2.9	2.8	2.8	-0.1	0.0
Consumption expenditure (private)	1.5181	1.4743	1.4757	-0.0424	0.0014	45.0	46.0	45.7	0.7	-0.3
Consumption expenditure of general government	1.5942	1.6033	1.5873	-0.0069	-0.0160	12.9	14.2	13.4	0.5	-0.8
Investment	1.8187	1.6761	1.6411	-0.1776	-0.0349	22.2	18.4	19.8	-2.5	1.3
Capital formation (public)	1.8670	1.7916	1.7772	-0.0898	-0.0144	4.7	3.7	4.1	-0.6	0.4
Capital formation (private)	1.8017	1.6433	1.6349	-0.1667	-0.0084	17.1	14.6	15.4	-1.7	0.8
Increase in stocks	2.0052	3.7638	0.8332	-1.1720	-2.9306	0.4	0.1	0.3	-0.2	0.2
Exports	2.1854	2.0749	2.0878	-0.0976	0.0129	17.0	18.6	18.3	1.3	-0.3
Total final demand	1.6803	1.6180	1.6105	-0.0698	-0.0075	100.0	100.0	100.0	0.0	0.0

(3) Final demand and gross value-added inducement

Looking at induced gross value added in 2012, which is calculated by multiplying each sector's domestic production induced by each final demand item by each sector's gross value added rate, shows that gross value added induced by consumption, investment and exports amounted to 327.7, 85.4 and 65.4 trillion yen, respectively.

Looking at how much of gross value added in 2012 was induced by individual final demand items, using gross value-added inducement dependency (composition of gross value added induced by individual final demand items), the gross value-added inducement dependency on consumption was 68.5%, followed by investment at 17.9% and exports at 13.7%.

The gross value-added inducement coefficient—an index that indicates the level of gross value added induced per unit of demand in individual final demand items—for consumption was 0.8817, followed by exports at 0.8294 and investment at 0.7877 (Table 3-2).

1) Comparisons with 2011

Gross value added induced by consumption decreased by 0.2% from 2011, that by investment increased by 8.9% and that by exports decreased by 0.7%.

The gross value-added inducement dependency on consumption decreased by 1.0 points from 2011, that on investment increased by 1.3 points, and that on exports decreased by 0.3 points.

Gross value-added inducement coefficients increased in exports, and decreased in consumption and investment (Table 3-2).

2) Comparisons with 2005

Gross value added induced by consumption and investment decreased by 1.3% and 12.0%, respectively, from 2005, while that by exports increased by 5.0%.

The gross value-added inducement dependency on consumption and exports increased by 0.9% and 1.0%, respectively, from 2005, while that on investment decreased by 1.9%.

Gross value-added inducement coefficients decreased in all final demand items from 2005 levels (Table 3-2).

Table 3-2. Trends by year of induced gross value added, gross value-added inducement coefficients, and gross value-added inducement dependency

	Induced gross value added (billion yen, %)						
	2005	2011	2012	Difference from 2005	Growth rate compared to 2005	Difference from 2011	Growth rate compared to 2011
Consumption	332,060	328,283	327,667	-4,394	-1.3	-617	-0.2
Consumption expenditure outside households	14,324	13,441	14,071	-253	-1.8	630	4.7
Consumption expenditure (private)	245,859	241,519	243,028	-2,831	-1.2	1,509	0.6
Consumption expenditure of general government	71,877	73,324	70,568	-1,310	-1.8	-2,756	-3.8
Investment	97,113	78,423	85,419	-11,694	-12.0	6,996	8.9
Capital formation (public)	21,064	15,761	17,857	-3,207	-15.2	2,096	13.3
Capital formation (private)	74,287	62,111	65,681	-8,606	-11.6	3,571	5.7
Increase in stocks	1,762	551	1,880	119	6.7	1,330	241.4
Exports	62,349	65,922	65,438	3,089	5.0	-483	-0.7
Total final demand	491,522	472,628	478,524	-12,998	-2.6	5,897	1.2

	Gross value-added inducement coefficient					Gross value-added inducement dependency (%)				
	2005	2011	2012	Difference from 2005	Difference from 2011	2005	2011	2012	Difference from 2005	Difference from 2011
Consumption	0.8870	0.8821	0.8817	-0.0053	-0.0004	67.6	69.5	68.5	0.9	-1.0
Consumption expenditure outside households	0.8525	0.8467	0.8431	-0.0094	-0.0036	2.9	2.8	2.9	0.0	0.1
Consumption expenditure (private)	0.8753	0.8707	0.8715	-0.0038	0.0009	50.0	51.1	50.8	0.8	-0.3
Consumption expenditure of general government	0.9372	0.9295	0.9273	-0.0099	-0.0022	14.6	15.5	14.7	0.1	-0.8
Investment	0.8381	0.8020	0.7877	-0.0504	-0.0143	19.8	16.6	17.9	-1.9	1.3
Capital formation (public)	0.8844	0.8587	0.8579	-0.0265	-0.0009	4.3	3.3	3.7	-0.6	0.4
Capital formation (private)	0.8256	0.7842	0.7749	-0.0507	-0.0094	15.1	13.1	13.7	-1.4	0.6
Increase in stocks	0.8513	2.4380	0.6587	-0.1926	-1.7793	0.4	0.1	0.4	0.0	0.3
Exports	0.8452	0.8282	0.8294	-0.0158	0.0013	12.7	13.9	13.7	1.0	-0.3
Total final demand	0.8715	0.8601	0.8561	-0.0154	-0.0040	100.0	100.0	100.0	0.0	0.0

(4) Final demand and import inducement

Looking at imports induced by final demand in 2012 shows that imports induced by consumption, investment and exports amounted to 44.0, 23.0 and 13.5 trillion yen, respectively.

Looking at how much of imports in 2012 were induced by individual final demand items, using import inducement dependency (composition of imports induced by individual final demand items), the import inducement dependency on consumption was 54.7%, followed by investment at 28.6% and exports at 16.7%.

The import inducement coefficient—an index that indicates the level of imports induced per unit of demand in individual final demand items—for investment was 0.2123, followed by exports at 0.1706 and consumption at 0.1183 (Table 3-3).

1) Comparisons with 2011

Imports induced by consumption and investment increased by 0.2% and 18.9%, respectively, from 2011,

while those by exports decreased by 1.6%.

The import inducement dependency on consumption decreased by 2.4 points from 2011, that on investment increased by 3.4 points, and that on exports decreased by 1.1 points.

Import inducement coefficients increased in consumption and investment from 2011, but decreased in exports (Table 3-3).

2) Comparisons with 2005

Imports induced by consumption, investment and exports increased by 3.9%, 22.7% and 17.8%, respectively, from 2005.

The import inducement dependency on investment and exports increased by 2.7 points and 1.0 points, respectively, from 2005, while that on consumption decreased by 3.7 points.

Import inducement coefficients increased in all final demand items from 2005 (Table 3-3).

Table 3-3. Trends by year of induced imports, import inducement coefficients, and import inducement dependency

	Induced imports (billion yen, %)									
	2005	2011	2012	Difference from 2005	Growth rate compared to 2005	Difference from 2011	Growth rate compared to 2011			
Consumption	42,305	43,871	43,970	1,664	3.9	99	0.2			
Consumption expenditure outside households	2,479	2,434	2,619	140	5.6	185	7.6			
Consumption expenditure (private)	35,014	35,879	35,822	808	2.3	-57	-0.2			
Consumption expenditure of general government	4,813	5,558	5,529	717	14.9	-29	-0.5			
Investment	18,758	19,356	23,016	4,258	22.7	3,661	18.9			
Capital formation (public)	2,754	2,593	2,959	205	7.4	366	14.1			
Capital formation (private)	15,697	17,088	19,083	3,386	21.6	1,995	11.7			
Increase in stocks	308	-325	974	667	216.7	1,299	-400.0			
Exports	11,419	13,678	13,456	2,037	17.8	-222	-1.6			
Total final demand	72,483	76,905	80,442	7,959	11.0	3,537	4.6			
	Import inducement coefficient					Import inducement dependency (%)				
	2005	2011	2012	Difference from 2005	Difference from 2011	2005	2011	2012	Difference from 2005	Difference from 2011
Consumption	0.1130	0.1179	0.1183	0.0053	0.0004	58.4	57.0	54.7	-3.7	-2.4
Consumption expenditure outside households	0.1475	0.1533	0.1569	0.0094	0.0036	3.4	3.2	3.3	-0.2	0.1
Consumption expenditure (private)	0.1247	0.1293	0.1285	0.0038	-0.0009	48.3	46.7	44.5	-3.8	-2.1
Consumption expenditure of general government	0.0628	0.0705	0.0727	0.0099	0.0022	6.6	7.2	6.9	0.2	-0.4
Investment	0.1619	0.1980	0.2123	0.0504	0.0143	25.9	25.2	28.6	2.7	3.4
Capital formation (public)	0.1156	0.1413	0.1421	0.0265	0.0009	3.8	3.4	3.7	-0.1	0.3
Capital formation (private)	0.1744	0.2158	0.2251	0.0507	0.0094	21.7	22.2	23.7	2.1	1.5
Increase in stocks	0.1487	-1.4380	0.3413	0.1926	1.7793	0.4	-0.4	1.2	0.8	1.6
Exports	0.1548	0.1718	0.1706	0.0158	-0.0013	15.8	17.8	16.7	1.0	-1.1
Total final demand	0.1285	0.1399	0.1439	0.0154	0.0040	100.0	100.0	100.0	0.0	0.0

(5) Indices of the power of dispersion and sensitivity of dispersion

The 2012 indices of the power of dispersion and sensitivity of dispersion indicated that many goods sectors had high index values for the power of dispersion and low index values for the sensitivity of dispersion. Among goods sectors, 23 sectors had index values for the power of dispersion greater than 1, while 12 sectors had values less than 1. In addition, eight goods sectors had index values for the sensitivity of dispersion greater than 1, while 27 goods sectors had values less than 1.

Sectors plotted in Quadrant [I] exert strong influence on entire industries and are sensitive to external influences; they include "iron and steel," "motor vehicle parts and accessories" and "chemical basic products."

Sectors plotted in Quadrant [IV] exert strong influence on entire industries and are weakly affected by external influences; they include "other cars" and "passenger motor cars."

Sectors plotted in Quadrant [II] exert weak influence on entire industries and are sensitive to external influences; they include "petroleum and coal products."

Sectors plotted in Quadrant [III] exert weak influence on entire industries and are weakly affected by external influences; they include "electronic computing equipment and its accessories," "coal mining, crude petroleum and natural gas" and "household electronics equipment" (Figure 3-2).

Index of the power of dispersion

The index is calculated by the following procedure: each sum of the columns in the inverse matrix coefficient table is divided by the mean value of the entire vertical sum in the inverse matrix coefficient table. The index allows measurement of a relative strength being exerted by the corresponding industry toward entire industries. Industries with an index value greater than 1 exert above average influence.

Index of the sensitivity of dispersion

The index is calculated by the following procedure: each sum of the rows in the inverse matrix coefficient table is divided by the mean value of the entire horizontal sum in the inverse matrix coefficient table. The index allows measurement of a relative strength of influence that the corresponding industry receives from all other industries. Industries with an index value greater than 1 have above average sensitivity to external influence.

Figure 3-2. Indices of the power of dispersion and sensitivity of dispersion (goods)

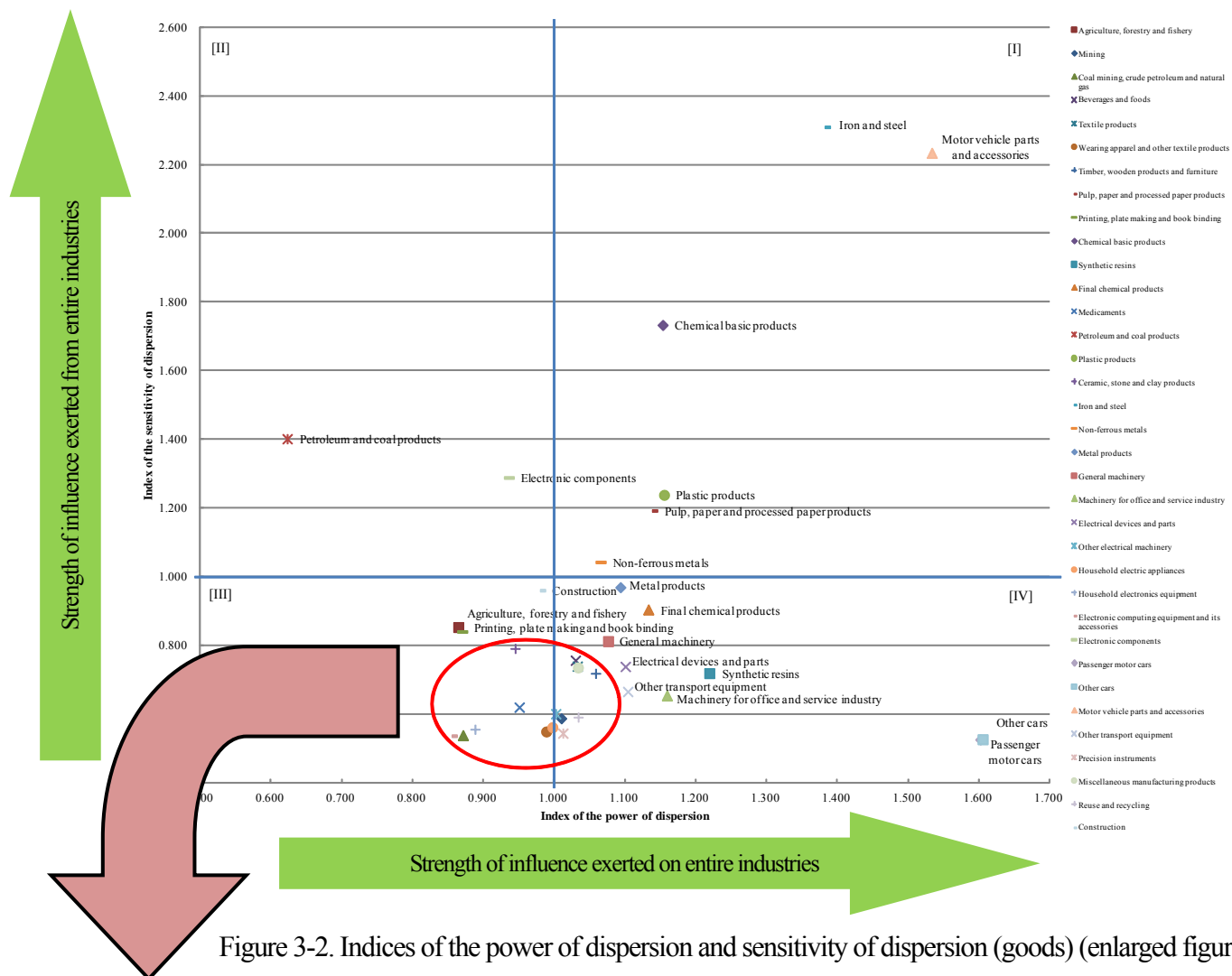
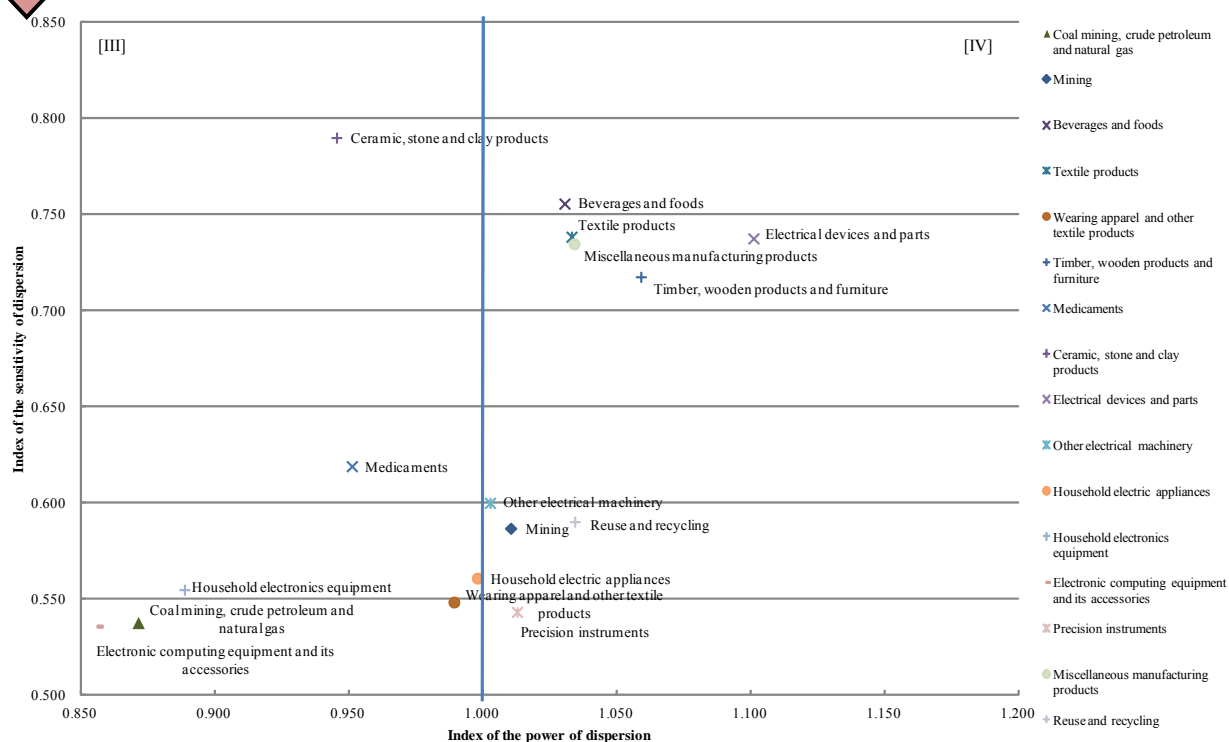


Figure 3-2. Indices of the power of dispersion and sensitivity of dispersion (goods) (enlarged figure)

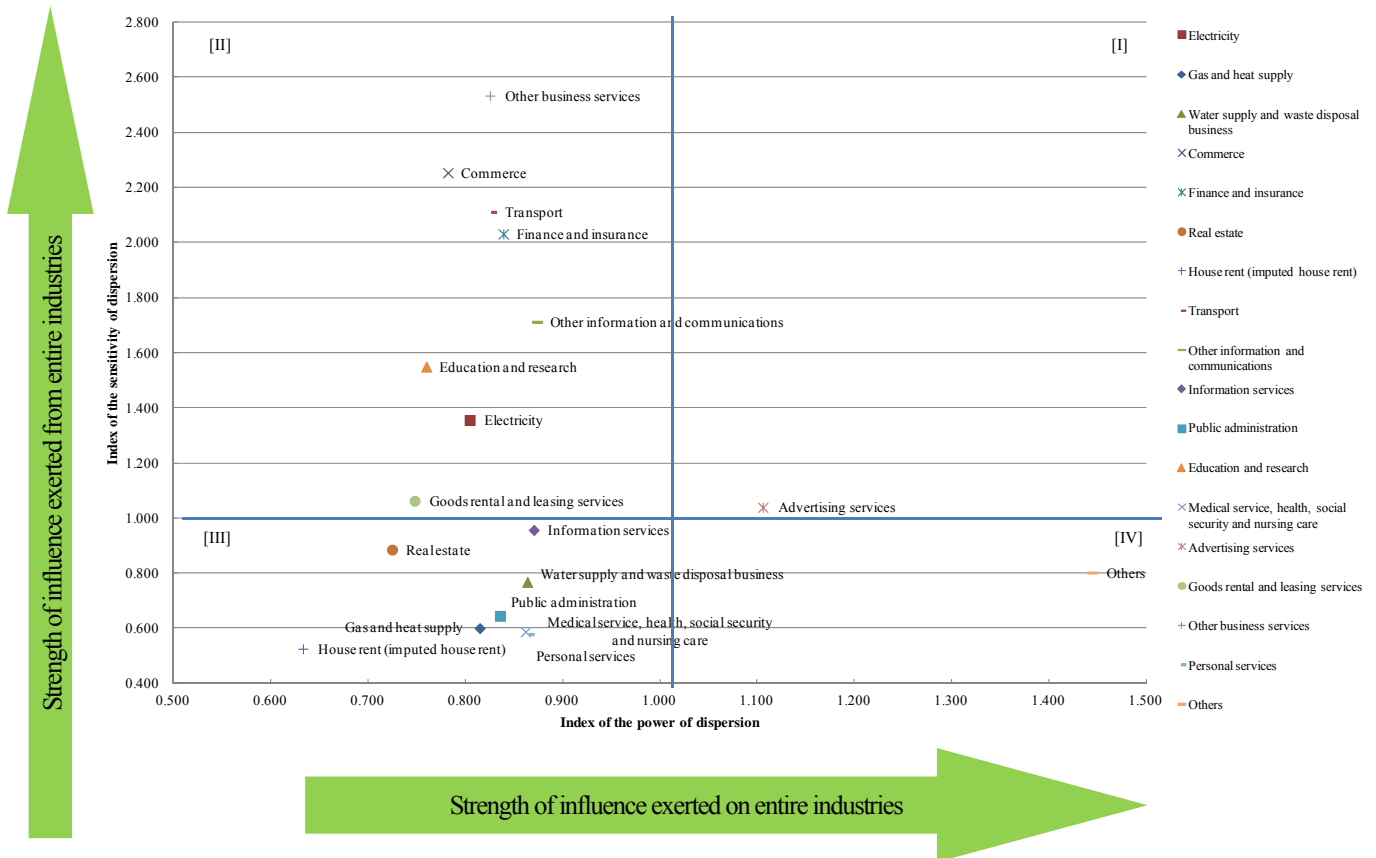


Most service sectors had low index values for the power of dispersion. Among service sectors, two sectors had index values for the power of dispersion greater than 1, while 16 sectors had values less than 1. In addition, nine service sectors had index values for the sensitivity of dispersion greater than 1, while nine service sectors had values less than 1.

Sectors plotted in Quadrant [II] exert weak influence on entire industries and are sensitive to external influences; they include "other business services," "commerce," "transport" and "finance and insurance."

Sectors plotted in Quadrant [III] exert weak influence on entire industries and are weakly affected by external influences; they include "house rent (imputed house rent)," "real estate" and "gas and heat supply" (Figure 3-3).

Figure 3-3. Indices of the power of dispersion and sensitivity of dispersion (services)



4. Analysis of factors contributing to variations in production

An analysis of factors^{*2} was attempted based on the equation output model derived from input-output tables to explain the changes in 2012 domestic production values by year from the perspective of changes in production technology structure, changes in final demand scale,^{*1} changes in final demand inter-item structure, and changes in final demand merchandise composition.

(1) Comparisons with 2011

Looking at changes in production technology structure and changes in final demand, the changes in production technology structure made a negative contribution to growth of 0.51% and the changes in final demand made a positive contribution of 1.78%.

Breaking down the changes in final demand reveals that the largest contribution to domestic production growth in 2012 was made by the changes in final demand scale at 1.29%, followed by those in final demand merchandise composition and those in final demand inter-item structure at 0.44% and 0.05%, respectively (Table 4-1).

Table 4-1 Factors contributing to variations in production
(changes in production technology structure and final demand)

	2012 Difference in value (billion yen)		2012 Degree of contribution to growth rate (%)	
	From 2005	From 2011	From 2005	From 2011
Production value	-47,507	11,048	-5.0	1.2
Changes in production technology structure	-26,836	-4,534	-2.83	-0.51
Changes in final demand	-20,224	15,857	-2.13	1.78
Changes in final demand scale	-18,570	11,485	-1.96	1.29
Changes in final demand inter-item structure	490	429	0.05	0.05
Changes in final demand merchandise composition	-2,144	3,943	-0.23	0.44
Confounding item	-447	-275	-0.05	-0.03

Below, we examine the elements of the following factors: 1) changes in final demand inter-item structure and 2) changes in final demand merchandise composition—the two factors comprising the changes in final demand—, and 3) changes in production technology structure.

1) Changes in final demand inter-item structure

Dividing the changes in final demand inter-item structure into consumption, investment and exports reveals that consumption and exports made a negative contribution to growth of 0.88% and 0.40%, respectively and investment made a positive contribution of 1.33% (Table 4-2).

^{*1} See Annotation for a model equation to analyze factors contribution to variations.

^{*2} These factors: changes in final demand scale, changes in final demand inter-item structure, and changes in final demand merchandise composition, are considered to jointly contribute to changes in final demand.

2) Changes in final demand merchandise composition

Dividing the changes in final demand merchandise composition into consumption, investment and exports reveals that consumption, investment and exports made a positive contribution of 0.20%, 0.11% and 0.13%, respectively (Table 4-2).

Table 4-2. Changes in final demand

	2012 Difference in value (billion yen)		2012 Degree of contribution to growth rate (%)	
	From 2005	From 2011	From 2005	From 2011
Changes in final demand	-20,224	15,857	-2.13	1.78
Changes in final demand scale	-18,570	11,485	-1.96	1.29
Changes in final demand inter-item structure	490	429	0.05	0.05
Consumption	5,481	-7,846	0.58	-0.88
Investment	-19,639	11,827	-2.07	1.33
Export	14,648	-3,552	1.55	-0.40
Changes in final demand merchandise composition	-2,144	3,943	-0.23	0.44
Consumption	-1,629	1,801	-0.17	0.20
Investment	-2,189	987	-0.23	0.11
Export	1,674	1,155	0.18	0.13

Next, we look at consumption, investment and exports by sector.

i) Factors contributing to variations in consumption

Dividing consumption (with a positive contribution to growth of 0.20%) under "changes in final demand merchandise composition" into goods and services reveals that goods and services each recorded a positive contribution of 0.10%.

Among goods sectors, "primary products" made a positive contribution to growth of 0.18%, while "manufactured products" made a negative contribution of 0.07%. Breaking down "manufactured products" shows that "other products" contributed to growth with a positive contribution of 0.04% but the rest of the sectors made a negative contribution to growth.

Among service sectors, "commerce" and "public services" contributed to growth with a positive contribution of 0.34% and 0.07%, respectively but the rest of the sectors made a negative contribution to growth (Table 4-3).

Table 4-3. Changes in merchandise composition in consumption

	Consumption			
	2012 Difference in value (billion yen)		2012 Degree of contribution to growth rate (%)	
	From 2005	From 2011	From 2005	From 2011
Total	-1,629	1,801	-0.17	0.20
Goods	-4,198	878	-0.44	0.10
Primary products	1,107	1,613	0.12	0.18
Manufactured products	-5,348	-643	-0.56	-0.07
Raw material products	-1,704	-371	-0.18	-0.04
Processed and assembled products	-2,870	-658	-0.30	-0.07
Other products	-774	386	-0.08	0.04
Construction	42	-93	0.00	-0.01
Services	2,570	924	0.27	0.10
Commerce	-921	3,043	-0.10	0.34
Finance and real estate	-325	-549	-0.03	-0.06
Transport and information and communications	3,721	-1,772	0.39	-0.20
Public services	5,085	653	0.54	0.07
Other services	-4,991	-451	-0.53	-0.05

ii) Factors contributing to variations in investment

Dividing investment (with a positive contribution to growth of 0.11%) under "changes in final demand merchandise composition" into goods and services reveals that goods recorded a positive contribution of 0.21% while services recorded a negative contribution of 0.10%.

Among goods sectors, "primary products" made a negative contribution to growth of 0.06%, while "manufactured products" and "construction" made a positive contribution of 0.19% and 0.08%, respectively. Breaking down "manufactured products" shows that "processed and assembled products" contributed to growth with a positive contribution of 0.24% but the rest of the sectors made a negative contribution to growth.

Among service sectors, "public services" contributed to growth with a positive contribution of 0.01%, but the rest of the sectors made a negative contribution to growth (Table 4-4).

Table 4-4. Changes in merchandise composition in investment

	Investment			
	2012 Difference in value (billion yen)		2012 Degree of contribution to growth rate (%)	
	From 2005	From 2011	From 2005	From 2011
Total	-2,189	987	-0.23	0.11
Goods	-6,531	1,879	-0.69	0.21
Primary products	-172	-514	-0.02	-0.06
Manufactured products	-1,670	1,709	-0.18	0.19
Raw material products	-2,242	-318	-0.24	-0.04
Processed and assembled products	476	2,157	0.05	0.24
Other products	96	-130	0.01	-0.01
Construction	-4,689	684	-0.49	0.08
Services	4,342	-893	0.46	-0.10
Commerce	2,721	-20	0.29	-0.00
Finance and real estate	185	-13	0.02	-0.00
Transport and information and communications	875	-595	0.09	-0.07
Public services	123	57	0.01	0.01
Other services	438	-322	0.05	-0.04

iii) Factors contributing to variations in exports

Dividing exports (with a positive contribution to growth of 0.13%) under "changes in final demand merchandise composition" into goods and services reveals that goods and services recorded a positive contribution of 0.10% and 0.03%, respectively.

Among goods sectors, "manufactured products" made a positive contribution to growth of 0.10%. Breaking down "manufactured products" shows that "raw material products" made a negative contribution to growth of 0.06%, "processed and assembled products" made a positive contribution of 0.18%, and "other products" made a negative contribution of 0.02%.

Among service sectors, "commerce" and "finance and real estate" made a negative contribution to growth of 0.05% and 0.00%, respectively, but the rest of the sectors made a positive contribution to growth (Table 4-5).

Table 4-5. Changes in merchandise composition in exports

	Exports			
	2012 Difference in value (billion yen)		2012 Degree of contribution to growth rate (%)	
	From 2005	From 2011	From 2005	From 2011
Total	1,674	1,155	0.18	0.13
Goods	2,825	927	0.30	0.10
Primary products	-8	-3	-0.00	-0.00
Manufactured products	2,826	932	0.30	0.10
Raw material products	1,163	-536	0.12	-0.06
Processed and assembled products	1,941	1,638	0.20	0.18
Other products	-278	-169	-0.03	-0.02
Construction	6	-2	0.00	-0.00
Services	-1,151	227	-0.12	0.03
Commerce	-833	-410	-0.09	-0.05
Finance and real estate	-304	-41	-0.03	-0.00
Transport and information and communications	-420	560	-0.04	0.06
Public services	130	25	0.01	0.00
Other services	277	93	0.03	0.01

3) Changes in production technology structure

Dividing the changes in production technology structure (with a negative contribution to growth of 0.51%) into goods and services reveals that goods recorded a positive contribution of 0.02% while services recorded a negative contribution of 0.53%.

Among goods sectors, "primary products" made a positive contribution to growth of 0.02%, "manufactured products" made a negative contribution of 0.00%, and "construction" made a positive contribution of 0.01%. Breaking down "manufactured products" shows that "raw material products" and "processed and assembled products" contributed to growth with a positive contribution of 0.04% and 0.05%, respectively, while "other products" made a negative contribution to growth of 0.09%.

Among service sectors, "commerce," "finance and real estate" and "public services" made a negative contribution to growth of 0.51%, 0.14% and 0.11%, but the rest of the sectors contributed to growth (Table 4-6).

Table 4-6. Changes in production technology structure

	Changes in production technology structure			
	2012		2012	
	Difference in value (billion yen)		Degree of contribution to growth rate (%)	
	From 2005	From 2011	From 2005	From 2011
Total	-26,836	-4,534	-2.83	-0.51
Goods	-15,176	202	-1.60	0.02
Primary products	-242	166	-0.03	0.02
Manufactured products	-15,086	-9	-1.59	-0.00
Raw material products	-11,238	319	-1.19	0.04
Processed and assembled products	-2,647	440	-0.28	0.05
Other products	-1,201	-768	-0.13	-0.09
Construction	152	46	0.02	0.01
Services	-11,660	-4,736	-1.23	-0.53
Commerce	-7,391	-4,518	-0.78	-0.51
Finance and real estate	-5,004	-1,243	-0.53	-0.14
Transport and information and communications	1,802	383	0.19	0.04
Public services	-2,395	-969	-0.25	-0.11
Other services	1,328	1,611	0.14	0.18

(2) Comparisons with 2005

Looking at changes in production technology structure and changes in final demand, both of them made a negative contribution to growth of 2.83% and 2.13%, respectively.

Breaking down the changes in final demand reveals that the largest negative contribution to domestic production growth in 2012 was made by the changes in final demand scale, with a negative contribution of 1.96%, followed by the changes in final demand merchandise composition, which provided a negative contribution of 0.23%. The changes in final demand inter-item structure made a positive contribution to growth of 0.05%. (Table 4-1).

Below, we examine the elements of the following factors: 1) changes in final demand inter-item structure and 2) changes in final demand merchandise composition—the two factors comprising the changes in final demand—and 3) changes in production technology structure.

1) Changes in final demand inter-item structure

Dividing the changes in final demand inter-item structure into consumption, investment and exports reveals that consumption and exports made a positive contribution to growth of 0.58% and 1.55%, respectively, and investment made a negative contribution of 2.07% (Table 4-2).

2) Changes in final demand merchandise composition

Dividing the changes in final demand merchandise composition into consumption, investment and exports reveals that consumption and investment made a negative contribution to growth of 0.17% and 0.23%, respectively, and exports made a positive contribution of 0.18% (Table 4-2).

Next, we look at consumption, investment and exports by sector.

i) Factors contributing to variations in consumption

Dividing consumption (with a negative contribution to growth of 0.17%) under "changes in final demand merchandise composition" into goods and services reveals that goods recorded a negative contribution of 0.44% and services recorded a positive contribution of 0.27%.

Among goods sectors, "primary products" made a positive contribution to growth of 0.12%, while "manufactured products" made a negative contribution of 0.56%. Breaking down "manufactured products," all sectors made a negative contribution to growth.

Among service sectors, "transport and information and communications" and "public services" contributed to growth with a positive contribution of 0.39% and 0.54%, respectively, but the rest of the sectors made a negative contribution to growth (Table 4-3).

ii) Factors contributing to variations in investment

Dividing investment (with a negative contribution to growth of 0.23%) under "changes in final demand merchandise composition" into goods and services reveals that goods recorded a negative contribution of 0.69% and services recorded a positive contribution of 0.46%.

Among goods sectors, "primary products," "manufactured products" and "construction" made a negative contribution to growth of 0.02%, 0.18% and 0.49%, respectively. Breaking down "manufactured products" shows that "raw material products" made a negative contribution to growth of 0.24%, but the rest of the sectors made a positive contribution to growth.

Among service sectors, all sectors contributed to growth, with "commerce" providing the largest positive contribution of 0.29% (Table 4-4).

iii) Factors contributing to variations in exports

Dividing exports (with a positive contribution to growth of 0.18%) under "changes in final demand merchandise composition" into goods and services reveals that goods recorded a positive contribution of 0.30% and services recorded a negative contribution of 0.12%.

Among goods sectors, "manufactured products" made a positive contribution to growth of 0.30%. Breaking down "manufactured products" shows that "other products" made a negative contribution to growth of 0.03% but the rest of the sectors contributed to growth.

Among service sectors, "public services" and "other services" contributed to growth with a positive contribution of 0.01% and 0.03%, respectively, but the rest of the sectors made a negative contribution to growth (Table 4-5).

3) Changes in production technology structure

Dividing the changes in production technology structure (with a negative contribution to growth of 2.83%) into goods and services reveals that both goods and services recorded a negative contribution of 1.60% and 1.23%, respectively.

Among goods sectors, "primary products," and "manufactured products" made a negative contribution to growth of 0.03% and 1.59%, respectively, while "construction" made a positive contribution to growth of

0.02%. Breaking down "manufactured products," all sectors made a negative contribution to growth.

Among service sectors, "transport and information and communications" and "other services" contributed to growth with a positive contribution of 0.19% and 0.14%, respectively, but the rest of the sectors made a negative contribution to growth (Table 4-6).