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Report Highlights:

Milk production in Japan is projected to remain flat in 2019 before increasing around one percent in 2020 as recovery in the heifer population brings productivity gains. Lower than expected summer temperatures in 2019 reduced consumption of chilled dairy drinks and frozen products, pushing excess volumes of fluid milk to further processing. Butter and nonfat dry milk (NFDM) production is projected to grow two percent in 2019 and 2020 on higher milk supplies. Increased NFDM production amid low consumption pushed NFDM stocks to near historic highs in mid-2019, causing the government of Japan to reduce planned imports by 6,000 MT. Cheese production is projected to remain relatively flat in 2019 and 2020 as imports rise to meet growing demand.

Fluid Milk PS&D Table

Dairy, Milk, Fluid	2018		2019		2020	
Market Begin Year	Jan 2018		Jan 2019		Jan 2020	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Cows In Milk	731	731	735	730	0	735
Cows Milk Production	7230	7289	7275	7290	0	7335
Other Milk Production	0	0	0	0	0	0
Total Production	7230	7289	7275	7290	0	7335
Other Imports	0	0	0	0	0	0
Total Imports	0	0	0	0	0	0
Total Supply	7230	7289	7275	7290	0	7335
Other Exports	0	0	0	0	0	0
Total Exports	0	0	0	0	0	0
Fluid Use Dom. Consum.	3980	4000	3980	3975	0	4005
Factory Use Consum.	3200	3243	3245	3270	0	3285
Feed Use Dom. Consum.	50	46	50	45	0	45
Total Dom. Consumption	7230	7289	7275	7290	0	7335
Total Distribution	7230	7289	7275	7290	0	7335
(1000 HEAD), (1000 MT)						

Butter PS&D Table

Dairy, Butter	2018		2019		2020	
Market Begin Year	Jan 2018		Jan 2019		Jan 2020	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	22	22	23	20	0	22
Production	60	60	61	61	0	62
Other Imports	16	16	30	21	0	22
Total Imports	16	16	30	21	0	22
Total Supply	98	98	114	102	0	106
Other Exports	0	0	0	0	0	0
Total Exports	0	0	0	0	0	0
Domestic Consumption	75	78	86	80	0	81
Total Use	75	78	86	80	0	81
Ending Stocks	23	20	28	22	0	25
Total Distribution	98	98	114	102	0	106
(1000 MT)						

Cheese PS&D Table

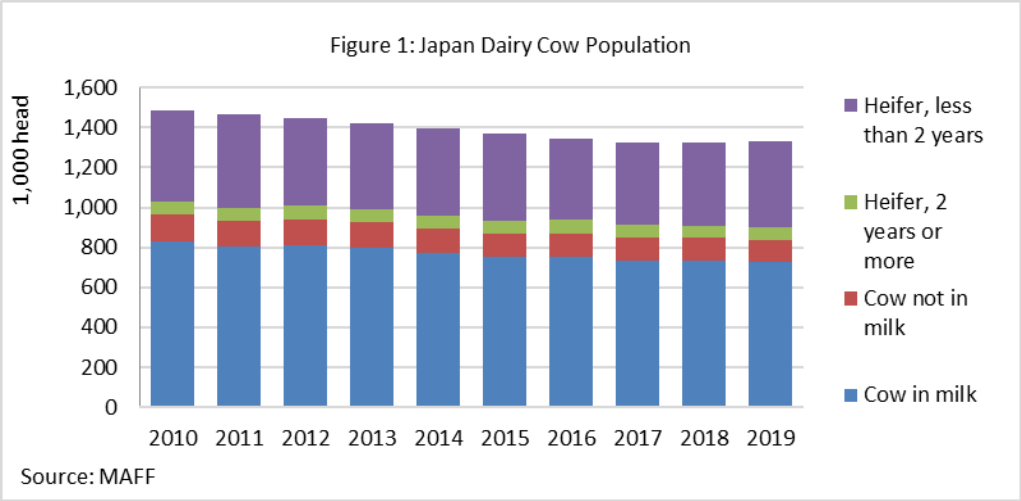
Dairy, Cheese	2018		2019		2020	
Market Begin Year	Jan 2018		Jan 2019		Jan 2020	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	9	9	10	10	0	10
Production	45	45	46	45	0	46
Other Imports	286	286	315	310	0	325
Total Imports	286	286	315	310	0	325
Total Supply	340	340	371	365	0	381
Other Exports	1	1	1	1	0	1
Total Exports	1	1	1	1	0	1
Human Dom. Consumption	329	329	359	354	0	370
Other Use, Losses	0	0	0	0	0	0
Total Dom. Consumption	329	329	359	354	0	370
Total Use	330	330	360	355	0	371
Ending Stocks	10	10	11	10	0	10
Total Distribution	340	340	371	365	0	381
(1000 MT)						

Non-Fat Dry Milk PS&D Table

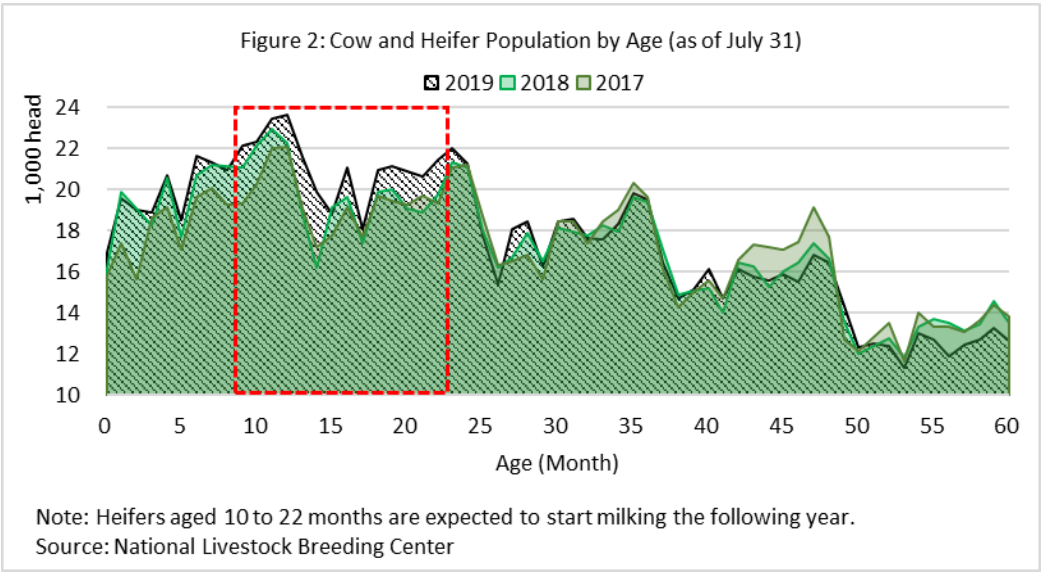
Dairy, Milk, Nonfat Dry	2018		2019		2020	
Market Begin Year	Jan 2018		Jan 2019		Jan 2020	
Japan	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Beginning Stocks	56	56	51	61	0	65
Production	115	120	120	122	0	124
Other Imports	52	52	50	47	0	45
Total Imports	52	52	50	47	0	45
Total Supply	223	228	221	230	0	234
Other Exports	0	0	0	0	0	0
Total Exports	0	0	0	0	0	0
Human Dom. Consumption	142	135	145	135	0	140
Other Use, Losses	30	32	30	30	0	30
Total Dom. Consumption	172	167	175	165	0	170
Total Use	172	167	175	165	0	170
Ending Stocks	51	61	46	65	0	64
Total Distribution	223	228	221	230	0	234
(1000 MT)						

Fluid Milk

FAS/Tokyo projects fluid milk production in Japan to remain relatively flat in 2019 at 7.290 million MT. According to surveys by the Ministry of Agriculture, Forestry, and Fisheries (MAFF), there were 729,500 cows in milk as of February 1, 2019, down just 0.2 percent from the previous year (see Figure 1). There were an additional 109,700 cows not in milk. By contrast, the number of heifers less than two years old as of February 1, 2019 was up two percent from the previous year at 431,100 head.



Milk production is forecasted to increase around half a percent in 2020 as heifers born in 2017 start milking. The anticipated rise in milk production marks a turnaround for the industry after heifer numbers declined sharply in 2015 and 2016. At that time, Japanese beef calf prices were spiking on short supply, incentivizing dairy farmers to produces cross-breed F-1 beef calves or purebred wagyu calves by embryo transfer (see JA9105) instead of raising replacement Holstein heifers. By 2016, the number of dairy heifers less than two years old had dropped seven percent from the previous year. Beef calf prices began to stabilize in late 2016, allowing the dairy heifer population to gradually recover to pre-2015 levels. As of July 31, 2019, the number of heifers aged 10-22 months stood higher than each of the previous two years (see Figure 2). As these heifers start milking, dairy farmers are likely to remove older cows from the herd, keeping the overall dairy cow population relatively stable.

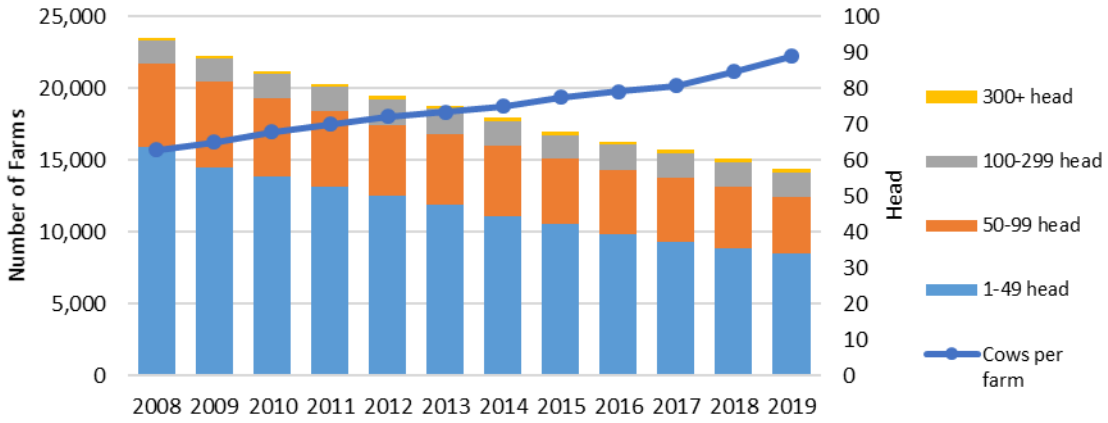


Milk production in Hokkaido, which accounts for around 54 percent of Japan's milk production, was up one percent through the first eight months of 2019 as the region demonstrated full recovery from the September 2018 earthquake which temporarily disrupted supply chains in the southern part of the

prefecture (see JA8083). Recovery in the dairy heifer population began slightly earlier in Hokkaido than the rest of country, allowing increased milk production in Hokkaido in 2019 to help offset supply shortfalls in other prefectures. As production rises in the rest of Japan in 2020, increased volumes from Hokkaido are likely to be diverted instead into further processing. According to MAFF, in Japanese fiscal year 2018 (April 2018-March 2019) approximately 12 percent (492,000 MT) of fresh milk produced in Hokkaido was distributed to other prefectures while 73 percent (2.9 million MT) was sent to further processing. By contrast, 91 percent (3.4 million MT) of milk produced in the rest of Japan (including milk received from Hokkaido) was consumed locally as drinking milk.

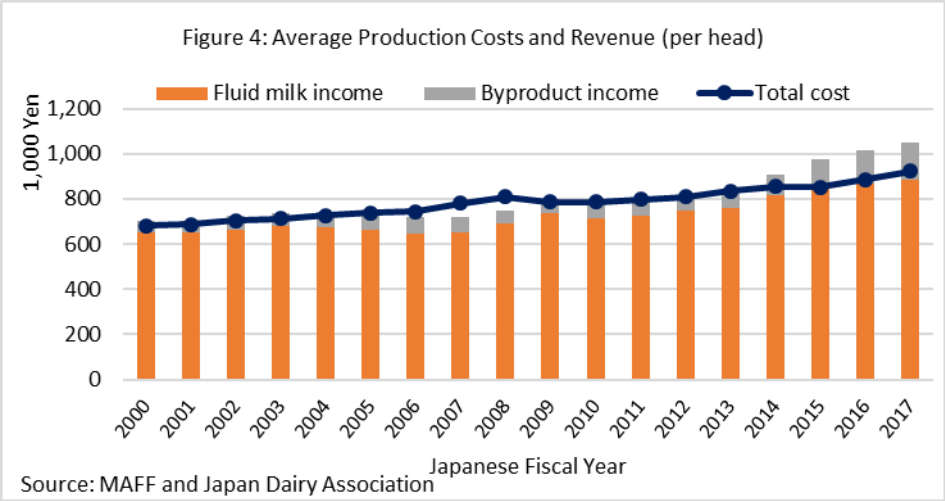
Meanwhile, the overall number of dairy operators in Japan continues to fall. According to MAFF data, there were 15,000 dairy farms in operation as of February 1, 2019, down three percent from the previous year (see Figure 3). Dairy farm numbers have fallen continuously since the 1960s as aging farmers exit the industry without successors. The decline in dairy cow numbers has been less precipitous due to increasing herd sizes which reached 88.8 head per farm in 2019 (up five percent from the previous year).

Figure 3: Dairy Farms in Japan

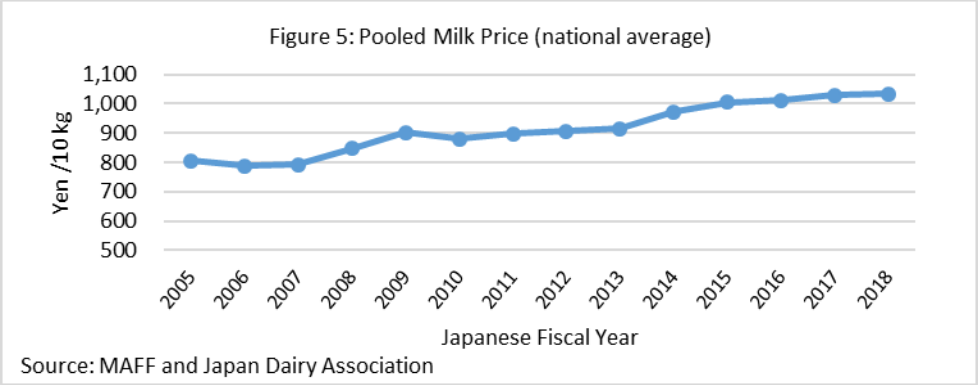


Source: MAFF

High calf prices have provided a significant revenue boost for milk producers staying in operation (see Figure 4). Many were operating at a loss prior to 2014, but have since been able to turn a profit due to increased income from byproduct sales (mainly calves and manure). Between 2014 and 2017, byproduct income nearly doubled from 88,000 yen ($813) to 165,000 yen ($1,524) per cow. Fluid milk income increased eight percent over the same period, keeping pace with slightly higher production costs (also up eight percent).



Milk prices, which are negotiated annually between local dairy cooperatives and milk processors, have likewise trended steadily upward in recent years. The national average pooled milk price has increased around two percent each year since 2005 (see Figure 5). The pooled milk price represents the price paid to producers based on proportion of milk going to fresh consumption versus further processing, factoring in government supports and fees.

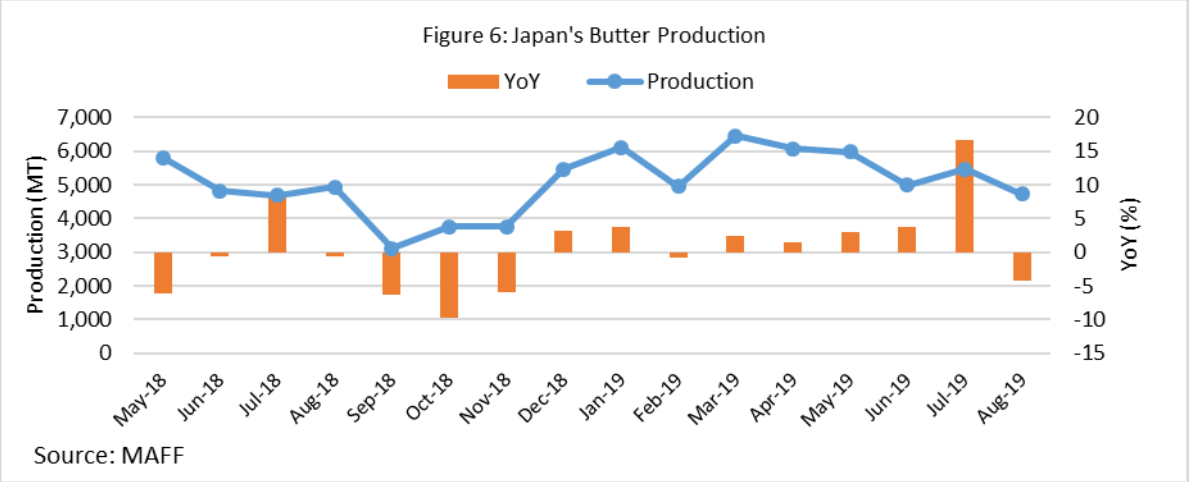


According to data from Ministry of Internal Affairs and Communications, household consumption of drinking milk in the first seven months of 2019 increased one percent from 2018. Industry sources report that consumption of other dairy products such as yogurt and lactic acid bacteria drinks were down in part due to mild temperatures during the early summer months as the rainy season lasted longer than normal in many parts of the country. See Supplemental Tables 1-a and 1-b for more information on product-by-product consumption.

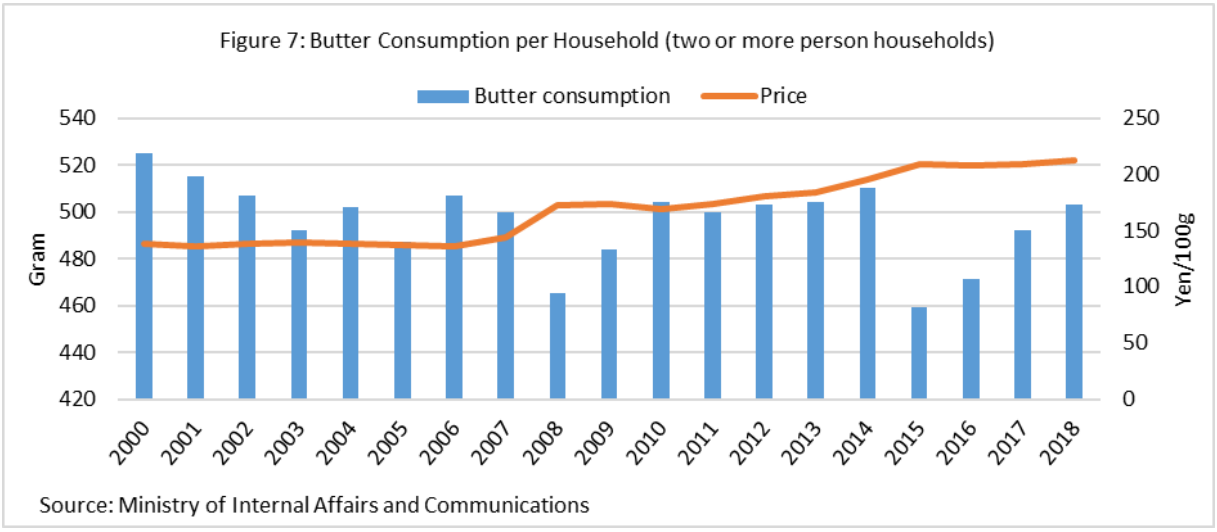
Butter

Reduced consumption of yogurt and drinking milk products in early 2019 increased the availability of fresh milk for butter production which trended three percent higher through the first eight months of 2019 compared to 2018. Production spiked in July 2019 as lower than expected summer temperatures reduced drinking milk demand, pushing monthly butter production up 17 percent compared to July of

the previous year (See Figure 6). As a result, August ending stocks of domestically produced butter were 2.4 percent higher than the previous year. With milk production remaining steady in the second half of 2019, FAS/Tokyo projects overall butter production for the year to increase around two percent. Production is forecasted to grow an additional two percent in 2020 as fresh milk production increases nationwide.



FAS/Tokyo projects butter consumption to grow around three percent in 2019 as retail growth offsets reduced demand from food service and further processors. According to data from Ministry of Internal Affairs and Communications, retail consumption increased three percent in the first seven months of 2019 compared to 2018. Industry sources report that consumers are expanding use of butter as a home cooking ingredient due to perceived health benefits over margarine. Increased butter availability following severe shortages in 2015 (see Figure 7) has also given consumers the flexibility and confidence to use butter more liberally in a wider range of applications. Industrial butter use declined six percent over the same period, primarily due to reduced demand for frozen dairy products which fell 16 percent.



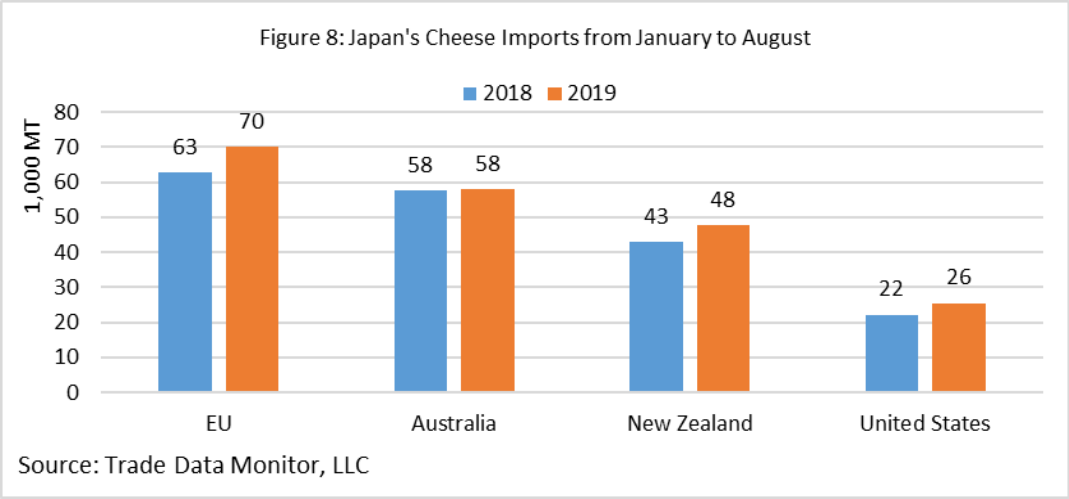
With consumption growth outpacing production, FAS/Tokyo revises projected butter imports upward for 2019. Most of Japan's butter imports are conducted through the Agriculture and Livestock Industries Corporation (ALIC) based on annual volumes announced by MAFF. In May 2019, MAFF announced its intent to import 20,000 MT of butter in JFY 2019 which was 7,000 MT higher than the previous year. Through October, ALIC had successfully tendered 12,094 MT of this volume. As domestic production ticks up in the second half of 2019 and 2020, FAS/Tokyo estimates that sustained imports of butter will push up ending stocks to around 22,000 MT in 2019 and 25,000 MT in 2020. ALIC is expected to fulfil the remainder of this year's tenders, but MAFF may seek to reduce JFY 2020 imports if stocks remain persistently high. Imported butter can be held in frozen stocks for up to two years. In 2018, imports accounted for 92 percent of Japan's butter supply, coming primarily from New Zealand and the European Union

Cheese

FAS/Tokyo projects Japan's domestic production of natural cheese to remain flat in 2019 as excess fresh milk supplies are mainly diverted to butter production. With fresh milk production increasing slightly in 2020, additional volumes should be made available for cheese manufacturers, pushing cheese production upward an estimated two percent.

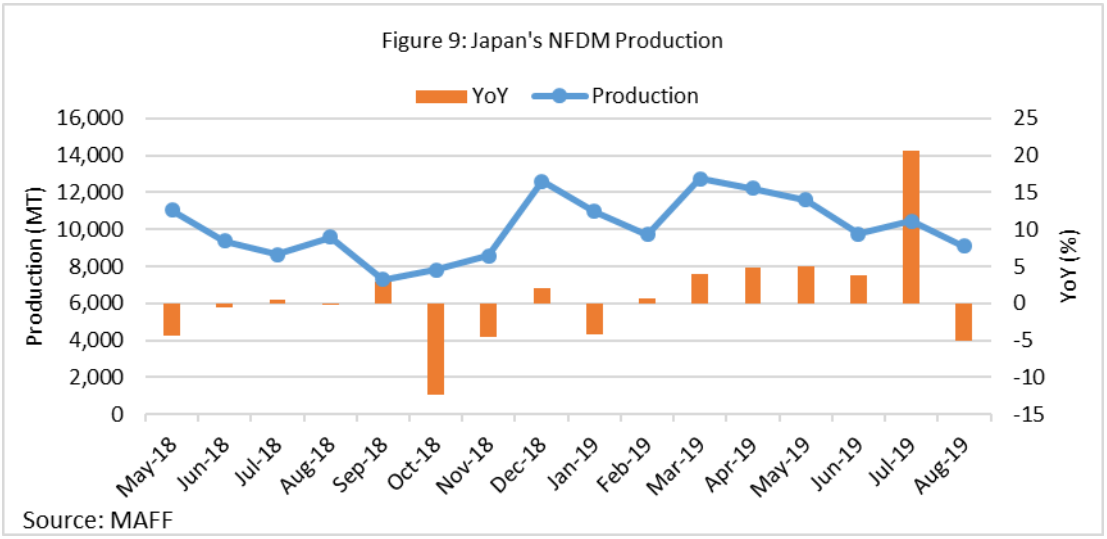
Cheese demand continues to trend upward. Growth has been particularly strong in the retail sector which saw estimated growth of three percent in JFY 2018, according to industry sources. Natural cheese saw the fastest growth with mozzarella up 20 percent (2,500 MT), camembert up 14 percent (6,500 MT) and cream cheese up six percent (8,500 MT). The total market for retail cheese is estimated at 140,000 MT. The industrial cheese market, estimated at around 200,000 MT, grew at a slightly slower pace. Shredded cheese demand increased five percent to 37,000 MT while cheese snacks grew seven percent to 20,000 MT. FAS/Tokyo projects overall cheese consumption to grow around seven percent in 2019 and another five percent in 2020.

Consumption growth will be met primarily by increased imports. Through the first eight months of 2019, Japan's cheese imports trended eight percent higher than the previous year. The European Union was the primary supplier at 34 percent followed by Australia, New Zealand, and the United States (see Figure 8). This trend is likely to continue through the remainder of 2019 with imports staying high in 2020 as consumption growth outpaces a modest increase in domestic production. Ending stocks are projected to hold steady at around 10,000 MT.



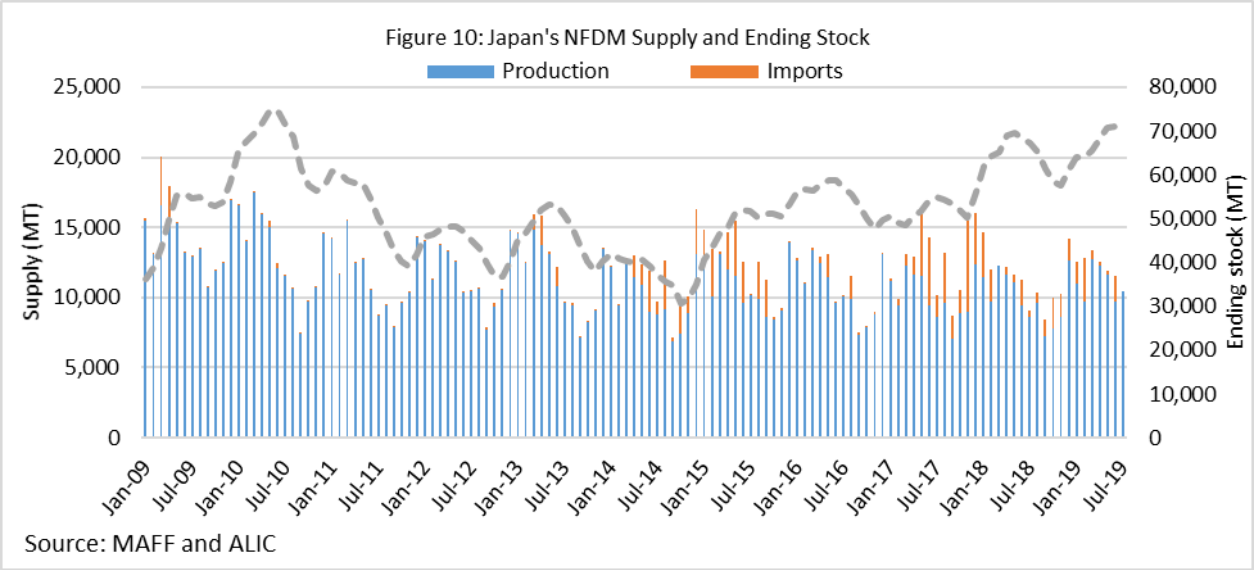
Non-Fat Dry Milk

FAS/Tokyo projects domestic production of non-fat dry milk (NFDM) to increase around two percent in 2019, in line with similar increases in butter production. Through the first eight months of 2019, NFDM production trended around four percent higher than the previous year, primarily due to excess supplies of drinking milk being diverted to butter production during the early summer months (see Figure 9). Dairy processors typically prioritize butter production above other dairy products due to consistently high demand for domestic retail butter.



As a byproduct of butter production, NFDM supplies tend to fluctuate independently of market demand. Despite increased supplies, consumption of NFDM fell in the first half of 2019. Industry sources report that mild early summer temperatures reduced consumption of many chilled and frozen products using NFDM as an ingredient. In first seven months of 2019, ice cream consumption fell six percent from the previous year while yogurt consumption fell one percent (see Supplemental Table 1-a). Reduced demand pushed NFDM stocks to near historic highs in mid-2019. According to MAFF

estimates, ending stocks in July reached 72,000 MT, up seven percent from the previous year and 32 percent from (see Figure 10). As a result of higher than anticipated domestic production and excess stocks, MAFF announced on October 4 that it would reduce planned imports of NFDM in JFY 2019 from 20,000 MT to 14,000 MT under the ALIC quota which typically covers around half of Japan's annual NFDM imports (see JA2019-0023).



Prior to MAFF's announcement, imports were already trending six percent lower in the first eight months of 2019 compared to 2018. The main suppliers of NFDM to Japan were New Zealand, Australia, and the United States. With stocks remaining high and MAFF lowering planned quota imports, FAS/Tokyo projects year-end 2019 imports to decline around 10 percent compared to 2018 and remain low in 2020. Stocks should unwind somewhat in the second half of 2019, but still end higher than the previous year.

Supplemental Tables

Table 1: Japanese Household Consumption of Milk and Dairy Products (two or more person household)

1-a) Household consumption in value

Unit: JP Yen

	Bread	Milk	Powdered Milk	Yogurt	Butter	Cheese	Confecti onary	Coffee Beverage	Lactic Acid Bacterial Drinks	Milk Beverage	Margarine	Ice Cream and Sherbet*
2015	30,507	15,434	607	12,135	960	4,937	83,027	4,452	3,703	1,593	797	8,708
2016	30,294	15,519	738	13,495	981	5,193	83,472	4,452	4,079	1,641	701	8,908
2017	29,957	15,300	685	13,391	1,031	5,493	83,087	4,426	4,129	1,764	684	9,047
2018	30,554	14,950	648	13,203	1,067	5,887	83,916	4,590	3,948	1,945	681	9,670
% Chg.	2%	-2%	-5%	-1%	3%	7%	1%	4%	-4%	10%	0%	7%
Jan/Jul, 2018	17,762	8,564	382	7,854	605	3,347	47,580	2,619	2,375	1,066	396	5,697
Jan/Jul, 2019	18,964	8,687	441	7,783	647	3,408	49,830	2,809	2,335	1,299	399	5,353
% Chg.	7%	1%	15%	-1%	7%	2%	5%	7%	-2%	22%	1%	-6%

*Ice Cream and Sherbet are also included in Confectionary Data

Source: Ministry of Internal Affairs and Communications (Statistics Bureau)

1-b) Household consumption in volume

	Milk (1 liter)	Powdered Milk (1 gram)	Cheese (1 gram)	Butter (1 gram)	Margarine (1 gram)	Bread (1 gram)
2015	78	287	2,901	459	1,075	45,676
2016	79	326	3,084	471	954	45,099
2017	78	306	3,309	492	932	44,840
2018	76	287	3,488	503	917	44,526
% Chg.	-2%	-6%	5%	2%	-2%	-1%
Jan/Jul, 2018	44	172	1,990	285	520	26,249
Jan/Jul, 2019	44	182	2,003	305	520	27,045
% Chg.	0%	6%	1%	7%	0%	3%

Source: Ministry of Internal Affairs and Communications (Statistics Bureau)

Table 2: Japanese Fluid Milk Production

Unit: 1,000 Metric Ton

	2014	2015	2016	2017	2018	% Chg.	2018	2019	% Chg.
	Jan/Dec	Jan/Dec	Jan/Dec	Jan/Dec	Jan/Dec		Jan/Aug	Jan/Aug	
National Fluid Milk Production	7334	7379	7394	7277	7289	0.2%	4,943	4,927	0%
Hokkaido	3,811	3,868	3,934	3,893	3965	1.8%	2,684	2,709	1%
Other Prefectures	3,524	3,511	3,460	3,384	3319	-1.9%	2,259	2,218	-2%
Hokkaido Share	52%	52%	53%	54%	54%		54%	55%	
Other Prefectures Share	48%	48%	47%	46%	46%		46%	82%	
Fluid Milk Utilizations	Jan/Dec	Jan/Dec	Jan/Dec	Jan/Dec	Jan/Dec		Jan/Aug	Jan/Aug	
For Drinking	3,911	3,933	3,992	3,986	3,999	0%	2,658	2,645	0%
For Processing	3,364	3,390	3,349	3,241	3,243	0%	2,254	2,253	0%
Others	59	57	53	49	46	-7%	31	29	-6%

Source: MAFF and ALIC

Table 3: Japanese Utilization of Fluid Milk for Drinking Use Category

Unit: 1,000 Kilo Liter

	2014	2015	2016	2017	2018	% Chg.	2018	2019	% Chg.
	Jan/Dec	Jan/Dec	Jan/Dec	Jan/Dec	Jan/Dec		Jan/Jul	Jan/Aug	
Total Drinking Milk Products	3,456	3,456	3,488	3,539	3,556	0%	2,353	2,343	0%
Regular Milk	2,989	3,005	3,049	3,091	3,142	2%	2,073	2,078	0%
Processed Milk	468	451	439	448	414	-8%	280	265	-5%
Milk Beverages	1,330	1,306	1,239	1,178	1,129	-4%	752	741	-1%
Fermented Milk	1,001	1,055	1,105	1,072	1,068	0%	727	691	-5%
Lactic Acid Bacteria Drinks	146	148	140	124	126	1%	87	79	-8%

Note: Processed Milk: low fat, high fat, vitamin and mineral fortified, calcium enriched

Milk Beverages: flavored milk (coffee and fruits flavored)

Fermented Milk: Yogurt etc.

Source: MAFF

Table 4: Japanese Production of Processed Milk Products

Unit: Metric Ton

	2014	2015	2016	2017	2018	% Chg.	2018	2019	% Chg.
	Jan/Dec	Jan/Dec	Jan/Dec	Jan/Dec	Jan/Dec		Jan/Aug	Jan/Aug	
Butter	60,762	64,810	66,210	59,808	59,589	0%	43,415	44,741	3%
Cream	116,911	114,205	111,029	115,848	116,246	0%	75,777	75,824	0%
Whole Milk Powder	12,077	11,862	11,505	9,415	9,795	4%	7,533	7,456	-1%
Prepared Milk Powder	26,659	26,309	27,657	26,728	27,773	4%	18,389	17,465	-5%
Skim Milk Powder (NFDM)	119,844	128,610	127,598	121,063	120,005	-1%	83,740	86,570	3%
Ice Cream (Unit: kilo liter)	144,724	134,093	141,767	147,708	148,317	0%	104,000	92,333	-11%

Source: MAFF

Table 5: Japanese Imports of Non Fat Dry Milk

Unit: Metric Ton

	2014	2015	2016	2017	2018	% Chg.	2018	2019	% Chg.
	Jan/Dec	Jan/Dec	Jan/Dec	Jan/Dec	Jan/Dec		Jan/Jul	Jan/Jul	
For School Lunch Program	1,874	1,803	1,752	1,689	1,853	10%	1,135	924	-19%
For Feeds	24,040	25,483	28,875	27,655	30,466	10%	17,239	17,440	1%
ALIC (Current Access and Additic	13,665	23,805	4,052	25,365	17,854	-30%	11,417	8,129	-29%
For Other (Ordinary Imports)	2,947	1,911	1,485	3,836	1,910	-50%	1,156	2,332	102%
Total NFDM Imports	42,526	53,002	36,164	58,545	52,083	-11%	30,946	28,825	-7%

Source: ALIC

Attachments:

No Attachments