## TYCHOS SECTOR RISK REPORT

		2017	2018	2019	2020	2021 Q2
	Debt to GDP	156%	159%	163%	182%	182%
Total Private Debt	5 year % change	-3%	-0%	4%	19%	19%
	Billion Yen	¥862,012	¥885,763	¥915,032	¥981,789	¥991,371
	Debt to GDP	96%	98%	101%	116%	115%
<b>Business Debt</b>	5 year % change	-4%	-0%	4%	24%	24%
	Billion Yen	¥528,526	¥544,014	¥565,198	¥622,973	¥628,967
	Debt to GDP	60%	61%	62%	67%	67%
Household Debt	5 year % change	-2%	0%	3%	12%	12%
	Billion Yen	¥333,486	¥341,750	¥349,834	¥358,816	¥362,405

## Areas of Concern

Corporate Sect	tors	2017	2018	2019	2020	2021 Q2
Manufacturing, Transportation	DLB Loans to GDP	1.2%	1.2%	1.3%	2.2%	1.8%
Manufacturing: Transportation	5 year % change	-0%	-3%	8%	81%	60%
Equipment	Billion Yen	¥6,443	¥6,477	¥7,053	¥11,675	¥9,643
	DLB Loans to GDP	14.0%	14.7%	15.1%	16.3%	16.3%
Non-Manufacturing: Real Estate	5 year % change	16%	23%	25%	33%	25%
_	Billion Yen	¥77,308	¥81,948	¥84,735	¥87,786	¥88,905
Non-Manufacturing: Transport	DLB Loans to GDP	3.0%	3.1%	3.0%	3.5%	3.6%
	5 year % change	-6%	1%	1%	20%	21%
	Billion Yen	¥16,500	¥17,244	¥17,044	¥19,067	¥19,423
N Mfti Oi	DLB Loans to GDP	2.5%	2.6%	2.8%	3.3%	3.1%
Non-Manufacturing: Services:	5 year % change	27%	30%	28%	47%	31%
Commodity Lease	Billion Yen	¥13,717	¥14,314	¥15,425	¥17,732	¥16,814
	DLB Loans to GDP	2.2%	2.4%	2.6%	2.9%	2.9%
Non-Manufacturing:	5 year % change	30%	31%	36%	48%	50%
Utilities	Billion Yen	¥12,039	¥13,400	¥14,546	¥15,414	¥15,606
N M f 4 i	DLB Loans to GDP	2.0%	2.1%	2.1%	2.5%	2.4%
Non-Manufacturing:	5 year % change	-12%	-7%	-5%	20%	22%
Construction	Billion Yen	¥11,201	¥11,406	¥11,571	¥13,537	¥12,789

Business Debt Securit	ties, by Type	2017	2018	2019	2020	2021 Q2
	Debt to GDP	13.7%	14.2%	15.1%	17.5%	17.8%
<b>Total Debt Securities</b>	5 year % change	-4%	3%	12%	38%	31%
	Billion Yen	¥75,706	¥78,756	¥84,518	¥94,419	¥96,804
	Debt to GDP	10.3%	10.0%	10.8%	12.8%	12.9%
Memo: Industrial Securities	5 year % change	-4%	-5%	6%	32%	21%
	Billion Yen	¥57,198	¥55,367	¥60,439	¥68,967	¥70,177
Mana Fatamal Caramitica	Debt to GDP	1.3%	1.7%	1.7%	1.8%	2.1%
Memo: External Securities Issued by Residents	5 year % change	111%	142%	107%	107%	138%
	Billion Yen	¥6,893	¥9,217	¥9,434	¥9,944	¥11,157

<sup>\*</sup> 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	2017	2018	2019	2020	2021 Q2
	Debt to GDP	35.2%	36.2%	37.0%	39.6%	39.5%
Housing Loans	5 year % change	-3%	1%	4%	13%	13%
	Billion Yen	¥194,873	¥201,506	¥207,041	¥213,162	¥215,101
	Debt to GDP	8.2%	8.4%	8.6%	8.7%	8.8%
Consumer Credit	5 year % change	11%	10%	11%	13%	13%
	Billion Yen	¥45,168	¥46,814	¥47,867	¥47,000	¥47,780













### Areas of Concern Continued

Private Debt Len	ders	2017	2018	2019	2020	2021 Q2
Other Financial Intermediaries:	Debt to GDP	12.3%	13.4%	14.1%	15.4%	15.7%
Non Banks	5 year % change	9%	23%	22%	32%	33%
	Billion Yen	¥68,001	¥74,755	¥79,010	¥82,877	¥85,254
	Debt to GDP	3.8%	4.9%	5.5%	6.2%	6.3%
Financial Auxiliaries	5 year % change	137%	212%	224%	218%	163%
	Billion Yen	¥20,959	¥26,964	¥30,550	¥33,472	¥34,409
	Debt to GDP	2.6%	3.0%	2.5%	2.8%	2.8%
Collectively Managed Trusts	5 year % change	175%	169%	112%	112%	7%
	Billion Yen	¥14,222	¥16,865	¥14,237	¥15,166	¥15,134
	Debt to GDP	2.0%	2.0%	2.0%	2.1%	2.1%
Pension Funds	5 year % change	40%	35%	40%	46%	7%
	Billion Yen	¥10,938	¥10,988	¥11,404	¥11,096	¥11,223
Private Sector (Households and Non-Financial Corporations)	Debt to GDP	13.8%	14.8%	15.0%	16.6%	17.4%
	5 year % change	20%	25%	21%	31%	20%
	Billion Yen	¥76,171	¥82,354	¥84,283	¥89,624	¥94,793

<sup>\*</sup> Financial Auxiliaries include Stock Exchanges and Credit Guarantee Institutions, Foreign Exchange Brokers, and Financial Holding Companies
\* Non Banks include Finance Companies & Structured Financing Special Purpose Companies

OTC Derivative Co	ontracts	2016	2017	2018	2019	2020
	to GDP	1028.9%	1037.1%	1039.5%	1098.2%	1094.4%
Interest Rate Contracts	5 Year % Change	46%	14%	-5%	18%	14%
	Billion Yen	¥5,690,503	¥5,768,405	¥5,819,685	¥5,916,089	¥5,962,093
	to GDP	159.4%	159.8%	149.9%	169.4%	175.2%
Foreign Exchange Contracts	5 Year % Change	57%	24%	-2%	9%	19%
	Billion Yen	¥881,526	¥888,661	¥839,277	¥912,301	¥954,679
	to GDP	4.8%	3.6%	4.9%	4.3%	4.2%
Equity-Linked Contracts	5 Year % Change	98%	49%	-11%	-8%	6%
	Billion Yen	¥26,542	¥19,916	¥27,134	¥22,944	¥23,125
	to GDP	1201.0%	1208.3%	1202.5%	1281.8%	1284.9%
Total OTC Derivative Contracts	5 Year % Change	48%	16%	-4%	17%	15%
	Billion Yen	¥6,642,361	¥6,720,145	¥6,732,138	¥6,904,682	¥6,999,749

Exchange-Traded Deriva	Exchange-Traded Derivative Contracts		2017	2018	2019	2020
Equity-Linked Contracts	to GDP	9.2%	6.6%	7.2%	6.2%	7.0%
	5 Year % Change	401%	150%	127%	-3%	-15%
	Billion Yen	¥50,590	¥36,490	¥40,083	¥33,599	¥37,940

### **Business Debt**

DLB Loans by Ind	ustry	2017	2018	2019	2020	2021 Q2
	DLB Loans to GDP	10.2%	10.2%	10.4%	12.5%	11.5%
Manufacturing	5 year % change	-6%	-7%	-3%	18%	13%
	Billion Yen	¥56,286	¥56,522	¥58,322	¥67,416	¥62,696
Managa Managaratanian	DLB Loans to GDP	1.2%	1.2%	1.3%	2.2%	1.8%
Memo: Manufacturing:	5 year % change	-0%	-3%	8%	81%	60%
Transportation Equipment	Billion Yen	¥6,443	¥6,477	¥7,053	¥11,675	¥9,643
	DLB Loans to GDP	46.6%	48.3%	48.7%	53.3%	53.1%
Non-Manufacturing	5 year % change	7%	10%	9%	20%	20%
3	Billion Yen	¥257,947	¥268,545	¥272,839	¥287,188	¥288,999
lemo: Non-Manufacturing Real	DLB Loans to GDP	14.0%	14.7%	15.1%	16.3%	16.3%
•	5 year % change	16%	23%	25%	33%	25%
Estate	Billion Yen	¥77,308	¥81,948	¥84,735	¥87,786	¥88,905
Memo: Non-Manufacturing	DLB Loans to GDP	4.8%	4.8%	4.7%	5.1%	5.0%
	5 year % change	-11%	-10%	-12%	0%	5%
Wholesale Trade	Billion Yen	¥26,496	¥26,681	¥26,236	¥27,267	¥27,306
Memo: Non-Manufacturing	DLB Loans to GDP	3.0%	3.1%	3.0%	3.5%	3.6%
Transport	5 year % change	-6%	1%	1%	20%	21%
	Billion Yen	¥16,500	¥17,244	¥17,044	¥19,067	¥19,423
Memo: Non-Manufacturing Retail Trade	DLB Loans to GDP	2.8%	2.8%	2.8%	3.1%	3.2%
	5 year % change	-2%	-2%	-2%	12%	16%
	Billion Yen	¥15,702	¥15,748	¥15,897	¥16,937	¥17,474
Memo: Non-Manufacturing:	DLB Loans to GDP	2.5%	2.6%	2.8%	3.3%	3.1%
Services:	5 year % change	27%	30%	28%	47%	31%
Commodity Lease	Billion Yen	¥13,717	¥14,314	¥15,425	¥17,732	¥16,814
,	DLB Loans to GDP	2.2%	2.4%	2.6%	2.9%	2.9%
Memo: Non-Manufacturing	5 year % change	30%	31%	36%	48%	50%
Utilities	Billion Yen	¥12,039	¥13,400	¥14,546	¥15,414	¥15,606
Memo: Non-Manufacturing	DLB Loans to GDP	2.1%	2.1%	2.1%	2.3%	2.3%
Services:	5 year % change	13%	12%	8%	17%	16%
Medical and Healthcare	Billion Yen	¥11,357	¥11,641	¥11,705	¥12.364	¥12.257
	DLB Loans to GDP	2.0%	2.1%	2.1%	2.5%	2.4%
Memo: Non-Manufacturing	5 year % change	-12%	-7%	-5%	20%	22%
Construction	Billion Yen	¥11,201	¥11,406	¥11.571	¥13.537	¥12.789
Mama, Nan Manufacturin	DLB Loans to GDP	1.2%	1.2%	1.3%	1.2%	1.2%
Memo: Non-Manufacturing Information and	5 year % change	13%	10%	6%	10%	6%
Communication	Billion Yen	¥6,605	¥6,663	¥7,030		
				· · ·	¥6,691	¥6,551
Memo: Non-Manufacturing	DLB Loans to GDP	0.4%	0.5%	0.5%	0.7%	0.6%
Services:	5 year % change	-5%	-3%	-1%	42%	40%
Eating and Drinking Places	Billion Yen	¥2,509	¥2,609	¥2,589	¥3,496	¥3,432

Debt Securities, by	/ Туре	2017	2018	2019	2020	2021 Q2
	Debt to GDP	13.7%	14.2%	15.1%	17.5%	17.8%
<b>Total Debt Securities</b>	5 year % change	-4%	3%	12%	38%	31%
	Billion Yen	¥75,706	¥78,756	¥84,518	¥94,419	¥96,804
Mama, Bublic Composition	Debt to GDP	0.8%	0.8%	0.8%	0.7%	0.8%
Memo: Public Corporation	5 year % change	-38%	-32%	-22%	-16%	-8%
Securities	Billion Yen	¥4,361	¥4,517	¥4,645	¥3,872	¥4,522
	Debt to GDP	10.3%	10.0%	10.8%	12.8%	12.9%
Memo: Industrial Securities	5 year % change	-4%	-5%	6%	32%	21%
	Billion Yen	¥57,198	¥55,367	¥60,439	¥68,967	¥70,177
Manage Fortennel Committies	Debt to GDP	1.3%	1.7%	1.7%	1.8%	2.1%
Memo: External Securities	5 year % change	111%	142%	107%	107%	138%
Issued by Residents	Billion Yen	¥6,893	¥9,217	¥9,434	¥9,944	¥11,157
	Debt to GDP	0.8%	1.2%	1.3%	1.7%	1.6%
Memo: Commercial Paper	5 year % change	-30%	39%	46%	125%	153%
•	Billion Yen	¥4,405	¥6,864	¥7,350	¥9,119	¥8,439

<sup>\*</sup> 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.

A High Concern

No Current Concern

▲ Current or recent crisis

## Household Debt

Household Debt, b	y Type	2017	2018	2019	2020	2021 Q2
	Debt to GDP	35.2%	36.2%	37.0%	39.6%	39.5%
Housing Loans	5 year % change	-3%	1%	4%	13%	13%
	Billion Yen	¥194,873	¥201,506	¥207,041	¥213,162	¥215,10°
Consumer Credit	Debt to GDP	8.2%	8.4%	8.6%	8.7%	8.8%
	5 year % change	11%	10%	11%	13%	13%
	Billion Yen	¥45,168	¥46,814	¥47,867	¥47,000	¥47,780
	Debt to GDP	1.2%	1.1%	1.1%	1.0%	1.0%
Memo: Credit Card Debt	5 year % change	45%	30%	14%	1%	-7%
	Billion Yen	¥6,356	¥6,314	¥6,114	¥5,565	¥5,415
	Debt to GDP	0.4%	0.3%	0.2%	0.3%	0.4%
Margin Debt	5 year % change	3%	-62%	-66%	-56%	-22%
	Billion Yen	¥2,039	¥1,689	¥1,368	¥1,644	¥1,981

Credit Card Debt is derived from the balance sheets of Domestically Licensed Banks and Shinkin Banks only



## Private Debt by Lender/Holder

Private Debt Lend	ders	2017	2018	2019	2020	2021 Q2
	Debt to GDP	144.8%	147.0%	148.9%	162.2%	160.3%
Banks	5 year % change	5%	3%	3%	15%	15%
	Billion Yen	¥801,079	¥817,377	¥833,572	¥873,575	¥873,490
	Debt to GDP	0.9%	0.7%	0.6%	0.7%	1.0%
Financial Dealers and Brokers	5 year % change	-7%	-10%	-24%	-1%	31%
	Billion Yen	¥4,720	¥3,938	¥3,472	¥3,851	¥5,192
	Debt to GDP	0.9%	0.8%	1.0%	1.1%	1.2%
Securities investment Trusts	5 year % change	226%	236%	221%	221%	101%
	Billion Yen	¥4,779	¥4,647	¥5,820	¥5,841	¥6,586
Other Financial Intermediaries:	Debt to GDP	12.3%	13.4%	14.1%	15.4%	15.7%
	5 year % change	9%	23%	22%	32%	33%
Non Banks	Billion Yen	¥68,001	¥74,755	¥79,010	¥82,877	¥85,254
Financial Auxiliaries	Debt to GDP	3.8%	4.9%	5.5%	6.2%	6.3%
	5 year % change	137%	212%	224%	218%	163%
	Billion Yen	¥20,959	¥26,964	¥30,550	¥33,472	¥34,409
Insurance (Life/Non-Life and	Debt to GDP	9.6%	9.3%	9.1%	9.2%	9.0%
,	5 year % change	-22%	-20%	-18%	-10%	-12%
Mutual Aid)	Billion Yen	¥52,881	¥51,692	¥50,983	¥49,774	¥49,124
	Debt to GDP	2.6%	3.0%	2.5%	2.8%	2.8%
Collectively Managed Trusts	5 year % change	175%	169%	112%	112%	7%
	Billion Yen	¥14,222	¥16,865	¥14,237	¥15,166	¥15,134
	Debt to GDP	2.0%	2.0%	2.0%	2.1%	2.1%
Pension Funds	5 year % change	40%	35%	40%	46%	7%
	Billion Yen	¥10,938	¥10,988	¥11,404	¥11,096	¥11,223
Private Sector (Households and	Debt to GDP	13.8%	14.8%	15.0%	16.6%	17.4%
Non-Financial Corporations)	5 year % change	20%	25%	21%	31%	20%
Non-Financial Corporations)	Billion Yen	¥76,171	¥82,354	¥84,283	¥89,624	¥94,793
Government Financial	Debt to GDP	4.2%	4.2%	4.2%	4.5%	4.4%
Institutions	5 year % change	-30%	-24%	-15%	-2%	-1%
IIIstitutions	Billion Yen	¥23,444	¥23,457	¥23,743	¥23,987	¥23,918

<sup>\*</sup> Financial Auxiliaries include Stock Exchanges and Credit Guarantee Institutions, Foreign Exchange Brokers, and Financial Holding Companies
\* Non Banks include Finance Companies & Structured Financing Special Purpose Companies
\* A portion of the debt totals may contain debt owed by the public and financial sectors





## Repurchase Agreement & Securities Lending Market by Sector

R/A & Securities Lending Tra	ansaction Assets	2017	2018	2019	2020	2021 Q2
	Debt to GDP	36.4%	41.2%	44.3%	47.2%	45.3%
Total Economy	5 year % change	31%	17%	21%	36%	31%
	Billion Yen	¥201,509	¥229,065	¥248,150	¥254,306	¥246,907
	Debt to GDP	19.1%	21.9%	22.9%	23.7%	22.6%
Financial Dealers and Brokers	5 year % change	54%	33%	23%	27%	25%
	Billion Yen	¥105,838	¥121,650	¥128,326	¥127,751	¥123,112
	Debt to GDP	12.4%	14.3%	14.5%	17.3%	15.7%
Rest of World	5 year % change	81%	37%	24%	53%	31%
	Billion Yen	¥68,652	¥79,574	¥81,066	¥93,046	¥85,665
	Debt to GDP	3.6%	3.6%	5.1%	4.1%	4.8%
Banks	5 year % change	-3%	11%	74%	44%	50%
	Billion Yen	¥19,695	¥19,752	¥28,637	¥22,272	¥25,862
	Debt to GDP	0.2%	0.4%	0.8%	1.1%	1.5%
Non Banks	5 year % change	37%	149%	450%	502%	779%
	Billion Yen	¥1,257	¥2,093	¥4,320	¥6,127	¥7,982
	Debt to GDP	1.1%	1.1%	1.0%	1.0%	0.8%
Other	5 year % change	-77%	-78%	-68%	-47%	-34%
	Billion Yen	¥6,067	¥5,996	¥5,801	¥5,110	¥4,287
R/A & Securities Lending Tran	saction Liabilities	2017	2018	2019	2020	2021 Q2
	Debt to GDP	36.1%	40.9%	44.1%	46.5%	44.9%
Total Economy	5 year % change	47%	30%	28%	34%	31%
	Billion Yen	¥199,875	¥227,388	¥246,788	¥250,379	¥244,708
	Debt to GDP	20.0%	22.0%	23.5%	24.3%	23.2%
Financial Dealers and Brokers	5 year % change	50%	31%	22%	31%	25%
	Billion Yen	¥110,473	¥122,443	¥131,697	¥130,624	¥126,230
	Debt to GDP	11.4%	12.6%	12.3%	12.5%	11.7%
Banks	5 year % change	47%	28%	29%	9%	2%
	Billion Yen	¥63,160	¥70,059	¥69,033	¥67,323	¥63,803
	Debt to GDP	2.1%	2.9%	3.7%	4.1%	3.3%
Rest of World	5 year % change	53%	29%	13%	66%	61%
	Billion Yen	¥11,572	¥16,179	¥20,435	¥22,218	¥17,889
	Debt to GDP	2.1%	2.4%	2.8%	3.7%	4.2%
Insurance	5 year % change	12%	9%	26%	91%	126%
	Billion Yen	¥11,396	¥13,433	¥15,397	¥19,724	¥22,773
	Debt to GDP	0.6%	1.0%	1.8%	2.0%	2.6%
	Debt to di	0.070	11071			
Other	5 year % change	99%	262%	428%	1387%	606%

<sup>\*</sup> Repurchase agreements and securities lending transactions refers to those repurchase agreements and securities lending transactions that can be regarded as credit facilities backed by bonds and other instruments. Bonds and other instruments are sold or lent in real transactions. More specifically, they include bond gensaki (sale and repurchase) transactions in central government securities and treasury discount bills, and bond lending transactions with cash collateral.

Other Asset Holders includes Collectively Managed Trusts, Securities Investment Trusts, Pension Funds, Insurance, Public Financial Institutions, Non Financial Corporations and General Government.

<sup>\*\*</sup> Other Liability Holders includes Collectively Managed Trusts, Securities Investment Trusts, Pension Funds, Non Banks, Public Financial Institutions, Non Financial Corporations and General Government.

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

Debt Security Investment		rity Investment 2016 2017		2018	2019	2020	
	to GDP	50.9%	49.6%	48.6%	51.3%	57.6%	
apan Holdings of Foreign Debt	5 year % change	20%	1%	-13%	-0%	15%	
Securities	Billion Yen	¥277,212	¥274,370	¥270,095	¥287,113	¥310,398	
	to GDP	23.7%	22.1%	20.5%	22.2%	25.5%	
United States	5 year % change	71%	44%	14%	9%	16%	
	Billion Yen	¥128,862	¥122,424	¥113,873	¥123,999	¥137,409	
	to GDP	4.5%	4.4%	4.5%	4.9%	5.1%	
France	5 year % change	135%	29%	1%	-3%	17%	
	Billion Yen	¥24,737	¥24,139	¥25,275	¥27,246	¥27,289	
	to GDP	3.5%	3.6%	4.0%	4.2%	4.1%	
Cayman Islands	5 year % change	-51%	-57%	-55%	28%	12%	
	Billion Yen	¥19,296	¥19,939	¥22,398	¥23,217	¥22,032	
Equity and Investment Fo	und Shares	2016	2017	2018	2019	2020	
Japan Holdings of Foreign	to GDP	30.2%	34.2%	32.5%	37.1%	40.0%	
Equity & Investment Fund	5 year % change	190%	188%	121%	34%	40%	
Shares	Billion Yen	¥164,210	¥189,226	¥180,847	¥207,866	¥215,388	
	to GDP	11.3%	13.2%	13.4%	14.5%	15.0%	
Cayman Islands	5 year % change	619%	698%	594%	62%	47%	
	Billion Yen	¥61,341	¥72,973	¥74,741	¥81,099	¥80,605	
	to GDP	9.6%	10.4%	9.7%	12.1%	14.4%	
United States	5 year % change	117%	103%	48%	43%	63%	
	Billion Yen	¥52,350	¥57,663	¥54,143	¥67,504	¥77,363	
	to GDP	1.8%	1.8%	1.7%	2.0%	2.0%	
Luxembourg	5 year % change	337%	508%	277%	-13%	2%	
	Billion Yen	¥9,690	¥10,082	¥9,642	¥10,963	¥10,770	
Loans by Type	;	2017	2018	2019	2020	2021 Q2	
lanen Holdings of Foreign	to GDP	26.9%	28.3%	28.4%	30.1%	29.5%	
Japan Holdings of Foreign	5 year % change	43%	18%	3%	15%	22%	
Loans	Billion Yen	¥148,901	¥157,609	¥159,134	¥162,161	¥160,758	
Japan Holdings of Foreign	to GDP	15.4%	15.5%	14.9%	15.2%	15.0%	
Loans: Private Financial	5 year % change	48%	12%	-4%	2%	9%	
institutions	Billion Yen	¥85,358	¥86,347	¥83,176	¥81,929	¥81,912	
Japan Holdings of Foreign	to GDP	4.1%	4.1%	4.0%	4.2%	4.4%	
Loans: Public Financial	5 year % change	13%	2%	-6%	2%	10%	
institutions	Billion Yen	¥22,706	¥22,561	¥22,344	¥22,851	¥23,791	
	to GDP	5.1%	5.6%	5.7%	6.3%	6.6%	
Japan Holdings of Foreign Loans: Non Financial Sector	5 year % change	56%	51%	31%	44%	60%	
Loans: Non Financial Sector	Billion Yen	¥28,107	¥31,257	¥31.905	¥33.930	¥35,927	

<sup>\*</sup> Total Economy includes Financial, Non-Financial and General Government sectors

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

Debt Security Inv	estment	2016	2017	2018	2019	2020	
Foreign Holdings of Japan's	to GDP	16.4%	18.7%	20.7%	20.8%	24.1%	
Debt Securities	5 year % change	57%	66%	78%	59%	56%	4
Debt Securities	Billion Yen	¥89,421	¥103,606	¥115,002	¥116,692	¥129,873	
	to GDP	3.3%	4.6%	4.9%	4.3%	5.1%	
United States	5 year % change	106%	238%	238%	124%	90%	4
	Billion Yen	¥17,732	¥25,605	¥27,405	¥23,840	¥27,613	
	to GDP	1.4%	1.9%	2.4%	1.9%	1.8%	
France	5 year % change	-1%	27%	43%	6%	9%	4
	Billion Yen	¥7,402	¥10,294	¥13,573	¥10,557	¥9,883	
	to GDP	0.7%	0.3%	0.9%	1.4%	1.5%	
Cayman Islands	5 year % change	4667781.42%	357535%	57147%	55713%	118%	A
	Billion Yen	¥3,970	¥1,710	¥4,811	¥7,557	¥8,281	
Equity and Investment	Fund Shares	2016	2017	2018	2019	2020	
Foreign Holdings of Japan's	to GDP	29.7%	35.8%	29.6%	34.1%	39.2%	
Equity and Investment Fund	5 year % change	170%	160%	24%	25%	29%	4
Shares	Billion Yen	¥161,769	¥197,929	¥164,788	¥191,085	¥211,116	
	to GDP	14.9%	18.4%	15.2%	18.1%	19.5%	
United States	5 year % change	144%	149%	21%	31%	26%	4
		V04 004	¥101,881	¥84,271	¥101,146	¥105,224	
	Billion Yen	¥81,234	+101,001	TUT, Z I	T101,1 <del>10</del>		
	Billion Yen to GDP	¥81,234 0.7%	0.9%	0.9%	0.7%	3.4%	
Cayman Islands			·				
Cayman Islands	to GDP	0.7%	0.9%	0.9%	0.7%	3.4%	4
Cayman Islands	to GDP 5 year % change	0.7% n/a	0.9% n/a	0.9% 1056143%	0.7% 625010%	3.4% 451%	4
Cayman Islands  Luxembourg	to GDP 5 year % change Billion Yen	0.7% n/a ¥4,003	0.9% n/a ¥5,089	0.9% 1056143% ¥4,864	0.7% 625010% ¥4,069	3.4% 451% ¥18,047	

<sup>\*</sup> Total Economy includes Financial, Non-Financial and General Government sectors

## **Derivative Activity**

OTC Derivative Contracts		2017	2018	2019	2020	2021 Q2	
	to GDP	1028.9%	1037.1%	1039.5%	1098.2%	1094.4%	
Interest Rate Contracts	5 Year % Change	46%	14%	-5%	18%	14%	4
	Billion Yen	¥5,690,503	¥5,768,405	¥5,819,685	¥5,916,089	¥5,962,093	
	to GDP	159.4%	159.8%	149.9%	169.4%	175.2%	
Foreign Exchange Contracts	5 Year % Change	57%	24%	-2%	9%	19%	4
	Billion Yen	¥881,526	¥888,661	¥839,277	¥912,301	¥954,679	
	to GDP	4.8%	3.6%	4.9%	4.3%	4.2%	
<b>Equity-Linked Contracts</b>	5 Year % Change	98%	49%	-11%	-8%	6%	4
	Billion Yen	¥26,542	¥19,916	¥27,134	¥22,944	¥23,125	
	to GDP	0.1%	0.1%	0.1%	0.1%	0.1%	
<b>Commodity Contracts</b>	5 Year % Change	-72%	-64%	-50%	-44%	-24%	
	Billion Yen	¥602	¥703	¥623	¥517	¥551	
	to GDP	7.8%	7.7%	8.1%	9.8%	10.9%	
<b>Credit Derivatives</b>	5 Year % Change	-53%	-53%	-44%	-16%	12%	
	Billion Yen	¥43,092	¥42,614	¥45,448	¥52,903	¥59,101	
	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	155%	
	Billion Yen	¥220	¥200	¥210	¥209	¥199	_
	to GDP	1201.0%	1208.3%	1202.5%	1281.8%	1284.9%	
<b>Total OTC Derivative Contracts</b>	5 Year % Change	48%	16%	-4%	17%	15%	
	Billion Yen	¥6,642,361	¥6,720,145	¥6,732,138	¥6,904,682	¥6,999,749	
Exchange-Traded Deriva	tive Contracts	2017	2018	2019	2020	2021 Q1	
	to GDP	0.0%	0.0%	0.1%	0.0%	0.0%	
Foreign Exchange Contracts	5 Year % Change	547%	672%	448%	474%	16%	
	Billion Yen	¥111	¥76	¥283	¥93	¥102	_
	to GDP	99.8%	102.9%	93.2%	63.7%	68.9%	
Interest Rate Contracts	5 Year % Change	72%	56%	-15%	-49%	-25%	
	Billion Yen	¥551,680	¥572,385	¥521,966	¥342,907	¥375,225	,
	to GDP	9.2%	6.6%	7.2%	6.2%	7.0%	
<b>Equity-Linked Contracts</b>	5 Year % Change	401%	150%	127%	-3%	-15%	
	Billion Yen	¥50,590	¥36,490	¥40,083	¥33,599	¥37,940	_
	to GDP	0.0%	0.1%	0.0%	0.1%	0.0%	
Commodity Contracts	5 Year % Change	-89%	-78%	306%	959%	-19%	
	Billion Yen	¥64	¥250	¥190	¥382	¥140	_
	to GDP	108.9%	109.5%	100.5%	70.0%	75.9%	
Total Exchange-Traded	5 Year % Change	82%	60%	-11%	-46%	-24%	
Contracts	Billion Yen	¥602,446	¥609,201	¥562,521	¥376,980	¥413,406	













TYCHOS

# Largest Individual Lenders

Individual Lend	ders	2017	2018	2019	2020	2021 Q2
	Loans to GDP	21.5%	21.2%	21.1%	22.2%	19.4%
	5 year % change	16%	9%	-2%	0%	-4%
Mitsubishi UFJ Financial Group	Billion Yen	¥119,022	¥118,000	¥118,007	¥119,361	¥105,428
°	Charge-off Rate	0.1%	0.1%	0.1%	0.1%	0.1%
	Loans to GDP	17.7%	15.8%	16.8%	17.9%	16.0%
Sumitomo Mitsui Financial	5 year % change	35%	17%	22%	26%	11%
Group	Billion Yen	¥98,063	¥87,742	¥94,012	¥96,541	¥87,310
•	Charge-off Rate	0.2%	0.2%	0.2%	0.1%	0.1%
Mizuho Financial Group, Inc.	Loans to GDP	14.4%	14.4%	14.1%	15.6%	15.2%
	5 year % change	12%	8%	5%	14%	12%
	Billion Yen	¥79,374	¥80,137	¥79,105	¥84,053	¥83,017
*	Charge-off Rate	0.1%	0.1%	0.1%	0.1%	0.1%
	Loans to GDP	5.1%	5.2%	6.5%	6.9%	7.2%
Bassas Haldhana Ina	5 year % change	-1%	-0%	25%	35%	42%
Resona Holdings, Inc.	Billion Yen	¥28,343	¥29,064	¥36,312	¥37,119	¥39,114
	Charge-off Rate	0.6%	0.5%	0.6%	0.5%	0.5%
	Loans to GDP	2.2%	2.3%	3.3%	3.7%	4.5%
Navia de dels Bando	5 year % change	-29%	-36%	-4%	-3%	71%
Norinchukin Bank	Billion Yen	¥12,205	¥12,489	¥18,657	¥20,113	¥24,363
	Charge-off Rate	n/a	n/a	n/a	n/a	n/a



No Current Concern

▲ High Concern

## Real Estate

Total Debt	:	2017	2018	2019	2020	2021 Q2
Housing Loans	Debt to GDP	35.2%	36.2%	37.0%	39.6%	39.5%
	5 year % change	-3%	1%	4%	13%	13%
	Billion Yen	¥194,873	¥201,506	¥207,041	¥213,162	¥215,101

Quarterly Real Estat	e Summary	Mar-2020	Jun-2020	Sep-2020	Dec-2020	Mar-2021	Jun-2021
Residential Property Price	Index (2010=100)	115.34	111.14	114.85	114.98	119.19	120.92
Index	Annual Change	-0.01%	-1.89%	0.74%	3.08%	3.34%	8.80%
Commercial Property Price	Index (2010=100)	123.62	118.24	118.03	119.99	125.29	121.63
Index	Annual Change	-0.59%	-3.42%	-5.40%	0.28%	1.35%	2.87%
Tokyo Average Office	Percentage	1.50%	1.97%	3.43%	4.49%	5.42%	6.19%
Vacancy Rate	Annual Change	-15.73%	14.53%	109.15%	189.68%	261.33%	214.21%





n/a: Data Not Available





DLB: Domestically Licensed Banks



## Additional Data

Public Debt		2017	2018	2019	2020	2021 Q2
	Debt to GDP	221.6%	222.6%	225.9%	246.9%	244.6%
Total General Government Debt	5 Year % Change	2%	1%	1%	13%	7%
	Billion Yen	¥1,225,833	¥1,237,868	¥1,264,543	¥1,329,767	¥1,332,394
	Debt to GDP	189.4%	190.7%	194.3%	214.1%	211.6%
Central Government Debt	5 Year % Change	5%	3%	3%	16%	9%
	Billion Yen	¥1,047,539	¥1,060,645	¥1,087,800	¥1,153,191	¥1,152,632
	Debt to GDP	31.9%	31.5%	31.2%	32.5%	32.7%
Local Government Debt	5 Year % Change	-10%	-10%	-9%	-2%	-3%
	Billion Yen	¥176,141	¥175,200	¥174,861	¥174,780	¥177,968
Social Security Fund Debt	Debt to GDP	0.4%	0.4%	0.3%	0.3%	0.3%
	5 Year % Change	-49%	-45%	-43%	-36%	-26%
	Billion Yen	¥2,153	¥2,024	¥1,882	¥1,796	¥1,794

Supplementary	Data	2017	2018	2019	2020	2021 Q2
	Billion Yen	¥553,073	¥556,190	¥559,862	¥538,689	¥544,774
Nominal GDP	Annual % Change	1.6%	0.6%	0.7%	-3.8%	-0.2%
Real GDP	Billion 2015 Chain Linked Price	¥551,220	¥554,300	¥554,382	¥528,961	¥536,456
	Annual % Change	1.7%	0.6%	0.0%	-4.6%	-0.2%
	CPI (2010=100)	103.96	104.98	105.48	105.46	104.76
Consumer Price Index (Inflation)	Inflation Rate	0.5%	1.0%	0.5%	-0.0%	-0.7%
	Person (Thousands)	1,740	1,590	1,450	1,940	1,880
Unemployment	Unemployment Rate	2.7%	2.4%	2.2%	3.0%	2.6%
Current Account Balance	Billion Yen	¥22,778	¥19,374	¥20,115	¥17,535	¥21,045
	to GDP	4.2%	3.5%	3.6%	3.3%	3.9%





# **Explanatory Notes**

Color Code	Total Private Debt Cell Description					
	5 Year % Change > 20%					
	5 Year % Change > 13% < 20%					
	Residual Risk Period					

<sup>\*</sup> Due to the size of total private debt, five-year percentage growth constitutes greater concern as compared to the individual sector data

Color Code	Sector Data 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

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