Economic Monthly [Japan]

Responses to the labour shortage are helping to underpin capital expenditure

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MUFG Bank, Ltd.A member of MUFG, a global financial group

26 JULY 2018 (ORIGINAL JAPANESE VERSION RELEASED ON 27 JUNE 2018)

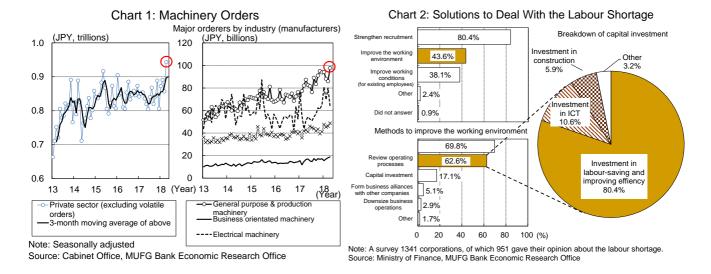
1. The Real Economy

While growth of corporate earnings and capital expenditure slowed in the January-March quarter, machinery orders - which indicate the future trend of capital expenditure - are currently rising again (Chart 1). According to Machinery Orders, published by the Cabinet Office, the value of (seasonally adjusted) "private sector machinery orders, excluding volatile ones for ships and those from power companies" (a leading indicator of capital expenditure by the private sector) rose by 10.1% month-on-month (MoM) to JPY 943.1 billion in April. The overall assessment was revised upwards for the first time in eight months from "appears to be recovering" to "recovering". The breakdown reveals a marked growth in orders from the "manufacturing sector", which increased by 22.7% MoM, while those from the "nonmanufacturing sector (excluding volatile orders)" increased by only 0.4% MoM. This is due, in particular, to a rise in orders from the "general purpose and production machinery" industry. Since 2017, growth of "general purpose and production machinery" orders has been accelerating, and a significant part of the background for this appears to be that domestic corporations are being forced to respond to the labour shortage. In April, the jobs-to-applicants ratio reached an historical high of 1.59, and according to a survey by the Ministry of Finance, around 70% of corporations said they are experiencing a labour shortage and that their main solutions to this are to "strengthen recruitment" (80.4%) and "improve the working environment" (43.6%) (Chart 2). Looking at the breakdown of those who said they would "improve the working environment", most said they would do this by "reviewing operating processes" (69.8%) followed by "capital investment" (62.6%). It can be assumed that efforts to save labour and streamline by introducing equipment to automate production and logistics will increase capital investment demand, particularly for production machinery. While Japan's labour shortage is also due to structural factors, namely Japan's ageing and shrinking population, responding to the shortage is becoming one of the most important issues for corporations. Investment in streamlining is forecast to accelerate further.

It is important to pay close attention to the current risk that corporations will strengthen their wait-and-see approach to capital investment owing to issues overseas, such as a rise in concerns about US trade policy. However, it is likely that addressing medium and long-term issues, such as the ageing population and labour shortage, will take greater precedence as a



new motive for investment. As a result, this is expected to support solid capital expenditure in the future.



2. Monetary Policy and Financial Markets

The Bank of Japan (BoJ) decided to maintain its current monetary policy at its Monetary Policy Meeting on 14th-15th June, where it also revised down the year-on-year rate of change in the Consumer Price Index (CPI) from "around 1%" to "a range of 0.5%–1.0%". In fact, May's core CPI (Consumer Price Index, less fresh food) published on 22nd June increased by 0.7% YoY (April: 0.7% YoY), and despite the output gap remaining positive (excess demand) for the past five quarters, the CPI growth rate is still not that high (Chart 3). At the press conference after the BoJ's Monetary Policy Meeting Governor Kuroda said that "the momentum toward achieving the price stability target of 2 percent is maintained". However, he also highlighted Japan's deflationary mind-set and a rise in investment in streamlining and IT, especially in the non-manufacturing industry, and an increase in internet sales as reasons for the sluggish growth of prices. He said that these points will be discussed further for July's Outlook for Economic Activity and Prices. In light of this, as well as the removal of the deadline for achieving the price target from the previous Outlook, it is thought the BoJ has already switched to a long-term strategy for raising prices and that the outline of the existing monetary policy will go unchanged for the time being.

That being said, there are current trends which should be monitored. Since the start of the year, staff at the BoJ have published working papers on themes such as the natural rate of interest and prices (Table 1). In particular, in the paper "Natural Rate of Interest in Japan" published in March, estimates that Japan's natural rate of interest – which is following a downward trend in the long term – is currently rising to around 1% and is attracting attention from market players. When giving a speech in May, Governor Kuroda said "as the natural rate of interest rises, this is expected to enhance monetary easing effects" Bearing this in mind, it is possible to interpret the current level of easing as comparatively high. At a past press conference in March, in response to the question, "if inflation expectations rise, does this means that logically this is not an exit from monetary easing, even if the nominal target rate is raised, because there is no



change in monetary easing effects?", Governor Kuroda answered, "logically, this does stand up", which shows he agrees with this theory to a certain extent. All things considered, based on the aforementioned discussion about the natural interest rates, there is a possibility that the BoJ will make small adjustments to their monetary policy which do not alter the level of easing, even if there is not a large increase in prices.

¹ Monetary easing effects are calculated by subtracting real interest rates (nominal interest rates less inflation expectations) from the natural interest rate. At present, where there is little change in nominal interest rates, if the natural interest rate rises and the real interest rate falls owing to an increase in inflation expectations, the stimulative effect on economic activity and prices will become stronger.

Chart 3: CPI and the Output Gap (YoY, %) (% of potential real GDP) 3.0 1.5 0.0 -1.5 -2 -3.0 -4.5 -6 —Core CPI (left axis) Core CPI less energy (left axis) -6.0 -8 -Output gap (right axis) -10 90 92 94 96 98 00 02 04 06 08 10 12 14 16 18(Year)

Note: "Core CPI" is total CPI less fresh food. The most recent data is an average of April and May. *Output gap = real GDP less potential real GDP (Cabinet Office estimate)

Source: Cabinet Office, Ministry of Internal Affairs and Communications, MUFG Bank Economic Research Office

Table 1: Working Papers About the Natural Rate of Interest and Prices by Bank of Japan Staff

Release date	Title	Summary
Jan 20	Population Aging and the Real Interest Rate in the Last and Next 50 Years (1)	Over the past 50 years, about 270 out of the 640 basis points decline in real interest rates was attributed to demographics in Japan. For the next 50 years, we find that demographic changes alone will not substantially increase or decrease the real interest rate from the current level. A demography-induced decline in real interest rates may be contained in other developed countries as well.
4	Natural Rate of Interest in Japan	Japan's natural rate of interest has shown a secular decline over time, from 400 basis points in the 1980s, to 30 basis points in the last five years. The decline has been mostly attributed to changes in neutral technology. A secular decline and the quantitative importance of neutral technology are also seen when considering the expected future natural rates over a long horizon. In the banking crisis starting in the 1990s, financial factors stood out as an important driver that depressed the natural rate. Their contribution holds second place, after changes in neutral technology.
	Determinants of the Natural Rate of Interest in Japan	 Consolidated Japanese versions of (1) and (2) which were also published on 13th June.
	Prices *	The growth of internet shopping is putting downward pressure on prices, particularly in the case of goods where there appears to be tough competition with existing retail companies. on of this paper has not yet been released

Source: Bank of Japan, MUFG Bank Economic Research Office

(Translated by Elizabeth Foster)



MAIN ECONOMIC AND FINANCIAL INDICATORS (JAPAN)

1. Main Economic Indicators

As of Jun. 27, 2018

	Fiscal	Fiscal	20	17	2018			2018	AS Of .	Jun. 27, 201
	2016	2017	3Q	4Q	1Q	JAN	FEB	MAR	APR	MAY
	_		-			JAIN ***	***	***	***	IVIA 1
Real GDP Growth Rate <% changes from	1.2	1.6	2.0	1.0	-0.6					
previous period at SA annual rate>			(2.0)	(1.9) 0.7	(1.1)	4.4	0.4	0.0	4.0	
Index of All Industries Activity	0.5	1.7	1		-0.4	-1.1	0.4	0.0	1.0	
Indicated Decidentics Indica			(1.5)	(1.8) 1.6	(1.3)	(1.8)	(1.1)	(1.2)	(1.5)	
Industrial Production Index	1.0	4.1	1		-1.3	-4.5			0.5	
Production			(4.0)	(4.6)	(2.4)	(2.9) -4.5	(1.6)	(2.4)	(2.6)	
Shipments	0.8	3.3	- 1			1 1		4		
leventon.	-		(3.8)	(3.1)	(1.5)	(2.2) -0.5	(0.7)	(1.4)	(3.6) -0.6	
Inventory	-4.0	3.9	-1.4 (-2.5)	(1.9)	(3.9)	-0.5 (1.5)	(1.6)	(3.9)	-0.6 (1.7)	
Inventory/Shipments Ratio	440.0	440.4	111.1	112.1	114.9	113.7	114.0	117.1	113.8	
(2010=100)	112.9	112.4	[114.3]	[109.7]	[111.1]	[111.2]	[111.1]	[111.0]	[113.1]	[111.7
Domestic Corporate Goods Price Index	0.4	0.7	0.4	0.9	0.6	0.3	0.1	-0.1	0.2	0.6
Domestic Corporate Coods i lice ilidex	-2.4	2.7	(2.8)	(3.3)	(2.5)	(2.7)	(2.6)	(2.1)	(2.1)	(2.7
Consumer Price Index(SA, total, excl.fresh foods)	0.0	0.7	0.0	0.4	-0.1	0.2	0.1	-0.1	-0.1	0.0
Consumer Frice index(SA, total, excl.ilestrioods)	-0.2	0.7	(0.6)	(0.9)	(0.9)	(0.9)	(1.0)	(0.9)	(0.7)	(0.7
Index of Capacity Utilization	00.6	101.7	101.6	102.7	101.0	98.6	101.9	102.4	104.2	
(2010=100)	98.6	101.7	[98.0]	[100.1]	[100.1]	[99.3]	[100.8]	[100.2]	[103.5]	[100.3
Machinery Orders(Private Demand,	0.5	-0.8	2.8	0.3	3.3	8.2	2.1	-3.9	10.1	[100.0
Excl. Electric Power and Ship building)	0.5	-0.0	(-2.5)	(0.0)	(0.2)	(2.9)	(2.4)	(-2.4)	(9.6)	
Manufacturing	-4.6	9.2	6.2	3.5	2.5	9.9	8.0	-17.5	22.7	
Walidactumg	-4.0	9.2	(9.2)	(13.3)	(10.6)	(16.8)	(21.4)	(1.5)	(23.5)	
Non-manufacturing	4.3	-7.8	0.0	-2.1	3.4	4.4	0.0	2.2	0.4	
Excl.Electric Power & Ship building	4.3	-7.0	(-10.1)	(-9.7)	(-6.9)	(-7.0)	(-10.4)	(-4.9)	(-1.1)	
Shipments of Capital Goods	1.4	6.2	1.2	3.1	-0.5	-3.4	-1.4	3.0	2.5	
(Excl.Transport Equipment)	1.4	0.2	(4.3)	(7.2)	(7.0)	(9.5)	(3.1)	(8.3)	(9.5)	
Construction Orders	4.0	0.7	(4.0)	(1.2)	(1.0)	(5.5)	(0.1)	(0.0)	(0.0)	
Construction Orders	4.0	0.7	(-4.7)	(4.0)	(2.6)	(0.9)	(19.2)	(-4.0)	(4.0)	
Private	5.1	0.6	(-4.7)	(4.0)	(2.0)	(0.3)	(13.2)	(-4.0)	(4.0)	
i iivate	5.1	0.6	(5.0)	(3.5)	(1.0)	(-11.4)	(18.4)	(-1.1)	(8.3)	
Public	8.4	-5.4	(0.0)	(0.0)	(1.0)	(11.4)	(10.4)	(1.1)	(0.0)	
i dollo	0.4	-5.4	(-34.3)	(6.3)	(-0.4)	(28.1)	(12.6)	(-13.5)	(1.3)	
Public Works Contracts	4.1	-4.3	(04.0)	(0.0)	(0.4)	(20.1)	(12.0)	(10.0)	(1.0)	
Table Works Softable	4.1	-4.3	(-7.9)	(1.1)	(-15.6)	(-12.8)	(-20.2)	(-14.5)	(5.5)	(3.5
Housing Starts	97.4	94.6	95.5	94.8	89.2	85.6	92.6	89.5	99.2	(0.0
10,000 units at Annual Rate, SA	(5.8)	(-2.8)	(-2.4)	(-2.4)	(-8.0)	(-13.2)	(-2.6)	(-8.3)	(0.3)	
Total floor	(4.1)	(-2.8)	(-3.7)	(-3.2)	(-9.2)	(-14.9)	(-5.6)	(-7.2)	(-2.1)	
Sales at Retailers	-0.2	1.9	(0.1)	(0.2)	(0.2)	(1 1.0)	(0.0)	(1.2)	(2.1)	
Sales at Netanois	-0.2	1.3	(2.0)	(1.9)	(1.4)	(1.5)	(1.7)	(1.0)	(1.5)	
Real Consumption Expenditures	-1.6	0.4	-0.4	-0.6	1.1	2.8	-1.5	-0.1	-1.6	
of Households over 2 persons (SA)	1.0	0.4	(0.0)	(0.5)	(0.6)	(2.0)	(0.1)	(-0.2)	(-1.3)	
Propensity to Consume	72.1	71.7	70.3	71.3	71.4	74.5	69.3	70.6	70.2	
(SA,%)	72.1	, , , ,	[71.3]	[71.8]	[73.0]	[71.5]	[75.1]	[72.4]	[73.1]	[77.0
Overtime Hours Worked	-0.7	0.4	-0.2	0.3	-1.1	-1.7	1.4	-0.1	0.4	[
(All Industries, 5 employees or more)	0.7	0.4	(0.9)	(1.2)	(-1.2)	(-2.0)	(-0.9)	(-0.9)	(0.0)	
Total Cash Earnings (Regular Employees	0.4	0.7	()	,	` '	\ ''	(- 7)	(/	(/	
Only; All Industries, 5 employees or more)	0.4	0.1	(0.2)	(0.7)	(1.4)	(1.2)	(1.0)	(2.0)	(0.6)	
Employment Index(Regular Employees Only;'All Industries,	103	105	130	133	25	25	30	21	13	
5 employees or more) (Change over the M/Q/Y)	103	100	.55	.50		-3	55	-'	.0	
Ratio of Job Offers to Applicants	1.39	1.54	1.52	1.57	1.59	1.59	1.58	1.59	1.59	
(SA,Times)	1.39	1.04	[1.37]	[1.41]	[1.44]	[1.43]	[1.44]	[1.45]	[1.47]	i i
Unemployment Rate	3.0	2.7	2.8	2.7	2.5	2.4	2.5	2.5	2.5	
(SA,%)	3.0	2.1	2.0	2.1	2.5	2.4	2.5	2.5	2.5	
Economy Watcher Survey	46.4	50.5	50.3	53.3	49.1	49.9	48.6	48.9	49.0	47.
(Judgment of the present condition D.I,%)	70.4	30.3	[45.5]	[49.8]	[48.7]	[49.4]	[48.8]	[47.9]	[48.5]	
Bankruptcies (Number of cases)	8,381	8,367	2,032	2,106		635	617	789	650	
	(-3.5)	(-0.2)	(-2.6)	(1.0)	(-1.8)	(5.0)	(-10.3)	(0.4)	(-4.4)	(-4

(Notes)

 $Unless \ otherwise \ indicated, \ tabulated \ figures \ and \ those \ in \ parentheses \ show \ \% \ changes \ from \ previous \ quarter/month \ as \ applicable.$

The figures in () indicate % changes from previous year.

[] show the comparable figure of the previous year.



2. Balance of Payments

As of Jun. 27, 2018

											u 27, 2010
	Fiscal	Fiscal	2017		2018	2018					
	2016		2017	3Q	4Q	1Q	JAN	FEB	MAR	APR	MAY
Customs Clearance (Exports in Yen Terms)		3.5	10.8	(15.1)	(13.0)	(4.9)	(12.3)	(1.8)	(2.1)	(7.8)	(8.1)
Value	-	5.8	6.0	(8.8)	(8.1)	(2.4)	(2.7)	(4.1)	(0.3)	(3.0)	(3.7)
Volumes		2.4	4.5	(5.8)	(4.6)	(2.6)	(9.3)	(-2.1)	(1.8)	(4.6)	(4.2)
Imports (In Yen terms)		0.2	13.7	(14.8)	(17.0)	(7.4)	(7.8)	(16.6)	(-0.5)	(5.9)	(14.0)
Value	-1	0.7	10.1	(12.8)	(12.7)	(4.7)	(5.0)	(4.4)	(4.5)	(4.4)	(7.2)
Volumes		0.5	3.3	(1.8)	(3.9)	(2.6)	(2.6)	(11.7)	(-4.8)	(1.5)	(6.3)
Current Account (100 mil. yen)		188	217,362	70,061	43,257	58,057	6,074	20,760	31,223	18,451	
Goods (100 mil. yen)	57,	851	45,818	17,588	11,527	7,128	-6,666	1,887	11,907	5,738	
Services (100 mil. yen)	-13,	813	-6,029	-2,652	-1,975	1,476	-1,682	1,227	1,931	-5,015	
Financial Account (100 mil. yen)		407	194,144	45,817	30,753	73,592	12,072	15,390	46,130	4,254	
Gold & Foreign Exchange Reserves (\$1mil.)		330	1,268,287	1,266,310	1,264,283	1,268,287	1,268,535	1,261,749	1,268,287	1,256,018	1,254,477
Exchange Rate (\/\$)		3.37	110.80	111.01	112.95	108.20	110.77	107.82	106.00	107.43	109.69

3. Financial Market Indicators

			Fiscal	Fiscal	2017		2018	2018				
			2016	2017	3Q	4Q	1Q	JAN	FEB	MAR	APR	MAY
Uncollateralized Overnight Call Rates		-0.045	-0.050	-0.054	-0.042	-0.048	-0.040	-0.042	-0.062	-0.063	-0.061	
					[-0.046]	[-0.043]	[-0.042]	[-0.045]	[-0.038]	[-0.042]	[-0.054]	-0.053
Euro Yen TIBOR			0.057	0.065	0.062	0.063	0.078	0.068	0.068	0.097	0.097	0.078
(3 Months)					[0.057]	[0.056]	[0.056]	[0.056]	[0.056]	[0.056]	[0.056]	[0.056]
Newly Issued Japanese Government Bonds Yields			0.065	0.045	0.060	0.045	0.045	0.080	0.045	0.045	0.050	0.030
(10 Years)					[-0.085]	[0.040]	[0.065]	[0.085]	[0.050]	[0.065]	0.015	[0.040]
Average Contracted Interest Rates		0.847	0.817									
on Loans and Disco	unts(City Ba	anks)			0.831	0.828	0.817	0.827	0.827	0.817	0.793	
(% changes from pre	vious period)			(-0.011)	(-0.003)	(-0.011)	(-0.001)	(0.000)	(-0.010)	(-0.024)	
The Nikkei Stock Average		18,909	21,454	20,356	22,765	21,454	23,098	22,068	21,454	22,468	22,202	
(TSE 225 Issues)				[16,450]	[19,114]	[18,909]	[19,041]	[19,119]	[18,909]	[19,197]	[19,651]	
M2(Average)		(3.6)	(3.7)	(4.0)	(3.9)	(3.2)	(3.4)	(3.2)	(3.1)	(3.2)	(3.2)	
Broadly-defined Liqu	Broadly-defined Liquidity(Average)			(3.2)	(3.6)	(3.6)	(3.0)	(3.2)	(2.9)	(2.9)	(3.1)	(3.0)
Principal Figures of I	Financial Inst	titutions										
	Banks & S	hinkin	(2.4)	(2.8)	(3.1)	(2.6)	(2.1)	(2.3)	(2.1)	(2.0)	(2.1)	(2.0)
Loans and		Banks	(2.4)	(2.8)	(3.2)	(2.6)	(2.1)	(2.3)	(2.1)	(1.9)	(2.0)	(1.9)
Discount		City Banks etc.	(1.2)	(2.0)	(2.8)	(1.7)	(0.7)	(1.1)	(0.6)	(0.3)	(0.5)	(0.3)
(Average)		Regional Banks	(3.5)	(3.7)	(3.7)	(3.7)	(3.5)	(3.5)	(3.6)	(3.5)	(3.6)	(4.4)
		Regional Banks II	(3.1)	(3.0)	(3.1)	(3.0)	(2.8)	(2.8)	(2.8)	(2.8)	(2.7)	(-0.5)
	Shinkin		(2.3)	(2.7)	(2.7)	(2.6)	(2.5)	(2.5)	(2.5)	(2.5)	(2.3)	(2.3)
Total(3 Business Condition)		(3.8)	(4.2)	(4.5)	(4.3)	(3.5)	(3.8)	(3.5)	(3.3)	(3.8)	(3.8)	
Deposits		City Banks	(5.5)	(5.9)	(6.4)	(6.1)	(4.9)	(5.3)	(4.9)	(4.5)	(5.3)	(5.1)
and CDs		Regional Banks	(2.3)	(2.5)	(2.6)	(2.5)	(2.2)	(2.4)	(2.2)	(2.0)	(2.3)	(3.2)
(Average)		Regional Banks II	(2.1)	(2.1)	(2.3)	(2.0)	(1.6)	(1.6)	(1.7)	(1.5)	(1.7)	(-1.1)

(Notes)

Newly Issued Japanese Government Bonds Yields and Interest rates are averages. The Nikkei Stock Average is as of month-end.

Unless otherwise indicated, tabulated figures and those in parentheses show % changes from previous quarter/month as applicable.

The figures in () indicate % changes from previous year. [] show the comparable figure of the previous year.

(Sources)

Cabinet Office, National Accounts, Machinery Orders; METI, Indices of Tertiary Industry Activity, Industrial Production, Current Survey of Commerce; MOF, Trade Statistics, Balance of Payments; MPMHAPT, Consumer Price Index, Family Income and Expenditure Survey, Labour Force Survey; MHLW, Monthly Labour Survey; Ministry of Land, Infrastructure, and Transport, Economic Construction Statistics; BOJ, Corporate Price Index, Financial and Economic Statistics Monthly, etc.

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