# Is Labor Share Decreasing?

By Nobuo Iizuka

#### Various Definitions of Labor Share

Labor share indicates how much of the added value a country produces is distributed to the workforce. Recently there have been editorials here and there about labor share being on a downward trend across the entire world. Indeed, labor share, which can be obtained by dividing the compensation for employees, or distribution to the workforce, by gross domestic product (GDP), is on a decreasing trend *(Chart 1)*. This is often attributed to technological innovation and globalization.

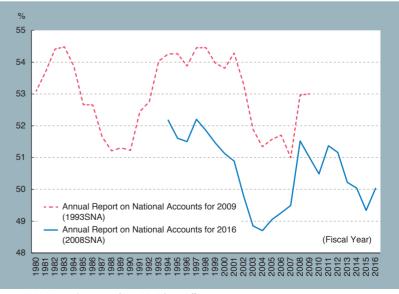
However, there are various definitions of labor share. The *Databook of International Labour Statistics 2017* published by the Japan Institute for Labour Policy and Training offers international comparisons of data on labor share, one derived by dividing

compensation for employees by gross national income, and another by dividing compensation for employees by national income at factor cost. Of these definitions, the labor share most closely suiting economic theory is that derived by dividing compensation for employees by national income at factor cost. This is because it indicates how added value is distributed amongst workers and businesses. When observing labor share using this scale, a downward trend is not necessarily clear (*Chart 2*).

### Increase in Depreciation & Amortization

What, then, is causing the difference in *Chart 1* and *Chart 2*? The first factor is the expansion of consumption of fixed capital which corresponds to the stock amount of depreciation and amortization. Japan's GDP increased by nearly 30 trillion yen with the introduction of the 2008SNA (System of National Accounts) in December 2016. The 2008SNA has several features and the main

reason for the increase in GDP is the capitalization of research and development (R&D). In the 1993SNA, expenditure on R&D was treated as intermediate consumption, so it was not included in GDP. In the 2008SNA, it is treated as gross fixed capital formation. You can see the difference of the data between the annual report on National Accounts for 2009 and the annual report on National Accounts for 2016. We can get data from FY1980 in the case of the annual report on National Accounts for 2016. We can get data from FY1980 in the case of the annual report on National Accounts for 2009. On the other hand, R&D is depreciated and amortized in a shorter period of time compared to other capital investment. Hence consumption of fixed capital also expanded after the revision. For example, GDP increased by 19.8 trillion yen in the current standard year (2011) with the introduction of the 2008SNA, and of this, 14.4 trillion yen was consumption of fixed capital.



Source: "SNA (National Accounts of Japan)", Cabinet Office

#### CHART 1 Compensation of employees / Gross Domestic Product



Author Nobuo Iizuka

The second factor is taxes on production and imports including consumption tax. With the hike in the consumption tax to 8% in April 2014, taxes on production and imports increased. National income at factor cost deducts consumption of fixed capital and taxes on production and imports, thereby creating the difference in movements between *Chart 1* and *Chart 2*. We can see that dividing compensation of employees by national income at factor cost is higher in the 1990s than the 1980s.

# Is Stagnant Growth in Disposable Income Behind Sluggish Spending?

The sluggish consumer spending that Japan is currently experiencing can be attributed to the attention on labor share. The real GDP growth rate in fiscal year 2016 was 1.2%, exceeding 1% for two consecutive years, but of this, 0.8 percentage points were contributions from external demand. Growth in consumer spending went down from 0.8% in fiscal 2015 to 0.3% in fiscal 2016.

The main factor behind this is the stagnant growth in household disposable income. The percentage of disposable income of households in Japan's overall disposable income (national disposable income) has dropped to the lowest level since the 1980s *(Chart 3)*. In addition to the hike in consumption tax in April 2014, the increase in social insurance premiums has had a great impact. The main factors include the annual increase in insurance premiums for welfare pensions since October 2004.

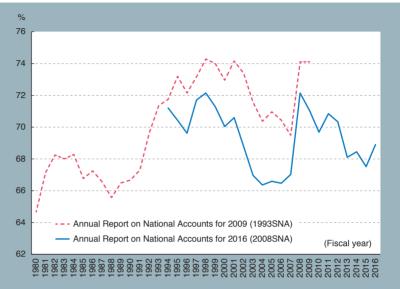
The rise in insurance premiums for welfare pensions ended in September 2017. But in 2018, households that earn above a certain level are now no longer eligible for exemptions for spouses and special exemptions for spouses, and will essentially experience a tax increase. Moreover, under the tax revision package which was approved by the Japanese Cabinet on Dec. 22, 2017, a reduction in deduction from income was introduced for households earning above a certain level.

Another increase in the consumption tax is also scheduled for October 2019. Whether households can survive these consecutive increases in payments, and whether a steady expansion of consumer spending can be achieved, should be closely monitored.

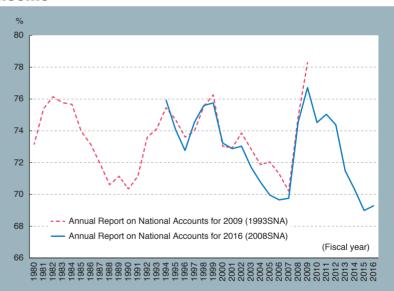
CHART 2

CHART 3





Source: "SNA (National Accounts of Japan)", Cabinet Office



# Household disposable income / National disposable income

Source: "SNA (National Accounts of Japan)", Cabinet Office

Note: This article was written with information available as of Jan. 7, 2018.

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### ECONOMIC INDICATORS FOR JAPAN

Calendar year, Quarter and Month	Real	I GDP	Nomin	al GDP		CPI	
	Amount (trillion yen)	Rate of increase over previous year/term (%)	Amount (trillion yen)	Rate of increase over previous year/term (%)	IIP rate of increase over previous year/term (month) (%)	(All terms, less fresh food) rate of increase over previous year/the same term (month) of the previous year (%)	
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	510.7	0.4	513.9	2.1	2.1	2.6	
2015	517.6	1.4	532.0	3.5	-1.2	0.5	
2016	522.5	0.9	538.4	1.2	-0.1	-0.3	
2017	530.8	1.6	545.8	1.4	4.5	0.5	
2017/1st Qtr.	526.8	0.3	540.3	0.1	0.2	0.2	
2nd Qtr.	530.2	0.6	545.4	0.9	2.1	0.4	
3rd Qtr.	533.1	0.6	548.9	0.6	0.4	0.6	
4th Qtr.	533.7	0.1	548.7	0.0	1.8	0.9	
2017/May	_	-	_	-	-3.6	0.4	
Jun.	_	-	_	-	2.2	0.4	
Jul.	_	-	_	-	-0.8	0.5	
Aug.	_	_	_	_	2.0	0.7	
Sep.	-	-	-	-	-1.0	0.7	
Oct.	-	-	-	-	0.5	0.8	
Nov.	_	_	_	_	0.5	0.9	
Dec.	_	-	-	-	2.9	0.9	
					"Indices of Industrial Production",	"Consumer Price Index", Statistic:	

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

	Foreign Trade Statistics									
Calendar year, Quarter and Month	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 (%)
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
2017	78.3	11.8	75.3	14.0	15.1	6.8	8.1	10.3	8.7	8.5
2017/1st Qtr.	19.0	8.5	18.7	8.6	3.6	-0.7	2.0	9.2	2.1	-0.1
2nd Qtr.	18.8	10.5	18.1	16.2	3.6	6.8	2.0	12.1	2.1	10.0
3rd Qtr.	19.6	15.1	18.4	14.5	3.8	14.4	2.0	12.3	2.2	11.1
4th Qtr.	20.9	13.0	20.2	17.0	4.1	7.5	2.0	7.8	2.3	13.4
2017/May	5.9	14.9	6.1	17.9	1.1	11.6	0.7	7.4	0.7	19.8
Jun.	6.6	9.7	6.2	15.5	1.3	7.1	0.7	19.3	0.7	9.6
Jul.	6.5	13.4	6.1	16.3	1.3	11.5	0.7	14.0	0.7	8.3
Aug.	6.3	18.1	6.2	15.3	1.2	21.8	0.6	5.7	0.7	13.7
Sep.	6.8	14.1	6.1	12.1	1.3	11.1	0.7	17.4	0.8	11.6
Oct.	6.7	14.0	6.4	19.0	1.3	7.1	0.6	3.2	0.8	15.8
Nov.	6.9	16.2	6.8	17.3	1.4	13.0	0.7	12.4	0.7	13.3
Dec.	7.3	9.3	6.9	14.9	1.4	3.0	0.7	7.5	0.8	11.4
Sources		"Trade Statistics of Japan", Ministry of Finance								

#### ECONOMIC INDICATORS FOR JAPAN

	Cash salary amount			M2	Balance o	f payments		
Calendar year, Quarter and Month	rate of increase over previous year/ the same term (month) of the previous year (%)	Active job openings- to-applicants ratio (time(s))	Unemployment rate (%)	rate of increase over previous year/ the same term (month) of the previous year (%)	Trade balance (trillion yen)	Current balance (trillion yen)	Yen/\$ rate (averaged during the term)	
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	-0.3 10.4		
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	3.6	-0.9	16.2	121.0	
2016	0.5	1.36	3.1	3.4	5.5	20.3	108.8	
2017	0.4	1.50	2.8	4.0	4.9	21.9	112.2	
2017/1st Qtr.	0.2	1.44	2.9	4.1	1.1	6.0	113.6	
2nd Qtr.	0.5	1.49	2.9	3.9	0.9	4.6	111.1	
3rd Qtr.	0.2	1.52	2.8	4.0	1.7	7.0	111.0	
4th Qtr.	0.6	1.56	2.8	3.9	1.2	4.3	112.9	
2017/May	0.6	1.49	3.1	3.8	-0.1	1.7	112.2	
Jun.	0.4	1.51	2.8	3.9	0.5	0.9	110.9	
Jul.	-0.6	1.52	2.8	4.0	0.6	2.4	112.5	
Aug.	0.7	1.52	2.8	4.0	0.3 2.4		109.9	
Sep.	0.9	1.52	2.8	4.0	0.8	2.3	110.7	
Oct.	0.2	1.55	2.8	4.1	0.4	2.2	112.9	
Nov.	0.9	1.56	2.7	4.0	0.2	1.3	112.9	
Dec.	0.7	1.59	2.8	3.6	0.5	0.8	113.0	
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	

	Foreign Trade Statistics									
Calendar year, Quarter and Month	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 (%)
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
2017	8.8	7.4	28.0	13.3	18.6	14.6	14.9	20.5	18.4	8.4
2017/1st Qtr.	2.1	-1.7	6.9	13.9	4.6	6.4	3.4	16.3	4.5	0.8
2nd Qtr.	2.1	9.9	6.7	11.6	4.5	16.5	3.6	19.2	4.3	7.4
3rd Qtr.	2.2	10.3	7.0	14.7	4.6	18.2	3.7	24.2	4.5	8.3
4th Qtr.	2.4	11.5	7.5	13.0	4.9	18.2	4.2	21.9	5.1	17.0
2017/May	0.7	12.5	2.1	13.4	1.5	19.6	1.1	23.8	1.4	9.6
Jun.	0.7	11.6	2.3	10.6	1.6	16.7	1.2	19.6	1.5	5.2
Jul.	0.7	3.2	2.3	13.4	1.6	23.2	1.2	17.7	1.5	13.2
Aug.	0.8	12.4	2.3	17.0	1.5	16.5	1.2	25.8	1.5	11.1
Sep.	0.8	15.4	2.4	13.7	1.5	14.9	1.3	29.3	1.6	1.7
Oct.	0.8	18.2	2.4	15.2	1.6	20.4	1.4	26.0	1.6	14.4
Nov.	0.8	6.9	2.5	18.0	1.6	17.9	1.4	25.1	1.8	21.7
Dec.	0.8	9.9	2.6	6.8	1.7	16.6	1.5	15.9	1.7	14.9
Sources	"Trade Statistics of Japan", Ministry of Finance									