

Shortage of Labor Force Varies Between Industries



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What Is the Active Job Openings-to-Applicants Ratio in Japan?

The previous article of this series introduced the unemployment rate, and like this index, the active job openings-to-applicants ratio is an index that indicates the demand and supply relationship in the labor market. It is a key index of the “Employment Referrals for General Workers” compiled by the Public Employment Security Office on the state of job openings, applicants, and employment.

The active job openings-to-applicants ratio is defined as monthly active job openings subtracted by monthly active job applicants. Monthly active job openings is the sum of job openings carried over from the previous month because they remain open, plus new job openings. Monthly active job applicants is the sum of undecided job applicants carried over from the previous month and new job applicants for that month. The balance in demand and supply of labor is determined by whether the active job openings-to-applicants ratio exceeds 1 or not.

In addition, the new job openings-to-applicants ratio, which is new job openings divided by new job applicants, tends to fluctuate preceding movements in the active job openings-to-applicants ratio. New job openings is adopted for the leading index of business conditions, and the active job openings-to-applicants ratio is adopted for the coincidence index (*Chart 1*).

Ratio Exceeds 1 for All Prefectures

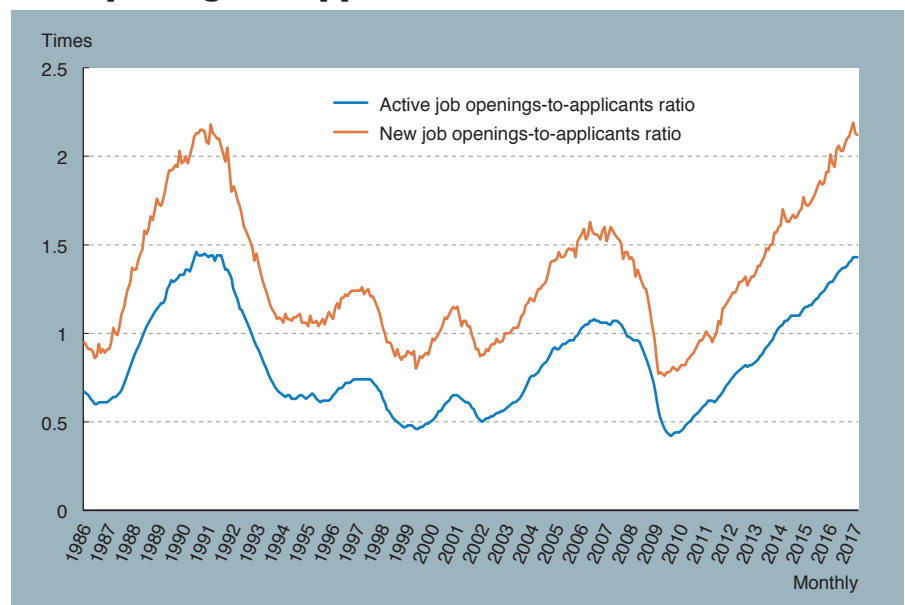
The latest active job openings-to-applicants ratio, at the time when this article was written, was 1.43 times for

February 2017. This is similar to the level during the peak of the economic bubble at 1.46 times (July 1990). The rise in the active job openings-to-applicants ratio in recent years is the result of a combination of decreases in monthly active job applications and increases in monthly active job openings. Monthly active job applicants most recently peaked in 2009 at an average of 2.76 million people, and has since continued to drop to an average of 1.86 million people in 2016. On the other hand, monthly active job openings bottomed at an average of 1.31 million people in 2009, and continued to rise to an average of 2.53 million people in 2016.

In July 2016, the active job openings-to-applicants ratio (by the application acceptance locations) all exceeded 1 times in every prefecture. Prefectures with high active job openings-to-applicants ratios for February 2017 were Tokyo (2.04 times), Fukui (1.89 times)

CHART 1

Job openings-to-applicants ratio



Source: “Employment Referrals for General Workers”, Ministry of Health, Labour and Welfare

and Ishikawa (1.80 times), and those with low ratios were Kagoshima (1.10 times), Kanagawa (1.07 times), Okinawa (1.02 times) and the difference by prefectures are quite significant.

The active job openings-to-applicants ratio for fulltime workers remains below 1 times (0.92 times as of February 2017). The high demand in part-time labor is the driving force for the high active job openings-to-applicants ratio.

Job openings by industry also vary. New job openings for February 2017 showed a 4.9% increase for all industries, but while the manufacturing industry (10.7% increase) and construction industry (7.60% increase) were above average, industries like information & communications showed a decrease (Chart 2). Such variance in demand for job openings may also be tied to the difference in the active job openings-to-applicants ratio by prefectures.

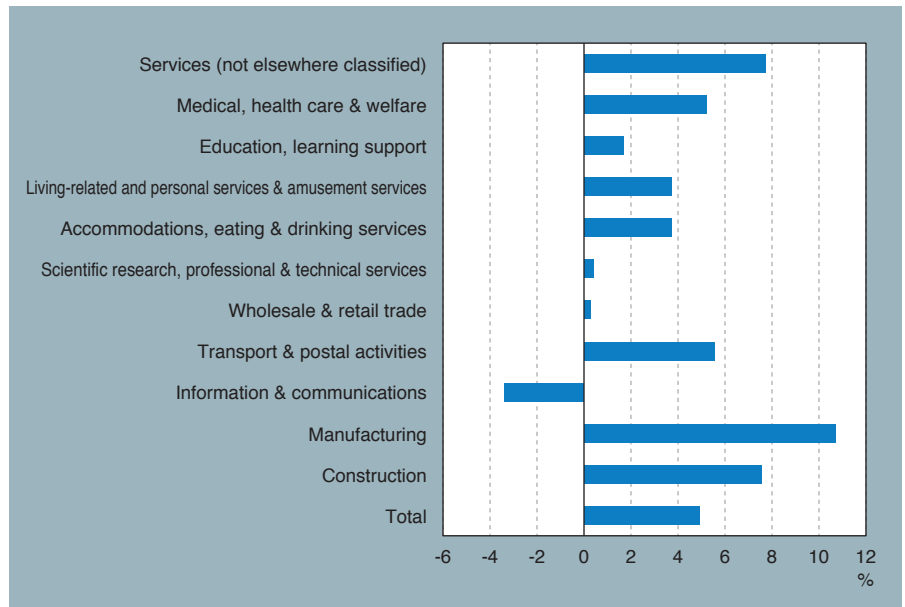
Variance Is Large for Active Job Openings-to-Applicants Ratio by Occupation

The difference in the active job openings-to-applicants ratio is more apparent in the ratio by occupation. Occupations with large active job openings-to-applicants ratios are security (6.96 times as of February 2017), construction and mining (3.70 times), nursing care (3.33 times), and services (3.14 times). Automobile driving, which newspapers and magazines have been covering for its “distribution crisis”, is at 2.69 times. On the other hand, administrative occupation is at 0.48 times, which means job openings are less than half the number of job applicants.

Although the rise in the active job openings-to-applicants ratio is the result of an increase in job openings on the back of an economic

CHART 2

Status of new job openings for general employment by key industry & size (Year-on-year, February 2017)



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

expansion and a decrease in job applicants, the effect of these mismatches by industry or by occupation is also significant. There is a need for policy support to prevent a shortage of workers from becoming the bottleneck of the Japanese economy.

Note: This article was written with available information as of March 31, 2017.

JS

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ECONOMIC INDICATORS FOR JAPAN

Calendar year, Quarter and Month	Real GDP		Nominal GDP		IIP rate of increase over previous year/term (month) (%)	CPI (All terms, less fresh food) rate of increase over previous year/the same term (month) of the previous year (%)
	Amount (trillion yen)	Rate of increase over previous year/term (%)	Amount (trillion yen)	Rate of increase over previous year/term (%)		
2008	499.3	-1.1	520.7	-2.1	-3.4	1.5
2009	472.2	-5.4	489.5	-6.0	-21.9	-1.3
2010	492.0	4.2	500.4	2.2	15.6	-1.0
2011	491.5	-0.1	491.4	-1.8	-2.8	-0.3
2012	498.8	1.5	495.0	0.7	0.6	-0.1
2013	508.8	2.0	503.2	1.7	-0.8	0.4
2014	510.5	0.3	513.7	2.1	2.1	2.6
2015	516.6	1.2	530.5	3.3	-1.2	0.5
2016	521.8	1.0	537.3	1.3	-0.1	-0.3
2016/1st Qtr.	518.6	0.5	535.0	0.7	-0.9	-0.1
2nd Qtr.	521.4	0.5	536.9	0.4	0.3	-0.4
3rd Qtr.	523.0	0.3	537.6	0.1	1.6	-0.5
4th Qtr.	524.6	0.3	539.7	0.4	1.8	-0.3
2016/Jul.	—	—	—	—	0.0	-0.5
Aug.	—	—	—	—	1.3	-0.5
Sep.	—	—	—	—	0.3	-0.5
Oct.	—	—	—	—	0.3	-0.4
Nov.	—	—	—	—	1.0	-0.4
Dec.	—	—	—	—	0.7	-0.2
2017/Jan.	—	—	—	—	-2.1	0.1
Feb.	—	—	—	—	3.2	0.2
Sources	"SNA (National Accounts of Japan)", Cabinet Office				"Indices of Industrial Production", Ministry of Economy, Trade and Industry	"Consumer Price Index", Statistics Bureau, Ministry of Internal Affairs and Communications

Calendar year, Quarter and Month	Foreign Trade Statistics									
	Exports amount (trillion yen)	Exports rate of increase over previous year/ the same term (month) of the previous year (%)	Imports amount (trillion yen)	Imports rate of increase over previous year/ the same term (month) of the previous year (%)	Exports amount to US (trillion yen)	Exports to US rate of increase over previous year/ the same term (month) of the previous year (%)	Imports amount from US (trillion yen)	Imports from US rate of increase over previous year/ the same term (month) of the previous year (%)	Exports amount to EU (trillion yen)	Exports to EU rate of increase over previous year/ the same term (month) of the previous year (%)
2008	81.0	-3.5	79.0	8.0	14.2	-15.9	8.0	-3.7	11.4	-7.8
2009	54.2	-33.1	51.5	-34.8	8.7	-38.6	5.5	-31.4	6.7	-41.0
2010	67.4	24.4	60.8	18.0	10.4	18.8	5.9	7.2	7.6	12.8
2011	65.5	-2.7	68.1	12.1	10.0	-3.4	5.9	0.3	7.6	0.0
2012	63.7	-2.7	70.7	3.8	11.2	11.7	6.1	2.5	6.5	-14.7
2013	69.8	9.5	81.2	14.9	12.9	15.6	6.8	12.0	7.0	7.7
2014	73.1	4.8	85.9	5.7	13.6	5.6	7.5	10.7	7.6	8.4
2015	75.6	3.4	78.4	-8.7	15.2	11.5	8.1	6.9	8.0	5.3
2016	70.0	-7.4	66.0	-15.8	14.1	-7.1	7.3	-9.2	8.0	-0.0
2016/1st Qtr.	17.5	-7.9	17.2	-15.6	3.7	-3.5	1.8	-9.3	2.1	6.0
2nd Qtr.	17.0	-9.5	15.6	-18.7	3.4	-9.6	1.8	-14.5	1.9	1.9
3rd Qtr.	17.0	-10.2	16.1	-19.3	3.3	-11.6	1.8	-10.1	1.9	-2.3
4th Qtr.	18.5	-1.9	17.2	-9.3	3.8	-3.9	1.9	-2.2	2.0	-5.3
2016/Jul.	5.7	-14.0	5.2	-24.6	1.2	-11.8	0.6	-15.1	0.7	-6.5
Aug.	5.3	-9.6	5.4	-17.0	1.0	-14.5	0.6	-8.8	0.6	-0.7
Sep.	6.0	-6.9	5.5	-16.1	1.2	-8.7	0.6	-6.0	0.7	0.7
Oct.	5.9	-10.3	5.4	-16.3	1.2	-11.2	0.6	-9.8	0.7	-9.5
Nov.	6.0	-0.4	5.8	-8.7	1.2	-1.8	0.6	-5.0	0.6	-2.2
Dec.	6.7	5.4	6.0	-2.5	1.4	1.4	0.7	9.7	0.7	-4.0
2017/Jan.	5.4	1.3	6.5	8.4	1.1	-6.6	0.7	11.9	0.6	-5.6
Feb.	6.3	11.3	5.5	1.2	1.2	0.4	0.6	-0.7	0.7	3.3
Sources	"Trade Statistics of Japan", Ministry of Finance									

Calendar year, Quarter and Month	Cash salary amount rate of increase over previous year/ the same term (month) of the previous year (%)	Active job openings-to-applicants ratio (time(s))	Unemployment rate (%)	M2 rate of increase over previous year/ the same term (month) of the previous year (%)	Balance of payments		Yen/\$ rate (averaged during the term)
					Trade balance (trillion yen)	Current balance (trillion yen)	
2008	-0.3	0.88	4.0	2.1	5.8	14.9	103.3
2009	-3.9	0.47	5.1	2.7	5.4	13.6	93.5
2010	0.5	0.52	5.1	2.8	9.5	19.4	87.8
2011	-0.2	0.65	4.6	2.7	-0.3	10.4	79.8
2012	-0.9	0.80	4.3	2.5	-4.3	4.8	79.8
2013	-0.4	0.93	4.0	3.6	-8.8	4.5	97.6
2014	0.4	1.09	3.6	3.4	-10.5	3.9	105.8
2015	0.1	1.20	3.4	3.7	-0.9	16.2	121.0
2016	0.5	1.36	3.1	3.5	5.5	20.3	108.8
2016/1st Qtr.	0.7	1.29	3.2	3.2	0.8	5.9	115.4
2nd Qtr.	0.6	1.35	3.2	3.4	1.5	4.6	108.1
3rd Qtr.	0.5	1.37	3.1	3.4	1.5	5.8	102.4
4th Qtr.	0.4	1.41	3.0	3.9	1.7	4.1	109.4
2016/Jul.	1.2	1.37	3.0	3.4	0.6	1.9	104.0
Aug.	0.0	1.37	3.1	3.3	0.2	2.0	101.3
Sep.	0.0	1.38	3.0	3.5	0.7	1.9	102.0
Oct.	0.1	1.40	3.0	3.7	0.6	1.5	103.8
Nov.	0.5	1.41	3.1	3.9	0.3	1.4	108.3
Dec.	0.5	1.43	3.1	4.0	0.8	1.1	116.0
2017/Jan.	0.3	1.43	3.0	4.0	-0.9	0.1	114.7
Feb.	0.4	1.43	2.8	4.2	1.1	2.8	113.1
Sources	"Monthly Labour Survey", Ministry of Health, Labour and Welfare	"Employment Referrals for General Workers", Ministry of Health, Labour and Welfare	"Labour Force Survey", Statistics Bureau, Ministry of Internal Affairs and Communications	"Money Stock", Bank of Japan	"Balance of Payments", Ministry of Finance		Bank of Japan

Calendar year, Quarter and Month	Foreign Trade Statistics									
	Imports amount from EU (trillion yen)	Imports from EU rate of increase over previous year/ the same term (month) of the previous year (%)	Exports amount to Asia (excluding China) (trillion yen)	Exports to Asia (excluding China) rate of increase over previous year/ the same term (month) of the previous year (%)	Imports amount from Asia (excluding China) (trillion yen)	Imports from Asia (excluding China) rate of increase over previous year/ the same term (month) of the previous year (%)	Exports amount to China (trillion yen)	Exports to China rate of increase over previous year/ the same term (month) of the previous year (%)	Imports amount from China (trillion yen)	Imports from China rate of increase over previous year/ the same term (month) of the previous year (%)
2008	7.3	-4.8	27.0	-2.0	17.2	4.1	12.9	0.9	14.8	-1.4
2009	5.5	-24.3	19.1	-29.3	11.6	-32.8	10.2	-21.0	11.4	-22.9
2010	5.8	5.5	24.7	29.5	14.1	22.0	13.1	27.8	13.4	17.3
2011	6.4	10.1	23.8	-3.9	15.7	11.7	12.9	-1.4	14.6	9.2
2012	6.6	3.6	23.3	-1.8	16.3	3.3	11.5	-10.8	15.0	2.7
2013	7.6	15.2	25.2	8.1	18.3	12.6	12.6	9.7	17.7	17.4
2014	8.2	6.8	26.1	3.5	19.4	6.2	13.4	6.0	19.2	8.6
2015	8.6	5.6	27.1	3.7	18.9	-2.6	13.2	-1.2	19.4	1.3
2016	8.2	-5.5	24.7	-8.7	16.2	-14.5	12.4	-6.5	17.0	-12.4
2016/1st Qtr.	2.1	5.4	6.0	-13.2	4.3	-14.4	2.9	-7.1	4.5	-7.5
2nd Qtr.	1.9	-5.3	6.0	-11.9	3.8	-17.1	3.0	-10.8	4.0	-13.0
3rd Qtr.	2.0	-10.9	6.1	-10.5	3.9	-17.4	3.0	-10.8	4.2	-17.8
4th Qtr.	2.1	-9.9	6.6	1.3	4.2	-9.1	3.5	2.4	4.4	-11.1
2016/Jul.	0.7	-15.6	2.0	-14.4	1.3	-24.1	1.0	-12.7	1.3	-21.6
Aug.	0.7	-12.4	2.0	-9.7	1.3	-11.9	1.0	-8.8	1.3	-15.3
Sep.	0.7	-3.7	2.1	-7.3	1.3	-15.6	1.0	-10.6	1.5	-16.6
Oct.	0.7	-11.3	2.0	-10.3	1.3	-16.7	1.1	-9.2	1.4	-17.9
Nov.	0.7	-13.2	2.1	2.8	1.4	-5.1	1.1	4.4	1.5	-9.8
Dec.	0.7	-4.8	2.4	11.8	1.4	-4.9	1.3	12.4	1.5	-4.9
2017/Jan.	0.7	-4.5	2.0	7.4	1.6	6.7	0.9	3.1	1.8	7.3
Feb.	0.7	-7.5	2.3	17.5	1.4	1.2	1.2	28.2	1.1	-18.0
Sources	"Trade Statistics of Japan", Ministry of Finance									