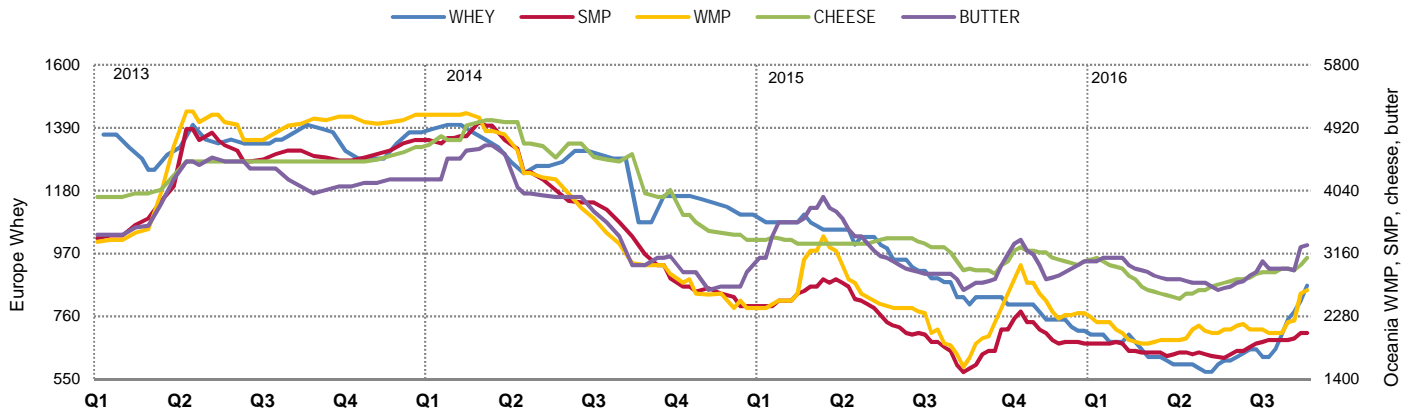


**2013-16 PRICE TREND - SMP, WMP, CHEESE, BUTTER, WHEY\***

(\$/MT)



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

Source: USDEC and commercial sources.

## Global markets see August rally

By Alan Levitt and Marc Beck

It's rare for international dairy markets to rally in August, with European traders on holiday and Oceania in its off season. But this year commodity prices (except skim milk powder) jumped 25-30 percent in a matter of weeks.

We still harbor caution, however. While the recovery is welcome, there's still a backlog of excess supply to work through and a number of factors could limit further price gains in the near- to medium-term. It's also noteworthy that market strength is not fully across-the-board; gains are driven around fat values, while the SMP price continues to lag.

The rebalancing of world supply and demand appears to be underway.

In Q2, milk production from the Top 5 suppliers was down 0.4 percent year-over-year, while exports from those same five suppliers were up about 2 percent, putting a dent in the surplus. We expect this trend to continue through H2 and into 2017.

The main driver is a slowdown in supply growth from the European Union. EU milk production was up 6 percent in in Q1, but growth slowed in April and May. In June, it was down 1.9 percent. Similar losses are reported for July. Coupled with declines in Australia and Argentina and flat output in New Zealand, production from the Top 5 suppliers was down 1.6 percent in June. Stated another way, in June, year-over-year milk production from the Top 5 was down 364,000 tons; in the April 2015-March 2016 period production was up 585,000 tons per month.

We expect production to remain negative for the balance of 2016 – down about 0.5 percent from the Top 5 suppliers. While both the details and efficacy of the EU's voluntary supply-management program remain unclear, in Q4 it may contribute to ongoing contraction there. In addition, growth on top of last year's 4-percent gain in the EU in H2 will be very difficult. In H2-15, Irish and Dutch milk production was up 20 percent and 12 percent, respectively – rates that will not be repeated.

**AUGUST INDICATIVE PRICES - USDEC sources**  
\$/MT, FOB SHIP (with change from July)

	EUROPE		OCEANIA	
SMP	2016	(+103)	2006	(+63)
WMP	2481	(+188)	2419	(+356)
Cheddar	3325	(+188)	2944	(+81)
Butter	3856	(+350)	3100	(+125)
Butteroil	4288	(+356)	3463	(+138)
Dry whey	800	(+150)	750	(+33)
WPC-34%	1825	(+138)	1600	(+50)
Lactose	838	(+38)	650	(+25)

Source: USDEC.

**Continued on p. 2**

From p. 1

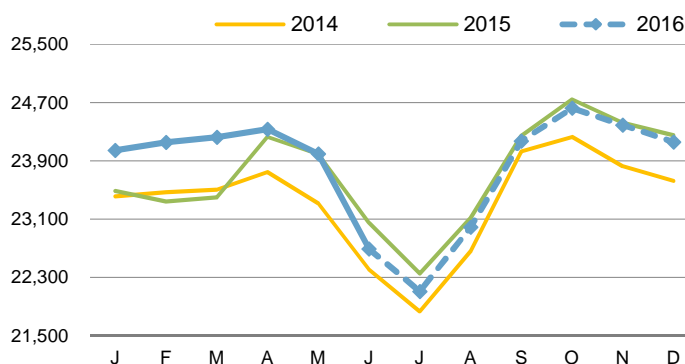
Nearly 12,000 miles away, New Zealand is coming into its flush season with pastures in good condition. New Zealand is highly dependent on spring weather; so far they're expected to see a small decline at worst, perhaps a small gain at best. Australia and Argentina are down sharply and though they are smaller players on the world market it leaves less for export supply. The United States is the only region still growing, but a resiliently strong domestic market will continue to constrain volumes sold overseas.

In the face of declining milk supplies, buyers have stepped up with more urgency to get ahead of continued price increases. China purchasing has improved. Lower milk production in China has reinvigorated the need for imports. Imports (milk equivalent) were up about 18 percent in the first seven months of the year vs. 2015 levels. However, China imports are still off about one-fourth from 2014 peak volumes. Meanwhile, demand from other regions is uneven, and it remains to be seen how sustainable this buying surge is.

Prices could move a bit higher through the end of the year. Sellers are asking for (and in most cases, receiving) premiums for future shipments. Negotiations for Q4 are ongoing, but coming along slowly, as offers and bids are relatively far apart due to supply uncertainty. Whey supply is very tight, particularly for feed, bringing up the entire whey complex. In Europe, cheese and butter stocks have tightened. Price movements will drive some shift in product mix. The large price premium of WMP vs. SMP will likely redirect milk away from SMP, which could squeeze current SMP supplies and support price increases. In addition, EU processors are pushing more milk into the cheese vat at the expense of butter/powder.

That said, we believe the price upside is limited. Several headwinds are still in play:

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. July-December 2016 are USDEC forecasts.

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

- Commodity and oil prices are still relatively low. Corn futures are flirting with 7-year lows, down more than \$1 in the last two months on projected record yields. Soybeans are a little stronger, but not much. That will give us cheap feed through next year's harvest. Oil rallied in the first half of August, with October futures moving from \$42 to \$51, before retreating again. But the outlook is tame, with 2017 futures still below \$54. Weak oil prices have contributed to the drag on dairy demand from key importing regions, especially the Middle East/North Africa.
- The strong U.S. dollar will limit commodity price increases, including dairy. It also will be a drag on import purchasing power.
- Economic growth in emerging markets remains erratic and uncertain.
- Russia and Venezuela, previously two of the world's largest importers, remain out of the picture. This lost demand isn't coming back in any significant way prior to 2018.

Continued on p. 3

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 late August 2016. For up-to-date market data and commentary, visit the USDEC website at [www.usdec.org/research-and-data/market-data](http://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.

From p. 2

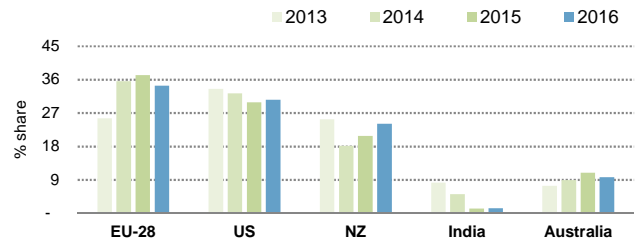
- There’s still more than 300,000 tons (and growing) of SMP in EU intervention stores hanging over the market. This represents more than half of annual EU SMP exports. While the EU will hold off releasing that product back onto the market as long as possible, it will continue to cast a long shadow on the global SMP market.

- Milk processors and co-ops in New Zealand and Europe are beginning to increase payout prices to farmers. Producers will ramp up quickly with the right price signals, and this would stall the needed supply contraction before it gets too much deeper.

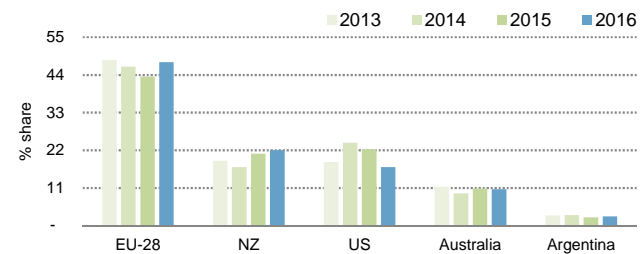
- Market psychology: bull markets need to be fed. There isn’t enough broad-based bullish news or fundamentals to support ongoing price gains. Most of the supply-contraction news is now already priced in. Therefore, we would expect prices to be fairly volatile in the year ahead.

We look for the world market to continue to recalibrate in 2017, with demand growth exceeding supply growth and eroding the overhanging surplus. The markets should be more balanced in 2017, but barring weather or other shocks, prices will remain at or below the 10-year average.

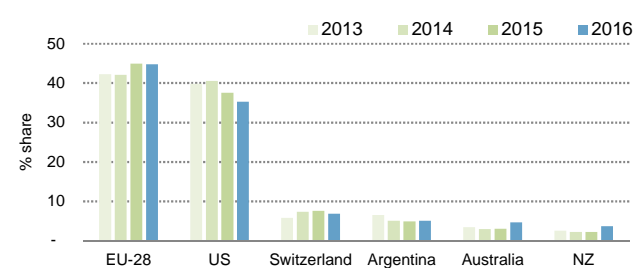
SMP/NDM EXPORTS - SHARE OF SELECTED 5 (JAN-JUN)



CHEESE EXPORTS - SHARE OF SELECTED 5 (JAN-JUN)

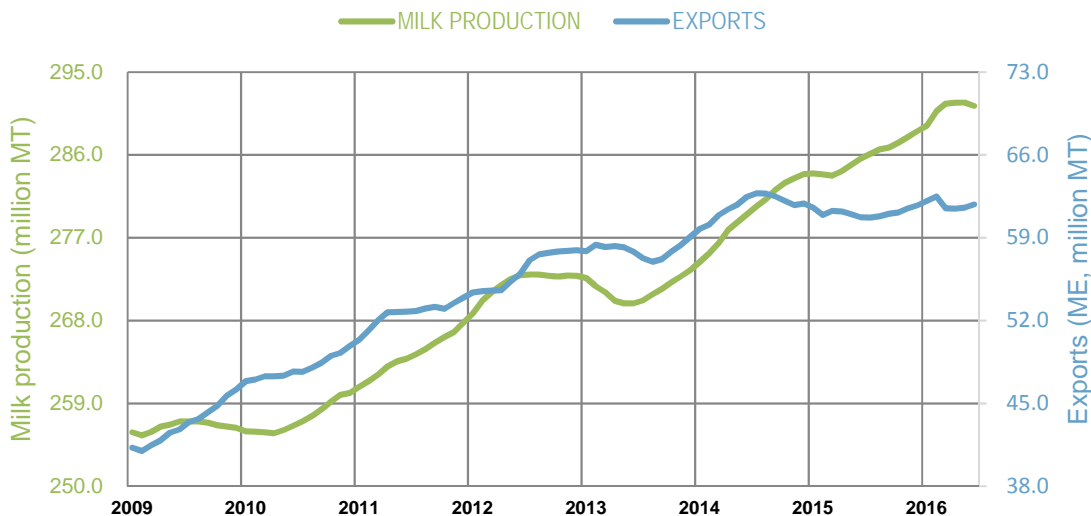


WHEY PRODUCTS EXPORTS - SHARE OF SELECTED 6 (JAN-JUN)



MILK PRODUCTION VS. EXPORTS (ME) FROM TOP 5 SUPPLIERS

ROLLING 12-MONTHS



**Exports from the Top 5 suppliers (shown here as a indicator of global trade) have stagnated since mid-2014. Milk production is only now starting to contract.**

Exports include SMP, WMP, cheese, butterfat and whey. Source: USDEC, Global Trade Atlas, USDA, EuroStat, DairyAustralia, DCANZ, Argentina Min. of Ag.

## World Dairy Exports

### SMP EXPORTS

	LATEST MONTH		JUNE (VOLUME, MT)			YEAR-TO-DATE		JANUARY-JUNE (VOLUME, MT)		
	2014	2015	2016	% CHG		2014	2015	2016	% CHG	
EU-28	56,362	54,362	41,281	-24	EU-28	330,868	359,397	310,214	-14	
U.S.	60,939	46,703	49,459	+6	U.S.	300,729	288,876	276,112	-4	
NZ	27,161	19,897	33,702	+69	NZ	168,921	200,975	217,343	+8	
Australia	15,024	21,596	9,369	-57	Australia	82,818	105,780	87,381	-17	
India	3,316	1,429	2,000	+40	India	47,675	12,029	12,535	+4	
<b>TOTAL OF 5</b>	<b>162,802</b>	<b>143,987</b>	<b>135,811</b>	<b>-6</b>	<b>TOTAL OF 5</b>	<b>931,011</b>	<b>967,057</b>	<b>903,585</b>	<b>-7</b>	

### WMP EXPORTS

	LATEST MONTH		JUNE (VOLUME, MT)			YEAR-TO-DATE		JANUARY-JUNE (VOLUME, MT)		
	2014	2015	2016	% CHG		2014	2015	2016	% CHG	
NZ	103,475	91,355	105,660	+16	NZ	759,726	700,948	677,633	-3	
EU-28	35,338	36,479	36,976	+1	EU-28	216,857	199,559	205,371	+3	
Argentina	8,912	10,028	5,884	-41	Argentina	70,601	62,990	56,359	-11	
Australia	7,144	7,274	4,424	-39	Australia	45,514	36,359	33,393	-8	
U.S.	5,223	2,856	2,421	-15	U.S.	30,140	21,262	13,915	-35	
<b>TOTAL OF 5</b>	<b>160,092</b>	<b>147,992</b>	<b>155,365</b>	<b>+5</b>	<b>TOTAL OF 5</b>	<b>1,122,838</b>	<b>1,021,118</b>	<b>986,671</b>	<b>-3</b>	

### CHEESE EXPORTS

	LATEST MONTH		JUNE (VOLUME, MT)			YEAR-TO-DATE		JANUARY-JUNE (VOLUME, MT)		
	2014	2015	2016	% CHG		2014	2015	2016	% CHG	
EU-28	63,923	62,201	69,512	+12	EU-28	382,518	343,134	392,115	+14	
NZ	22,091	20,997	28,279	+35	NZ	140,222	165,154	180,535	+9	
U.S.	33,819	26,119	23,041	-12	U.S.	198,839	175,493	139,950	-20	
Australia	15,679	17,467	18,922	+8	Australia	77,231	85,396	86,767	+2	
Argentina	4,137	3,694	3,589	-3	Argentina	24,882	18,911	22,261	+18	
<b>TOTAL OF 5</b>	<b>139,649</b>	<b>130,478</b>	<b>143,343</b>	<b>+10</b>	<b>TOTAL OF 5</b>	<b>823,692</b>	<b>788,088</b>	<b>821,628</b>	<b>+4</b>	

### BUTTERFAT EXPORTS

	LATEST MONTH		JUNE (VOLUME, MT)			YEAR-TO-DATE		JANUARY-JUNE (VOLUME, MT)		
	2014	2015	2016	% CHG		2014	2015	2016	% CHG	
NZ	37,981	29,949	37,493	+25	NZ	269,943	237,063	244,472	+3	
EU-28	10,948	16,583	17,829	+8	EU-28	71,564	91,054	122,535	+35	
Australia	3,729	5,425	5,301	-2	Australia	21,915	19,893	17,687	-11	
U.S.	5,893	1,470	992	-33	U.S.	51,164	12,851	12,705	-1	
Argentina	917	326	303	-7	Argentina	6,167	4,653	2,898	-38	
<b>TOTAL OF 5</b>	<b>59,468</b>	<b>53,753</b>	<b>61,918</b>	<b>+15</b>	<b>TOTAL OF 5</b>	<b>420,753</b>	<b>365,514</b>	<b>400,297</b>	<b>+10</b>	

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

Source: Global Trade Atlas and USDA.

# World Dairy Exports

## WHEY PRODUCTS EXPORTS

	LATEST MONTH		JUNE (VOLUME, MT)		% CHG
	2014	2015	2016		
EU-28	39,119	53,002	55,647		+5
U.S.	41,735	38,012	47,479		+25
Switzerland	7,647	7,946	6,843		-14
Argentina	4,279	5,642	5,168		-8
Australia	4,681	4,826	7,551		+56
NZ	2,963	1,572	4,183		+166
<b>TOTAL OF 6</b>	<b>100,424</b>	<b>111,000</b>	<b>126,871</b>		<b>+14</b>

	YEAR-TO-DATE		JANUARY-JUNE (VOLUME, MT)		% CHG
	2014	2015	2016		
EU-28	265,964	283,775	293,204		+3
U.S.	256,234	236,880	230,514		-3
Switzerland	46,168	47,719	44,262		-7
Argentina	31,595	30,771	32,625		+6
Australia	18,166	19,004	30,334		+60
NZ	13,889	13,428	23,807		+77
<b>TOTAL OF 6</b>	<b>632,016</b>	<b>631,577</b>	<b>654,746</b>		<b>+4</b>

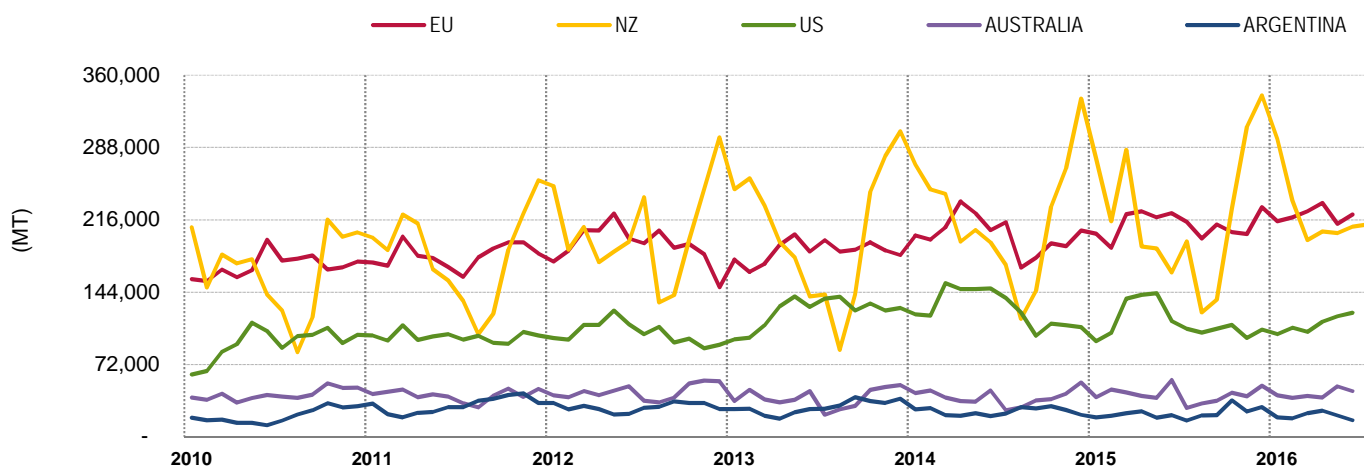
## LACTOSE EXPORTS

	LATEST MONTH		JUNE (VOLUME, MT)		% CHG
	2014	2015	2016		
U.S.	26,993	33,133	31,141		-6
EU-28	13,909	14,877	13,344		-10
NZ	1,811	2,722	2,226		-18
<b>TOTAL OF 3</b>	<b>42,713</b>	<b>50,732</b>	<b>46,711</b>		<b>-8</b>

	YEAR-TO-DATE		JANUARY-JUNE (VOLUME, MT)		% CHG
	2014	2015	2016		
U.S.	172,787	176,286	175,086		-1
EU-28	87,684	86,425	80,692		-7
NZ	9,503	10,145	11,336		+12
<b>TOTAL OF 3</b>	<b>269,974</b>	<b>272,856</b>	<b>267,114</b>		<b>-2</b>

## AGGREGATE EXPORT VOLUME - MAJOR SUPPLIERS

SMP, WMP, CHEESE, BUTTERFAT, WHEY



Source: Global Trade Atlas and USDA.

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Visit [usdec.org/research-and-data/market-data/trade-flows](http://usdec.org/research-and-data/market-data/trade-flows)

## World Dairy Imports

### SMP IMPORTS

(VOLUME, MT)

	LATEST MONTH	Prev Yr	Latest Mo	% CHG
China	Jul 16	17,873	13,067	-27
Mexico	May 16	18,158	21,009	+16
Malaysia	May 16	8,832	11,245	+27
Indonesia	May 16	14,225	10,162	-29
Algeria	Nov 15	5,673	6,515	+15
Philippines	Apr 16	9,971	14,270	+43

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
China	Jul	126,378	126,944	+0
Mexico	May	89,420	107,646	+20
Malaysia	May	65,713	54,636	-17
Indonesia	May	61,702	60,058	-3
Algeria	Jan-Nov 15	155,301	130,599	-16
Philippines	Apr	33,205	61,355	+85

### WMP IMPORTS

(VOLUME, MT)

	LATEST MONTH	Prev Yr	Latest Mo	% CHG
China	Jul 16	23,630	24,777	+5
Venezuela	Dec 15	3,915	-	-100
Algeria	Nov 15	7,839	9,859	+26
Singapore	Jun 16	5,804	6,437	+11
Hong Kong	Jun 16	6,131	6,116	-0

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
China	Jul	259,148	318,737	+23
Venezuela	Jan-Dec 15	142,864	57,345	-60
Algeria	Jan-Nov 15	192,038	209,717	+9
Singapore	Jun	36,363	34,461	-5
Hong Kong	Jun	39,080	41,340	+6

### CHEESE IMPORTS

(VOLUME, MT)

	LATEST MONTH	Prev Yr	Latest Mo	% CHG
Japan	Jun 16	20,809	19,492	-6
U.S.	Jun 16	15,877	15,338	-3
Mexico	May 16	10,803	10,750	-0
So. Korea	Jul 16	10,257	10,810	+5
Russia	Jun 16	4,074	1,927	-53

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
Japan	Jun	124,701	126,414	+1
U.S.	Jun	85,758	99,803	+16
Mexico	May	51,558	53,190	+3
So. Korea	Jul	66,806	63,857	-4
Russia	Jun	18,395	13,718	-25

### BUTTERFAT IMPORTS

(VOLUME, MT)

	LATEST MONTH	Prev Yr	Latest Mo	% CHG
China	Jul 16	5,993	8,004	+34
Iran	Jul 16	4,369	6,235	+43
Mexico	May 16	2,298	3,025	+32
Morocco	Apr 16	2,586	1,895	-27
Russia	Jun 16	1,612	1,038	-36

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
China	Jul	38,761	52,178	+35
Iran	Jul	27,975	23,836	-15
Mexico	May	17,353	20,578	+19
Morocco	Apr	8,936	7,057	-21
Russia	Jun	8,647	8,355	-3

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	Jul 16	50,825	47,543	-6
Indonesia	May 16	8,711	9,820	+13
Mexico	May 16	3,566	4,307	+21
Thailand	Jun 16	5,379	4,252	-21
Japan	Jun 16	3,863	5,870	+52

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
China	Jul	257,747	287,548	+12
Indonesia	May	48,591	45,554	-6
Mexico	May	20,419	18,618	-9
Thailand	Jun	29,999	30,260	+1
Japan	Jun	28,401	32,227	+13

## LACTOSE IMPORTS

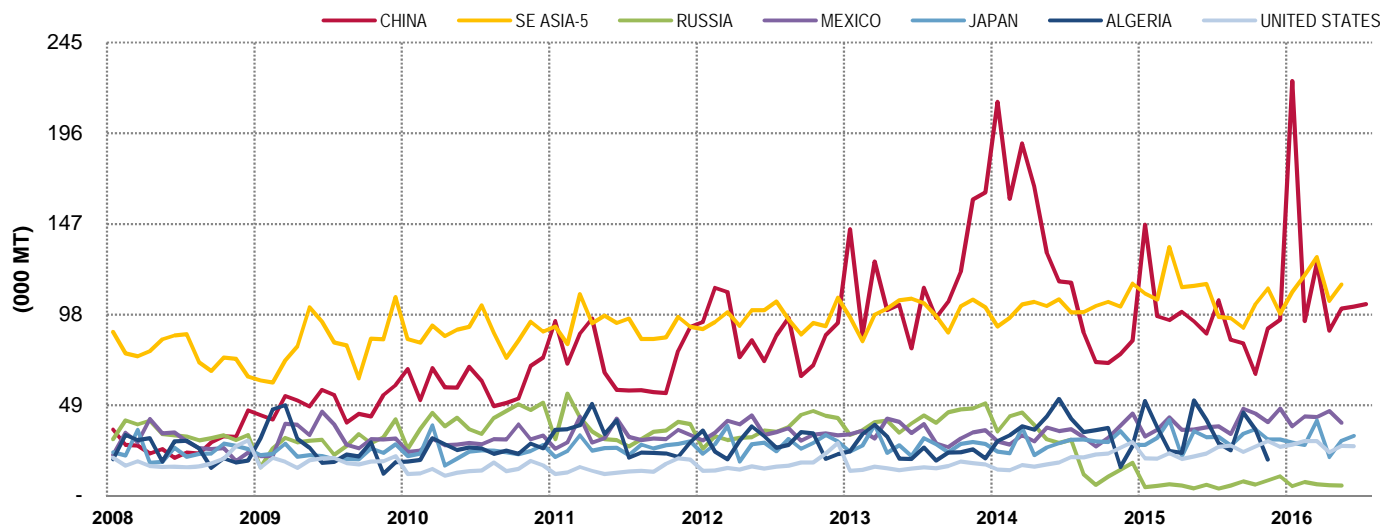
(VOLUME, MT)

	LATEST MONTH	Prev Yr	Latest Mo	% CHG
China	Jul 16	9,866	6,914	-30
NZ	Jul 16	4,049	4,272	+6
Japan	Jun 16	4,948	6,472	+31

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
China	Jul	54,533	52,366	-4
NZ	Jul	41,609	42,976	+3
Japan	Jun	34,122	36,186	+6

## 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.

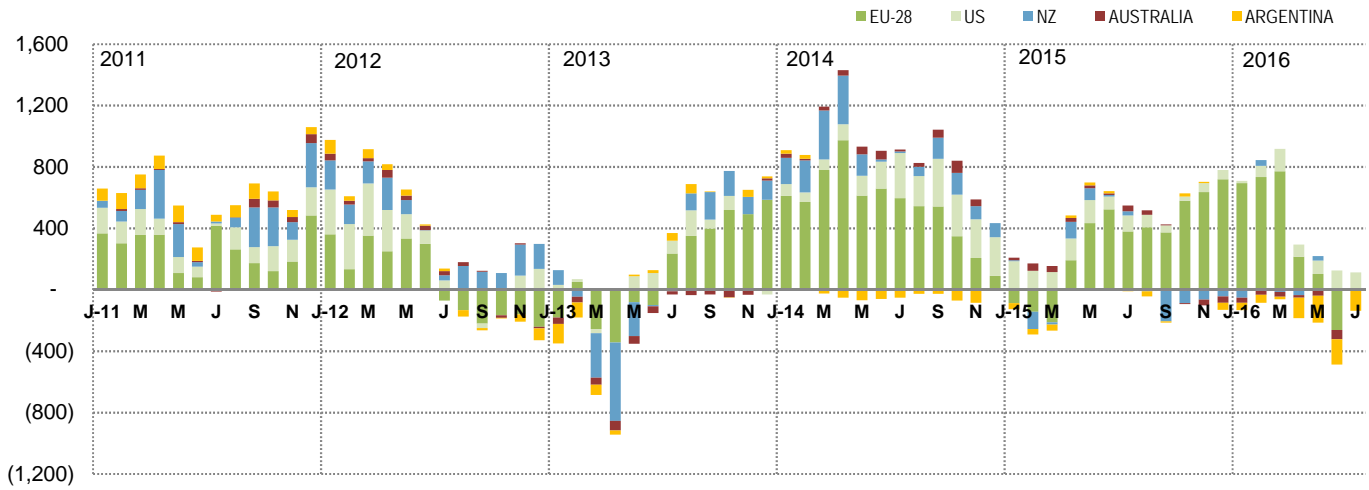
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# Global Milk Production

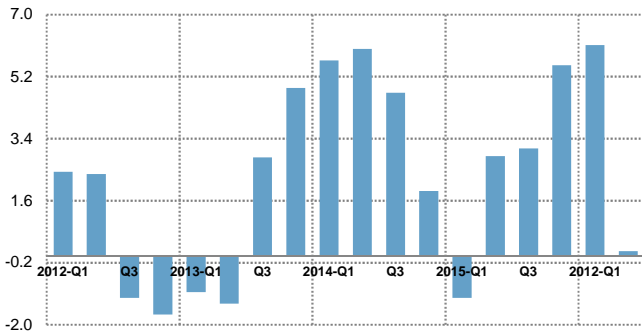
## MILK PRODUCTION - CHANGE FROM PRIOR YEAR

(000 MT)

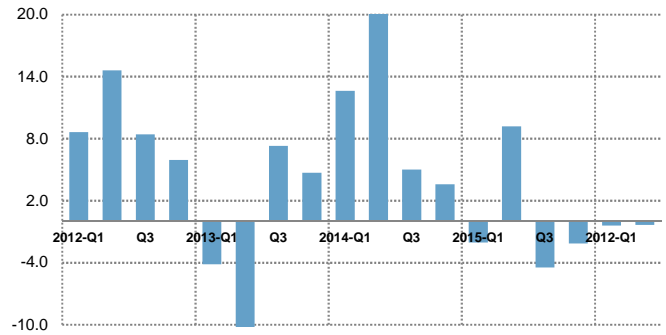


\* Feb 2012 and 2016 adjusted for leap day.

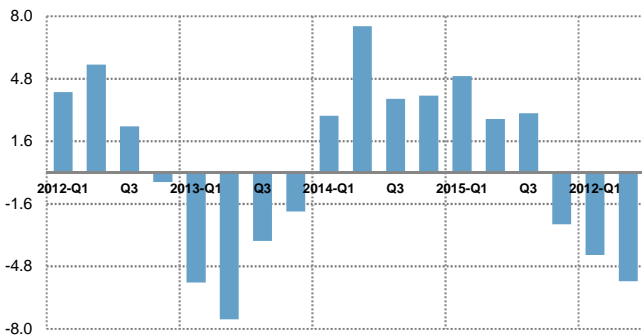
### EUROPEAN UNION MILK DELIVERIES (% CHG VS. PRIOR YEAR)



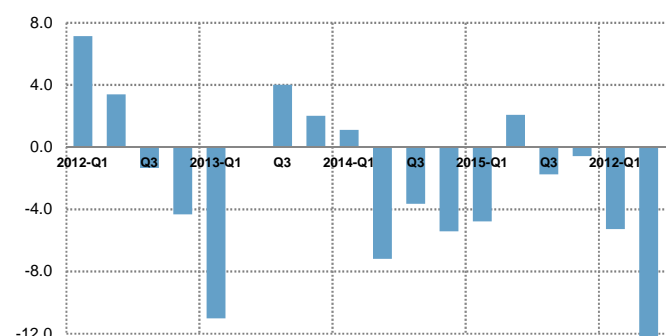
### NEW ZEALAND MILK PRODUCTION (% CHG VS. PRIOR YEAR)



### 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](http://usdec.org/research-and-data/market-data/milk-production)

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

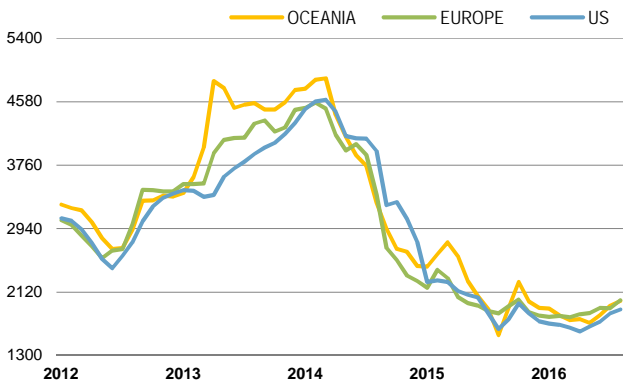
Latest month may include USDEC estimates.

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



# World Prices

**SMP PRICES** (\$/MT)



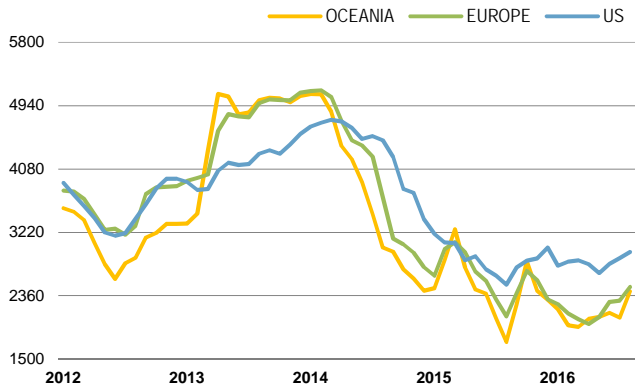
Prices vs. a year ago

	Oceania	Europe	U.S.
SMP	+28%	+9%	+15%
WMP	+40%	+19%	+18%
Cheddar	+1%	+3%	+4%
Butter	+14%	+30%	+9%
Whey	-19%	-2%	-9%

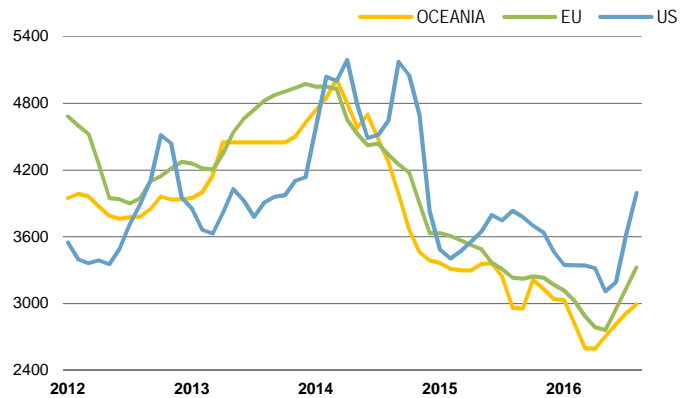
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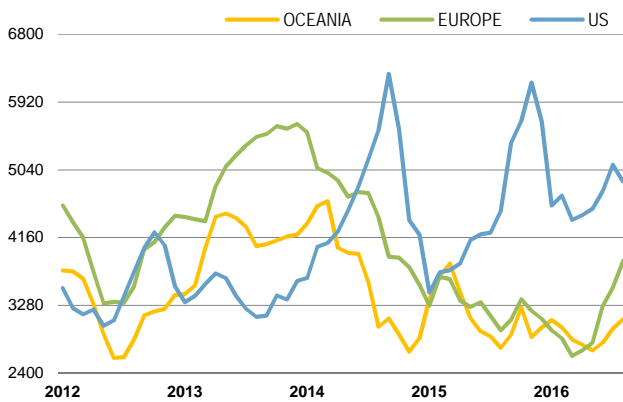
**WMP PRICES** (\$/MT)



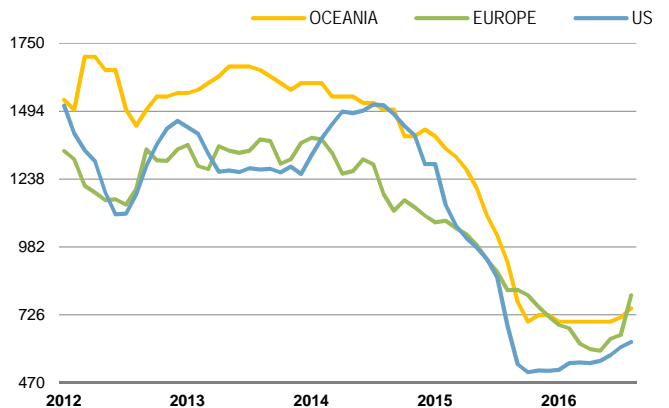
**CHEDDAR PRICES** (\$/MT)



**BUTTER PRICES** (\$/MT)



**DRY WHEY PRICES** (\$/MT)

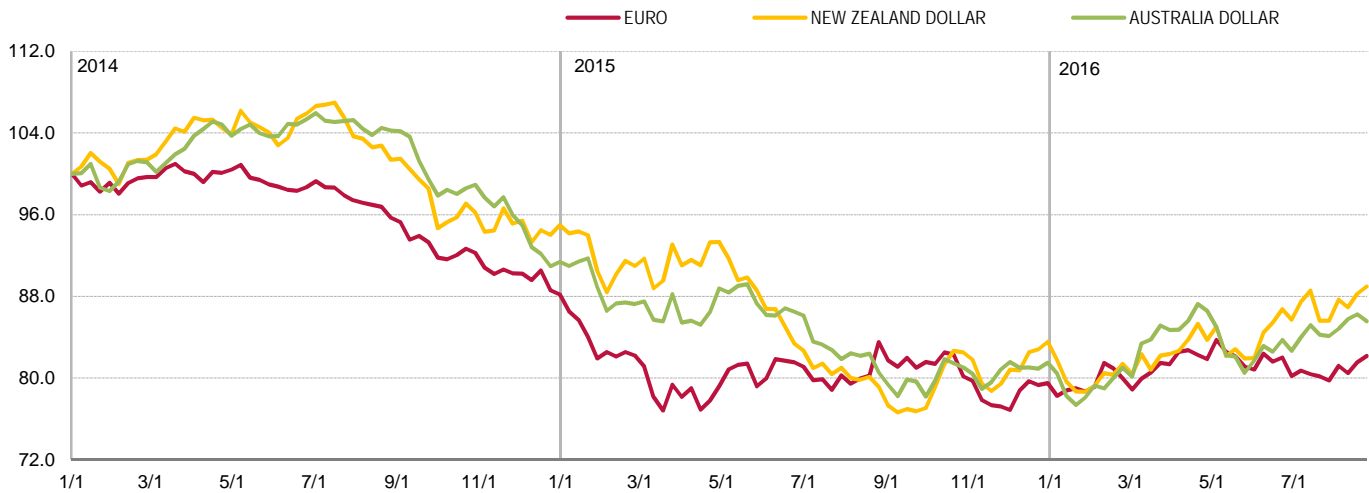


Source: USDEC and commercial sources.

# Currency Exchange Rates

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

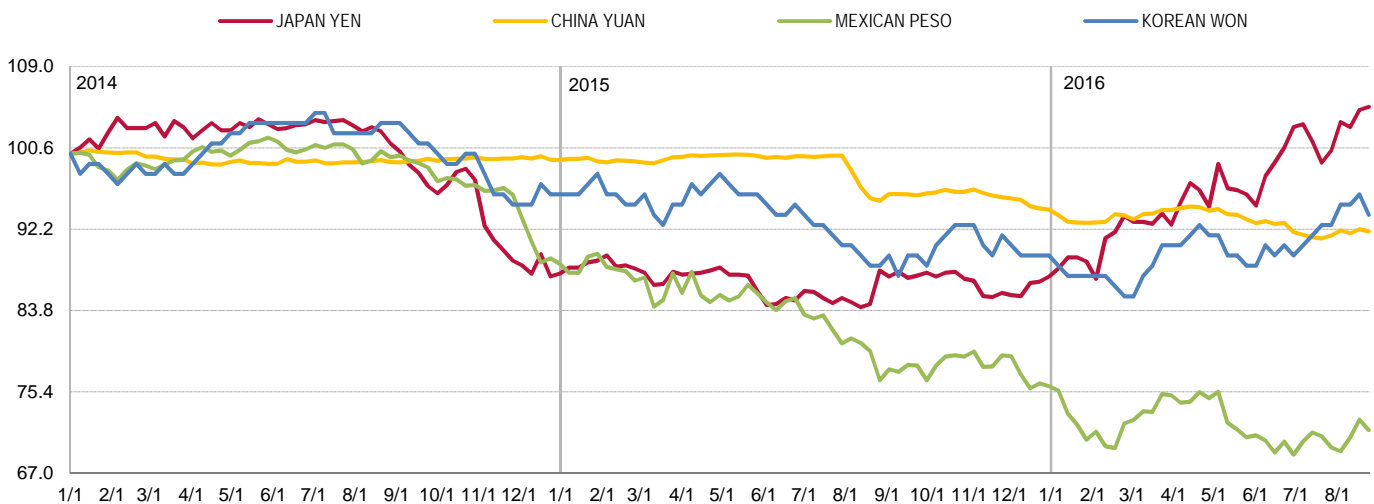
INDEXED TO JAN. 1, 2014



**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

# Overall volume up on record WPC exports

U.S. exporters shipped 161,882 tons of milk powders, cheese, butterfat, whey and lactose in June, up 5 percent from a year ago and the highest figure since May 2015. Gains were led by record shipments of whey protein concentrate, offsetting declines in all the other major categories.

Exporters shipped 27,926 tons of WPC in June, up 52 percent from a year ago. China bought a record 14,751 tons (+57 percent) and another 4,346 tons (+55 percent) went to Southeast Asia. Whey protein isolates also registered a double-digit gain against June 2015, up 13 percent, led by a boost in sales to Canada. Meanwhile, exports of dry whey were down 2 percent from last year. All told, total shipments of whey products were 47,479 tons, the most ever, and up 25 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-June to account for this misclassification.

Adjusted NDM/SMP exports in June were 49,459 tons, up 6 percent year-over-year. The bulk of sales went to Mexico, offsetting a decline in shipments to Southeast Asia. Meanwhile, adjusted WMP exports in June were down 15 percent from a year ago.

With U.S. cheese prices at a sizeable premium to the world market, cheese exports remained below year-earlier levels during June. Shipments totaled 23,041 tons, 12 percent less than last year and 32 percent below two years ago. Sales to South Korea and the Middle East/North Africa region were each off by more than a third.

Butterfat exports faced the same price-competitive pressure, with U.S. prices well above world market levels. Exports totaled just 992 tons, down 33 percent from June 2015.

Among other products, lactose exports were off 6 percent, fluid milk shipments were down 24 percent and food preps (blends) volume was up 26 percent compared with a year ago.

On a total milk solids basis, U.S. exports were equivalent to 14.9 percent of U.S. milk production in June, the highest since April 2015. Imports were equivalent to 4.1 percent of production.

### U.S. Exports

	LATEST MONTH				JUNE (VOLUME, MT)					YEAR-TO-DATE				JANUARY-JUNE (VOLUME, MT)			
	2014	2015	2016	% CHG	2014	2015	2016	% CHG		2014	2015	2016	% CHG	2014	2015	2016	% CHG
NDM/SMP*	60,939	46,703	49,459	+6	NDM/SMP*	300,729	288,876	276,112	-4								
WMP*	5,223	2,856	2,421	-15	WMP*	30,140	21,262	13,915	-35								
Cheese	33,819	26,119	23,041	-12	Cheese	198,839	175,493	139,950	-20								
Butterfat	5,893	1,470	992	-33	Butterfat	51,164	12,851	12,705	-1								
Total Whey	41,735	38,012	47,479	+25	Total Whey	256,234	236,880	230,514	-3								
-Dry whey	19,528	17,368	16,936	-2	-Dry whey	125,074	100,695	83,477	-17								
-WPC	20,164	18,324	27,926	+52	-WPC	118,891	113,665	130,956	+15								
-WPI	2,043	2,320	2,617	+13	-WPI	12,269	22,520	16,081	-29								
Lactose	26,993	33,133	31,141	-6	Lactose	172,787	176,286	175,086	-1								
MPC	3,049	2,106	1,689	-20	MPC	31,987	17,211	11,084	-36								
Food preps (blends)	4,578	4,488	5,660	+26	Food preps (blends)	33,892	31,458	33,057	+5								
<b>Aggregate volume*</b>	<b>182,230</b>	<b>154,887</b>	<b>161,882</b>	<b>+5</b>	<b>Aggregate volume*</b>	<b>1,075,772</b>	<b>960,317</b>	<b>892,422</b>	<b>-7</b>								
Fluid milk (000 liters)	7,034	7,694	5,849	-24	Fluid milk (000 liters)	46,226	45,943	42,104	-8								
<b>Total Value (millions) *</b>	<b>\$ 669.2</b>	<b>\$ 450.9</b>	<b>\$ 370.9</b>	<b>-18</b>	<b>Total Value (millions) *</b>	<b>\$ 3,918.8</b>	<b>\$ 2,864.7</b>	<b>\$ 2,233.4</b>	<b>-22</b>								

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

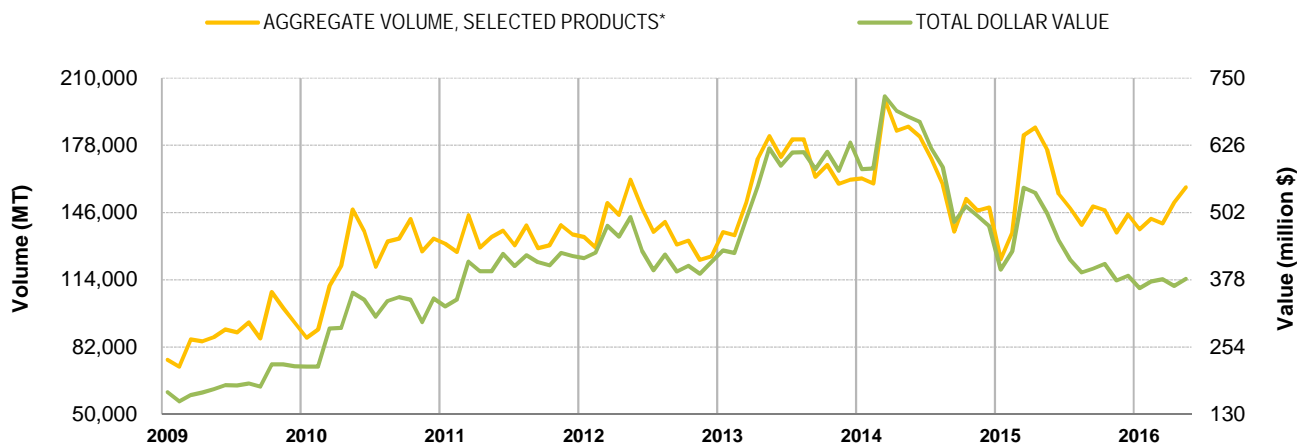
\*\* Aggregate volume includes the products listed above, except fluid milk. Total value includes other products in addition to the ones listed here.

Source: USDA, USDEC.

# U.S. Exports

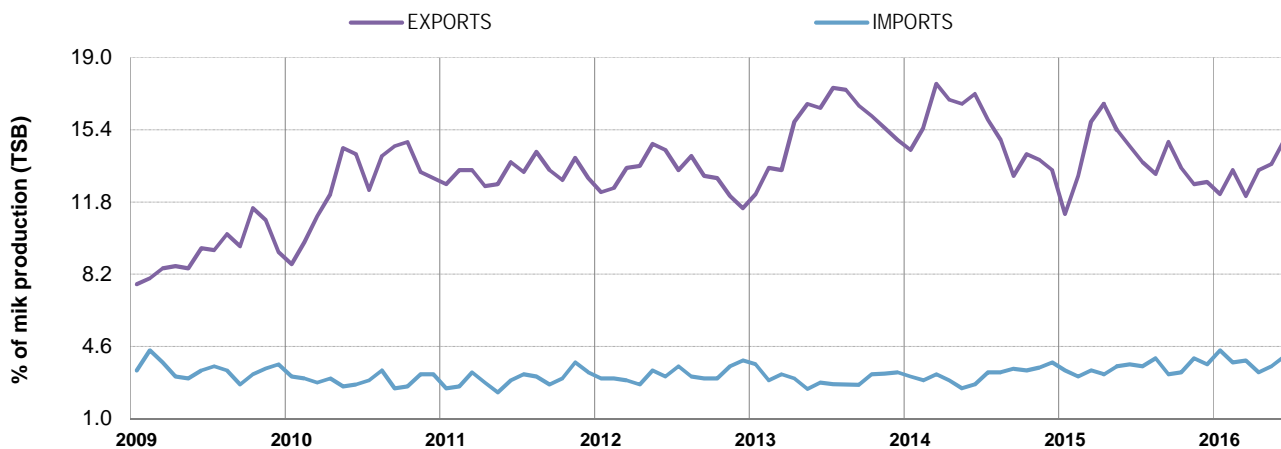
## U.S. EXPORTS

## 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 \$)	June 16	vs. yr ago
Mexico	\$ 94.1	-5%
Canada	52.9	+17%
Southeast Asia	49.0	-42%
China	30.0	-35%
South America	19.3	-10%
Japan	18.2	-20%
Caribbean	17.5	-9%
Oceania	15.4	-12%
So. Korea	15.2	-40%
Middle East/North Africa	13.3	-36%

### U.S. EXPORTS AS % OF PRODUCTION

	June	yr ago	Jan-June 16	yr ago
NDM/SMP	55%	51%	50%	51%
Total cheese	5.1%	5.9%	5.2%	6.6%
Butterfat	1.4%	2.3%	2.7%	2.9%
Dry sweet whey	47%	45%	38%	46%
Lactose	75%	81%	72%	73%
Total milk solids	14.9%	14.6%	13.3%	14.5%

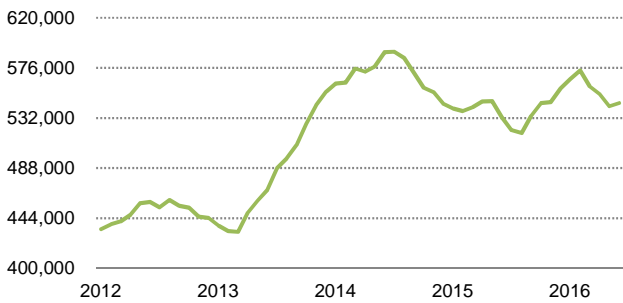
### ACCESS U.S. EXPORT DATA ONLINE

Visit [usdec.org/research-and-data/market-data/us-export-data](http://usdec.org/research-and-data/market-data/us-export-data)

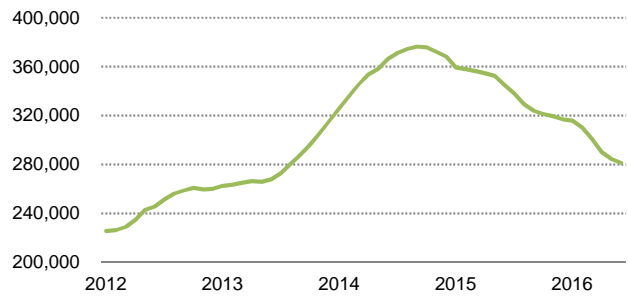
Source: USDA, USDEC, National Milk Producers Federation.

# U.S. Exports: Rolling 12-Month Volume

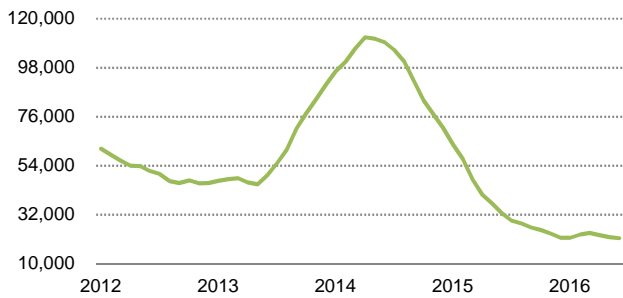
**U.S. NDM/SMP EXPORTS (MT)**



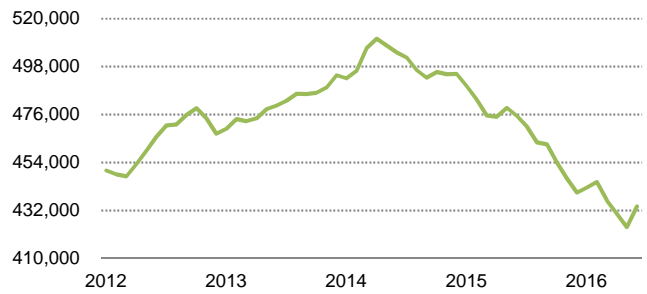
**U.S. CHEESE EXPORTS (MT)**



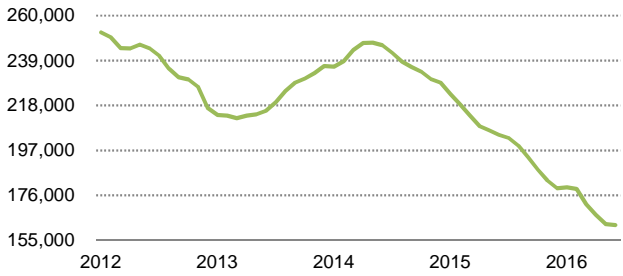
**U.S. BUTTERFAT EXPORTS (MT)**



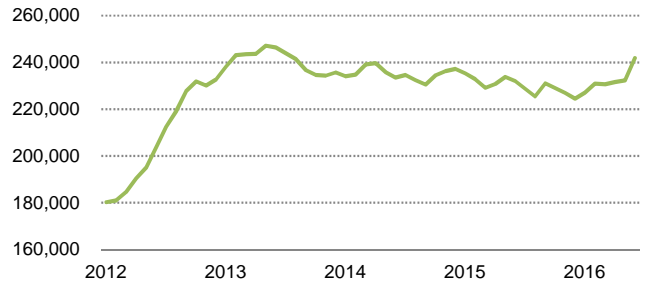
**U.S. TOTAL WHEY EXPORTS (MT)**



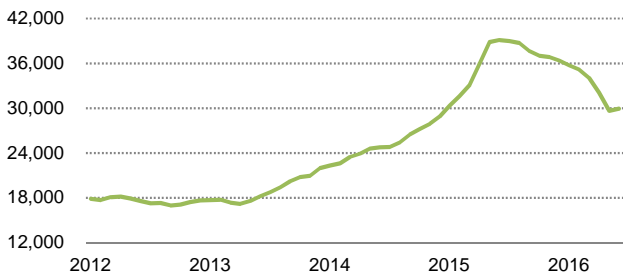
**U.S. DRY WHEY EXPORTS (MT)**



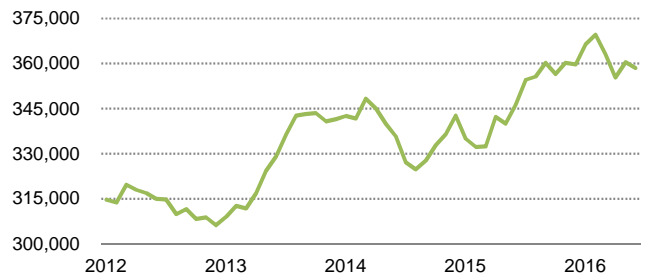
**U.S. WPC EXPORTS (MT)**



**U.S. WPI EXPORTS (MT)**



**U.S. LACTOSE EXPORTS (MT)**



Source: USDA, USDEC.

## U.S. Market Situation

### U.S. markets facing heavy inventories

Seasonally tight current supply and ongoing strong domestic demand kept U.S. dairy markets firm this summer.

U.S. milk production was up 1.4 percent year-over-year in the March-July period. Income over feed costs has been below the long-term average for nearly two years, but it hasn't fallen as low as 2012 or 2009. Since January, farmers have added 22,000 cows to the national herd. However, a very hot summer has pushed component levels lower, resulting in reduced yields and tight supply of current product in recent months.

Meanwhile, domestic use of cheese and butter has been very strong. In the first half of the year, domestic use of cheese was up more than 4 percent vs. last year, while butter use was up more than 5 percent.

As a result of this strong demand, cheese prices rallied this summer, with the benchmark CME block price moving from \$2800/ton in mid-May to \$4112/ton in mid-August – the highest level since November 2014. Spot butter prices peaked at \$5219/ton in mid-June.

By Aug. 24, however, blocks prices had pulled back to \$3924/ton and butter prices had retreated to \$4580/ton. Growing inventories may be weighing on the market.

Total commercial cheese stocks on July 31 were 579,000 tons, a record high and 16 percent greater than the five-year average for the month. Butter inventories also were an all-time high: 151,000 tons, 44 percent more than the five-year average. In fact, butter stocks increased in July vs. June for the first time since 2004.

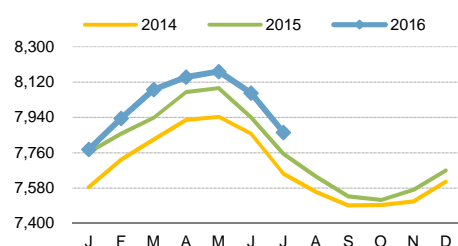
In Q2, U.S. cheese production was up 1.4 percent, butter output was up 4.3 percent and NDM/SMP and dry whey production were flat compared with a year ago.

The NDM/SMP market is steady, with prices ranging between \$1850 and \$1950/ton. Production volume is just about at its annual trough. Inventories are in line with the average of the last three years. U.S. prices are slightly below international prices, helping sustain U.S. export powder volumes.

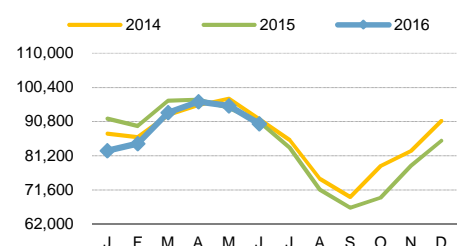
The whey market continues to firm. Dry whey prices are around \$625 to \$675/ton, up by more than one third since last October. Demand is good from the bakery sector and overseas, especially from China.

Whey protein concentrate and lactose are stronger as well. WPC is trading for around \$1575/ton, up by a third since the first of the year. Lactose is up about 40 percent since the beginning of 2016, valued at about \$625/ton.

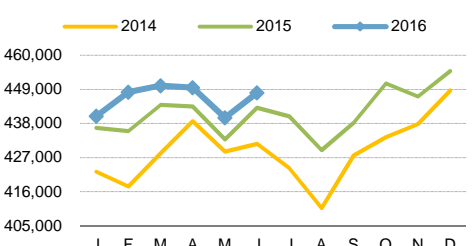
U.S. MILK PRODUCTION (000 MT; 30-DAY MOS.)



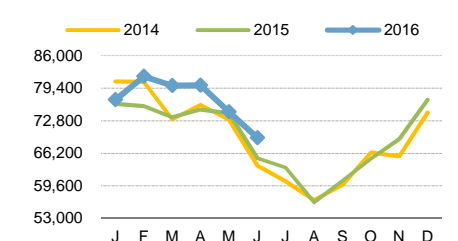
U.S. NDM/SMP PROD. (MT; 30-DAY MOS.)



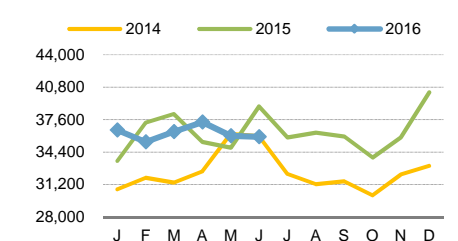
U.S. CHEESE PRODUCTION (MT; 30-DAY MOS.)



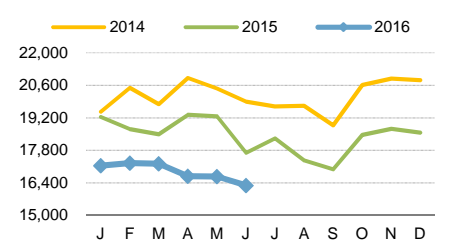
U.S. BUTTER PRODUCTION (MT; 30-DAY MOS.)



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



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



Source: USDA, USDEC.