

Milk and Milk Products: Price and Trade Update

December 2017¹

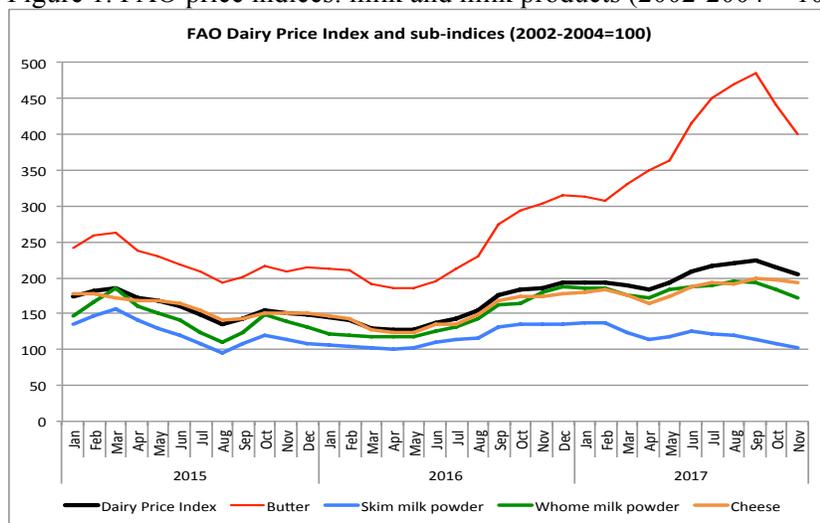
International dairy prices

The **FAO Dairy Price Index** averaged 204.2 points in November, up 11.2 points (5.8 percent) from January 2017. At this level, the index is 9.6 percent higher than November 2016, but still 26 percent below the peak it reached in February 2014.

During the five months since June 2017, the dairy price index has declined by 4.8 points (2.3 percent). The butter price index increased by 17 percent from June to September, making it the dairy commodity that gained the most, but the butter price index fell down by 17 per cent from September to November. The rise in butter prices is attributed to a combination of factors that coincided within a short period of time: unusually high demand for butter, especially in Europe but also North America; a production contraction in Oceania due to lower milk output; current pricing structure, which favoured the production of more cheese and other dairy products; all of which contributed to decline export availabilities from the major producing regions. In the last two months, butter prices have eased, as concerns over the availability of supplies diminished with increased milk output in all major producing regions, especially in Oceania.

The FAO skim milk powder (SMP) price index declined by as much as 18 percent from June this year. A key factor that weighed down the SMP price index is slack demand and the uncertainty about when and how the European Union (EU) is going to dispose nearly 370 000 tonnes of SMP stocks currently being held under the intervention stocks, nearly 16 percent of total world trade in SMP in 2016. Relatively lower SMP prices in open markets have, in turn, discouraged producing more SMP and exports in some countries. In the EU, however, farmers have been able to use the intervention stocks to buffer against lower international prices. In September, for example, EU farmers placed 16 597 tonnes of SMP in the interventions stock at Euro 1 698 (USD 2 022 at 1.19 USD / Euro - average exchange rate for September).

Figure 1. FAO price indices: milk and milk products (2002-2004 = 100)



During the five months from June to November, the FAO whole milk powder (WMP) price index declined by 8.8 percent. While global WMP supplies remained stable, import demand has declined, especially in the Middle East, reflecting relatively low purchasing power of consumers.

The FAO cheese price index gained 3.7 percent during the reference period, reflecting increased global demand.

¹ The Price and Trade Update is an information product prepared by the Dairy Unit of the Trade and Markets Division of FAO. It reviews the development of international prices and trade for milk and milk products.

World trade in milk and milk products

World trade in dairy products is forecast to reach 71.6 million tonnes (milk equivalent) in 2017, slightly more than 1 percent from 2016.

Current forecasts indicate that much of this year's import growth will be accounted by Asia, in particular China. Based on imports by China from January to September, China's dairy imports are likely to reach 12.5 million tonnes (milk equivalents). Much of this growth is also accounted for by value added products, as evidenced by rising imports of whey protein, yoghurt and others². The Russian Federation –the second largest dairy importer by volume - has stepped up imports in more recent years.

The ongoing dairy sector reforms have indirectly contributed to an increase in import demand in both China and the Russian Federation, but how long the surge in imports will last depend on the progress of the reforms and how the reforms will enable the two countries to step up their milk output. Both China and the Russian Federation have targeted enhancing milk output by improving efficiency and scale of dairy farm operations. The Russian Federation has moved towards diversifying its sources of dairy imports to include countries such as New Zealand, Kyrgyzstan, Chile and Uruguay. This has led Belarus to lose some of its market share in the Russian Federation but has found other markets in Europe and elsewhere.

In 2017, Mexico, Algeria, Indonesia, the Republic of Korea, Japan and Thailand also have increased their dairy purchases. For various reasons, including increased national production and reduced purchasing power, some major importing countries such as Brazil, Saudi Arabia, Oman, the United States, the Philippines, Egypt and Malaysia have reduced their dairy import demand this year.

On the supply side, in 2017, the EU, New Zealand and the United States are expected to supply nearly 68 percent of global dairy exports. Based on dairy exports data during the first nine months in 2017, EU's dairy exports have expanded across several product categories including skim milk powder (+41%), cheese (+5%) and WMP (+2%), but butter exports have contracted by 17 percent. Meanwhile, New Zealand's dairy exports have declined across several product categories including butter (-12%), SMP (-14%) and cheese (-1%), leaving out WMP exports at the 2016 level. The United States, continuing along its recent growth trajectory, dairy exports have expanded in cheese (+23%), butter (+12%) and SMP (+6%), but WMP exports declined (-16%).

Current forecasts indicate that in 2017 world exports of butter and WMP would decline, while those of cheese and SMP would increase.

Table 1. Milk and milk products exports – world and selected countries ('000 tonnes milk equivalents)

	2013-2015 average	2016 Estim.	2017 f'cast	Change 2017 over 2016 (%)
World	68 807	70 655	71 561	1.3
European Union	17 347	18 480	19 348	4.7
New Zealand	18 645	19 374	19 208	-0.9
United States	10 071	9 971	10 733	7.6
Belarus	3 634	3 930	3 722	-5.3
Australia	3 274	3 341	3 280	-1.8

Table 2. Milk and milk products imports – world and selected countries ('000 tonnes, milk equivalents)

	2013-2015 average	2016 Estim.	2017 f'cast	Change 2017 over 2016 (%)
World	68 769	70 599	71 599	1.4
China	12 063	11 998	12 500	4.2
Russian Federati	4 833	4 271	4 438	3.9
Mexico	3 327	3 693	3 799	2.9
Algeria	2 776	2 895	3 265	12.8
Indonesia	2 573	2 839	2 863	0.8

² In 2017, the composition of dairy imports by China is as follows: SMP (15%), WMP (33%), whey protein (32%), cheese (6%) and butter (6%), and balance constituting liquid milk, casein, yoghurt and other minor products.

Figure 2. Milk and milk product exports of selected countries ('000 tonnes, milk equivalents)

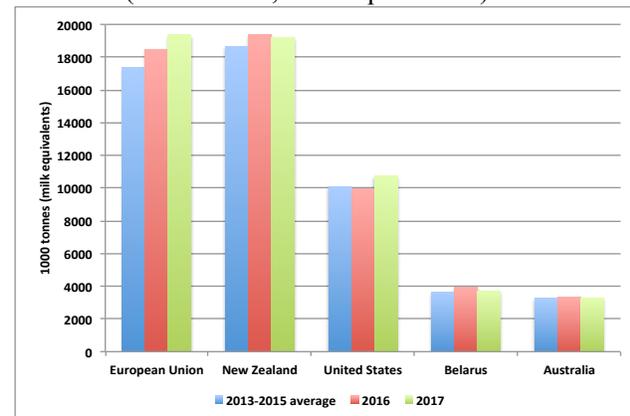
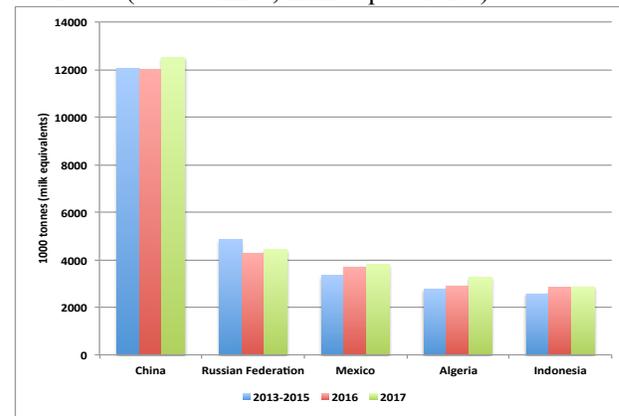


Figure 3: Milk and milk product imports of selected countries ('000 tonnes, milk equivalents)



Whole milk powder (WMP)

World exports of WMP is forecast to reach 2.4 million tonnes in 2017, or 2.3 percent less than 2016, making 2017 the third successive year that WMP exports would have declined.

Figure 3. Whole milk powder imports: World total and selected countries ('000 tonnes)

	2013-2015	2016 estim.	2017 f'cast	Change 2017 over 2016 (%)
World	2 396	2 367	2 333	-1.4
China	655	536	539	0.4
Algeria	190	224	264	17.7
United Arab Emirates	152	128	123	-4.3
Saudi Arabia	106	121	109	-10.2
Brazil	48	126	102	-19.1

Figure 4. Whole milk powder exports: World total and selected countries ('000 tonnes)

	2013-2015	2016 estim.	2017 f'cast	Change 2017 over 2016 %
World	2 538	2 465	2 408	-2.3
New Zealand	1 365	1 344	1 357	1.0
European Union	385	380	371	-2.5
Uruguay	76	126	108	-14.6
Argentina	155	110	78	-28.8
Australia	81	70	71	1.2

World market for WMP products is determined to a significant degree by what happens to milk output and production in New Zealand and the EU, as they jointly account for three-fourth of world exports. In the first nine months of this year, New Zealand's WMP exports have increased by only 0.4 per cent but those of the EU by some 2.1 per cent. In New Zealand, reduced milk output in 2016/17 dairy cycle caused the decline in its WMP exports. WMP exports of New Zealand to its destinations have dropped in line with reduced output and exports, but its exports to its main markets such as China and the United Arab Emirates have increased. WMP imports from New Zealand by Saudi Arabia and Algeria have declined, apparently reflecting this year's low purchasing power of consumers caused by low international oil prices. New Zealand's milk output in the new dairy cycle that began in June is expected to rise thanks to the prevailing good weather, giving rise to an expectation of a possible expansion in export supplies, which, in turn, has contributed to easing the market pressure recently.

In the case of the EU, WMP exports for the first nine months have increased by 2.1 percent over the same period in 2016. However, the European Commission in its *Short-term outlook for EU agricultural Markets in 2017 and 2018* expected that total WMP production and exports for the whole year would be down by 1 percent and 5 percent, respectively, because of low relative returns for WMP under the current price structure.

Elsewhere, WMP exports are expected to decline in Uruguay (-34%), Argentina (-45%), Australia (-24%) and the United States (-16%), while Belarus and Mexico are likely expand WMP exports.

Figure 4. World exports of WMP (January to September 2017)

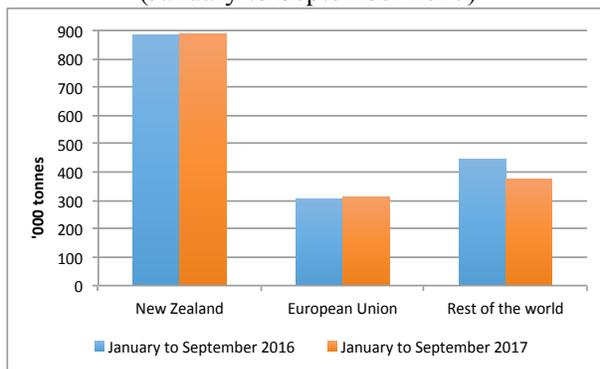
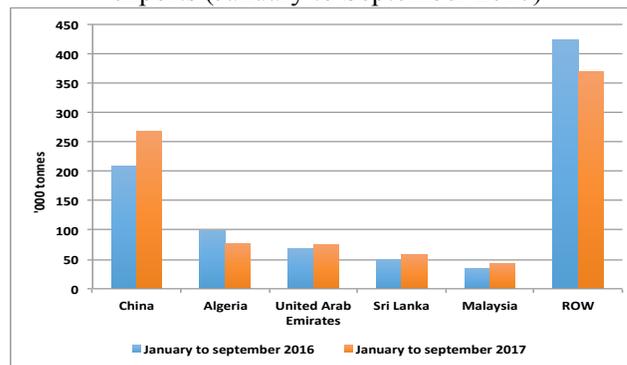


Figure 5. Major destinations of New Zealand's WMP exports (January to September 2017)



Note: Countries for which exports and imports data for 2017 are not available have been omitted from figures 4 and 5.

Skimmed milk powder (SMP)

In 2017, world trade in SMP is forecast to increase by 6.7 percent to nearly 2.3 million tonnes. The EU and the United States are expected to lead this expansion, with additional growth contributed by Canada, the Islamic Republic of Iran and Mexico. In contrast, SMP exports are expected to decline in New Zealand and Belarus, while Australia's exports to remain stable.

Table 5. Skim milk powder imports: World total and selected countries ('000 tonnes)

	2013-2015 average	2016 estim.	2017 f'cast	Change 2017 over 2016 (%)
World	2 075	2 175	2 278	4.7
Mexico	220	286	304	6.5
China	262	216	251	16.4
Philippines	103	185	174	-5.6
Indonesia	149	159	164	3.4
Russian Federation	113	133	136	2.2

Table 6. Skim milk powder exports: World total and selected countries ('000 tonnes)

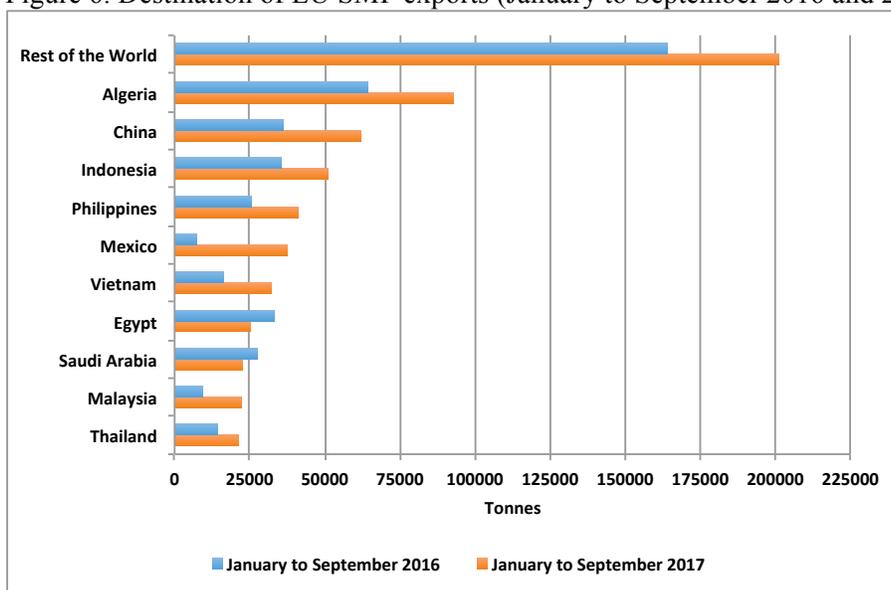
	2013-2015 average	2016 estim.	2017 f'cast	Change 2017 over 2016 (%)
World	2 083	2 187	2 333	6.7
European Union	581	574	697	21.4
United States	556	593	643	8.4
New Zealand	395	444	408	-8.1
Australia	161	164	165	0.8
Belarus	99	111	108	-2.6

In the first nine months, EU SMP exports have increased by 40 percent, supported by export expansions to some of its traditional and main exporting destinations such as Algeria, China, the Philippines and Indonesia, while also maintaining a significant export expansion to other countries in the world. A possible reduction in SMP output in the EU has contributed a draw down in existing private stocks, but neither the output expansion nor the current level of international prices are conducive for disposing of SMP held in the EU intervention stocks. By accepting tenders for SMP intervention stocks at around Euro 1 440 in an auction in October, the EU appeared to have signalled a possible floor price for disposing of the existing stock of nearly 370 000 tonnes. Growth in demand for SMP with a parallel reduction in output might help the EU to dispose of the existing SMP stock.

In contrast, New Zealand is expected to export less SMP this year, as producing more SMP is relatively less profitable for local producers. Moreover, reduced milk output for both Australia and New Zealand does not offer much of a choice, as both countries appear to focus on fulfilling long-term supply commitments.

The current lower SMP prices appear to have provided an impetus for some countries to import more SMP this year

Figure 6. Destination of EU SMP exports (January to September 2016 and 2017)



Butter

World trade in butter in 2017 is forecast to decline by 3.5 percent to around 929 000 tonnes.

Reduced export availabilities from major producing regions, especially Europe, but also Oceania and North America, have contributed to the sharp reduction in exports in 2017. In the EU, between January and September compared to the same period last year, butter production has dropped by 3.5 percent, although milk collections has been 0.4 percent higher, as producing other dairy products such as cream and cheese are more profitable under the current market prices. For example, for the same months, production of cream increased by 2.2 percent, condensed milk by 1.6 per cent and cheese by 1.3 per cent. In the meantime, for the same period, New Zealand's butter exports declined by 12 percent and those of Australia by 49 percent, contributing to add pressure to the global butter market.

As a result of all these, international butter prices rose, setting a new record for the FAO dairy price index in last September and creating the widest gap between butter and other dairy commodities on record.

Figure 5. Butter imports: World total and selected countries ('000 tonnes)

	2013-2015 average	2016 estim.	2017 f'cast	Change 2017 over 2016 (%)
World	883	922	890	-3.5
China	100	117	118	0.8
Russian Federation	136	105	114	8.7
Egypt	48	58	52	-10.2
Mexico	35	52	47	-10.2
United States	26	48	46	-3.9

Figure 6. Butter exports: World total and selected countries ('000 tonnes)

	2013-2015 average	2016 estim.	2017 f'cast	Change 2017 over 2016 (%)
World	947	963	929	-3.5
New Zealand	490	503	514	2.2
European Union	151	208	166	-19.9
Belarus	74	84	88	4.8
United States	65	29	29	0.4
Australia	42	31	23	-26.1

Increased milk output in the new dairy cycle in Oceania has, however, reduced concerns over the availability of butter in the coming months, thus, reducing international butter prices significantly in

recent months. Price sensitivity and relatively high butter prices have, in turn, reduced import demand in Saudi Arabia, Turkey and the Islamic Republic of Iran and some African countries. Reduced consumer purchasing power due to drop in oil income has not helped the situation, by judging the reduction of butter imports by some countries that heavily depend on oil-income.

Cheese

World trade in cheese is forecast to increase by 3.8 percent to 2.6 million tonnes. Much of the increased exports are expected to originate in the EU and the United States.

In the EU in 2017, cheese exports are expected to rise by 6 percent, supported by increased import demand by Japan, Switzerland, Republic Korea and Australia, while imports by the United States, Algeria, Chile, the United Arab Emirates and several others remained more or less within the last year levels. In the United States, cheese exports in the first nine months of the year have increased by as much as 23 percent, signalling the possibility for an excellent year for the cheese sector although the overall annual exports are likely to be lower, especially given that the dairy cycle for the year has come to an end. Recent decline in milk fat stock drawdown, however, indicates that an export expansion is unlikely in the immediate future.

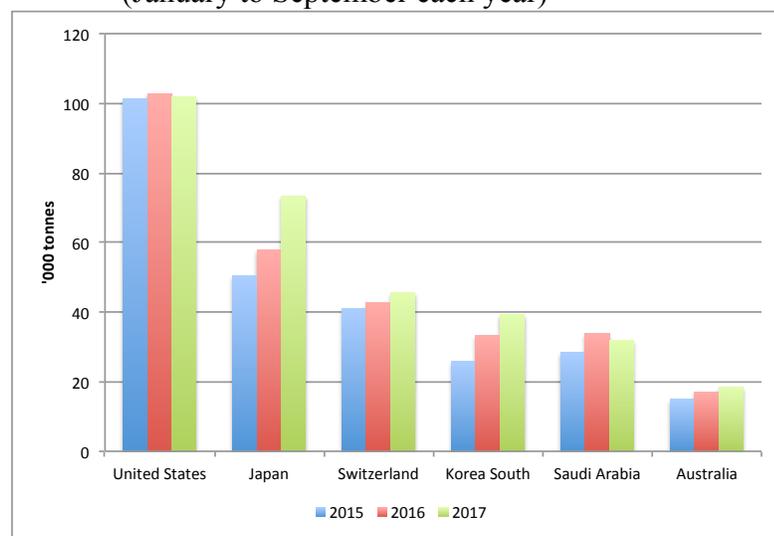
Figure 5. Cheese imports: World total and selected countries ('000 tonnes)

	2013-2015 average	2016 estim.	2017 f'cast	Change 2017 over 2016 (%)
World	2 322	2 443	2 515	3.0
Japan	239	258	273	6.0
Russian Federation	323	222	224	0.9
United States	171	205	185	-9.9
Saudi Arabia	150	170	175	2.9
China	105	146	162	11.0

Figure 6. Cheese exports: World total and selected countries ('000 tonnes)

	2013-2015 average	2016 estim.	2017 f'cast	Change 2017 over 2016 (%)
World	2 376	2 478	2 573	3.8
European Union	742	800	848	6.0
New Zealand	294	355	350	-1.4
United States	336	289	342	18.2
Belarus	161	204	199	-2.6
Australia	162	167	170	1.9

Figure 7. Main EU destinations of cheese exports (January to September each year)



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