TYCHOS SECTOR RISK REPORT

		2016	2017	2018	2019	2020 Q2
	Debt to GDP	157%	157%	161%	164%	177%
Total Private Debt	5 year % change	-4%	-3%	0%	4%	15%
	Billion Yen	¥840,544	¥856,880	¥880,342	¥908,729	¥958,683
	Debt to GDP	99%	98%	101%	103%	114%
Business Debt	5 year % change	-4%	-4%	-0%	4%	19%
	Billion Yen	¥527,531	¥534,875	¥550,732	¥570,492	¥614,637
	Debt to GDP	58%	59%	60%	61%	64%
Household Debt	5 year % change	-4%	-1%	1%	4%	10%
	Billion Yen	¥313,014	¥322,005	¥329,610	¥338,237	¥344,046

Areas of Concern

Corporate Sect	Corporate Sectors		2017	2018	2019	2020 Q2
	DLB Loans to GDP	10.7%	10.3%	10.3%	10.5%	12.8%
Manufacturing	5 year % change	-3%	-6%	-6%	-3%	22%
	Billion Yen	¥57,170	¥56,285	¥56,520	¥58,320	¥69,418
	DLB Loans to GDP	13.2%	13.7%	14.4%	14.7%	15.5%
Non-Manufacturing Real Estate	5 year % change	9%	13%	19%	21%	26%
	Billion Yen	¥70,727	¥74,976	¥78,914	¥81,357	¥83,703
No. Manuelantonia	DLB Loans to GDP	2.5%	2.5%	2.6%	2.8%	3.1%
Non-Manufacturing	5 year % change	29%	28%	31%	28%	39%
Commodity Lease	Billion Yen	¥13,329	¥13,717	¥14,314	¥15,425	¥16,616
No. Manager Access of	DLB Loans to GDP	2.0%	2.2%	2.4%	2.6%	2.8%
Non-Manufacturing	5 year % change	35%	31%	31%	36%	44%
Utilities	Billion Yen	¥10,648	¥12,032	¥13,387	¥14,526	¥15,182

Household Debt,	Household Debt, by Type		2017	2018	2019	2020 Q2
	DLB Loans to GDP	1.8%	1.9%	1.9%	1.9%	1.9%
Consumer Credit	5 year % change	31%	32%	25%	15%	10%
	Billion Yen	¥9,866	¥10,411	¥10,458	¥10,381	¥10,191

Private Debt Lend	lers	2016	2017	2018	2019	2020 Q2
	Debt to GDP	22.3%	20.5%	23.1%	24.0%	24.9%
Financial Dealers and Brokers	5 year % change	55%	46%	28%	18%	20%
	Billion Yen	¥119,187	¥111,689	¥126,471	¥132,860	¥134,435
	Debt to GDP	1.8%	2.2%	2.1%	2.8%	3.4%
Securities investment Trusts	5 year % change	66%	82%	32%	55%	83%
	Billion Yen	¥9,588	¥11,877	¥11,621	¥15,265	¥18,530
Other Financial Intermediaries:	Debt to GDP	11.9%	12.2%	13.7%	15.0%	15.7%
	5 year % change	-1%	10%	28%	32%	37%
Non Banks	Billion Yen	¥63,631	¥66,674	¥74,744	¥82,917	¥85,112
	Debt to GDP	3.0%	3.8%	4.9%	5.5%	5.9%
Financial Auxiliaries	5 year % change	94%	138%	216%	226%	227%
	Billion Yen	¥15,994	¥20,905	¥26,898	¥30,491	¥32,080
	Debt to GDP	2.7%	2.7%	3.3%	2.7%	3.1%
Collectively Managed Trusts	5 year % change	174%	173%	178%	117%	116%
	Billion Yen	¥14,246	¥14,667	¥17,966	¥15,029	¥17,132
	Debt to GDP	1.7%	1.8%	1.9%	1.9%	1.7%
Pension Funds	5 year % change	43%	45%	31%	17%	-2%
	Billion Yen	¥9,248	¥9,836	¥10,402	¥10,327	¥9,127

^{*} Non Banks include Finance Companies & Structured Financing Special Purpose Companies

^{*} Financial Auxiliaries include Stock Exchanges and Credit Guarantee Institutions, Foreign Exchange Brokers, and Financial Holding Companies













n/a: Data Not Available

DLB: Domestically Licensed Banks



Areas of Concern Continued -

OTC Derivative Co	ontracts	2016	2017	2018	2019	2020 Q1
	to GDP	903.7%	1038.0%	1059.5%	1055.5%	1143.7%
Interest Rate Contracts	5 Year % Change	21%	57%	23%	8%	12%
	Billion Yen	¥4,839,872	¥5,666,470	¥5,793,844	¥5,845,063	¥6,181,934
	to GDP	155.1%	160.8%	163.2%	152.2%	148.6%
Foreign Exchange Contracts	5 Year % Change	64%	69%	35%	12%	-4%
	Billion Yen	¥830,608	¥877,803	¥892,580	¥842,723	¥803,291
	to GDP	3.9%	4.8%	3.7%	4.9%	4.2%
Equity-Linked Contracts	5 Year % Change	19%	113%	62%	1%	-19%
	Billion Yen	¥20,947	¥26,430	¥20,003	¥27,253	¥22,580
	to GDP	1071.8%	1211.6%	1234.3%	1221.0%	1306.2%
Total OTC Derivative Contracts	5 Year % Change	27%	60%	26%	9%	10%
	Billion Yen	¥5,740,085	¥6,614,307	¥6,749,781	¥6,761,278	¥7,060,364

Exchange-Traded Deriva	ative Contracts	2016	2017	2018	2019	2020 Q1
	to GDP	86.7%	100.3%	104.3%	94.2%	80.1%
Interest Rate Contracts	5 Year % Change	73%	86%	69%	-3%	-23%
	Billion Yen	¥464,390	¥547,764	¥570,151	¥521,482	¥433,003
	to GDP	6.1%	9.2%	6.6%	7.2%	6.9%
Equity-Linked Contracts	5 Year % Change	447%	441%	170%	159%	53%
	Billion Yen	¥32,537	¥50,231	¥36,348	¥40,046	¥37,126
	to GDP	92.8%	109.6%	111.0%	101.5%	87.1%
Total Exchange-Traded Contracts	5 Year % Change	79%	96%	73%	1%	-20%
	Billion Yen	¥497,148	¥598,170	¥606,823	¥562,000	¥470,769

Business Debt

DLB Loans by Ind		2016	2017	2018	2019	2020 Q2
	DLB Loans to GDP	10.7%	10.3%	10.3%	10.5%	12.8%
Manufacturing	5 year % change	-3%	-6%	-6%	-3%	22%
	Billion Yen	¥57,170	¥56,285	¥56,520	¥58,320	¥69,418
	DLB Loans to GDP	46.0%	46.8%	48.6%	48.7%	51.8%
Non-Manufacturing	5 year % change	5%	6%	9%	8%	17%
	Billion Yen	¥246,323	¥255,617	¥265,512	¥269,467	¥280,233
Memo: Non-Manufacturing Real	DLB Loans to GDP	13.2%	13.7%	14.4%	14.7%	15.5%
•	5 year % change	9%	13%	19%	21%	26%
Estate	Billion Yen	¥70,727	¥74,976	¥78,914	¥81,357	¥83,703
Memo: Non-Manufacturing	DLB Loans to GDP	5.0%	4.9%	4.9%	4.7%	5.1%
•	5 year % change	-9%	-10%	-9%	-12%	-1%
Wholesale Trade	Billion Yen	¥26,707	¥26,496	¥26,681	¥26,236	¥27,352
Memo: Non-Manufacturing	DLB Loans to GDP	3.0%	3.0%	3.2%	3.1%	3.5%
•	5 year % change	-7%	-6%	1%	1%	17%
Transport	Billion Yen	¥16,286	¥16,500	¥17,244	¥17,044	¥18,996
Memo: Non-Manufacturing	DLB Loans to GDP	2.9%	2.9%	2.9%	2.9%	3.2%
Retail Trade	5 year % change	-3%	-2%	-1%	-1%	11%
	Billion Yen	¥15,325	¥15,703	¥15,750	¥15,899	¥17,101
Memo: Non-Manufacturing: Services: Commodity Lease	DLB Loans to GDP	2.5%	2.5%	2.6%	2.8%	3.1%
	5 year % change	29%	28%	31%	28%	39%
	Billion Yen	¥13,329	¥13,717	¥14,314	¥15,425	¥16,616
	DLB Loans to GDP	2.0%	2.2%	2.4%	2.6%	2.8%
Memo: Non-Manufacturing	5 year % change	35%	31%	31%	36%	44%
Utilities	Billion Yen	¥10,648	¥12,032	¥13,387	¥14,526	¥15,182
Memo: Non-Manufacturing	DLB Loans to GDP	2.1%	2.1%	2.1%	2.1%	2.2%
Services:	5 year % change	13%	13%	13%	8%	14%
Medical and Healthcare	Billion Yen	¥10,984	¥11,357	¥11,641	¥11,707	¥11,919
	DLB Loans to GDP	2.1%	2.1%	2.1%	2.1%	2.2%
Memo: Non-Manufacturing	5 year % change	-15%	-12%	-7%	-5%	10%
Construction	Billion Yen	¥11,229	¥11,201	¥11,406	¥11,572	¥11,870
Memo: Non-Manufacturing	DLB Loans to GDP	0.7%	0.6%	0.6%	0.6%	0.6%
Information and	5 year % change	49%	18%	6%	-6%	-7%
Communication	Billion Yen	¥3.654	¥3,391	¥3.399	¥3,407	¥3,190
Memo: Non-Manufacturing	DLB Loans to GDP	0.5%	0.5%	0.5%	0.5%	0.6%
Services:	5 year % change	-4%	-5%	-3%	-1%	33%
Eating and Drinking Places	Billion Yen	¥2,493	¥2,509	¥2,609	¥2,589	¥3,370
	DLB Loans to GDP	0.4%	0.4%	0.4%	0.4%	0.5%
Memo: Non-Manufacturing	5 year % change	-13%	-7%	1%	5%	33%
Services:				·		
Hotel	Billion Yen	¥2,077	¥2,167	¥2,266	¥2,347	¥2,70

Household Debt

Household Del	ot, by Type	2016	2017	2018	2019	2020 Q2	
	Debt to GDP	36.8%	36.8%	38.0%	38.7%	40.1%	
Housing Loans	5 year % change	-3%	-3%	1%	4%	9%	
•	Billion Yen	¥197,102	¥201,006	¥207,803	¥214,433	¥216,855	
	DLB Loans to GDP	1.8%	1.9%	1.9%	1.9%	1.9%	
Consumer Credit	5 year % change	31%	32%	25%	15%	10%	
	Billion Yen	¥9,866	¥10,411	¥10,458	¥10,381	¥10,191	
	DLB to GDP	1.0%	1.1%	1.0%	1.0%	1.0%	
Credit Card Debt	5 year % change	54%	52%	33%	15%	8%	
	Billion Yen	¥5,445	¥5,748	¥5,700	¥5,514	¥5,276	
	Debt to GDP	0.3%	0.4%	0.3%	0.2%	0.3%	
Margin Debt	5 year % change	-34%	3%	-62%	-66%	-56%	
•	Billion Yen	¥1.709	¥2.039	¥1.689	¥1.368	¥1.644	















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Private Debt by Lender/Holder

Private Debt Len	ders	2016	2017	2018	2019	2020 Q2
	Debt to GDP	144.9%	146.2%	148.1%	150.2%	163.3%
Banks	5 year % change	6%	3%	3%	4%	16%
	Billion Yen	¥775,892	¥798,185	¥810,050	¥831,531	¥882,599
	Debt to GDP	22.3%	20.5%	23.1%	24.0%	24.9%
Financial Dealers and Brokers	5 year % change	55%	46%	28%	18%	20%
	Billion Yen	¥119,187	¥111,689	¥126,471	¥132,860	¥134,435
	Debt to GDP	1.8%	2.2%	2.1%	2.8%	3.4%
Securities investment Trusts	5 year % change	66%	82%	32%	55%	83%
	Billion Yen	¥9,588	¥11,877	¥11,621	¥15,265	¥18,530
Other Financial Intermediaries:	Debt to GDP	11.9%	12.2%	13.7%	15.0%	15.7%
	5 year % change	-1%	10%	28%	32%	37%
Non Banks	Billion Yen	¥63,631	¥66,674	¥74,744	¥82,917	¥85,112
Financial Auxiliaries	Debt to GDP	3.0%	3.8%	4.9%	5.5%	5.9%
	5 year % change	94%	138%	216%	226%	227%
	Billion Yen	¥15,994	¥20,905	¥26,898	¥30,491	¥32,080
Insurance (Life/Non-Life and	Debt to GDP	11.1%	10.5%	10.5%	10.1%	10.2%
•	5 year % change	-21%	-22%	-19%	-20%	-16%
Mutual Aid)	Billion Yen	¥59,246	¥57,253	¥57,204	¥55,840	¥55,288
	Debt to GDP	2.7%	2.7%	3.3%	2.7%	2.7%
Collectively Managed Trusts	5 year % change	174%	173%	178%	117%	69%
	Billion Yen	¥14,246	¥14,667	¥17,966	¥15,029	¥14,813
	Debt to GDP	1.7%	1.8%	1.9%	1.9%	1.7%
Pension Funds	5 year % change	43%	45%	31%	17%	-2%
	Billion Yen	¥9,248	¥9,836	¥10,402	¥10,327	¥9,127
rivate Sector (Households and	Debt to GDP	11.6%	11.1%	12.2%	12.3%	12.9%
•	5 year % change	4%	1%	11%	8%	11%
Non-Financial Corporations)	Billion Yen	¥62,035	¥60,476	¥66,979	¥68,216	¥69,601

^{*} Non Banks include Finance Companies & Structured Financing Special Purpose Companies

▲ High Concern

^{*} Financial Auxiliaries include Stock Exchanges and Credit Guarantee Institutions, Foreign Exchange Brokers, and Financial Holding Companies

Portfolio Loans & Investment (Total Economy) - Japan into Foreign Countries

Debt Security Inves	stment	2015	2016	2017	2018	2019	
	to GDP	51.0%	48.2%	49.9%	49.2%	53.3%	
Japan Holdings of Foreign Debt	5 year % change	9%	10%	9%	-6%	17%	
Securities	Billion Yen	¥270,929	¥257,885	¥272,423	¥269,041	¥295,050	
	to GDP	22.3%	22.4%	22.3%	20.7%	23.4%	
United States	5 year % change	46%	56%	56%	24%	30%	
	Billion Yen	¥118,462	¥119,878	¥121,555	¥113,428	¥129,304	
	to GDP	4.4%	4.3%	4.4%	4.6%	5.1%	
France	5 year % change	95%	114%	40%	10%	14%	,
	Billion Yen	¥23,383	¥23,013	¥23,968	¥25,177	¥28,114	'
	to GDP	3.7%	3.4%	3.6%	4.1%	4.2%	
Cayman Islands	5 year % change	-51%	-55%	-53%	-52%	46%	1
	Billion Yen	¥19,768	¥17,951	¥19,797	¥22,311	¥23,195	
Equity and Investment F	und Shares	2015	2016	2017	2018	2019	
Japan Holdings of Foreign	to GDP	29.0%	28.5%	34.4%	32.9%	37.5%	
Equity & Investment Fund	5 year % change	144%	164%	211%	139%	53%	
Shares	Billion Yen	¥154,314	¥152,761	¥187,883	¥180,141	¥207,618	
	to GDP	10.4%	10.7%	13.3%	13.6%	14.5%	
Cayman Islands	5 year % change	555%	555%	760%	651%	83%	
	Billion Yen	¥55,018	¥57,064	¥72,455	¥74,450	¥80,166	
	to GDP	8.9%	9.1%	10.5%	9.9%	12.2%	
United States	5 year % change	89%	97%	119%	60%	64%	
	Billion Yen	¥47,482	¥48,700	¥57,254	¥53,932	¥67,640	
	to GDP	2.0%	1.7%	1.8%	1.8%	2.0%	
Luxembourg	5 year % change	561%	298%	556%	307%	-1%	
	Billion Yen	¥10,598	¥9,014	¥10,011	¥9,605	¥10,920	
Loans		2015	2016	2017	2018	2019	
Japan Holdings of Foreign	to GDP	26.4%	27.2%	27.3%	28.8%	28.8%	
	5 year % change	73%	51%	43%	19%	4%	
Loans	Billion Yen	¥140,329	¥145,656	¥148,903	¥157,613	¥159,488	
Japan Holdings of Foreign	to GDP	15.2%	15.8%	15.8%	15.9%	15.2%	
Loans: Private Financial	5 year % change	89%	64%	49%	12%	-4%	
institutions	Billion Yen	¥80,902	¥84,493	¥86,110	¥87,110	¥84,111	
Japan Holdings of Foreign	to GDP	4.2%	4.3%	4.2%	4.1%	4.0%	
Loans: Public Financial	5 year % change	19%	24%	13%	3%	-6%	
institutions	Billion Yen	¥22,392	¥22,855	¥22,706	¥22,561	¥22,344	
	to GDP	4.3%	4.5%	5.0%	5.6%	5.6%	
Japan Holdings of Foreign Loans: Non Financial Sector	5 year % change	56%	51%	54%	55%	33%	
Loans. Non Financial Sector	Billion Yen	¥22,608	¥24,173	¥27,357	¥30,499	¥31,239	

^{*} Total Economy includes Financial, Non-Financial and General Government sectors

Portfolio Loans & Investment (Total Economy) - Foreign Countries into Japan

Debt Security Inve	stment	2015	2016	2017	2018	2019	
Faraira Haldings of Japania	to GDP	15.8%	15.5%	18.8%	20.9%	20.9%	
Foreign Holdings of Japan's	5 year % change	69%	43%	79%	93%	80%	4
Debt Securities	Billion Yen	¥83,778	¥83,187	¥102,871	¥114,432	¥115,660	
	to GDP	2.8%	3.1%	4.7%	5.0%	4.4%	
United States	5 year % change	197%	88%	265%	265%	161%	4
	Billion Yen	¥14,614	¥16,496	¥25,424	¥27,298	¥24,281	
	to GDP	1.7%	1.3%	1.9%	2.5%	1.9%	
France	5 year % change	34%	-9%	37%	54%	21%	<u> </u>
	Billion Yen	¥9,125	¥6,886	¥10,221	¥13,520	¥10,548	
	to GDP	0.7%	0.7%	0.3%	0.9%	1.4%	
Cayman Islands	5 year % change	370854%	4252176%	385707%	61795%	63608%	4
	Billion Yen	¥3,804	¥3,693	¥1,698	¥4,793	¥7,550	
Equity and Investment F	Fund Shares	2015	2016	2017	2018	2019	
Foreign Holdings of Japan's	to GDP	30.9%	28.1%	36.0%	30.0%	34.6%	
Equity and Investment Fund	5 year % change	114%	146%	181%	34%	43%	4
Shares	Billion Yen	¥164,055	¥150,547	¥196,553	¥164,133	¥191,615	
	to GDP	15.7%	14.1%	18.5%	15.4%	18.3%	
United States	5 year % change	99%	122%	169%	31%	51%	4
	Billion Yen	¥83,577	¥75,571	¥101,157	¥83,942	¥101,529	_
	to GDP	1.9%	1.9%	2.3%	2.0%	2.2%	
Luxembourg	5 year % change	127%	181%	234%	48%	43%	4
	Billion Yen	¥10,335	¥9,910	¥12,742	¥10,834	¥12,114	
	to GDP	2.8%	2.5%	3.0%	1.9%	1.9%	
United Kingdom	5 year % change	94%	127%	154%	-5%	-27%	4
	Billion Yen	¥14.899	¥13,594	¥16,154	¥10,538	¥10,677	_

 $^{^{\}star}$ Total Economy includes Financial, Non-Financial and General Government sectors

Derivative Activity

OTC Derivative Co	ontracts	2016	2017	2018	2019	2020 Q2	
	to GDP	903.7%	1038.0%	1059.5%	1055.5%	1143.7%	
Interest Rate Contracts	5 Year % Change	21%	57%	23%	8%	12%	Δ
	Billion Yen	¥4,839,872	¥5,666,470	¥5,793,844	¥5,845,063	¥6,181,934	
	to GDP	155.1%	160.8%	163.2%	152.2%	148.6%	
Foreign Exchange Contracts	5 Year % Change	64%	69%	35%	12%	-4%	Δ
	Billion Yen	¥830,608	¥877,803	¥892,580	¥842,723	¥803,291	
	to GDP	3.9%	4.8%	3.7%	4.9%	4.2%	
Equity-Linked Contracts	5 Year % Change	19%	113%	62%	1%	-19%	4
	Billion Yen	¥20,947	¥26,430	¥20,003	¥27,253	¥22,580	
	to GDP	0.1%	0.1%	0.1%	0.1%	0.1%	
Commodity Contracts	5 Year % Change	-75%	-69%	-61%	-43%	-47%	G
	Billion Yen	¥614	¥600	¥706	¥623	¥595	
	to GDP	9.0%	7.8%	7.8%	8.2%	9.6%	
Credit Derivatives	5 Year % Change	-51%	-54%	-53%	-44%	-27%	•
	Billion Yen	¥47,966	¥42,786	¥42,448	¥45,406	¥51,750	
	to GDP	0.0%	0.0%	0.0%	0.0%	0.0%	
Other Derivatives	5 Year % Change	n/a	n/a	n/a	n/a	n/a	
	Billion Yen	¥76	¥219	¥201	¥211	¥213	
	to GDP	1071.8%	1211.6%	1234.3%	1221.0%	1306.2%	
Total OTC Derivative Contracts	5 Year % Change	27%	60%	26%	9%	10%	Δ
	Billion Yen	¥5,740,085	¥6,614,307	¥6,749,781	¥6,761,278	¥7,060,364	
Exchange-Traded Deriva	tive Contracts	2016	2017	2018	2019	2020 Q2	
	to GDP	0.0%	0.0%	0.0%	0.1%	0.0%	
Foreign Exchange Contracts	5 Year % Change	7%	598%	735%	526%	361%	<u> </u>
	Billion Yen	¥44	¥111	¥75	¥282	¥221	_
	to GDP	86.7%	100.3%	104.3%	94.2%	80.1%	
Interest Rate Contracts	5 Year % Change	73%	86%	69%	-3%	-23%	4
	Billion Yen	¥464,390	¥547,764	¥570,151	¥521,482	¥433,003	_
	to GDP	6.1%	9.2%	6.6%	7.2%	6.9%	
Equity-Linked Contracts	5 Year % Change	447%	441%	170%	159%	53%	4
	Billion Yen	¥32,537	¥50,231	¥36,348	¥40,046	¥37,126	
	to GDP	0.0%	0.0%	0.0%	0.0%	0.1%	
Commodity Contracts	5 Year % Change	-94%	-88%	-76%	363%	1400%	4
	Billion Yen	¥178	¥64	¥249	¥189	¥419	
	to GDP	92.8%	109.6%	111.0%	101.5%	87.1%	
Total Exchange-Traded Contracts	5 Year % Change	79%	96%	73%	1%	-20%	4
Contracts							

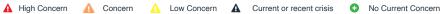














Largest Individual Lenders

Individual Lenders		2016	2017	2018	2019	2020 Q2
	Loans to GDP	20.4%	20.2%	19.9%	19.3%	20.8%
	5 year % change	24%	14%	-1%	-9%	-2%
MUFG Financial Group	Billion Yen	¥109,291	¥110,371	¥108,834	¥106,859	¥112,660
	Charge-off Rate	0.1%	0.1%	0.1%	0.1%	n/a
	Loans to GDP	15.7%	15.8%	14.6%	14.8%	15.8%
Sumitomo Mitsui Financial	5 year % change	21%	20%	6%	0%	9%
Group	Billion Yen	¥84,036	¥85,993	¥80,049	¥81,803	¥85,527
	Charge-off Rate	0.2%	0.2%	0.2%	0.2%	0.3%
Mizuho Financial Group, Inc.	Loans to GDP	15.1%	15.2%	14.5%	14.8%	16.5%
	5 year % change	13%	15%	5%	4%	17%
	Billion Yen	¥80,941	¥82,826	¥79,148	¥82,074	¥89,382
	Charge-off Rate	0.3%	0.1%	0.1%	0.1%	n/a
	Loans to GDP	5.2%	5.2%	6.5%	6.6%	7.1%
December Heldings Inc.	5 year % change	0%	-1%	25%	26%	35%
Resona Holdings, Inc.	Billion Yen	¥27,781	¥28,306	¥35,808	¥36,512	¥38,441
	Charge-off Rate	0.7%	0.6%	0.5%	0.6%	n/a
	Loans to GDP	2.4%	2.4%	3.1%	3.7%	3.7%
	5 year % change	-24%	-31%	-16%	-7%	-6%
Norinchukin Bank	Billion Yen	¥12,947	¥13,261	¥16,715	¥20,721	¥20,035
	Charge-off Rate	n/a	n/a	n/a	n/a	n/a



▲ High Concern ▲ Concern ▲ Current or recent crisis • No Current Concern

Real Estate

Total Debt		2016	2017	2018	2019	2020 Q2
Housing Loans	Debt to GDP	36.8%	36.8%	38.0%	38.7%	40.1%
	5 year % change	-3%	-3%	1%	4%	9%
	Billion Yen	¥197,102	¥201,006	¥207,803	¥214,433	¥216,855

Quarterly Real Estate Summary		Mar-2019	June-2019	Sep-2019	Dec-2019	Mar-2020	Jun-2020
Residential Property Price	Index (2010=100)	115.35	113.28	114.01	111.54	115.34	112.07
Index	Annual Change	1.51%	1.25%	2.38%	0.54%	-0.01%	-1.07%
Commercial Property Price Index	Index (2010=100)	124.35	122.43	124.77	119.65	123.62	118.06
	Annual Change	0.65%	-0.61%	0.45%	-0.37%	-0.59%	-3.57%
Tokyo Average Office Vacancy Rate	Percentage	1.78%	1.72%	1.64%	1.55%	1.50%	1.97%
	Annual Change	-23.61%	-21.82%	-17.17%	-17.55%	-15.73%	14.53%









Additional Data

Public Debt		2016	2017	2018	2019	2020 Q2
	Debt to GDP	226.9%	224.6%	226.4%	228.4%	240.4%
Total General Government Debt	5 Year % Change	7%	3%	2%	1%	7%
	Billion Yen	¥1,215,176	¥1,225,835	¥1,237,871	¥1,264,614	¥1,299,161
	Debt to GDP	193.4%	191.9%	194.0%	196.5%	207.3%
Central Government Debt	5 Year % Change	10%	5%	4%	3%	9%
	Billion Yen	¥1,035,669	¥1,047,540	¥1,060,645	¥1,087,869	¥1,120,424
Local Government Debt	Debt to GDP	33.1%	32.3%	32.0%	31.6%	32.7%
	5 Year % Change	-7%	-10%	-9%	-9%	-3%
	Billion Yen	¥177,083	¥176,142	¥175,202	¥174,863	¥176,860
Social Security Fund Debt	Debt to GDP	0.5%	0.4%	0.4%	0.3%	0.3%
	5 Year % Change	-48%	-49%	-45%	-43%	-35%
	Billion Yen	¥2,424	¥2,153	¥2,024	¥1,883	¥1,877

Supplementary	Data	2016	2017	2018	2019	2020 Q2
	Billion Yen	¥535,537	¥545,897	¥546,852	¥553,760	¥540,517
Nominal GDP	Annual % Change	0.8%	1.9%	0.2%	1.3%	-1.2%
Real GDP	Billion 2011 Chain Linked Price	¥519,631	¥530,898	¥532,363	¥535,937	¥520,505
	Annual % Change	0.5%	2.2%	0.3%	0.7%	-2.6%
Consumer Price Index (Inflation)	CPI (2015=100)	100.10	101.20	101.50	102.30	101.70
	Inflation Rate	0.3%	1.1%	0.3%	0.8%	0.1%
Unemployment	Person (Thousands)	1,930	1,740	1,590	1,450	1,950
	Unemployment Rate	3.0%	2.7%	2.4%	2.2%	2.8%
Current Account Balance	Billion Yen	¥21,391	¥22,778	¥19,374	¥20,115	¥16,508
	to GDP	4.0%	4.2%	3.5%	3.6%	3.1%





Explanatory Notes

Color Code	Cell Description					
	5 Year % Change > 40%					
	5 Year % Change > 40%					
	Debt to GDP < 1.5% (immaterial)					
	5 Year % Change > 20% < 40%					
	5 Year % Change > 20% < 40%					
	Debt to GDP < 1.5% (immaterial)					
	5 Year % Change > 13% < 20%					
	5 Year % Change > 13% < 20%					
	Debt to GDP < 1.5% (immaterial)					
	Residual Risk Period					

n/a: Data Not Available

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Sources

Page One

- Bank for International Settlement (BIS). "Credit to the Non-Financial Sector." https://www.bis.org/statistics/totcredit.htm.
- Bank of Japan. "Table JP.KB009: Loans and Discounts by Industry." Retrieved from CEIC Data.
- Bank of Japan. "Table JP.KB014: Consumer Credit." Retrieved from CEIC Data.
- Bank of Japan. "Table Japan: Flow of Funds." Retrieved from CEIC Data.

Page Two

 Bank of Japan. "Regular Derivatives Market Statistics in Japan: Long-Term Time Series Data on 'Regular Derivatives Market Statistics in Japan." https://www.boj.or.jp/en/statistics/bis/yoshi/index.htm/.

Page Three

- Bank of Japan. "Table JP.KB009: Loans and Discounts by Industry." Retrieved from CEIC Data.
- · Bloomberg.
- Bank of Japan. "Table JP.KB014: Consumer Credit." Retrieved from CEIC Data.

Page Four

Bank of Japan. "Table Japan: Flow of Funds." Retrieved from CEIC Data.

Page Five

International Monetary Fund (IMF). "Table 1: Reported Portfolio Investment Assets by Economy of Nonresident Issuer." https://data.imf.org/?sk=B981B4E3-4E58-467E-9B90-9DE0C3367363&sld=1424963554286.

Page Six

- International Monetary Fund (IMF). "Table 8" Derived Portfolio Investment Liabilities (All Economies) by Economy of Nonresident Holder: (Derived from Creditor Data)." https://data.imf.org/?sk=B981B4E3-4E58-467E-9B90-9DE0C3367363&sld=1424963554286.
- Bank of Japan. "Table Japan: Flow of Funds." Retrieved from CEIC Data.

Page Seven

• Bank of Japan. "Regular Derivatives Market Statistics in Japan: Long-Term Time Series Data on 'Regular Derivatives Market Statistics in Japan." https://www.boj.or.jp/en/statistics/bis/yoshi/index.htm/.

Page Eight

S&P Capital IQ. "Market Intelligence." https://www.capitaliq.com/.

Page Nine

- Bank of Japan. "Table Japan: Flow of Funds." Retrieved from CEIC Data.
- Ministry of Land, Infrastructure, Transport and Tourism. "Table.JP.EB018: Residential Property Price Index." Retrieved from CEIC Data.
- Ministry of Land, Infrastructure, Transport and Tourism. "Table.JP.EB019: Commercial Property Price Index." Retrieved from CEIC Data.
- Miki Shoji Company Limited. "Table.JP.EB005: Office Vacancy Rate: By Region." Retrieved from CEIC Data.

Page Ten

- Economic and Social Research Institute. "Table JP.A001: SNA 2008: GDP: By Expenditure." Retrieved from CEIC Data.
- Economic and Social Research Institute. "Table JP.A007: SNA 2008: GDP: By Expenditure: Chain Linked: 2011 Price." Retrieved from CFIC Data
- International Monetary Fund (IMF). "International Financial Statistics (IFS): Prices, Production, and Labor." https://data.imf.org/?sk=4c514d48-b6ba-49ed-8ab9-52b0c1a0179b&sld=1409151240976.
- Statistical Bureau. "Table JP.G027: Labor Force Survey: Unemployment." Retrieved from CEIC Data.
- Statistical Bureau. "Table JP.G029: Labor Force Survey: Unemployment Rate." Retrieved from CEIC Data.
- Bank of Japan. "Table JP.JB001: Balance of Payment: BPM6: Summary." Retrieved from CEIC Data.

