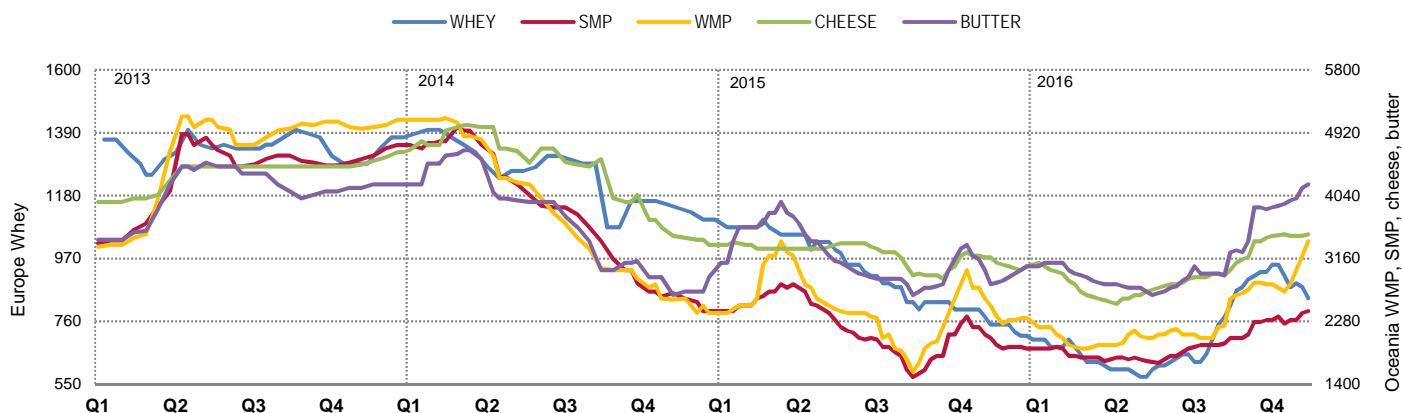


2013-16 PRICE TREND - SMP, WMP, CHEESE, BUTTER, WHEY*

(\$/MT)



*Indicative prices. Milk powder, cheese and butterfat are Oceania; whey is western Europe.

Source: USDEC and commercial sources.

Market recovery looks sustainable

By Alan Levitt and Marc Beck

After a two-year slump, global dairy prices rallied since mid-year, pausing to catch their breath a couple times, but now up significantly from historic lows. Since bottoming out, WMP and whey prices are up about 50 percent, butter is up 50-70 percent, cheese is up 30-40 percent and SMP is up 20-30 percent. Average winning prices at the GDT auction have increased 12 of the last 15 events, and WMP settled at \$3,423/ton at the Nov. 15 auction, the highest price since July 2014.

Having breached the \$3000/ton level for WMP earlier this month amid declining milk supply worldwide, we believe this price threshold is sustainable. We remain cautious, however, about how much higher the price can go, as a backlog of product remains in the pipeline, buyers

have tremendous uncertainty about the global economy, and demand remains subdued for milk powder in particular. Low oil prices and grain prices, plus a strong U.S. dollar, all put downward pressure on world dairy commodity prices.

In the June-September period, milk production from the top five exporters was down about 1.3 percent year-over-year, the first stretch of contraction since early 2013 (see charts on p. 7). Meanwhile, exports from those same suppliers were up 6 percent. This has begun to make a dent in the surplus, but higher payout prices in Europe and Oceania in recent months have improved farmer confidence and could lead production to snap back in 2017.

In the first three quarters of the year, **China** imports were up 16 percent vs. last year on a milk-equivalent basis, but still down 15 percent from 2014 volume. Two years ago, 60 percent of China imports were milk powder (milk-equivalent basis). This year just 43 percent of imports are milk powder, while purchases of UHT milk, infant formula and cheese have increased to record levels.

China imports seem to be more a function of declining domestic supply, rather than robust demand. Milk production is reportedly down about 2 percent this year as a result of lower farmgate milk prices and hot summer weather. Meanwhile,

NOVEMBER INDICATIVE PRICES - USDEC sources
\$/MT, FOB SHIP (with change from October)

	EUROPE	OCEANIA
SMP	2188 (-44)	2375 (+75)
WMP	3025 (+66)	3200 (+438)
Cheddar	4017 (+114)	3483 (-1)
Butter	4725 (+113)	4117 (+198)
Butteroil	5308 (+146)	4608 (+240)
Dry whey	867 (-55)	779 (-21)
WPC-34%	2013 (-100)	1675 (+25)
Lactose	913 (-13)	700 (+25)

Source: USDEC.

Continued on p. 2

From p. 1

demand for fresh fluid milk appears to be good, leaving less milk available for drying.

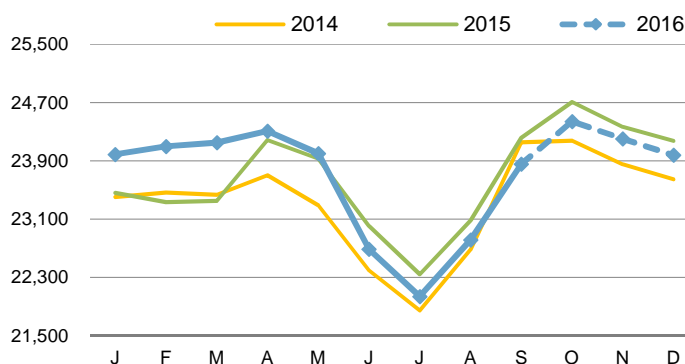
Production signals out of New Zealand fueled the run-up in **WMP**. Milk production in the first four months of the season (June-September) was about even with a year ago, and reports of much lower output in October has raised buyers' anxiety and brought them back to the market. Removal of volume off the GDT auction also created some bullish sentiment, and a large shipment to Algeria in September has helped clear New Zealand stocks. Overall China WMP imports were up 20 percent in the first nine months of the year, while imports from Hong Kong and Sri Lanka were up by double digits as well.

In contrast, large EU intervention stocks (more than 350,000 tons, plus another 73,000 tons in private storage) have kept a lid on **SMP** prices, resulting in the largest spread between WMP and SMP since the 2008 market crash. Buyers also know SMP is available from the United States, where milk production was up 1.7 percent in the first three quarters of the year and NDM/SMP production was up 6 percent in Q3.

Mexico (imports +24 percent YTD through August) and the Philippines (+80 percent YTD through July) have taken advantage of historically low SMP prices this year to buy heavily. But Algeria, China and Malaysia have bought less. Overall SMP trade from the 5 major suppliers was down 5 percent in the first three-quarters of 2016. In June-September, Australia SMP exports were down 40 percent as declining milk production left less available to dry for exports. Meanwhile, EU SMP exports were down 19 percent in the first three-quarters of 2016 as hundreds of tons went into intervention instead.

Cheese trade has been good this year, with greater imports from the United States, Japan and the Middle East/North Africa (MENA) region offsetting flat imports from Mexico and South

TOTAL MILK PRODUCTION FROM MAJOR EXPORTERS (000 MT)



Includes EU-28, U.S., New Zealand, Australia and Argentina. EU and Argentina are milk deliveries. 30-day months. October-December 2016 are USDEC forecasts.

Source: USDA, EuroStat, DairyAustralia, DCANZ, Argentina Ministry of Agriculture.

Korea. EU and New Zealand suppliers have been aggressive, taking share from the United States, which has been at a pricing disadvantage all year. Prices converged in September-October, but in the last month U.S. cheese prices rallied again, denting U.S. export competitiveness.

EU cheese supplies are tight, aided by good domestic demand (as in the United States). EU milk production was down about 1.8 percent in the June-September period, but the remaining milk continues to flow to the cheese vat, while production of SMP/butter and WMP is lower. The EU has more than replaced lost cheese sales to Russia – with volume increases to the MENA region, the United States, South Korea, Japan and Mexico.

Butter prices are sharply higher in Europe – up more than \$2000/ton since the spring. EU exports were up 39 percent in the first three quarters of the year, more than double 2013 levels and the most since 2006. World butter demand has been very good this year, especially from China and the MENA region. EU prices are significantly higher than Oceania prices but that hasn't limited EU butterfat export sales.

They prices have eased over the last 5-6 weeks, which is attributed to softer demand from the feed sector. But overall demand has been strong this year, led by China and Southeast Asia.

ABOUT THIS ISSUE

Global Dairy Market Outlook is written and distributed by the U.S. Dairy Export Council (USDEC), 2101 Wilson Blvd., Suite 400, Arlington, VA 22201, USA, (703) 528-3049, FAX (703) 528-3705, website www.usdec.org. Data is compiled and analyzed by Alan Levitt, vice president of communications and market analysis, and Marc Beck, executive vice president of strategy and insights. Analysis is supported by USDEC's network of 10 international offices.

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This issue of Global Dairy Market Outlook covers conditions in mid-November 2016. **For up-to-date market data and commentary, visit the USDEC website at www.usdec.org/research-and-data/market-data.**

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The U.S. Dairy Export Council, primarily funded by Dairy Management Inc. through the producer checkoff, works closely with its member processors, trading companies and others to build global demand for U.S. dairy products.

World Dairy Exports

SMP EXPORTS

	LATEST MONTH		SEPTEMBER (VOLUME, MT)		YEAR-TO-DATE	JANUARY-SEPTEMBER (VOLUME, MT)			
	2014	2015	2016	% CHG		2014	2015	2016	% CHG
EU-28	47,135	54,601	42,821	-22	EU-28	478,736	532,500	433,090	-19
U.S.	32,136	47,340	51,847	+10	U.S.	430,076	419,485	440,862	+5
NZ	23,892	18,106	27,219	+50	NZ	246,494	264,353	303,227	+15
Australia	10,171	14,165	9,951	-30	Australia	111,427	144,561	113,998	-21
India	1,918	897	500	-44	India	55,869	14,788	13,982	-5
TOTAL OF 5	115,252	135,109	132,338	-2	TOTAL OF 5	1,322,602	1,375,687	1,305,159	-5

WMP EXPORTS

	LATEST MONTH		SEPTEMBER (VOLUME, MT)		YEAR-TO-DATE	JANUARY-SEPTEMBER (VOLUME, MT)			
	2014	2015	2016	% CHG		2014	2015	2016	% CHG
NZ	71,574	63,962	70,743	+11	NZ	960,874	922,250	885,258	-4
EU-28	28,436	36,989	28,411	-23	EU-28	300,499	311,368	302,860	-3
Argentina	11,449	10,761	9,857	-8	Argentina	110,338	89,040	83,337	-6
Australia	7,277	4,754	6,104	+28	Australia	59,967	47,717	51,389	+8
U.S.	3,196	2,974	1,299	-56	U.S.	42,838	29,064	19,046	-34
TOTAL OF 5	121,932	119,440	116,414	-3	TOTAL OF 5	1,474,516	1,399,439	1,341,890	-4

CHEESE EXPORTS

	LATEST MONTH		SEPTEMBER (VOLUME, MT)		YEAR-TO-DATE	JANUARY-SEPTEMBER (VOLUME, MT)			
	2014	2015	2016	% CHG		2014	2015	2016	% CHG
EU-28	50,952	63,956	72,959	+14	EU-28	550,722	524,066	596,626	+14
NZ	18,250	20,180	20,812	+3	NZ	197,436	229,786	251,326	+9
U.S.	27,717	22,190	22,046	-1	U.S.	290,051	245,855	208,675	-15
Australia	12,443	13,559	13,033	-4	Australia	110,787	123,375	120,678	-2
Argentina	5,727	4,696	6,157	+31	Argentina	38,744	31,677	37,613	+19
TOTAL OF 5	115,089	124,581	135,007	+8	TOTAL OF 5	1,187,740	1,154,759	1,214,918	+5

BUTTERFAT EXPORTS

	LATEST MONTH		SEPTEMBER (VOLUME, MT)		YEAR-TO-DATE	JANUARY-SEPTEMBER (VOLUME, MT)			
	2014	2015	2016	% CHG		2014	2015	2016	% CHG
NZ	30,630	32,621	31,094	-5	NZ	361,139	336,247	346,861	+3
EU-28	10,401	12,762	14,347	+12	EU-28	103,237	123,791	171,656	+39
Australia	2,665	1,429	1,863	+30	Australia	28,673	24,643	22,938	-7
U.S.	2,344	692	1,642	+137	U.S.	62,354	17,703	16,547	-7
Argentina	1,656	350	376	+7	Argentina	10,295	6,577	3,986	-39
TOTAL OF 5	47,696	47,854	49,322	+3	TOTAL OF 5	565,698	508,961	561,988	+10

* USDA data for U.S. 2016 for NDM/SMP and WMP adjusted to reflect shipments to Mexico misclassified as WMP. India 2016 is USDEC estimate.

Source: Global Trade Atlas and USDA.

World Dairy Exports

WHEY PRODUCTS EXPORTS

	LATEST MONTH		SEPTEMBER (VOLUME, MT)	
	2014	2015	2016	% CHG
EU-28	41,266	43,140	50,586	+17
U.S.	35,267	34,353	41,938	+22
Switzerland	6,262	6,420	4,938	-23
Argentina	6,736	5,169	6,032	+17
Australia	3,802	2,091	3,167	+51
NZ	1,195	1,802	2,305	+28
TOTAL OF 6	94,528	92,975	108,966	+17

	YEAR-TO-DATE			
	JANUARY-SEPTEMBER (VOLUME, MT)			
	2014	2015	2016	% CHG
EU-28	394,631	414,386	450,734	+9
U.S.	374,521	342,182	363,284	+6
Switzerland	66,627	67,945	60,913	-10
Argentina	49,440	44,089	52,870	+20
Australia	26,489	23,600	38,062	+61
NZ	20,678	20,069	31,785	+58
TOTAL OF 6	932,386	912,271	997,648	+9

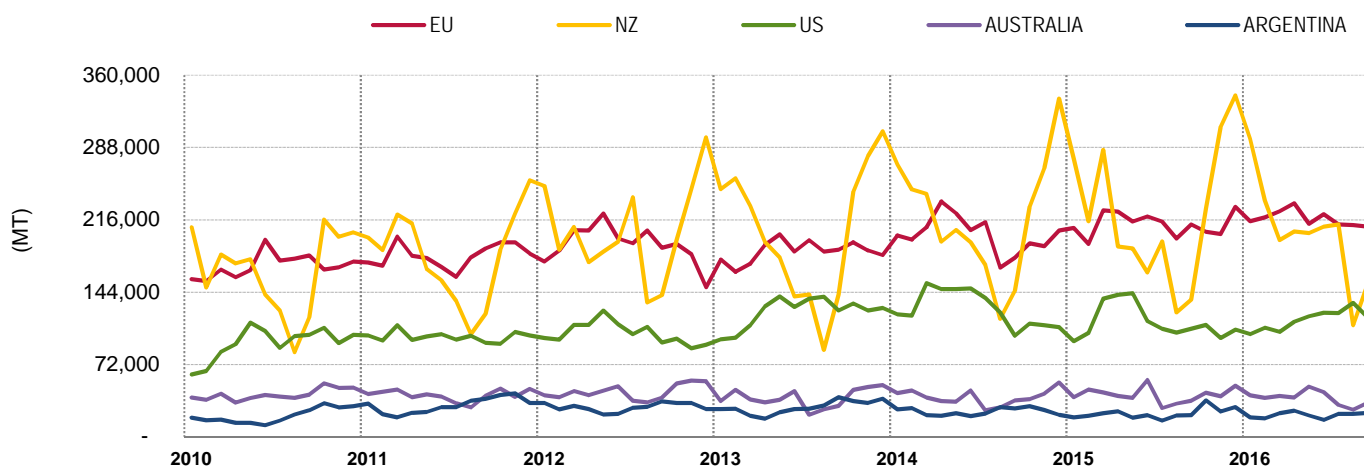
LACTOSE EXPORTS

	LATEST MONTH		SEPTEMBER (VOLUME, MT)	
	2014	2015	2016	% CHG
U.S.	29,014	33,568	29,857	-11
EU-28	14,252	12,196	17,579	+44
NZ	1,353	2,289	2,429	+6
TOTAL OF 3	44,619	48,053	49,865	+4

	YEAR-TO-DATE			
	JANUARY-SEPTEMBER (VOLUME, MT)			
	2014	2015	2016	% CHG
U.S.	255,194	272,799	267,427	-2
EU-28	130,102	128,335	129,729	+1
NZ	15,008	16,776	18,335	+9
TOTAL OF 3	400,304	417,910	415,491	-1

AGGREGATE EXPORT VOLUME - MAJOR SUPPLIERS

SMP, WMP, CHEESE, BUTTERFAT, WHEY



Source: Global Trade Atlas and USDA.

ACCESS TRADE DATA ONLINE

Visit usdec.org/research-and-data/market-data/trade-flows

World Dairy Imports

SMP IMPORTS

(VOLUME, MT)

	LATEST MONTH	Prev Yr	Latest Mo	% CHG
China	Sep 16	18,769	9,166	-51
Mexico	Aug 16	19,849	28,534	+44
Malaysia	Jul 16	14,161	13,918	-2
Indonesia	Jul 16	7,011	7,222	+3
Algeria	Nov 15	5,673	6,515	+15
Philippines	Jul 16	7,754	13,259	+71

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
China	Sep	164,818	152,055	-8
Mexico	Aug	148,393	183,392	+24
Malaysia	Jul	96,774	79,344	-18
Indonesia	Jul	82,996	81,034	-2
Algeria	Jan-Nov 15	155,301	130,599	-16
Philippines	Jul	58,685	105,491	+80

WMP IMPORTS

(VOLUME, MT)

	LATEST MONTH	Prev Yr	Latest Mo	% CHG
China	Sep 16	13,485	7,214	-47
Venezuela	Aug 16	3,202	-	-100
Algeria	Nov 15	7,839	9,859	+26
Singapore	Sep 16	5,471	3,958	-28
Hong Kong	Sep 16	5,559	6,997	+26

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
China	Sep	288,168	344,690	+20
Venezuela	Aug	119,871	57,345	-52
Algeria	Jan-Nov 15	192,038	209,717	+9
Singapore	Sep	55,427	52,960	-4
Hong Kong	Sep	55,070	63,241	+15

CHEESE IMPORTS

(VOLUME, MT)

	LATEST MONTH	Prev Yr	Latest Mo	% CHG
Japan	Sep 16	19,480	17,820	-9
U.S.	Sep 16	16,539	15,187	-8
Mexico	Aug 16	7,490	8,459	+13
So. Korea	Sep 16	8,167	8,169	+0
Russia	Sep 16	4,134	2,503	-39

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
Japan	Sep	184,312	190,552	+3
U.S.	Sep	136,472	147,147	+8
Mexico	Aug	79,813	81,054	+2
So. Korea	Sep	83,219	81,465	-2
Russia	Sep	27,614	22,638	-18

BUTTERFAT IMPORTS

(VOLUME, MT)

	LATEST MONTH	Prev Yr	Latest Mo	% CHG
China	Sep 16	6,030	5,015	-17
Iran	Oct 16	7,264	3,195	-56
Mexico	Aug 16	1,619	3,618	+123
Morocco	Aug 16	2,972	1,680	-43
Russia	Sep 16	2,967	1,439	-51

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
China	Sep	50,324	64,641	+28
Iran	Oct	42,555	37,914	-11
Mexico	Aug	23,374	33,500	+43
Morocco	Aug	23,799	14,813	-38
Russia	Sep	15,275	13,687	-10

Russia excludes imports from Belarus. Source: Global Trade Atlas and USDA.

World Dairy Imports

WHEY PRODUCTS IMPORTS

(VOLUME, MT)

	LATEST MONTH	Prev Yr	Latest Mo	% CHG
China	Sep 16	38,279	48,586	+27
Indonesia	Jul 16	5,990	6,366	+6
Mexico	Aug 16	4,248	4,904	+15
Thailand	Sep 16	5,284	4,980	-6
Japan	Sep 16	5,143	5,095	-1

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
China	Sep	334,524	387,370	+16
Indonesia	Jul	66,029	63,460	-4
Mexico	Aug	33,799	31,082	-8
Thailand	Sep	46,041	47,002	+2
Japan	Sep	43,817	48,028	+10

LACTOSE IMPORTS

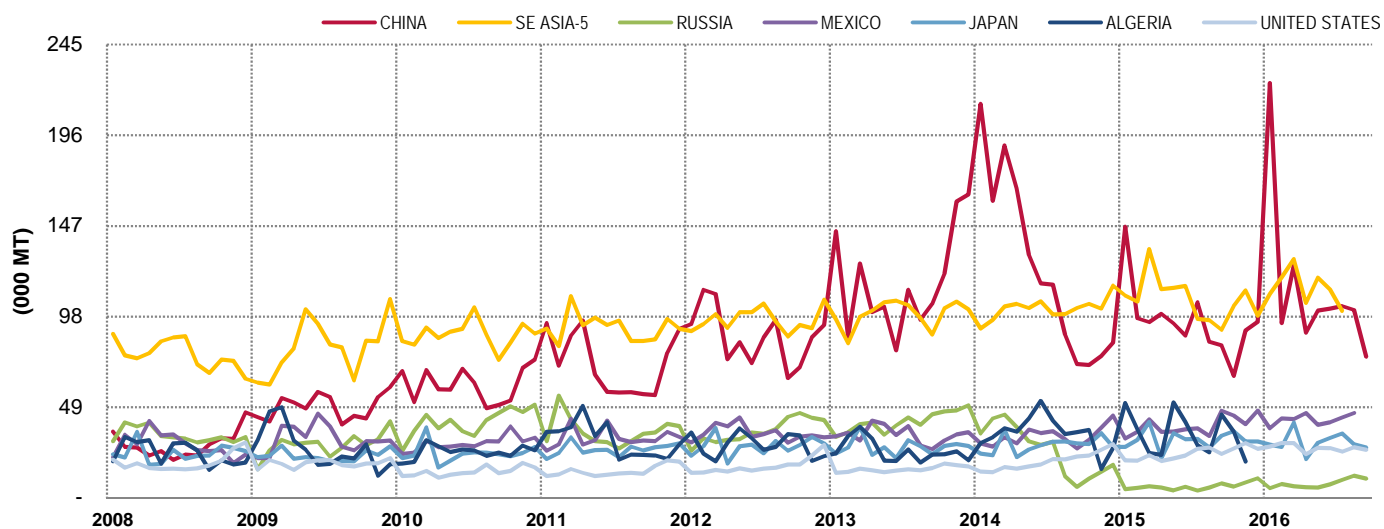
(VOLUME, MT)

	LATEST MONTH	Prev Yr	Latest Mo	% CHG
China	Sep 16	8,116	6,620	-18
NZ	Sep 16	7,557	5,980	-21
Japan	Sep 16	5,763	6,308	+9

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
China	Sep	68,908	66,175	-4
NZ	Sep	54,956	53,582	-3
Japan	Sep	51,346	55,092	+7

AGGREGATE IMPORT VOLUME - MAJOR BUYERS

SMP, WMP, CHEESE, BUTTERFAT, WHEY



SE Asia-5 includes Indonesia, Malaysia, Philippines, Singapore and Thailand. Russia excludes imports from Belarus.

Source: Global Trade Atlas and USDA.

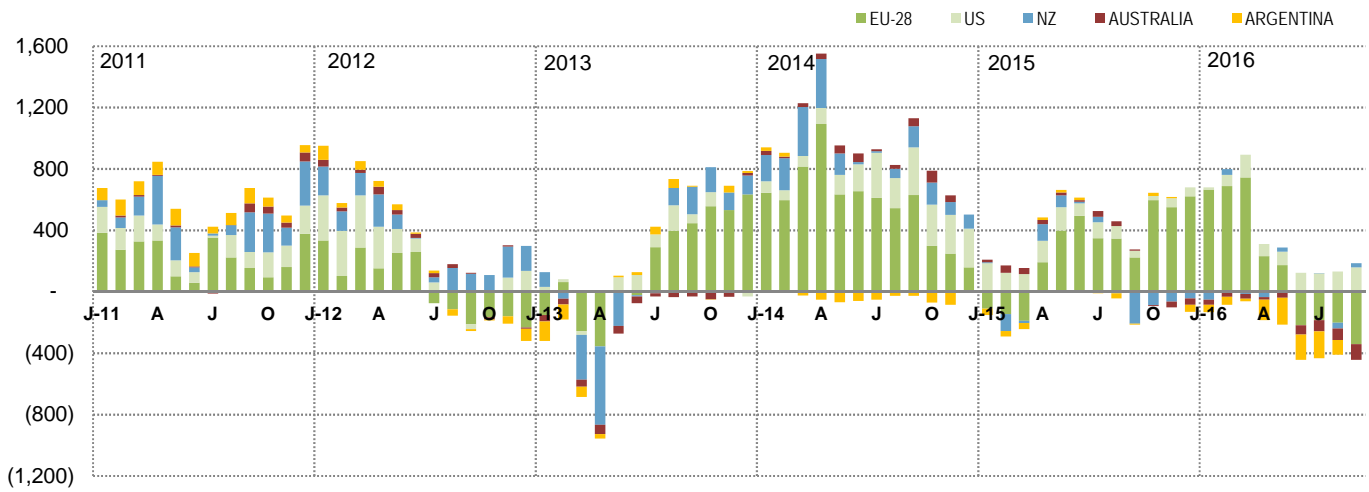
ACCESS TRADE DATA ONLINE

Visit usdec.org/research-and-data/market-data/trade-flows

Global Milk Production

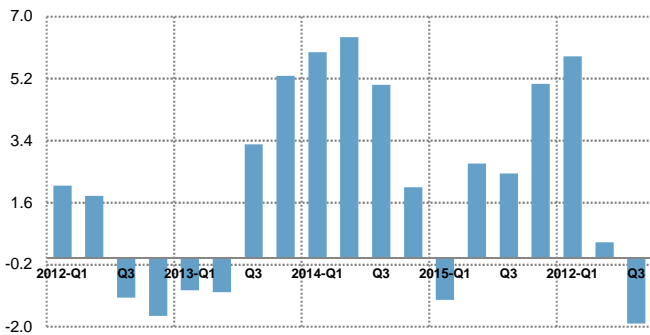
MILK PRODUCTION - CHANGE FROM PRIOR YEAR

(000 MT)

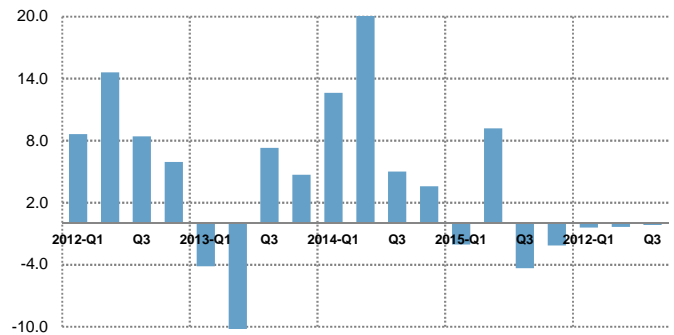


* Feb 2012 and 2016 adjusted for leap day.

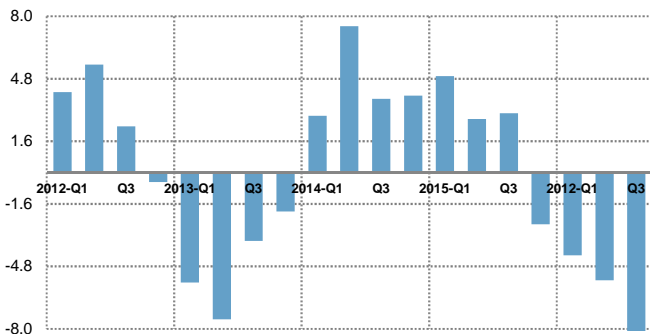
EUROPEAN UNION MILK DELIVERIES (% CHG VS. PRIOR YEAR)



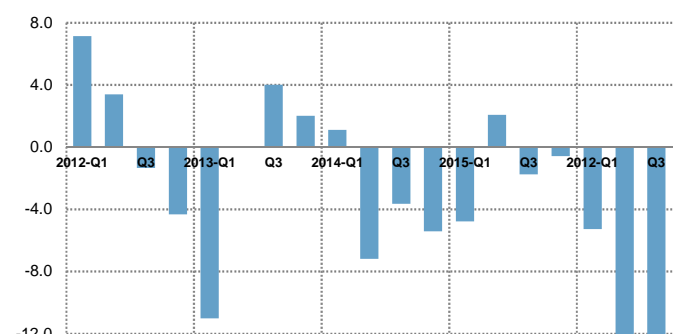
NEW ZEALAND MILK PRODUCTION (% CHG VS. PRIOR YEAR)



AUSTRALIA MILK PRODUCTION (% CHG VS. PRIOR YEAR)



ARGENTINA MILK DELIVERIES (% CHG VS. PRIOR YEAR)



ACCESS MILK PRODUCTION DATA ONLINE

Visit usdec.org/research-and-data/market-data/milk-production

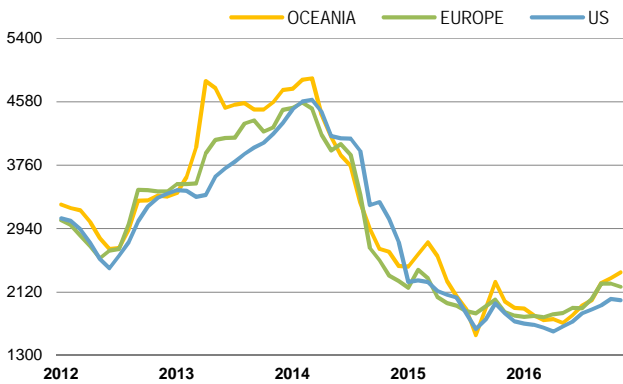
Q1-2012 and Q1-2016 adjusted for leap day.

Latest month may include USDEC estimates.

Source: USDA, EuroStat, DairyAustralia, DCANZ, Argentina Ministry of Agriculture.

World Prices

SMP PRICES (\$/MT)



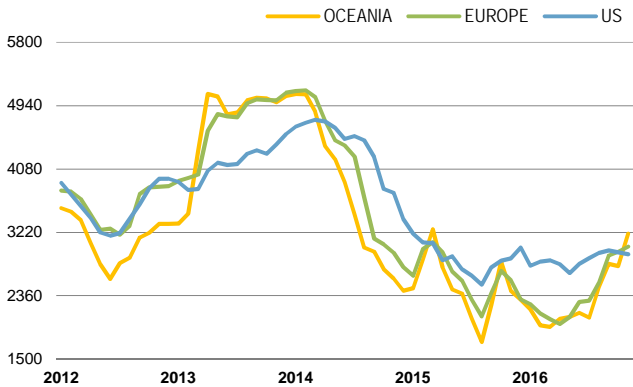
Prices vs. a year ago

	Oceania	Europe	U.S.
SMP	+19%	+17%	+9%
WMP	+32%	+18%	+2%
Cheddar	+11%	+24%	+7%
Butter	+44%	+47%	-32%
Whey	+7%	+15%	+55%

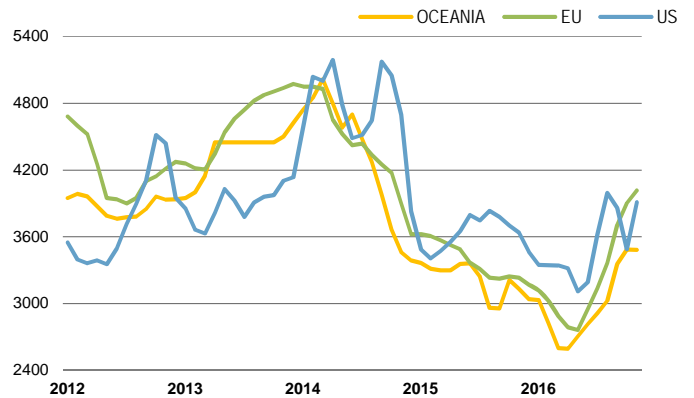
ACCESS PRICING DATA ONLINE

Visit usdec.org/research-and-data/market-data/prices

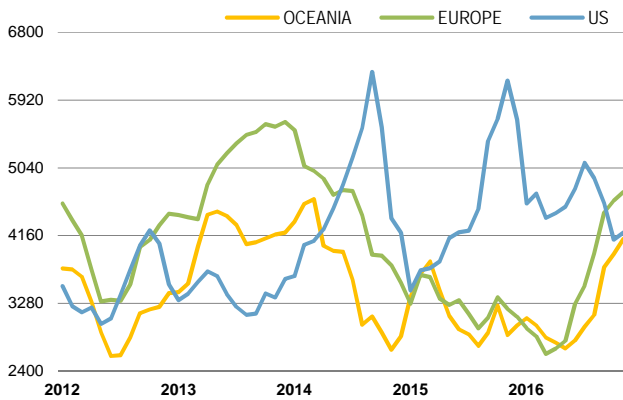
WMP PRICES (\$/MT)



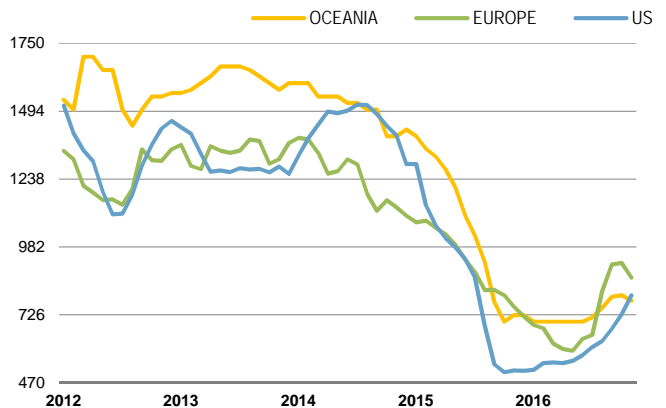
CHEDDAR PRICES (\$/MT)



BUTTER PRICES (\$/MT)



DRY WHEY PRICES (\$/MT)

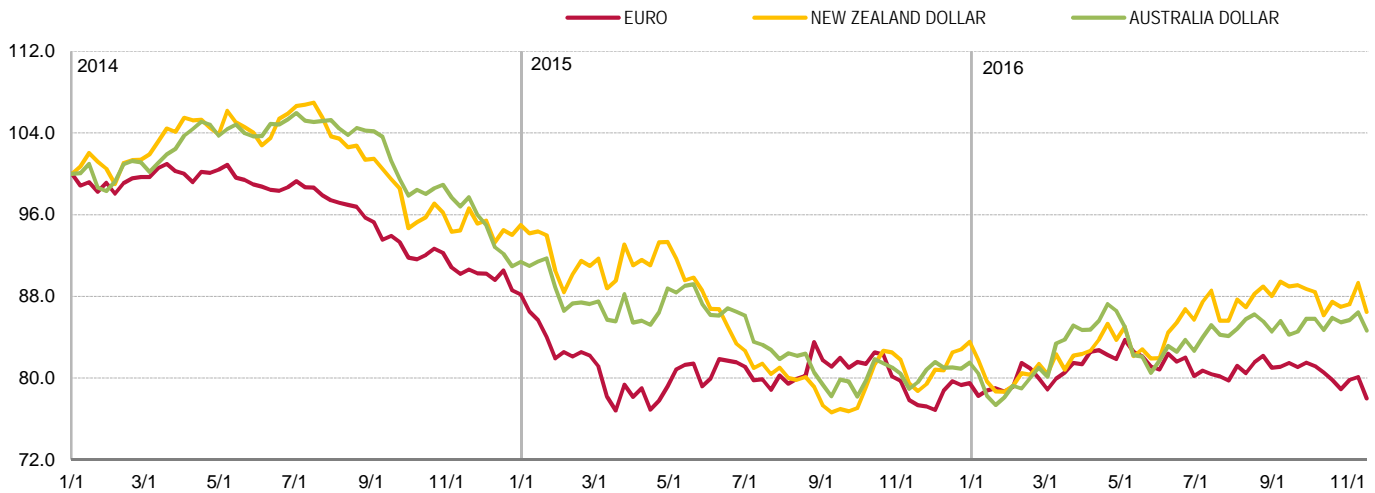


Source: USDEC and commercial sources.

Currency Exchange Rates

EXCHANGE RATES RELATIVE TO U.S. DOLLAR, EXPORTING COUNTRIES

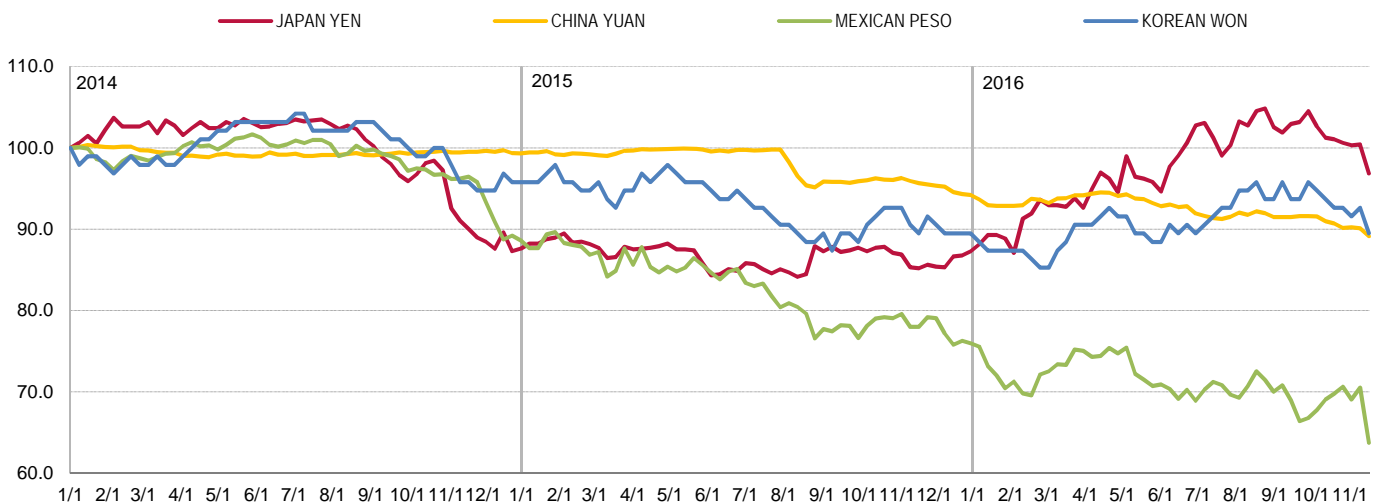
INDEXED TO JAN. 1, 2014



Top chart: If line is trending up, currency is strengthening vs. U.S. dollar (U.S. dollar is weakening). This is favorable for U.S. competitiveness. If line is trending down, currency is weakening vs. U.S. dollar (U.S. dollar is strengthening). This is unfavorable for U.S. competitiveness.

EXCHANGE RATES RELATIVE TO U.S. DOLLAR, IMPORTING COUNTRIES

INDEXED TO JAN. 1, 2014



Bottom chart: If line is trending up, currency is strengthening vs. U.S. dollar (U.S. dollar is weakening). This is favorable for exports, because it increases import purchasing power. If line is trending down, currency is weakening vs. U.S. dollar (U.S. dollar is strengthening). This is unfavorable for exports, because it decreases import purchasing power.

Source: Oanda.com.

U.S. Exports

Milk powder, whey products highlight trade data

U.S. dairy exporters shipped 155,885 tons of milk powders, cheese, butterfat, whey and lactose in September, topping year-ago levels for the fourth straight month. Exporters continued to post gains in shipments of milk powder and whey products. Overall export value was \$392.2 million in September, down 2 percent from a year ago, but the highest figure of the year (on a daily-average basis).

Milk powder exports were up 6 percent from last year. Official USDA data continues to show a spike in WMP exports to Mexico. However, Mexican import data and trade sources don't corroborate this, and we believe this volume represents SMP sales that were misclassified at the port. Therefore, we've adjusted NDM/SMP and WMP trade data for April-September to account for this misclassification.

Adjusted total NDM/SMP exports in September were 51,847 tons. Exporters shipped less to Mexico than the prior year, but more to Southeast Asia. During the third quarter, SMP exports to Southeast Asia were up 49 percent, with increased sales to Indonesia, the Philippines, Malaysia and Vietnam. Meanwhile, adjusted WMP exports in September were down 56 percent from a year ago.

Whey exports were 41,938 tons, less than recent months, but still well-above a year ago (+22 percent). Sales volume to China, our largest market, was the lowest in five months, but still topped year-ago levels. Shipments of whey protein concentrate (WPC) remained on a record pace; in the first nine months

of the year exports were up 19 percent from 2015 levels. In September, total whey exports to Southeast Asia were up 86 percent, led by the largest volume of WPC to Southeast Asia in four years.

Cheese exports were 22,046 tons, down 1 percent from last September. Volumes have been fairly steady for the last 15 months, between 21,000 tons and 25,000 tons almost every month. September sales to the Middle East/North Africa region were just 959 tons, the lowest since January 2010. Sales to Japan continued to lag as well, with third-quarter volume down 24 percent from a year ago. In contrast, September cheese exports to South Korea were up 19 percent, year-over-year.

U.S. butterfat exports were 1,642 tons, a six-month high and more than double year-ago levels, but still just a fraction of 2013 volume.

Among other products, fluid milk exports were up 28 percent, lactose exports were down 11 percent, food preps (blends) were up 2 percent and MPC was down 29 percent compared with a year ago.

On a total milk solids basis, U.S. exports were equivalent to 14.7 percent of U.S. milk production in September, bringing the year-to-date proportion to 13.9 percent. Imports were equivalent to 3.7 percent of production, the lowest since April.

U.S. Exports

	LATEST MONTH		SEPTEMBER (VOLUME, MT)			YEAR-TO-DATE		JANUARY-SEPTEMBER (VOLUME, MT)	
	2014	2015	2016	% CHG		2014	2015	2016	% CHG
NDM/SMP*	32,136	47,340	51,847	+10	NDM/SMP*	430,076	419,485	440,862	+5
WMP*	3,196	2,974	1,299	-56	WMP*	38,175	39,744	33,691	-15
Cheese	27,717	22,190	22,046	-1	Cheese	290,051	245,855	208,675	-15
Butterfat	2,344	692	1,642	+137	Butterfat	62,354	17,703	16,547	-7
Total Whey	35,267	34,353	41,938	+22	Total Whey	374,521	342,182	363,284	+6
-Dry whey	16,588	11,206	15,217	+36	-Dry whey	177,263	142,377	135,885	-5
-WPC	15,609	21,168	24,318	+15	-WPC	177,064	170,828	202,935	+19
-WPI	3,069	1,980	2,403	+21	-WPI	20,195	28,978	24,464	-16
Lactose	29,014	33,568	29,857	-11	Lactose	255,194	272,799	267,427	-2
MPC	2,072	2,641	1,876	-29	MPC	39,621	23,717	15,750	-34
Food preps (blends)	5,153	5,296	5,381	+2	Food preps (blends)	49,055	46,710	48,506	+4
Aggregate volume**	136,899	149,054	155,885	+5	Aggregate volume**	1,539,046	1,408,196	1,394,741	-1
Fluid milk (000 liters)	6,919	6,882	8,821	+28	Fluid milk (000 liters)	67,641	67,629	66,111	-2
Total Value (millions) **	\$ 484.6	\$ 398.6	\$ 392.2	-2	Total Value (millions) **	\$ 5,608.9	\$ 4,070.2	\$ 3,406.0	-16

* USDA data for NDM/SMP and WMP adjusted to reflect shipments to Mexico misclassified as WMP.

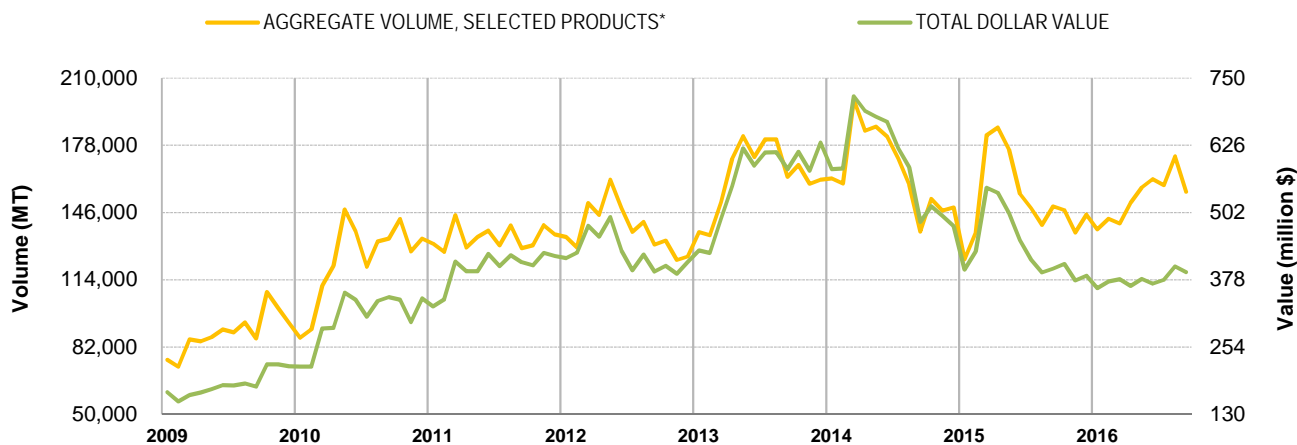
** Aggregate volume includes the products listed above, except fluid milk. Total value includes other products in addition to the ones listed here.

Source: USDA, USDEC.

U.S. Exports

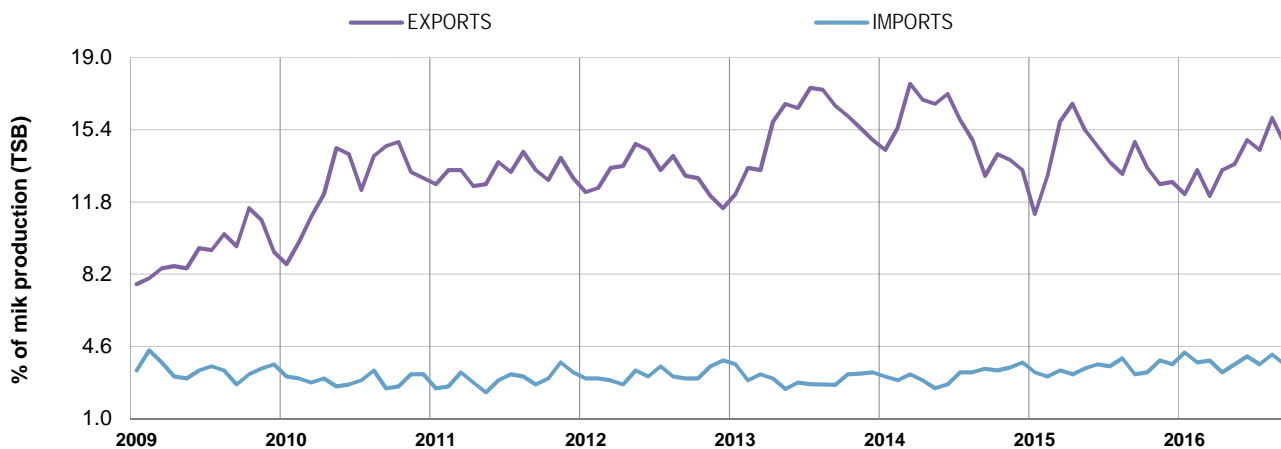
U.S. EXPORTS

VOLUME AND VALUE



* Volume includes SMP, WMP, food preps, MPC, whey, cheese, butterfat, lactose

U.S. EXPORTS AND IMPORTS AS A PERCENT OF MILK PRODUCTION



U.S. DAIRY EXPORTS, TOP 10 MARKETS

(million \$)	Sep 16	vs. yr ago
Mexico	\$ 100.7	-11%
Southeast Asia	58.8	+7%
Canada	54.7	+15%
China	28.5	-10%
South America	22.7	-2%
So. Korea	20.6	+21%
Caribbean	18.6	+19%
Middle East/North Africa	15.6	+16%
Oceania	15.6	-20%
Japan	15.4	-19%

U.S. EXPORTS AS % OF PRODUCTION

	September	yr ago	Jan-Sep 16	yr ago
NDM/SMP	70%	71%	56%	53%
Total cheese	5.0%	5.1%	5.1%	6.2%
Butterfat	2.7%	1.1%	2.5%	2.8%
Dry sweet whey	45%	31%	42%	43%
Lactose	72%	87%	72%	76%
Total milk solids	14.7%	14.8%	13.9%	14.3%

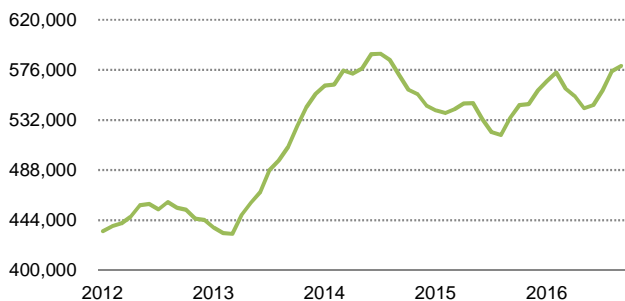
ACCESS U.S. EXPORT DATA ONLINE

Visit usdec.org/research-and-data/market-data/us-export-data

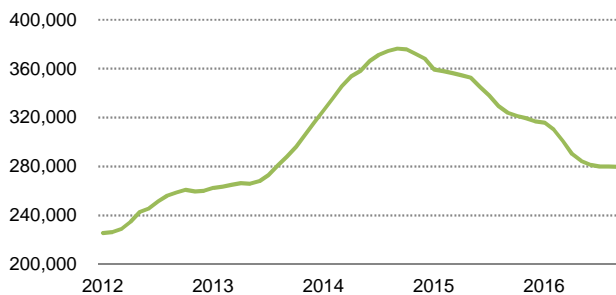
Source: USDA, USDEC, National Milk Producers Federation.

U.S. Exports: Rolling 12-Month Volume

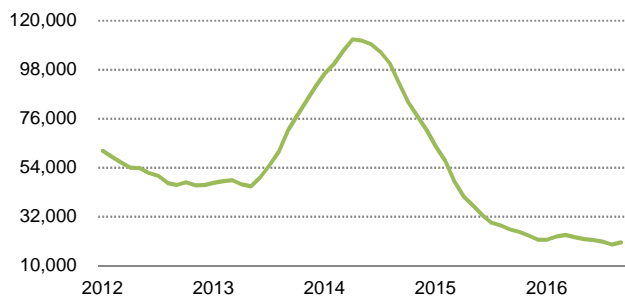
U.S. NDM/SMP EXPORTS (MT)



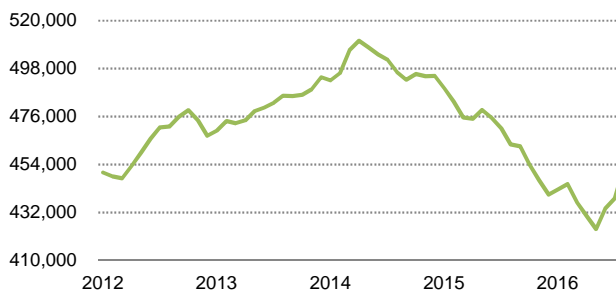
U.S. CHEESE EXPORTS (MT)



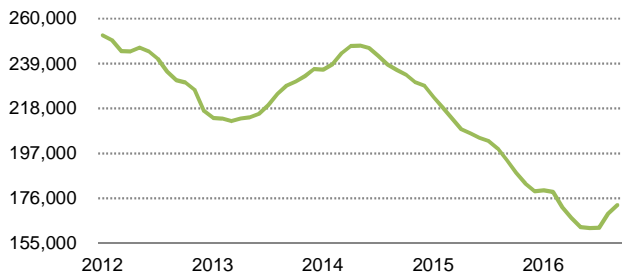
U.S. BUTTERFAT EXPORTS (MT)



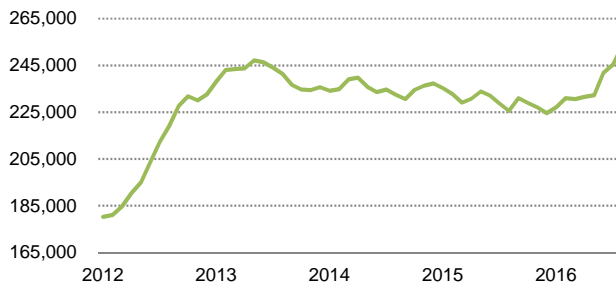
U.S. TOTAL WHEY EXPORTS (MT)



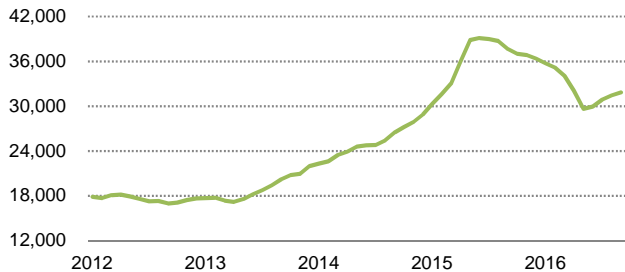
U.S. DRY WHEY EXPORTS (MT)



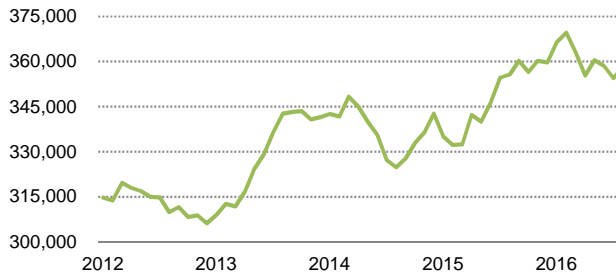
U.S. WPC EXPORTS (MT)



U.S. WPI EXPORTS (MT)



U.S. LACTOSE EXPORTS (MT)



Source: USDA, USDEC.

U.S. Market Situation

Strong demand buoying U.S. markets

The U.S. dairy markets softened in the third quarter, but have rallied in the fourth quarter on a strong seasonal pull for cheese and butter.

On Nov. 15, the benchmark CME block price settled at \$4156/ton, up \$739 from a month earlier. Butter closed at \$4365, up \$430 in the last month.

In the first three quarters of the year, domestic consumption of cheese and butter was up 4 percent from a year ago. Stocks are historically large, but brisk demand has justified the size of the inventory.

Total commercial cheese stocks on Sept. 30 were 562,000 tons, a record high and 16 percent greater than the five-year average for the month. Butter inventories also were an all-time high: 122,000 tons, 46 percent more than the five-year average.

Stocks are likely to continue to grow. Mild weather and improved margins have driven milk production higher. Production was up 2.1 percent in September, the largest year-over-year gain since January 2015. Cow numbers totaled 9.34 in August, up 31,000 head since January, and the most since the mid-1990s. USDA expects

expansion to continue; the ag department projects U.S. milk production to increase another 2.1 percent in 2017, following a 1.9 percent gain in 2016.

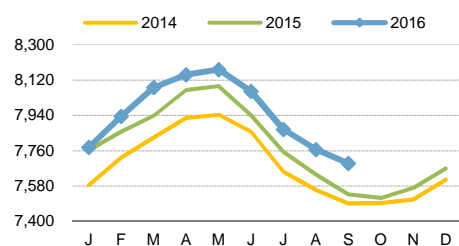
The NDM/SMP market is steady, with prices ranging between \$1940 and \$2040/ton. Production volume in the third quarter was up 6 percent year-over-year. Inventories are the most ever for end of third quarter, up 35 percent from the 5-year average. U.S. prices remain below international prices, helping sustain U.S. export powder volumes.

The whey market remains firm. Inventories of dry whey and whey protein concentrate (WPC) have declined significantly since mid-year. Dry whey prices are around \$750 to \$850/ton, up more than 60 percent in the last year. WPC-34 prices have been steady over the last month at \$1725/ton, but are up 47 percent since first of the year.

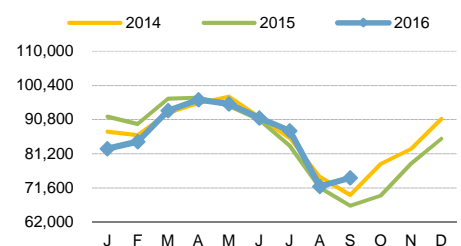
This year more than 60 percent of the whey stream has been turned into higher-protein products (WPC 50-90% and WPI), up from 50 percent five years ago. Production of WPIs is up 8 percent this year, and up 27 percent from two years ago.

Lactose prices continue to climb, approaching \$775/ton, up 81 percent since the first of the year.

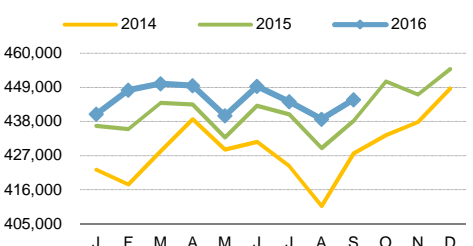
U.S. MILK PRODUCTION (000 MT; 30-DAY MOS.)



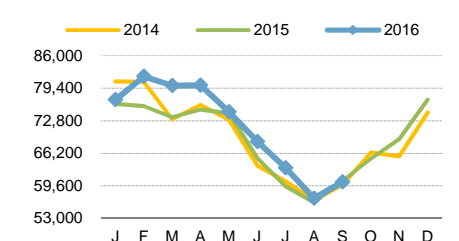
U.S. NDM/SMP PROD. (MT; 30-DAY MOS.)



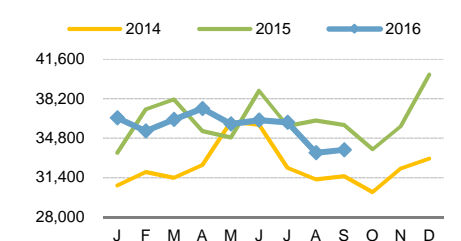
U.S. CHEESE PRODUCTION (MT; 30-DAY MOS.)



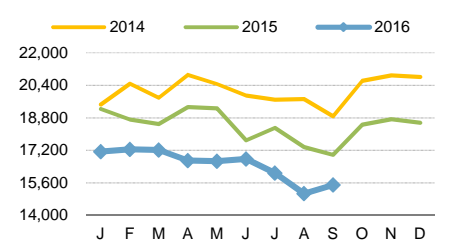
U.S. BUTTER PRODUCTION (MT; 30-DAY MOS.)



U.S. DRY WHEY PROD. (MT; 30-DAY MOS.)



U.S. WPC PRODUCTION (MT; 30-DAY MOS.)



Source: USDA, USDEC.