

## 4 Changes in Employment Structure

### **Continuous Decline in Number of People Employed in Agriculture and Forestry**

An examination of recent changes in the employment structure by industry reveals that the number of people employed in primary industries (agriculture, forestry and fisheries) has continued to decline, falling to 2.52 million in 2010 (see Table II-11). In terms of percentage, these workers made up 3.6% of the entire labor force.

A more detailed examination of long-term longitudinal statistics for agriculture and forestry, which is the main category of primary industry, shows that 14.87 people were employed in this category in 1953 when the labor force survey was first conducted in its present form. However the migration of labor from rural to urban areas during post war recovery of the Japanese economy and subsequent high growth period has caused a non-stop decline in the number of persons employed in agriculture and forestry, with the number falling below the 10-million (9.7million) in 1967. As a percentage of the total labor force, it fell below 10% to 9.6% (5.32 million workers) in 1980 and to 4.2% (2.68million) in 2002. A year-on-year comparison of number of persons employed in agriculture and forestry also shows number to be in a declining trend (see Figure II-14).

### **Number of People Employed in Manufacturing Also Now Declining**

The number of people employed in secondary industries (mining, construction, and manufacturing) continued to increase from the end of World War II, peaking at 21.94 million in 1992. It then went into decline, and stood at 15.49 million in 2010. These workers made up 24.5% of the entire labor force that year. (see Table II-11).

A more detailed analysis of situation in manufacturing, which represents the largest category of second industry, shows that the number, which

stood at 7.20 million in 1953, surged during the 15-year period of manufacturing-driven high economic growth from 1953, and had doubled to 14.43 million compared with 1953. As a percentage of the total labor force, it rose from 18.4% in 1953 to 27.4% in 1973.

When the economy slowed and entered a period of stable growth following the 1974 oil crisis, however, the number declined for almost 10 years. The number then entered a modest upward trend at the beginning of the 1980s to reach a peak of 15.69 million (24.3%) in 1992. However, the economy fell into a prolonged slump following the collapse of the so-called bubble economy in the early 1990s, and the number of workers in the manufacturing sector began falling. The decline continued unabated, to 12.22 million people in 2002, or as a percentage of the labor force virtually back where it was in 1953, at 19.3%. Although a simple comparison is not possible due to reclassification of industrial categories, the percentage stood at 16.3% as of 2014.

Incidentally, when the rise and fall of manufacturing-sector worker population is examined through the Labour Force Survey, it appears to have been on an upward trend in 2013 and 2014 (see Figure II-12). Nonetheless, there is no corresponding rise in manufacturing's share of industry as a whole, and this figure continues to decline.

Regarding their presence in the economy as a whole, however, they could hardly be described as insignificant; indeed, their presence could be seen as strong. In terms of added value, for example, manufacturing industries account for around 20% of all industries. As this reveals, their status as important industries in the Japanese economy remains unchanged (see Table II-13).

### **Conspicuous Growth in Medical Health Care and Welfare**

The number of people employed in tertiary

industries (comprised of industries other than primary and secondary industries) has gradually increased since 1953. In 1953, these industries accounted for 35.8% of the workforce (14.02 million workers), but by 1974 it had grown to more than half the working population at 50.5% (26.46 million people), and by 1994 to 60.3% (38.93 million), topping 60%.

Although straightforward comparison of figures from 2003 onward with earlier figures is not possible because of the revision of standard classification of Japanese industries in 2002, the share in 2004 stands at 70.4% (44.74 million workers).

Looking at trends in the main components of tertiary industries, one finds that while the wholesale and retail trades and eating drinking establishments made up 47.6% of tertiary industries as a whole in 1953, their share began to decline in 1961 at the start of the high-growth period, and stood at 34.8% in 2002. The standards for classification of Japanese industries were revised in 2002, and direct comparison with figures up to 2002 is not possible, but the statistics show that the share of the wholesale and retail trade (excluding eating and drinking establishments) among the tertiary industries declined from 26.6% in 2002 to 24.1% in 2010.

According to year on year comparison between 2011 and 2014, the number of wholesale and retail rose in 2013 and 2014. However, wholesale and retail are shrinking as a percentage of all tertiary industries. From this point, it can be gleaned that the wholesale and retail trade is in generally downward trend.

Conversely, the healthcare and welfare labor force is on a significant upward trend, surging from 4.74 million workers in 2002 to 7.57 million in 2014. As a percentage of all tertiary industries these fields rose from 11.4% to 16.9% over the same period. There is

a consistent year-on-year growth trend in terms of number of workers (see Table II-12).

### **Professional and Technical Occupations Experience Continued Increases**

Finally, let us look at the employment structure in terms of occupations. Table II-14 summarizes changes between 2000 and 2010.

First, workers in the agriculture, forestry and fisheries sector (15.19 million) accounted for 38.8% of all persons in employment in 1953. Reflecting changes in the industrial structure, however, they have continued to decrease since then, falling to 4.9% (3.21 million) in 2000 and 3.9% (2.47 million) in 2010 (Table II-14).

Next, the ratio of construction workers, machine operators, manufacturing and production workers (mainly consisting of workers in manufacturing industries) to the total number of persons employed stood at 25.9% (10.13 million) in 1953. The ratio then underwent a gradual upward curve through the eras of postwar reconstruction and high economic growth, peaking at 32.0% (16.71 million) in 1973<sup>1</sup>. Thereafter, however, it turned to a downward trend, decreasing to 24.5% in 2000 and 20.4% (12.77 million) in 2010 (Table II-14).

By contrast, professional and technical workers have increased more or less continuously since 1953 (4.4% of all workers, 1.73 million), breaking through 10% of all workers in 1986. By 2010, they accounted for 15.8% of the total (9.86 million) (see Table II-14). The most recent figures in the Labour Force Survey show that the number of these workers, 10.10 million in 2012, fell in 2013 but then rose again in 2014 to 10.24 million, and continued growth is projected for the foreseeable future.

<sup>1</sup> In 1953, "Construction workers, machine operators, manufacturing and production workers" included the figures for "Laborers", but in 1973, 2000 and 2010 these were not included.

**Table II-11 Trends of Employed by Three Industry Divisions (Total of Male and Female)**

Year	Real Count(10,000 persons)				Year-on-Year Difference(10,000 persons)				Year-on-Year Difference(%)				Proportion(%)			
	Total	Primary Industry	Secondary Industry	Tertiary Industry	Total	Primary Industry	Secondary Industry	Tertiary Industry	Total	Primary Industry	Secondary Industry	Tertiary Industry	Total	Primary Industry	Secondary Industry	Tertiary Industry
1994	6,453	373	2,157	3,894	3	-10	-19	31	0.0	-2.6	-0.9	0.8	100.0	5.8	33.4	60.3
1995	6,457	367	2,125	3,940	4	-6	-32	46	0.1	-1.6	-1.5	1.2	100.0	5.7	32.9	61.0
1996	6,486	356	2,121	3,979	29	-11	-4	40	0.4	-3.0	-0.2	1.0	100.0	5.5	32.7	61.3
1997	6,557	350	2,134	4,039	71	-6	13	60	1.1	-1.7	0.6	1.5	100.0	5.3	32.5	61.6
1998	6,514	343	2,050	4,084	-43	-7	-84	45	-0.7	-2.0	-3.9	1.1	100.0	5.3	31.5	62.7
1999	6,462	335	2,008	4,078	-52	-8	-42	-6	-0.8	-2.3	-2.0	-0.1	100.0	5.2	31.1	63.1
2000	6,446	326	1,979	4,102	-16	-9	-29	24	-0.2	-2.7	-1.4	0.6	100.0	5.1	30.7	63.6
2001	6,412	313	1,921	4,133	-34	-13	-58	31	-0.5	-4.0	-2.9	0.8	100.0	4.9	30.0	64.5
2002	6,330	296	1,825	4,158	-82	-17	-96	25	-1.3	-5.4	-5.0	0.6	100.0	4.7	28.8	65.7
2003	6,316	293	1,787	4,176	-14	-3	-38	18	-0.2	-1.0	-2.1	0.4	100.0	4.6	28.3	66.1
2004	6,329	286	1,738	4,236	13	-7	-49	60	0.2	-2.4	-2.7	1.4	100.0	4.5	27.5	66.9
2005	6,356	282	1,713	4,284	27	-4	-25	48	0.4	-1.4	-1.4	1.1	100.0	4.4	27.0	67.4
2006	6,389	272	1,726	4,320	33	-10	13	36	0.5	-3.5	0.8	0.8	100.0	4.3	27.0	67.6
2007	6,427	273	1,728	4,352	38	1	2	32	0.6	0.4	0.1	0.7	100.0	4.2	26.9	67.7
2008	6,409	270	1,695	4,370	-18	-3	-33	18	-0.3	-1.1	-1.9	0.4	100.0	4.2	26.4	68.2
2009	6,314	264	1,607	4,380	-95	-6	-91	10	-1.5	-2.2	-5.2	0.2	100.0	4.2	25.5	69.4
2010	6,298	255	1,567	4,411	-16	-9	-44	31	-0.3	-3.4	-2.5	0.7	100.0	4.0	24.9	70.0
2011	6,289	249	1,554	4,431	-9	-6	-44	20	-0.1	-2.4	-0.8	0.5	100.0	4.0	24.7	70.5
2012	6,270	240	1,538	4,430	-19	-9	-44	-1	-0.3	-3.6	-1.0	0.0	100.0	3.8	24.5	70.7
2013	6,311	233	1,541	4,445	41	-7	-44	15	0.7	-2.9	0.2	0.3	100.0	3.7	24.4	70.4
2014	6,351	230	1,548	4,474	40	-3	-44	29	0.6	-1.3	0.5	0.7	100.0	3.6	24.4	70.4

Source: Statistics Bureau, Ministry of Internal Affairs and Communications, *Labour Force Survey*

Notes: 1) Primary industries are Agriculture and forestry, and Fisheries.

2) Secondary industries are Mining and quarrying of stone and gravel, Construction and Manufacturing.

3) Tertiary industries are other than those detailed above. (Industries unable to be classified are not included. Consequently, the actual combined total for primary, secondary and tertiary industries does not add up to the grand total).

4) The Labour Force Survey could not be conducted in Iwate, Miyagi, and Fukushima prefectures for a period of time following the Great East Japan Earthquake of March 11, 2011. Figures for 2011 in <> brackets are supplementary estimates (based on the 2010 national population census) to make up for this missing data.

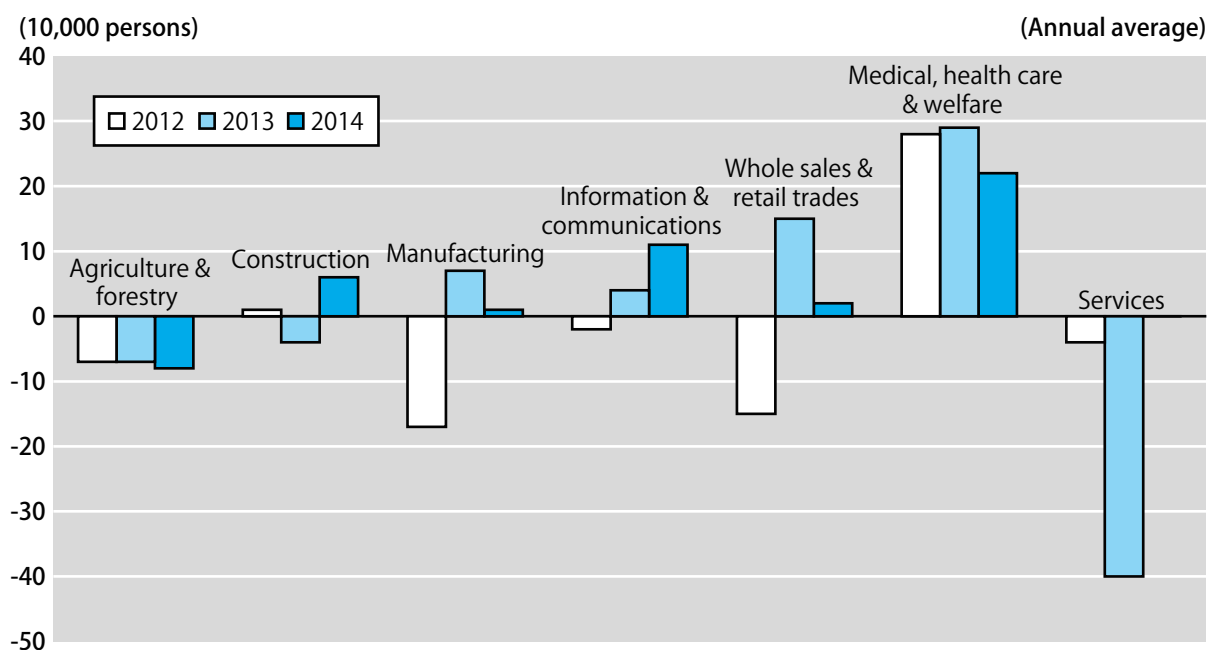
5) "Tertiary industries" are industries other than those listed above (not including unclassifiable industries, meaning that the totals for primary, secondary, and tertiary industries do not actually add up to 100% of the labor force).

6) Until December 2012, workers dispatched by staffing agencies were classified as "Services not elsewhere classified" based on the categorization of staffing agencies, regardless of what sector they were dispatched to. However, since January 2013 they have been classified according to the type of company where they are dispatched. When comparing industrial sectors chronologically, this change in classification (from "Services not elsewhere classified" to the industry where the workers are dispatched) must be taken into account.

7) With the privatization and segmentation of Japan Post on October 1, 2007, some workers' classifications changed from "Compound services" to "Transportation and postal services", "Finance and insurance", or "Services not elsewhere classified". When comparing industrial sectors chronologically, this change in classification must be taken into account.

8) With the integration of Japan Post Service and Japan Post Network on October 1, 2012, some workers' classifications changed (primarily from "Transportation and postal services" to "Compound services"). When comparing industrial sectors chronologically, this change in classification must be taken into account.

**Figure II-12 Number of Year-on-year Difference in the Number of Employed by Principal Industries (Total of Male and Female)**



Source: Ministry of Internal Affairs and Communications Statistics Bureau, *Labor Force Survey*

Note: 1) "Service Industry" shows the total for the "academic research and professional and technical service", the "lifestyle-related services and entertainment", the "combined service sector" and "service (otherwise unclassified)".

2) Until December 2012, workers dispatched by staffing agencies were classified as "Services not elsewhere classified" based on the categorization of staffing agencies, regardless of what sector they were dispatched to. However, since January 2013 they have been classified according to the type of company where they are dispatched. When comparing industrial sectors chronologically, this change in classification (from "Services not elsewhere classified" to the industry where the workers are dispatched) must be taken into account.

3) With the integration of Japan Post Service and Japan Post Network on October 1, 2012, some workers' classifications changed, primarily from "Transportation and postal services" to "Compound services" to "Finance and insurance", or "Services not elsewhere classified". When comparing industrial sectors chronologically, this change in classification must be taken into account.

**Table II-13 Number of Enterprises, Sales Turnover and Added Value by Industry**

(Unit: monetary amounts, billion yen)

Industry	Number of companies		Sales turnover		Added value <sup>1)</sup>	
	2009	2012	2012	Ratio to all industries (%)	2012	Ratio to all industries (%)
All industries	4,480,753	4,096,578	1,302,252	100.0	242,666	100.0
Agriculture, forestry and fisheries (except individual proprietorships)	25,738	23,255	3,435	0.3	768	0.3
Mining and quarrying of stone and gravel	2,187	1,901	1,218	0.1	426	0.2
Construction	520,473	462,879	79,435	6.1	13,912	5.7
Manufacturing	450,966	436,646	342,443	26.3	53,261	21.9
Electricity, gas, heat supply and water	922	705	21,774	1.7	2,794	1.2
Information and communications	51,576	44,636	46,593	3.6	12,586	5.2
Transportation and postal services	82,970	72,955	49,475	3.8	12,885	5.3
Wholesale and retail trade	1,059,676	929,386	400,304	30.7	42,348	17.5
Finance and insurance	37,529	31,446	110,516	8.5	31,288	12.9
Real estate and goods rental and leasing	356,486	330,044	36,065	2.8	7,949	3.3
Scientific research, professional and technical services	209,160	185,387	26,331	2.0	9,206	3.8
Accommodations, food and beverage services	606,517	541,375	20,036	1.5	7,575	3.1
Living-related and personal services and amusement services <sup>2)</sup>	407,667	380,879	36,072	2.8	6,130	2.5
Education, learning support	122,497	114,352	13,482	1.0	6,326	2.6
Medical healthcare and welfare	272,217	268,479	69,074	5.3	20,229	8.3
Compound services	6,923	5,559	7,733	0.6	2,355	1.0
Services (not elsewhere classified) <sup>3)</sup>	267,249	266,694	38,267	2.9	12,628	5.2

Sources: Economic Statistics Division, Statistical Survey Department, Statistics Bureau, Ministry of Internal Affairs and Communications / Structural Statistics Office, Statistics Group, Minister's Secretariat, Ministry of Internal Affairs and Communications, *Economic Census for Business Activity (Preliminary Report)*

Economic Structure Statistics Division, Statistical Survey Department, Statistics Bureau, Ministry of Internal Affairs and Communications, *Economic Census for Business Frame*

Notes: Excluding central and local government. "Enterprises" are corporations engaging in business or activities (excluding foreign companies) or establishments with individual proprietorship. Sales turnover and added value are aggregated for enterprises from which figures on the necessary items could be obtained.

1) A value that is newly generated during the production activities of an enterprise, calculated by subtracting the intermediate input value, including costs of raw materials, from the value of production.

Added value = Sales value - total expenses + total wages and salaries + tax and public dues

2) Excluding housekeeping services

3) Excluding foreign official business

**Table II-14 Number of Employed Person by Major Occupation and Year-on-year Difference (Total of Male and Female)**

		Total	Professional & technical	Manager & official	Clerical	Sales	Protective service & service	Agriculture, forestry & fishery	Transport & communication	Mining worker	Craftman, Manufacturing & construction worker	Labourer
Real count (10,000 persons)	2000	6,446	856	206	1,285	911	677	321	221	3	1,580	347
	2001	6,412	873	202	1,249	968	693	309	214	3	1,506	353
	2002	6,330	890	187	1,228	934	717	291	211	4	1,468	349
	2003	6,316	906	185	1,230	917	729	289	210	4	1,437	353
	2004	6,329	920	189	1,244	901	748	284	201	3	1,415	360
	2005	6,356	937	189	1,247	892	757	279	204	3	1,416	363
	2006	6,382	937	185	1,260	881	772	269	206	3	1,432	370
	2007	6,412	938	173	1,262	888	787	269	205	3	1,441	376
	2008	6,385	950	172	1,292	870	789	264	199	3	1,401	377
	2009	6,282	968	168	1,295	857	804	257	198	2	1,305	371
2010	6,256	986	161	1,284	856	817	247	199	2	1,277	371	
Year-on-year difference (10,000 persons)	2001	-34	17	-4	-36	57	16	-12	-7	0	-74	6
	2002	-82	17	-15	-21	-34	24	-18	-3	1	-38	-4
	2003	-14	16	-2	2	-17	12	-2	-1	0	-31	4
	2004	13	14	4	14	-16	19	-5	-9	-1	-22	7
	2005	27	17	0	3	-9	9	-5	3	0	1	3
	2006	26	0	-4	13	-11	15	-10	2	0	16	7
	2007	30	1	-12	2	7	15	0	-1	0	9	6
	2008	-27	12	-1	30	-18	2	-5	-6	0	-40	1
	2009	-103	18	-4	3	-13	15	-7	-1	-1	-96	-6
	2010	-26	18	-7	-11	-1	13	-10	1	0	-28	0

Source: Ministry of Internal Affairs and Communications, Statistics Bureau, *Labour Force Survey*

Note: The population forming the basis for calculation from the January 2007 results has been switched to the latest population projection (new benchmark) based on official estimates in the 2005 Census. In line with this, the figure includes an increase of around 60,000 in the population aged 15 and over compared to the old benchmark (published figures for 2006) due to switching. In the same way, the benchmark population has been switched every five years from 1982 to 2002, causing variation each time.