

TYCHOS SECTOR RISK REPORT

		2016	2017	2018	2019	2020 Q3
Total Private Debt	Debt to GDP	154%	155%	158%	162%	178%
	5 year % change	-5%	-3%	-0%	3%	18%
	Billion Yen	¥840,544	¥856,880	¥880,342	¥908,729	¥964,897
Business Debt	Debt to GDP	97%	97%	99%	102%	114%
	5 year % change	-5%	-4%	-1%	4%	21%
	Billion Yen	¥527,531	¥534,875	¥550,732	¥570,492	¥617,275
Household Debt	Debt to GDP	57%	58%	59%	60%	64%
	5 year % change	-5%	-1%	1%	3%	12%
	Billion Yen	¥313,014	¥322,005	¥329,610	¥338,237	¥347,622

Areas of Concern

Corporate Sectors		2016	2017	2018	2019	2020 Q3
Manufacturing	DLB Loans to GDP	10.5%	10.2%	10.2%	10.4%	12.7%
	5 year % change	-4%	-6%	-7%	-4%	21%
	Billion Yen	¥57,170	¥56,285	¥56,520	¥58,320	¥68,595
Memo: Manufacturing: Transportation Equipment	DLB Loans to GDP	1.2%	1.2%	1.2%	1.3%	2.2%
	5 year % change	-9%	-0%	-3%	8%	92%
	Billion Yen	¥6,449	¥6,443	¥6,477	¥7,053	¥11,835
Non-Manufacturing: Real Estate	DLB Loans to GDP	13.0%	13.6%	14.2%	14.5%	15.5%
	5 year % change	9%	13%	18%	20%	27%
	Billion Yen	¥70,727	¥74,976	¥78,914	¥81,412	¥83,963
Non-Manufacturing: Services: Commodity Lease	DLB Loans to GDP	2.5%	2.5%	2.6%	2.8%	2.9%
	5 year % change	28%	27%	30%	27%	32%
	Billion Yen	¥13,329	¥13,717	¥14,314	¥15,425	¥15,903
Non-Manufacturing Utilities	DLB Loans to GDP	2.0%	2.2%	2.4%	2.6%	2.8%
	5 year % change	35%	30%	31%	35%	44%
	Billion Yen	¥10,653	¥12,039	¥13,400	¥14,546	¥15,359

Business Debt Securities, by Type		2016	2017	2018	2019	2020 Q3
Total Debt Securities	Debt to GDP	14.2%	14.3%	14.6%	15.4%	17.6%
	5 year % change	-4%	-1%	5%	11%	37%
	Billion Yen	¥77,062	¥78,853	¥81,484	¥86,359	¥95,011
Memo: Industrial Securities	Debt to GDP	10.8%	10.3%	9.9%	10.7%	12.2%
	5 year % change	-2%	-4%	-5%	5%	26%
	Billion Yen	¥58,558	¥56,970	¥54,919	¥60,104	¥65,871
Memo: External Securities Issued by Residents	Debt to GDP	1.3%	1.9%	2.2%	2.2%	2.6%
	5 year % change	112%	164%	143%	96%	120%
	Billion Yen	¥7,056	¥10,267	¥12,393	¥12,565	¥13,879
Memo: Commercial Paper	Debt to GDP	0.8%	0.8%	1.2%	1.3%	1.8%
	5 year % change	-35%	-30%	39%	46%	217%
	Billion Yen	¥4,184	¥4,405	¥6,864	¥7,350	¥9,523

* Industrial Securities are bonds issued domestically by joint-stock corporations.

* External Securities refers to bonds issued in overseas markets by Japanese residents.

Household Debt, by Type		2016	2017	2018	2019	2020 Q3
Consumer Credit	DLB Loans to GDP	1.8%	1.9%	1.9%	1.8%	1.9%
	5 year % change	30%	32%	24%	14%	9%
	Billion Yen	¥9,866	¥10,411	¥10,458	¥10,387	¥10,036

▲ High Concern ⚠️ Concern ⚠️ Low Concern ⚠️ Current or recent crisis + No Current Concern

n/a: Data Not Available

DLB: Domestically Licensed Banks

Areas of Concern Continued

Private Debt Lenders		2016	2017	2018	2019	2020 Q3
Financial Dealers and Brokers	Debt to GDP	21.7%	20.0%	22.6%	23.5%	25.0%
	5 year % change	60%	50%	31%	20%	24%
	Billion Yen	¥118,275	¥110,558	¥125,588	¥131,798	¥134,979
Securities investment Trusts	Debt to GDP	2.3%	2.8%	2.8%	3.5%	4.0%
	5 year % change	82%	107%	57%	78%	72%
	Billion Yen	¥12,414	¥15,532	¥15,310	¥19,591	¥21,511
Other Financial Intermediaries: Non Banks	Debt to GDP	11.8%	12.2%	13.5%	14.9%	15.9%
	5 year % change	-2%	9%	27%	31%	39%
	Billion Yen	¥64,156	¥67,216	¥75,331	¥83,561	¥85,855
Financial Auxiliaries	Debt to GDP	2.9%	3.8%	4.9%	5.5%	6.2%
	5 year % change	92%	136%	212%	222%	206%
	Billion Yen	¥16,053	¥20,977	¥26,981	¥30,567	¥33,522
Collectively Managed Trusts	Debt to GDP	2.5%	2.6%	3.0%	2.5%	2.8%
	5 year % change	175%	175%	169%	111%	77%
	Billion Yen	¥13,746	¥14,222	¥16,865	¥14,237	¥14,988
Pension Funds	Debt to GDP	1.9%	2.0%	2.0%	2.0%	2.0%
	5 year % change	32%	41%	35%	39%	41%
	Billion Yen	¥10,496	¥10,934	¥10,970	¥11,395	¥11,032
Private Sector (Households and Non-Financial Corporations)	Debt to GDP	11.9%	11.4%	12.6%	12.8%	14.1%
	5 year % change	23%	18%	25%	20%	27%
	Billion Yen	¥64,817	¥63,218	¥69,866	¥71,846	¥76,373

* 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

OTC Derivative Contracts		2016	2017	2018	2019	2020 Q2
Interest Rate Contracts	to GDP	903.7%	1038.0%	1059.5%	1055.5%	1143.7%
	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
Foreign Exchange Contracts	to GDP	155.1%	160.8%	163.2%	152.2%	148.6%
	5 Year % Change	64%	69%	35%	12%	-4%
	Billion Yen	¥830,608	¥877,803	¥892,580	¥842,723	¥803,291
Equity-Linked Contracts	to GDP	3.9%	4.8%	3.7%	4.9%	4.2%
	5 Year % Change	19%	113%	62%	1%	-19%
	Billion Yen	¥20,947	¥26,430	¥20,003	¥27,253	¥22,580
Total OTC Derivative Contracts	to GDP	1071.8%	1211.6%	1234.3%	1221.0%	1306.2%
	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 Derivative Contracts		2016	2017	2018	2019	2020 Q2
Interest Rate Contracts	to GDP	86.7%	100.3%	104.3%	94.2%	80.1%
	5 Year % Change	73%	86%	69%	-3%	-23%
	Billion Yen	¥464,390	¥547,764	¥570,151	¥521,482	¥433,003
Equity-Linked Contracts	to GDP	6.1%	9.2%	6.6%	7.2%	6.9%
	5 Year % Change	447%	441%	170%	159%	53%
	Billion Yen	¥32,537	¥50,231	¥36,348	¥40,046	¥37,126
Total Exchange-Traded Contracts	to GDP	92.8%	109.6%	111.0%	101.5%	87.1%
	5 Year % Change	79%	96%	73%	1%	-20%
	Billion Yen	¥497,148	¥598,170	¥606,823	¥562,000	¥470,769

▲ High Concern

▲ Concern

▲ Low Concern

▲ Current or recent crisis

● No Current Concern

n/a: Data Not Available

DLB: Domestically Licensed Banks

Business Debt

DLB Loans by Industry		2016	2017	2018	2019	2020 Q3	
Manufacturing	DLB Loans to GDP	10.5%	10.2%	10.2%	10.4%	12.7%	
	5 year % change	-4%	-6%	-7%	-4%	21%	⚠
	Billion Yen	¥57,170	¥56,285	¥56,520	¥58,320	¥68,595	
Memo: Manufacturing: Transportation Equipment	DLB Loans to GDP	1.2%	1.2%	1.2%	1.3%	2.2%	
	5 year % change	-9%	-0%	-3%	8%	92%	⚠
	Billion Yen	¥6,449	¥6,443	¥6,477	¥7,053	¥11,835	
Non-Manufacturing	DLB Loans to GDP	45.3%	46.2%	47.7%	48.0%	51.8%	
	5 year % change	4%	6%	9%	8%	18%	⚠
	Billion Yen	¥246,323	¥255,617	¥265,512	¥269,518	¥280,047	
Memo: Non-Manufacturing Real Estate	DLB Loans to GDP	13.0%	13.6%	14.2%	14.5%	15.5%	
	5 year % change	9%	13%	18%	20%	27%	⚠
	Billion Yen	¥70,727	¥74,976	¥78,914	¥81,412	¥83,963	
Memo: Non-Manufacturing Wholesale Trade	DLB Loans to GDP	4.9%	4.8%	4.8%	4.7%	5.0%	
	5 year % change	-9%	-11%	-10%	-13%	-1%	+
	Billion Yen	¥26,707	¥26,496	¥26,681	¥26,236	¥27,278	
Memo: Non-Manufacturing Transport	DLB Loans to GDP	3.0%	3.0%	3.1%	3.0%	3.5%	
	5 year % change	-7%	-6%	1%	1%	19%	⚠
	Billion Yen	¥16,286	¥16,500	¥17,244	¥17,044	¥18,839	
Memo: Non-Manufacturing Retail Trade	DLB Loans to GDP	2.8%	2.8%	2.8%	2.8%	3.1%	
	5 year % change	-3%	-2%	-2%	-2%	10%	+
	Billion Yen	¥15,325	¥15,703	¥15,750	¥15,899	¥16,959	
Memo: Non-Manufacturing Services: Commodity Lease	DLB Loans to GDP	2.5%	2.5%	2.6%	2.8%	2.9%	
	5 year % change	28%	27%	30%	27%	32%	⚠
	Billion Yen	¥13,329	¥13,717	¥14,314	¥15,425	¥15,903	
Memo: Non-Manufacturing Utilities	DLB Loans to GDP	2.0%	2.2%	2.4%	2.6%	2.8%	
	5 year % change	35%	30%	31%	35%	44%	⚠
	Billion Yen	¥10,653	¥12,039	¥13,400	¥14,546	¥15,359	
Memo: Non-Manufacturing Services: Medical and Healthcare	DLB Loans to GDP	2.0%	2.1%	2.1%	2.1%	2.3%	
	5 year % change	13%	13%	12%	7%	17%	⚠
	Billion Yen	¥10,984	¥11,357	¥11,641	¥11,705	¥12,161	
Memo: Non-Manufacturing Construction	DLB Loans to GDP	2.1%	2.0%	2.1%	2.1%	2.4%	
	5 year % change	-16%	-12%	-7%	-5%	14%	⚠
	Billion Yen	¥11,229	¥11,201	¥11,406	¥11,571	¥12,698	
Memo: Non-Manufacturing Information and Communication	DLB Loans to GDP	1.3%	1.2%	1.2%	1.3%	1.2%	
	5 year % change	25%	13%	10%	5%	9%	+
	Billion Yen	¥6,902	¥6,605	¥6,663	¥7,030	¥6,571	
Memo: Non-Manufacturing Services: Eating and Drinking Places	DLB Loans to GDP	0.5%	0.5%	0.5%	0.5%	0.6%	
	5 year % change	-4%	-5%	-3%	-1%	33%	⚠
	Billion Yen	¥2,493	¥2,509	¥2,609	¥2,589	¥3,370	

Debt Securities, by Type		2016	2017	2018	2019	2020 Q3	
Total Debt Securities	Debt to GDP	14.2%	14.3%	14.6%	15.4%	17.6%	
	5 year % change	-4%	-1%	5%	11%	37%	⚠
	Billion Yen	¥77,062	¥78,853	¥81,484	¥86,359	¥95,011	
Memo: Public Corporation Securities	DLB to GDP	0.8%	0.8%	0.8%	0.7%	0.6%	
	5 year % change	-45%	-38%	-32%	-38%	-36%	+
	Billion Yen	¥4,496	¥4,361	¥4,517	¥3,690	¥3,112	
Memo: Industrial Securities	Debt to GDP	10.8%	10.3%	9.9%	10.7%	12.2%	
	5 year % change	-2%	-4%	-5%	5%	26%	⚠
	Billion Yen	¥58,558	¥56,970	¥54,919	¥60,104	¥65,871	
Memo: External Securities Issued by Residents	Debt to GDP	1.3%	1.9%	2.2%	2.2%	2.6%	
	5 year % change	112%	164%	143%	96%	120%	⚠
	Billion Yen	¥7,056	¥10,267	¥12,393	¥12,565	¥13,879	
Memo: Commercial Paper	Debt to GDP	0.8%	0.8%	1.2%	1.3%	1.8%	
	5 year % change	-35%	-30%	39%	46%	217%	⚠
	Billion Yen	¥4,184	¥4,405	¥6,864	¥7,350	¥9,523	

* Public Corporation Securities refers to those securities issued domestically by corporations such as public institutions that are backed by government credit (Government Guaranteed Bonds are also included).

* Industrial Securities are bonds issued domestically by joint-stock corporations.

* External Securities refers to bonds issued in overseas markets by Japanese residents.

⚠ High Concern ⚠ Concern ⚠ Low Concern ⚠ Current or recent crisis + No Current Concern

n/a: Data Not Available

DLB: Domestically Licensed Banks

Household Debt

Household Debt, by Type		2016	2017	2018	2019	2020 Q3
Housing Loans	Debt to GDP	36.2%	36.3%	37.4%	38.2%	40.4%
	5 year % change	-4%	-3%	0%	4%	12%
	Billion Yen	¥197,102	¥201,006	¥207,803	¥214,433	¥218,663
Consumer Credit	DLB Loans to GDP	1.8%	1.9%	1.9%	1.8%	1.9%
	5 year % change	30%	32%	24%	14%	9%
	Billion Yen	¥9,866	¥10,411	¥10,458	¥10,387	¥10,036
Memo: Credit Card Debt	DLB to GDP	1.0%	1.0%	1.0%	1.0%	1.0%
	5 year % change	54%	51%	33%	15%	3%
	Billion Yen	¥5,445	¥5,748	¥5,700	¥5,514	¥5,142
Margin Debt*	Debt to GDP	0.3%	0.4%	0.3%	0.2%	0.3%
	5 year % change	-34%	3%	-62%	-66%	-56%
	Billion Yen	¥1,709	¥2,039	¥1,689	¥1,368	¥1,644

* 2020 data is for Q2 2020

Private Debt by Lender/Holder

Private Debt Lenders		2016	2017	2018	2019	2020 Q3	
Banks	Debt to GDP	143.4%	144.9%	147.0%	148.5%	161.5%	
	5 year % change	6%	5%	3%	3%	15%	⚠
	Billion Yen	¥780,694	¥801,321	¥817,443	¥833,581	¥873,422	
Financial Dealers and Brokers	Debt to GDP	21.7%	20.0%	22.6%	23.5%	25.0%	
	5 year % change	60%	50%	31%	20%	24%	⚠
	Billion Yen	¥118,275	¥110,558	¥125,588	¥131,798	¥134,979	
Securities investment Trusts	Debt to GDP	2.3%	2.8%	2.8%	3.5%	4.0%	
	5 year % change	82%	107%	57%	78%	72%	⚠
	Billion Yen	¥12,414	¥15,532	¥15,310	¥19,591	¥21,511	
Other Financial Intermediaries: Non Banks	Debt to GDP	11.8%	12.2%	13.5%	14.9%	15.9%	
	5 year % change	-2%	9%	27%	31%	39%	⚠
	Billion Yen	¥64,156	¥67,216	¥75,331	¥83,561	¥85,855	
Financial Auxiliaries	Debt to GDP	2.9%	3.8%	4.9%	5.5%	6.2%	
	5 year % change	92%	136%	212%	222%	206%	⚠
	Billion Yen	¥16,053	¥20,977	¥26,981	¥30,567	¥33,522	
Insurance (Life/Non-Life and Mutual Aid)	Debt to GDP	13.0%	12.4%	12.1%	12.0%	12.3%	
	5 year % change	-20%	-20%	-18%	-14%	-7%	+
	Billion Yen	¥70,865	¥68,693	¥67,154	¥67,546	¥66,491	
Collectively Managed Trusts	Debt to GDP	2.5%	2.6%	3.0%	2.5%	2.8%	
	5 year % change	175%	175%	169%	111%	77%	⚠
	Billion Yen	¥13,746	¥14,222	¥16,865	¥14,237	¥14,988	
Pension Funds	Debt to GDP	1.9%	2.0%	2.0%	2.0%	2.0%	
	5 year % change	32%	41%	35%	39%	41%	⚠
	Billion Yen	¥10,496	¥10,934	¥10,970	¥11,395	¥11,032	
Private Sector (Households and Non-Financial Corporations)	Debt to GDP	11.9%	11.4%	12.6%	12.8%	14.1%	
	5 year % change	23%	18%	25%	20%	27%	⚠
	Billion Yen	¥64,817	¥63,218	¥69,866	¥71,846	¥76,373	

* 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

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n/a: Data Not Available

DLB: Domestically Licensed Banks

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

Debt Security Investment		2015	2016	2017	2018	2019	
Japan Holdings of Foreign Debt Securities	to GDP	51.0%	48.2%	49.9%	49.2%	53.3%	⚠
	5 year % change	9%	10%	9%	-6%	17%	⚠
	Billion Yen	¥270,929	¥257,885	¥272,423	¥269,041	¥295,050	
United States	to GDP	22.3%	22.4%	22.3%	20.7%	23.4%	⚠
	5 year % change	46%	56%	56%	24%	30%	⚠
	Billion Yen	¥118,462	¥119,878	¥121,555	¥113,428	¥129,304	
France	to GDP	4.4%	4.3%	4.4%	4.6%	5.1%	⚠
	5 year % change	95%	114%	40%	10%	14%	⚠
	Billion Yen	¥23,383	¥23,013	¥23,968	¥25,177	¥28,114	
Cayman Islands	to GDP	3.7%	3.4%	3.6%	4.1%	4.2%	⚠
	5 year % change	-51%	-55%	-53%	-52%	46%	⚠
	Billion Yen	¥19,768	¥17,951	¥19,797	¥22,311	¥23,195	
Equity and Investment Fund Shares		2015	2016	2017	2018	2019	
Japan Holdings of Foreign Equity & Investment Fund Shares	to GDP	29.0%	28.5%	34.4%	32.9%	37.5%	⚠
	5 year % change	144%	164%	211%	139%	53%	⚠
	Billion Yen	¥154,314	¥152,761	¥187,883	¥180,141	¥207,618	
Cayman Islands	to GDP	10.4%	10.7%	13.3%	13.6%	14.5%	⚠
	5 year % change	555%	555%	760%	651%	83%	⚠
	Billion Yen	¥55,018	¥57,064	¥72,455	¥74,450	¥80,166	
United States	to GDP	8.9%	9.1%	10.5%	9.9%	12.2%	⚠
	5 year % change	89%	97%	119%	60%	64%	⚠
	Billion Yen	¥47,482	¥48,700	¥57,254	¥53,932	¥67,640	
Luxembourg	to GDP	2.0%	1.7%	1.8%	1.8%	2.0%	⚠
	5 year % change	561%	298%	556%	307%	-1%	⚠
	Billion Yen	¥10,598	¥9,014	¥10,011	¥9,605	¥10,920	
Loans		2016	2017	2018	2019	2020 Q3	
Japan Holdings of Foreign Loans	to GDP	26.8%	26.9%	28.3%	28.4%	30.4%	⚠
	5 year % change	50%	43%	18%	3%	18%	⚠
	Billion Yen	¥145,656	¥148,903	¥157,613	¥159,488	¥164,432	
Japan Holdings of Foreign Loans: Private Financial institutions	to GDP	15.5%	15.6%	15.7%	15.0%	15.3%	+
	5 year % change	64%	49%	12%	-4%	5%	+
	Billion Yen	¥84,493	¥86,110	¥87,110	¥84,111	¥82,802	
Japan Holdings of Foreign Loans: Public Financial institutions	to GDP	4.2%	4.1%	4.1%	4.0%	4.2%	+
	5 year % change	23%	13%	2%	-6%	-0%	+
	Billion Yen	¥22,855	¥22,706	¥22,561	¥22,344	¥22,627	
Japan Holdings of Foreign Loans: Non Financial Sector	to GDP	4.4%	5.0%	5.5%	5.6%	6.0%	⚠
	5 year % change	50%	54%	54%	33%	50%	⚠
	Billion Yen	¥24,173	¥27,357	¥30,499	¥31,239	¥32,549	

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

⚠ High Concern ⚠ Concern ⚠ Low Concern ⚠ Current or recent crisis + No Current Concern

n/a: Data Not Available

DLB: Domestically Licensed Banks

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

Debt Security Investment		2015	2016	2017	2018	2019	
Foreign Holdings of Japan's Debt Securities	to GDP	15.8%	15.5%	18.8%	20.9%	20.9%	
	5 year % change	69%	43%	79%	93%	80%	⚠
	Billion Yen	¥83,778	¥83,187	¥102,871	¥114,432	¥115,660	
United States	to GDP	2.8%	3.1%	4.7%	5.0%	4.4%	
	5 year % change	197%	88%	265%	265%	161%	⚠
	Billion Yen	¥14,614	¥16,496	¥25,424	¥27,298	¥24,281	
France	to GDP	1.7%	1.3%	1.9%	2.5%	1.9%	
	5 year % change	34%	-9%	37%	54%	21%	⚠
	Billion Yen	¥9,125	¥6,886	¥10,221	¥13,520	¥10,548	
Cayman Islands	to GDP	0.7%	0.7%	0.3%	0.9%	1.4%	
	5 year % change	370854%	4252176%	385707%	61795%	63608%	⚠
	Billion Yen	¥3,804	¥3,693	¥1,698	¥4,793	¥7,550	
Equity and Investment Fund Shares		2015	2016	2017	2018	2019	
Foreign Holdings of Japan's Equity and Investment Fund Shares	to GDP	30.9%	28.1%	36.0%	30.0%	34.6%	
	5 year % change	114%	146%	181%	34%	43%	⚠
	Billion Yen	¥164,055	¥150,547	¥196,553	¥164,133	¥191,615	
United States	to GDP	15.7%	14.1%	18.5%	15.4%	18.3%	
	5 year % change	99%	122%	169%	31%	51%	⚠
	Billion Yen	¥83,577	¥75,571	¥101,157	¥83,942	¥101,529	
Luxembourg	to GDP	1.9%	1.9%	2.3%	2.0%	2.2%	
	5 year % change	127%	181%	234%	48%	43%	⚠
	Billion Yen	¥10,335	¥9,910	¥12,742	¥10,834	¥12,114	
United Kingdom	to GDP	2.8%	2.5%	3.0%	1.9%	1.9%	
	5 year % change	94%	127%	154%	-5%	-27%	⚠
	Billion Yen	¥14,899	¥13,594	¥16,154	¥10,538	¥10,677	

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

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Derivative Activity

OTC Derivative Contracts		2016	2017	2018	2019	2020 Q2	
Interest Rate Contracts	to GDP	903.7%	1038.0%	1059.5%	1055.5%	1143.7%	
	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	
Foreign Exchange Contracts	to GDP	155.1%	160.8%	163.2%	152.2%	148.6%	
	5 Year % Change	64%	69%	35%	12%	-4%	⚠
	Billion Yen	¥830,608	¥877,803	¥892,580	¥842,723	¥803,291	
Equity-Linked Contracts	to GDP	3.9%	4.8%	3.7%	4.9%	4.2%	
	5 Year % Change	19%	113%	62%	1%	-19%	⚠
	Billion Yen	¥20,947	¥26,430	¥20,003	¥27,253	¥22,580	
Commodity Contracts	to GDP	0.1%	0.1%	0.1%	0.1%	0.1%	
	5 Year % Change	-75%	-69%	-61%	-43%	-47%	+
	Billion Yen	¥614	¥600	¥706	¥623	¥595	
Credit Derivatives	to GDP	9.0%	7.8%	7.8%	8.2%	9.6%	
	5 Year % Change	-51%	-54%	-53%	-44%	-27%	+
	Billion Yen	¥47,966	¥42,786	¥42,448	¥45,406	¥51,750	
Other Derivatives	to GDP	0.0%	0.0%	0.0%	0.0%	0.0%	
	5 Year % Change	n/a	n/a	n/a	n/a	n/a	
	Billion Yen	¥76	¥219	¥201	¥211	¥213	
Total OTC Derivative Contracts	to GDP	1071.8%	1211.6%	1234.3%	1221.0%	1306.2%	
	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 Derivative Contracts		2016	2017	2018	2019	2020 Q2	
Foreign Exchange Contracts	to GDP	0.0%	0.0%	0.0%	0.1%	0.0%	
	5 Year % Change	7%	598%	735%	526%	361%	⚠
	Billion Yen	¥44	¥111	¥75	¥282	¥221	
Interest Rate Contracts	to GDP	86.7%	100.3%	104.3%	94.2%	80.1%	
	5 Year % Change	73%	86%	69%	-3%	-23%	⚠
	Billion Yen	¥464,390	¥547,764	¥570,151	¥521,482	¥433,003	
Equity-Linked Contracts	to GDP	6.1%	9.2%	6.6%	7.2%	6.9%	
	5 Year % Change	447%	441%	170%	159%	53%	⚠
	Billion Yen	¥32,537	¥50,231	¥36,348	¥40,046	¥37,126	
Commodity Contracts	to GDP	0.0%	0.0%	0.0%	0.0%	0.1%	
	5 Year % Change	-94%	-88%	-76%	363%	1400%	⚠
	Billion Yen	¥178	¥64	¥249	¥189	¥419	
Total Exchange-Traded Contracts	to GDP	92.8%	109.6%	111.0%	101.5%	87.1%	
	5 Year % Change	79%	96%	73%	1%	-20%	⚠
	Billion Yen	¥497,148	¥598,170	¥606,823	¥562,000	¥470,769	

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Largest Individual Lenders

Individual Lenders		2016	2017	2018	2019	2020 Q3	
Mitsubishi UFJ Financial Group	Loans to GDP	20.1%	20.0%	19.6%	19.0%	24.4%	
	5 year % change	23%	14%	-1%	-9%	14%	⚠
	Billion Yen	¥109,291	¥110,371	¥108,834	¥106,859	¥131,853	
	Charge-off Rate	0.1%	0.1%	0.1%	0.1%	0.1%	
Sumitomo Mitsui Financial Group	Loans to GDP	15.4%	15.6%	14.4%	14.6%	16.1%	
	5 year % change	20%	20%	6%	-0%	11%	+
	Billion Yen	¥84,036	¥85,993	¥80,049	¥81,803	¥87,177	
	Charge-off Rate	0.2%	0.2%	0.2%	0.2%	0.1%	
Mizuho Financial Group, Inc.	Loans to GDP	14.9%	15.0%	14.2%	14.6%	16.0%	
	5 year % change	13%	14%	4%	3%	15%	⚠
	Billion Yen	¥80,941	¥82,826	¥79,148	¥82,074	¥86,745	
	Charge-off Rate	0.3%	0.1%	0.1%	0.1%	0.1%	
Resona Holdings, Inc.	Loans to GDP	5.1%	5.1%	6.4%	6.5%	7.2%	
	5 year % change	-0%	-1%	24%	25%	39%	⚠
	Billion Yen	¥27,781	¥28,306	¥35,808	¥36,512	¥38,990	
	Charge-off Rate	0.7%	0.6%	0.5%	0.6%	0.5%	
Norinchukin Bank	Loans to GDP	2.4%	2.4%	3.0%	3.7%	4.1%	
	5 year % change	-24%	-31%	-17%	-8%	10%	+
	Billion Yen	¥12,947	¥13,261	¥16,715	¥20,721	¥21,889	
	Charge-off Rate	n/a	n/a	n/a	n/a	n/a	

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Real Estate

Total Debt		2016	2017	2018	2019	2020 Q3
Housing Loans	Debt to GDP	36.2%	36.3%	37.4%	38.2%	40.4%
	5 year % change	-4%	-3%	0%	4%	12%
	Billion Yen	¥197,102	¥201,006	¥207,803	¥214,433	¥218,663

Quarterly Real Estate Summary		Mar-2019	June-2019	Sep-2019	Dec-2019	Mar-2020	Jun-2020
Residential Property Price Index	Index (2010=100)	115.35	113.28	114.01	111.54	115.34	114.95
	Annual Change	1.51%	1.25%	2.38%	0.54%	-0.01%	0.82%
Commercial Property Price Index	Index (2010=100)	124.35	122.43	124.77	119.65	123.62	118.1
	Annual Change	0.65%	-0.61%	0.45%	-0.37%	-0.59%	-5.37%
Tokyo Average Office Vacancy Rate	Percentage	1.78%	1.72%	1.64%	1.55%	1.50%	3.43%
	Annual Change	-23.61%	-21.82%	-17.17%	-17.55%	-15.73%	109.14%

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Additional Data

Public Debt		2016	2017	2018	2019	2020 Q3
Total General Government Debt	Debt to GDP	223.2%	221.6%	222.6%	225.3%	243.8%
	5 Year % Change	7%	2%	1%	1%	10%
	Billion Yen	¥1,215,176	¥1,225,835	¥1,237,871	¥1,264,614	¥1,318,457
Central Government Debt	Debt to GDP	190.3%	189.4%	190.7%	193.8%	211.4%
	5 Year % Change	10%	5%	3%	3%	13%
	Billion Yen	¥1,035,669	¥1,047,540	¥1,060,645	¥1,087,869	¥1,143,139
Local Government Debt	Debt to GDP	32.5%	31.9%	31.5%	31.2%	32.1%
	5 Year % Change	-7%	-10%	-10%	-10%	13%
	Billion Yen	¥177,083	¥176,142	¥175,202	¥174,863	¥173,442
Social Security Fund Debt	Debt to GDP	0.4%	0.4%	0.4%	0.3%	0.4%
	5 Year % Change	-48%	-49%	-45%	-43%	-34%
	Billion Yen	¥2,424	¥2,153	¥2,024	¥1,883	¥1,876

Supplementary Data		2016	2017	2018	2019	2020 Q3
Nominal GDP	Billion Yen	¥544,365	¥553,073	¥556,190	¥561,267	¥540,873
	Annual % Change	1.2%	1.6%	0.6%	0.9%	-3.5%
Real GDP	Billion 2015 Chain Linked Price	¥543,419	¥555,474	¥554,442	¥548,667	¥527,140
	Annual % Change	1.0%	2.2%	-0.2%	-1.0%	-5.7%
Consumer Price Index (Inflation)	CPI (2015=100)	100.10	101.20	101.50	102.30	101.97
	Inflation Rate	0.3%	1.1%	0.3%	0.8%	0.2%
Unemployment	Person (Thousands)	1,930	1,740	1,590	1,450	2,100
	Unemployment Rate	3.0%	2.7%	2.4%	2.2%	3.0%
Current Account Balance	Billion Yen	¥21,391	¥22,778	¥19,374	¥20,115	¥16,364
	to GDP	4.0%	4.2%	3.5%	3.6%	3.0%

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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%
	Debt to GDP < 1.5% (immaterial)
	5 Year % Change > 13% < 20%
	Debt to GDP < 1.5% (immaterial)
	Residual Risk Period

 High Concern
  Concern
  Low Concern
  Current or recent crisis
  No Current Concern

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