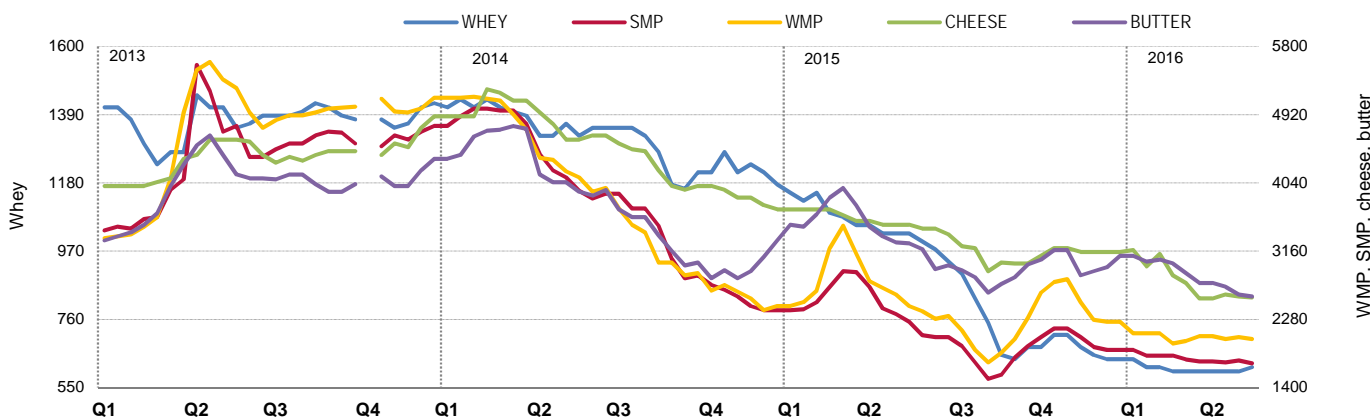


## 2013-16 PRICE TREND - SMP, WMP, CHEESE, BUTTER, WHEY\*

(\$/MT)



\*Mid-point of range. Milk powder, cheese and butterfat are Oceania; whey is western Europe.

Source: USDA's Dairy Market News.

## There's still more milk than market

By Alan Levitt and Marc Beck

The Northern Hemisphere spring flush is approaching its peak with all the fanfare of a guest who's overstayed his welcome. The markets remain characterized by oversupply, low prices and a buying community that does not have pressure to accelerate buying. Commodity prices are hovering about where they were last August. Moreover, absent a substantial negative weather event, there's little to suggest a legitimate and sustainable recovery any time before 2017.

There's still more milk than market – and virtually all the growth has come from the EU. In the first quarter, EU-28 milk production was up about 5.9 percent year-over-year (adjusting for leap day). The comparisons are a little skewed because EU farmers pulled back in Q1-2015 at the end of the quota year, but this year's output is still up 4.6 percent compared with two years ago.

Within the EU, the growth engines remain Ireland (+31 percent in Q1, year-over-year, adjusted for leap day); the Netherlands (+17 percent); and Germany (est. +5 percent).

The United States also has contributed a bit to the glut: output was up 1.0 percent in the first quarter. However, it's a different story in Oceania, where production in New Zealand and Australia was down 0.4 percent and 4.4 percent, respectively. Weather in New Zealand has been pretty good, boosting end-of-season production. Kiwi production is in line to finish the season down about 2 percent, a far cry from local forecasts of a 6-10 percent decline voiced in late 2015.

China's appetite looked promising in early 2016, with total dairy imports up 32 percent on a milk-equivalent basis in the first quarter. However, New Zealand's WMP exports to China were down significantly in March, suggesting China's April import numbers will show a reversal. The volume China bought on the latest Global Dairy Trade auction also was near the lowest ever. China milk production remains stable and is filling domestic needs, despite the higher cost of locally produced milk,

**Continued on p. 2**

### MAY INDICATIVE PRICES - USDEC sources \$/MT, FOB SHIP (with change from April)

	EUROPE	OCEANIA
SMP	1850 (+19)	1738 (-31)
WMP	2025 (+50)	2063 (+19)
Cheddar	2750 (-38)	2675 (+81)
Butter	2750 (+56)	2725 (-44)
Butteroil	3600 (-44)	3063 (-44)
Dry whey	575 (-22)	700 (NC)
WPC-34%	1475 (+25)	1475 (NC)
Lactose	700 (+25)	575 (+25)

Source: USDEC.

From p. 1

augmented by imports. New government regulations attempting to limit use of powder in reconstituted milk could potentially become an additional drag. Chinese consumer dairy demand is said to be lackluster.

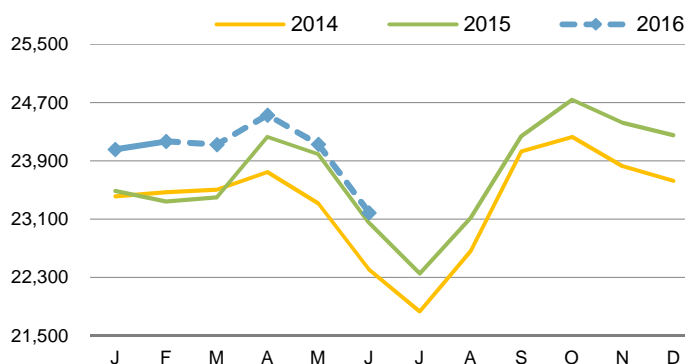
Rumors of a possible détente between the EU and Russia that would remove sanctions in August seem premature. We don't expect the ban on dairy trade will be lifted in 2016.

Other key importers are pulling back as well. Venezuela, historically the world's third-largest WMP importer (average imports of 150,000 tons/year 2009-2014), bought virtually nothing in the second half of 2015. The country is crippled by economic and political crises, in large part due to the crash in oil revenues, and can't afford to pay for imported powder. However trade rumors suggest Argentina will provide product for Venezuela against oil and government guarantees.

The jury is still out on how the oil-based economies of the Middle East/North Africa (MENA) region are faring, but early 2016 trade data suggests imports are slowing. In the first quarter, New Zealand's WMP exports to the MENA region were down 31 percent, led by a 57-percent drop in sales to Algeria. Shipments to sub-Saharan Africa were off 39 percent. In the first two months of the year, EU exports of SMP to the MENA region were down 6 percent, including a 12-percent drop in sales to Algeria.

Further: in the first quarter, Japan imports of milk powder, cheese, butterfat and whey were down 3 percent year-over-year, while South Korea imports were down 8 percent. We estimate Southeast Asia's imports were down about 4 percent in the first quarter, with big drops in Malaysia and Singapore, after the region posted a 5-percent gain in 2015. And Mexico's imports were outstanding in January-February (+19 percent), but a slowdown in U.S. NDM/SMP exports in March suggests

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. March-June 2016 are USDEC estimates/forecasts.

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

Mexico's powder imports have decelerated as well.

On balance, import demand is good in some places, with some stress signals in others, and weakness in a number of important markets. Thus, less milk is needed around the globe to "recalibrate" the market.

Which brings us back to the European Union. The EU surplus has meant two things: European exporters are offering very aggressively, putting downward pressure on world prices; and excesses are being turned into powder that's piling up in intervention and public warehouses.

In the first four months of the year, more than one third of EU SMP production went into either intervention or Private Storage Aid (PSA). Or, split another way, more than half of the incremental milk production growth in Europe this year has gone into powder for storage. At the end of April, the EU had about 206,000 tons of SMP in intervention and approximately 33,000 tons in PSA warehouses.

**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](http://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 May 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**

The intervention limit, just 58,000 tons away as of May 8, is likely to be reached in the first half of June. We expect the Commission will continue to take product via tender, which will only prolong the inventory overhang.

At some point, intervention stocks have to come back on the market, though the Commission is not likely to release them until prices move much higher. But they'll have at least 280,000 tons of powder to dispose of – equivalent to about five months of EU exports.

Likewise, suppliers are clearing butterfat into the PSA scheme, and this is helping support the market. Over the last month, 5,200 tons of per week of butter has moved into PSA, bringing the 2016 total to 74,457 tons. At the end of March (the latest figures available) holdings were 63,650 tons, though they're likely higher now.

That said, production growth in Europe is indeed starting to slow as lower milk prices squeeze margins. Payouts are falling more quickly now – 23 euros/100 kg (equivalent to about \$12.00/cwt.) in some areas. EU-wide output in April is estimated to have been up “only” 2.0 to 2.5 percent year-over-year. Sources say Ireland production growth has slowed to single digits, Germany was up 2-3 percent and France has gone into negative territory. By third quarter, overall EU production should be flat, and by fourth quarter it should slip below year-ago levels.

The EU Commission authorized individual co-ops and producer organizations to implement supply management programs if they choose (Reg. 222). However, it's unlikely any will do so.

Farmers in Oceania also are feeling the hurt. Fonterra's current 2015/16 payout forecast is NZ\$3.90/kgMS (equivalent to about \$10.40/cwt.). And Murray Goulburn's dramatic payout reduction and subsequent leadership shakeout has left

Australian farmers in dire straits. Projections for 2016/17 payouts don't look great either. The banks Down Under seem committed to helping farmers ride out another year of negative margins, but the financial stress is taking its toll.

And in the United States, the benchmark all-milk price looks like it'll fall below \$14.00/cwt. in upcoming months. Further erosion in cheese or butter prices will take farmgate prices down even lower. Farmers will be under margin pressure this summer – at levels similar to what they experienced in 2012 – which could accelerate herd contraction. In addition, there is early talk of a La Niña-driven hot, dry summer in the Northern Hemisphere, which could drive feed prices higher, as well as reducing cow comfort.

Our outlook hasn't changed materially from previous reports. Modest improvement and a bounce in prices within current price ranges is possible as we move into the second half of the year, which likely will mean U.S. cheese prices adjusting downward in the near term. Powder prices are tethered to the EU intervention price for now.

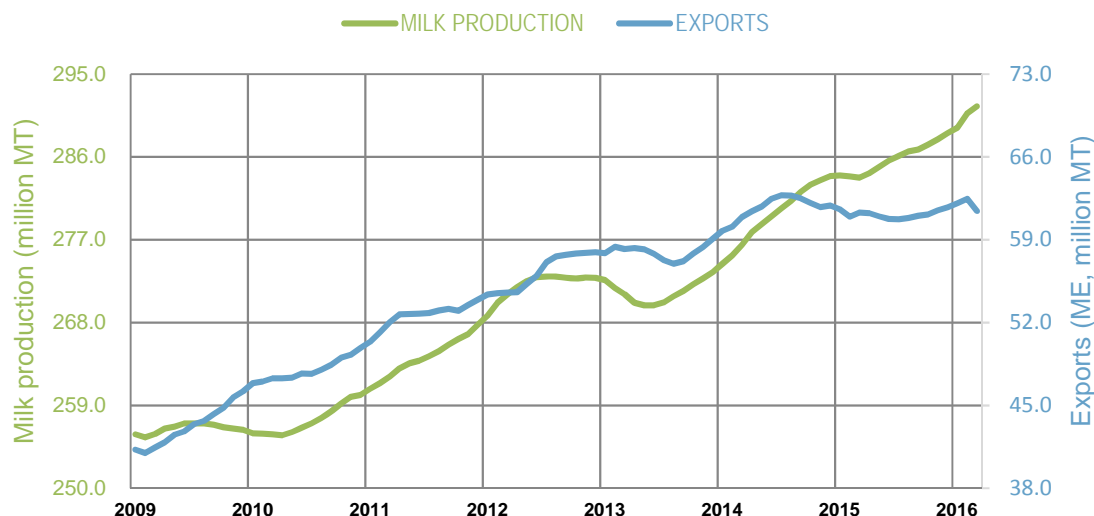
We're coming up on the trough in the global milk production cycle. Among the top five suppliers (EU, U.S., New Zealand, Australia and Argentina), milk production in June-August is typically about 6 percent lower than it is in the other nine months of the year; that will ease some of the ongoing surplus.

However, a true recovery just isn't in sight. We define “recovery” as sustainable world WMP prices of at least \$3000/ton, and we're still a long way from that benchmark. As an indicator of the market's sentiment, NZX WMP futures for December 2016 are \$2450/ton, while SMP futures are \$2085.

Buyers have good coverage, and in the face of heavy supplies have no reason to overbid. In addition, weakness in the overall commodity complex (grains, oil) keeps a lid on dairy prices. Global supply still needs to rebalance with global demand. The long process has been underway for a while now, and we're probably closer to the end of this down cycle than the beginning but with some stress in the months ahead. However, we think markets may not start to feel in balance again with an ensuing firmer price environment until at least second quarter 2017.

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

ROLLING 12-MONTHS



**Exports from the Top 5 suppliers (used here as a indicator of global trade) have stagnated since mid-2014, but milk production from these suppliers has continued to grow.**

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		MARCH (VOLUME, MT)			YEAR-TO-DATE	JANUARY-MARCH (VOLUME, MT)			
	2014	2015	2016	% CHG			2014	2015	2016	% CHG
<i>EU-28*</i>	52,910	63,799	56,100	-12		<i>EU-28*</i>	149,173	181,357	178,671	-1
U.S.	51,515	55,022	41,180	-25		U.S.	126,524	125,580	125,425	-0
NZ	25,535	40,694	29,311	-28		NZ	90,327	123,188	128,311	+4
Australia	13,504	18,006	16,493	-8		Australia	45,974	56,367	49,981	-11
<i>India*</i>	8,259	4,109	1,500	-63		<i>India*</i>	34,729	7,918	5,327	-33
<b>TOTAL OF 5</b>	<b>151,723</b>	<b>181,630</b>	<b>144,584</b>	<b>-20</b>		<b>TOTAL OF 5</b>	<b>446,727</b>	<b>494,410</b>	<b>487,715</b>	<b>-1</b>

### WMP EXPORTS

	LATEST MONTH		MARCH (VOLUME, MT)			YEAR-TO-DATE	JANUARY-MARCH (VOLUME, MT)			
	2014	2015	2016	% CHG			2014	2015	2016	% CHG
NZ	143,349	159,052	94,104	-41		NZ	440,958	419,352	353,643	-16
<i>EU-28*</i>	36,773	34,429	30,900	-10		<i>EU-28*</i>	104,153	94,600	93,980	-1
Argentina	12,466	12,146	10,637	-12		Argentina	38,377	30,514	26,272	-14
Australia	6,286	5,532	6,233	+13		Australia	26,883	17,261	15,315	-11
U.S.	4,612	3,857	1,886	-51		U.S.	14,174	11,602	6,589	-43
<b>TOTAL OF 5</b>	<b>203,486</b>	<b>215,016</b>	<b>143,760</b>	<b>-33</b>		<b>TOTAL OF 5</b>	<b>624,545</b>	<b>573,329</b>	<b>495,799</b>	<b>-14</b>

### CHEESE EXPORTS

	LATEST MONTH		MARCH (VOLUME, MT)			YEAR-TO-DATE	JANUARY-MARCH (VOLUME, MT)			
	2014	2015	2016	% CHG			2014	2015	2016	% CHG
<i>EU-28*</i>	63,694	59,367	68,600	+16		<i>EU-28*</i>	187,362	161,762	184,731	+14
NZ	25,824	35,380	31,682	-10		NZ	73,917	90,054	102,477	+14
U.S.	36,181	34,302	25,488	-26		U.S.	99,609	87,647	71,829	-18
Australia	13,773	14,647	13,506	-8		Australia	35,838	38,519	39,934	+4
Argentina	2,840	3,161	3,906	+24		Argentina	14,211	9,089	11,159	+23
<b>TOTAL OF 5</b>	<b>142,312</b>	<b>146,857</b>	<b>143,182</b>	<b>-3</b>		<b>TOTAL OF 5</b>	<b>410,937</b>	<b>387,071</b>	<b>410,130</b>	<b>+6</b>

### BUTTERFAT EXPORTS

	LATEST MONTH		MARCH (VOLUME, MT)			YEAR-TO-DATE	JANUARY-MARCH (VOLUME, MT)			
	2014	2015	2016	% CHG			2014	2015	2016	% CHG
NZ	44,534	48,617	37,737	-22		NZ	147,412	136,559	132,700	-3
<i>EU-28*</i>	12,088	15,457	22,100	+43		<i>EU-28*</i>	35,167	40,145	57,794	+44
Australia	3,280	2,955	1,829	-38		Australia	12,439	8,894	6,724	-24
U.S.	11,998	2,566	3,217	+25		U.S.	30,736	7,541	9,755	+29
Argentina	1,201	1,686	393	-77		Argentina	3,929	2,996	1,657	-45
<b>TOTAL OF 5</b>	<b>73,101</b>	<b>71,281</b>	<b>65,276</b>	<b>-8</b>		<b>TOTAL OF 5</b>	<b>229,683</b>	<b>196,135</b>	<b>208,630</b>	<b>+6</b>

\* EU and India 2016 are USDEC estimates.

Source: Global Trade Atlas and USDA.

# World Dairy Exports

## WHEY PRODUCTS EXPORTS

	LATEST MONTH		MARCH (VOLUME, MT)	
	2014	2015	2016	% CHG
EU-28*	43,149	48,408	41,800	-14
U.S.	48,696	41,038	32,747	-20
Switzerland	7,870	8,046	7,890	-2
Argentina	4,277	4,557	5,270	+16
Australia	2,412	2,957	3,202	+8
NZ	2,263	1,747	3,217	+84
<b>TOTAL OF 6</b>	<b>108,667</b>	<b>106,753</b>	<b>94,126</b>	<b>-12</b>

	YEAR-TO-DATE		JANUARY-MARCH (VOLUME, MT)	
	2014	2015	2016	% CHG
EU-28*	129,498	133,733	135,705	+1
U.S.	124,430	104,996	101,571	-3
Switzerland	22,319	22,443	22,088	-2
Argentina	15,680	15,525	15,066	-3
Australia	7,655	9,320	9,433	+1
NZ	6,009	7,672	10,603	+38
<b>TOTAL OF 6</b>	<b>305,591</b>	<b>293,689</b>	<b>294,466</b>	<b>+0</b>

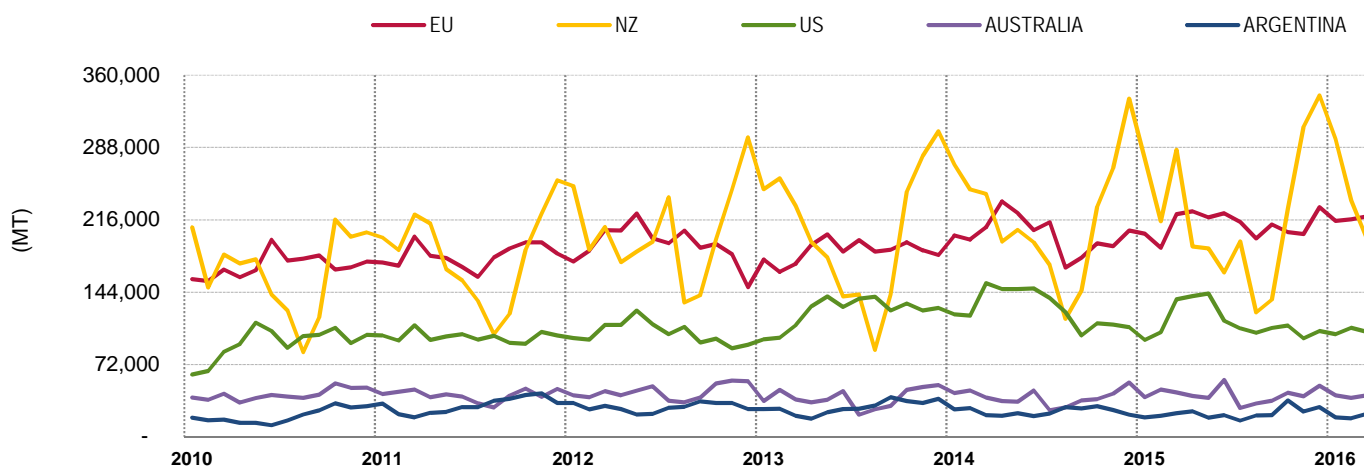
## LACTOSE EXPORTS

	LATEST MONTH		MARCH (VOLUME, MT)	
	2014	2015	2016	% CHG
U.S.	35,129	35,251	28,855	-18
EU-28*	16,476	17,372	14,200	-18
NZ	1,657	1,609	2,106	+31
<b>TOTAL OF 3</b>	<b>53,262</b>	<b>54,232</b>	<b>45,161</b>	<b>-17</b>

	YEAR-TO-DATE		JANUARY-MARCH (VOLUME, MT)	
	2014	2015	2016	% CHG
U.S.	91,731	82,385	84,930	+3
EU-28*	46,590	45,255	38,355	-15
NZ	4,863	4,092	5,419	+32
<b>TOTAL OF 3</b>	<b>143,184</b>	<b>131,732</b>	<b>128,704</b>	<b>-2</b>

## 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](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	Mar 16	15,493	21,420	+38
Mexico	Feb 16	16,524	21,152	+28
Malaysia	Feb 16	7,086	9,244	+30
Indonesia	Feb 16	12,709	13,872	+9
Algeria	Nov 15	5,673	6,515	+15
Philippines	Jan 16	6,868	12,117	+76

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
China	Mar	56,214	72,378	+29
Mexico	Feb	32,287	40,503	+25
Malaysia	Feb	28,737	25,258	-12
Indonesia	Feb	21,901	21,296	-3
Algeria	Jan-Nov	155,301	130,599	-16
Philippines	Jan	6,868	12,117	+76

### WMP IMPORTS

(VOLUME, MT)

	LATEST MONTH	Prev Yr	Latest Mo	% CHG
China	Mar 16	36,343	47,622	+31
Venezuela	Dec 15	3,915	-	-100
Algeria	Nov 15	7,839	9,859	+26
Singapore	Feb 16	4,775	4,089	-14
Hong Kong	Jan 16	7,305	7,110	-3

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
China	Mar	164,165	204,154	+24
Venezuela	Jan-Dec	142,864	57,345	-60
Algeria	Jan-Nov	192,038	209,717	+9
Singapore	Feb	11,648	9,848	-15
Hong Kong	Jan	7,305	7,110	-3

### CHEESE IMPORTS

(VOLUME, MT)

	LATEST MONTH	Prev Yr	Latest Mo	% CHG
Japan	Mar 16	22,565	26,459	+17
U.S.	Feb 16	13,137	18,175	+38
Mexico	Feb 16	9,987	11,206	+12
So. Korea	Mar 16	10,329	8,725	-16
Russia	Feb 16	3,079	2,895	-6

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
Japan	Mar	59,633	66,633	+12
U.S.	Feb	24,846	35,691	+44
Mexico	Feb	17,462	20,892	+20
So. Korea	Mar	28,406	26,228	-8
Russia	Feb	5,065	5,002	-1

### BUTTERFAT IMPORTS

(VOLUME, MT)

	LATEST MONTH	Prev Yr	Latest Mo	% CHG
China	Mar 16	4,737	5,630	+19
Iran	Feb 16	2,965	5,506	+86
Mexico	Feb 16	4,742	6,779	+43
Morocco	Dec 15	2,070	1,703	-18
Russia	Feb 16	1,288	1,583	+23

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
China	Mar	17,420	28,284	+62
Iran	Feb	8,404	8,359	-1
Mexico	Feb	8,615	11,501	+33
Morocco	Jan-Dec	30,238	20,340	-33
Russia	Feb	2,760	3,264	+18

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	Mar 16	31,638	43,865	+39
Indonesia	Feb 16	9,585	9,812	+2
Mexico	Feb 16	4,337	3,475	-20
Thailand	Mar 16	4,396	5,294	+20
Japan	Mar 16	9,896	9,632	-3

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
China	Mar	83,717	115,705	+38
Indonesia	Feb	17,245	15,908	-8
Mexico	Feb	8,707	7,181	-18
Thailand	Mar	12,787	15,608	+22
Japan	Mar	18,403	20,003	+9

## LACTOSE IMPORTS

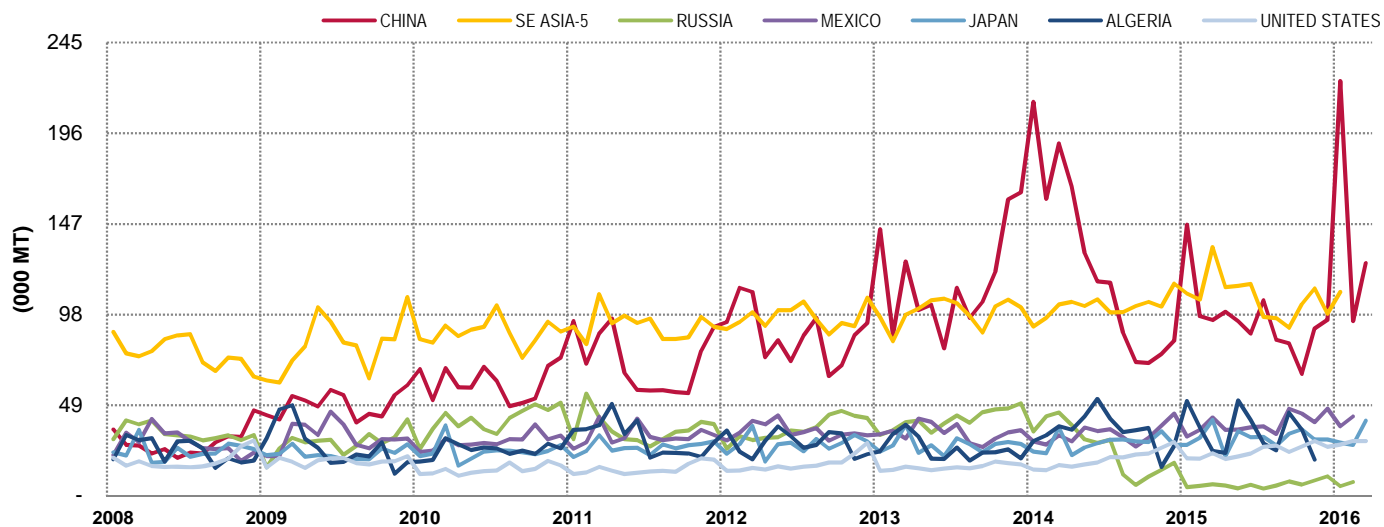
(VOLUME, MT)

	LATEST MONTH	Prev Yr	Latest Mo	% CHG
China	Mar 16	7,211	7,977	+11
NZ	Mar 16	6,587	9,741	+48
Japan	Mar 16	5,522	6,026	+9

	YEAR-TO-DATE	Prev Yr	Latest Yr	% CHG
China	Mar	19,412	20,297	+5
NZ	Mar	16,865	22,501	+33
Japan	Mar	16,309	18,002	+10

## 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.

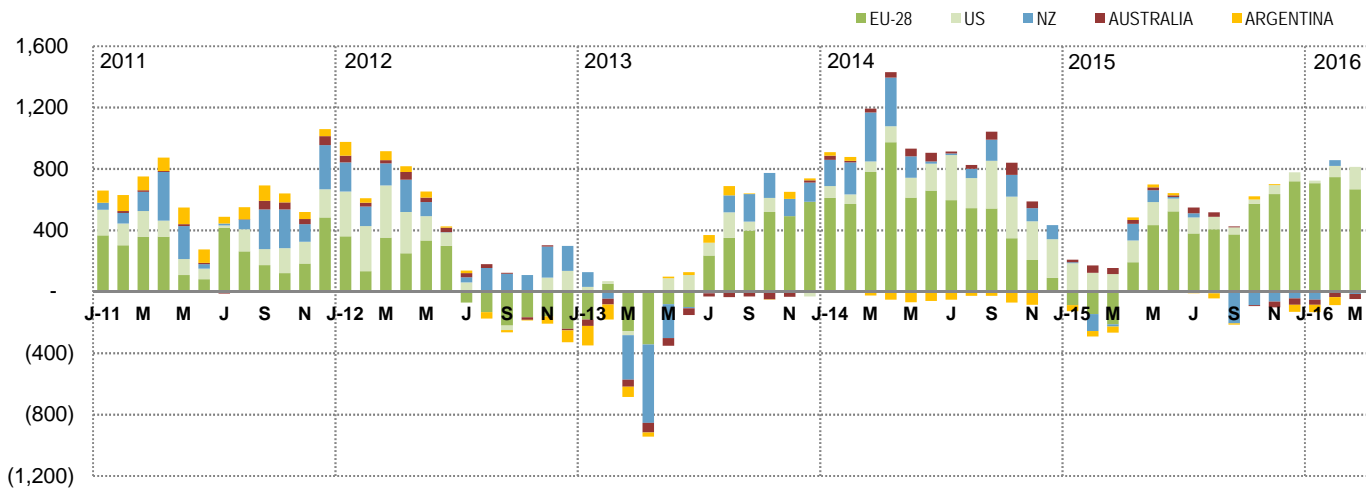
### ACCESS TRADE DATA ONLINE

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# Global Milk Production

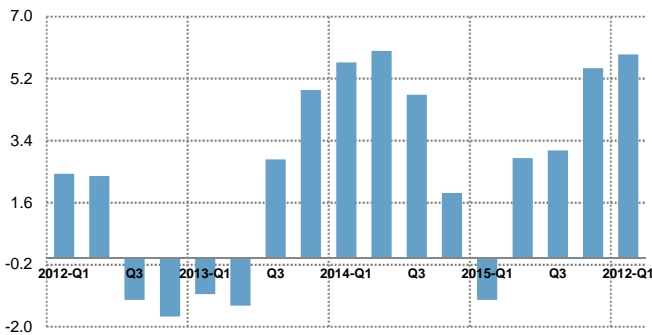
## MILK PRODUCTION - CHANGE FROM PRIOR YEAR

(000 MT)

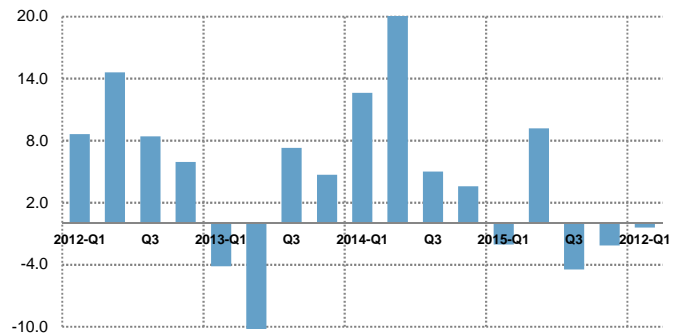


\* Feb 2012 and 2016 adjusted for leap day.

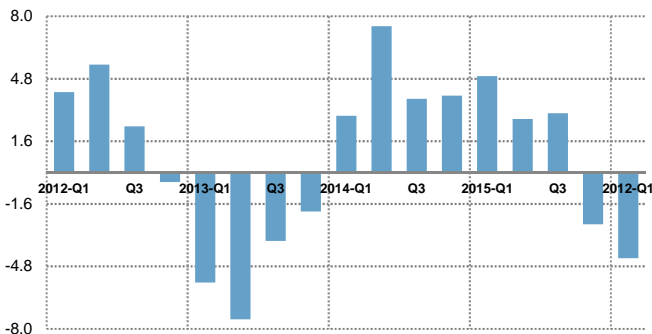
### EUROPEAN UNION MILK DELIVERIES (% CHG VS. PRIOR YEAR)



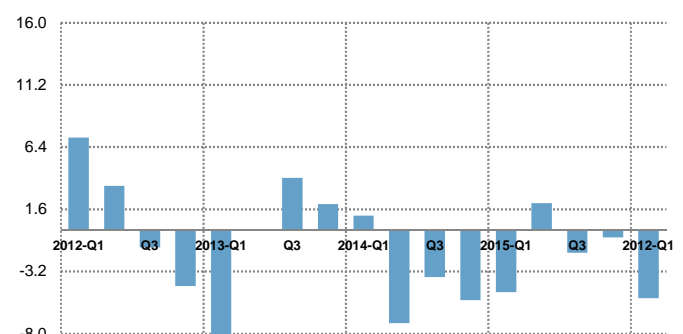
### NEW ZEALAND MILK PRODUCTION (% CHG VS. PRIOR YEAR)



### 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.

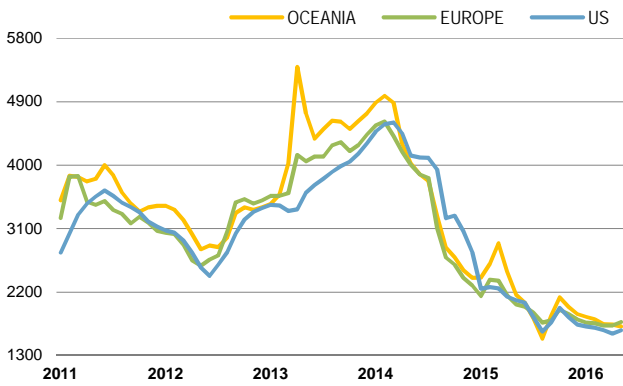
Latest month may include USDEC estimates.

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



# World Prices

## SMP PRICES (\$/MT)



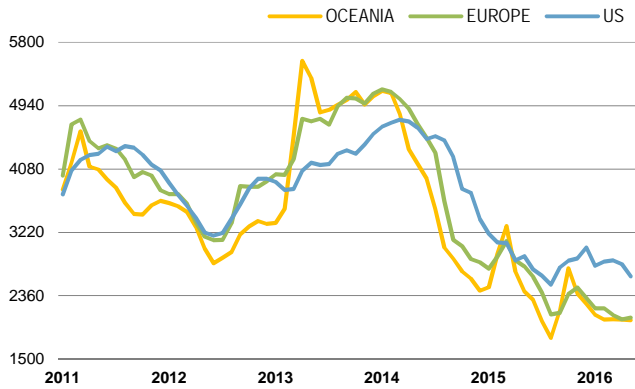
## Prices vs. a year ago

	Oceania	Europe	U.S.
SMP	-21%	-12%	-21%
WMP	-16%	-25%	-9%
Cheddar	-26%	-18%	-15%
Butter	-20%	-18%	+9%
Whey		-40%	-45%

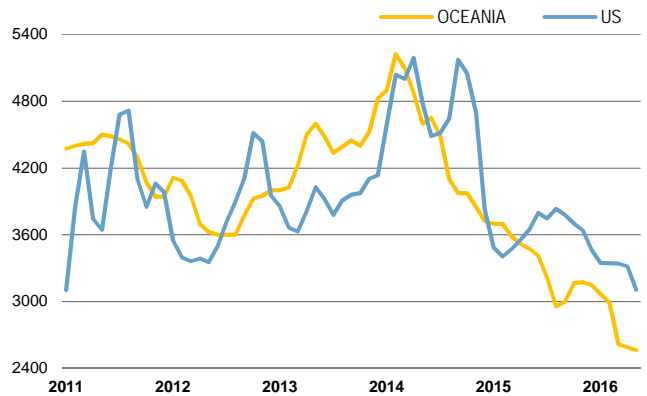
### ACCESS PRICING DATA ONLINE

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

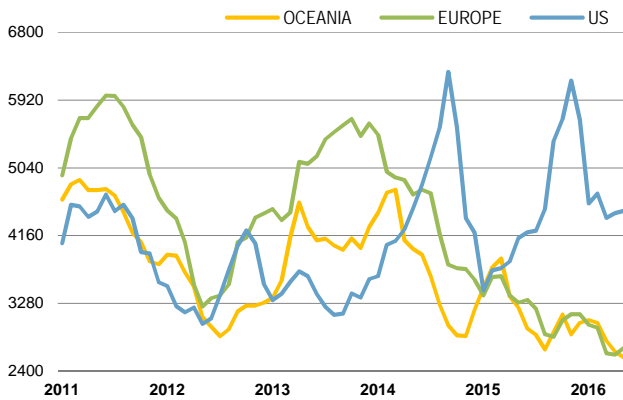
## WMP PRICES (\$/MT)



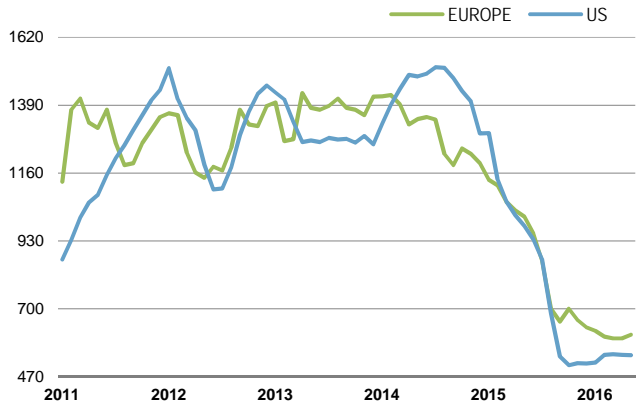
## CHEDDAR PRICES (\$/MT)



## BUTTER PRICES (\$/MT)



## DRY WHEY PRICES (\$/MT)

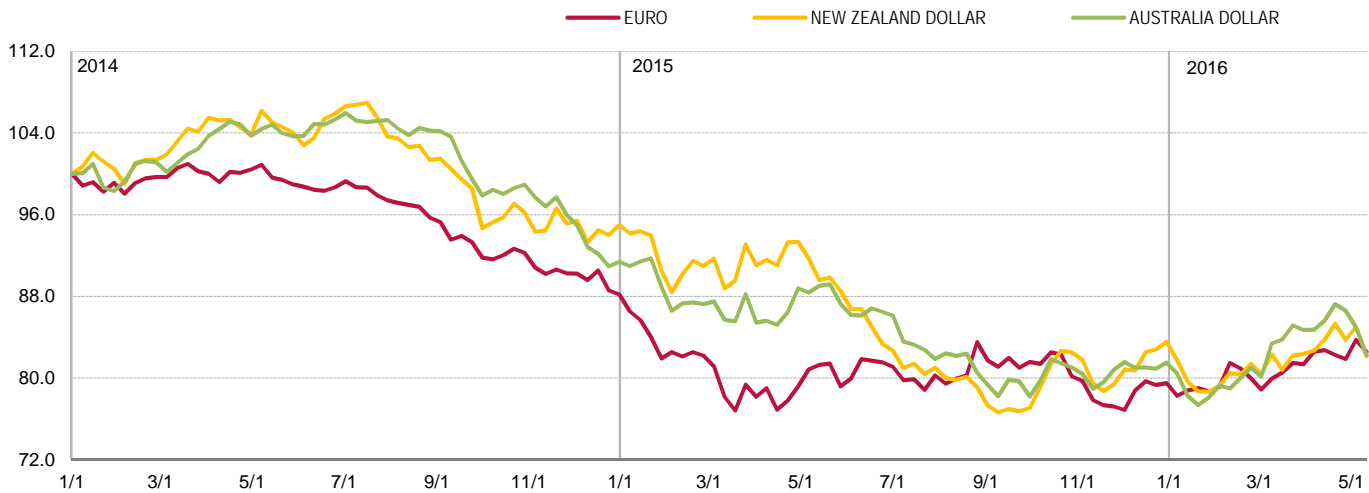


Source: USDA's Dairy Market News.

# Currency Exchange Rates

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

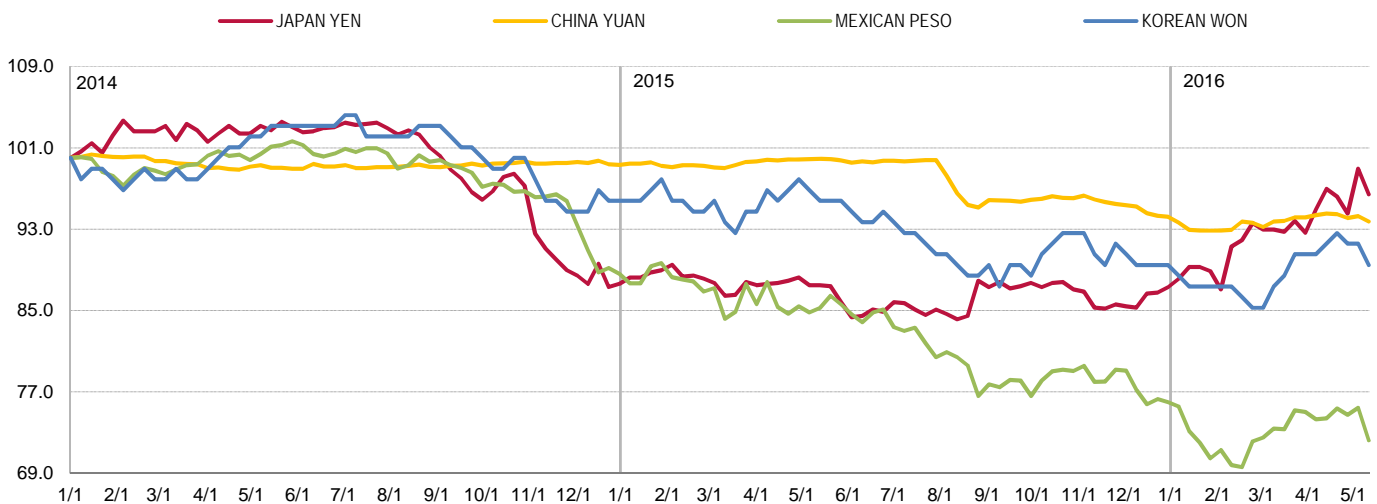
INDEXED TO JAN. 1, 2014



**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

### U.S. exports lighter in March

U.S. dairy exports in March were lower across the board, with overall volume and value down more than 20 percent from March 2015, when shipments were partially inflated by resolution of the West Coast port slowdown.

U.S. exporters shipped 140,759 tons of milk powders, cheese, butterfat, whey and lactose in March, down 23 percent year-over-year. Overall exports were valued at \$378.9 million, down 31 percent, and the lowest figure since February 2011 (on a daily-average basis).

Shipments of nonfat dry milk/skim milk powder (NDM/SMP) were just 41,180 tons, down 25 percent – the first year-over-year decline since August. Sales to Mexico were down 30 percent, and also were the lowest since August. Volume to Southeast Asia was off 28 percent, with lighter sales to Indonesia, Malaysia and the Philippines. The lone bright spot was a record-high 3,858 tons to Colombia (vs. 480 tons last March), more than double the previous single-month high.

Cheese exports in March were 25,488 tons, down 26 percent from last year, the 18<sup>th</sup> straight month cheese volume has lagged the prior year. Shipments to Mexico were up 7 percent, but exports to South Korea were down 61 percent from last March's record-high volume.

Whey exports remain sluggish in the midst of weak market conditions. Overall whey exports were 32,747 tons, down 20 percent from last year. Shipments of dry sweet whey were just 10,792 tons, down 39 percent and the lowest monthly volume in nearly 16 years. Exports of whey protein isolate also were lower – down 28 percent – due to a significant drop-off in sales to China. Exports of whey protein concentrate held up better – down just 2 percent year-over-year – driven by improved sales to Southeast Asia (4,367 tons, up 38 percent and the most since December 2014).

Exports of lactose slipped to 28,855 tons, down 18 percent, characterized by lighter sales to China and New Zealand. Shipments of butterfat were just 3,217 tons, with nearly three-quarters of sales going to Mexico (mostly anhydrous milkfat) and only 172 tons going to MENA.

On a total milk solids basis, U.S. exports were equivalent to 12.1 percent of U.S. milk production in March, the lowest figure in 14 months. Imports were equivalent to 3.9 percent of production.

#### U.S. Exports

	LATEST MONTH		MARCH (VOLUME, MT)			YEAR-TO-DATE		JANUARY-MARCH (VOLUME, MT)	
	2014	2015	2016	% CHG		2014	2015	2016	% CHG
NDM/SMP	51,515	55,022	41,180	-25	NDM/SMP	126,524	125,580	125,425	-0
WMP	4,612	3,857	1,886	-51	WMP	14,174	11,602	6,589	-43
Cheese	36,181	34,302	25,488	-26	Cheese	99,609	87,647	71,829	-18
Butterfat	11,998	2,566	3,217	+25	Butterfat	30,736	7,541	9,755	+29
Total Whey	48,696	41,038	32,747	-20	Total Whey	124,430	104,996	101,571	-3
-Dry whey	23,071	17,710	10,792	-39	-Dry whey	60,312	45,400	37,612	-17
-WPC	23,302	19,611	19,295	-2	-WPC	58,113	49,377	56,053	+14
-WPI	2,324	3,717	2,659	-28	-WPI	6,005	10,219	7,906	-23
Lactose	35,129	35,251	28,855	-18	Lactose	91,731	82,385	84,930	+3
MPC	6,502	4,332	1,791	-59	MPC	16,374	9,844	5,615	-43
Food preps (blends)	5,105	5,582	5,596	+0	Food preps (blends)	18,216	15,808	16,204	+3
<b>Aggregate volume*</b>	<b>199,739</b>	<b>181,950</b>	<b>140,759</b>	<b>-23</b>	<b>Aggregate volume*</b>	<b>521,793</b>	<b>445,402</b>	<b>421,917</b>	<b>-5</b>
Fluid milk (000 liters)	7,987	7,928	7,355	-7	Fluid milk (000 liters)	23,713	21,745	21,441	-1
<b>Total Value (millions) *</b>	<b>\$ 716.7</b>	<b>\$ 545.4</b>	<b>\$ 378.9</b>	<b>-31</b>	<b>Total Value (millions) *</b>	<b>\$ 1,882.0</b>	<b>\$ 1,380.6</b>	<b>\$ 1,116.4</b>	<b>-19</b>

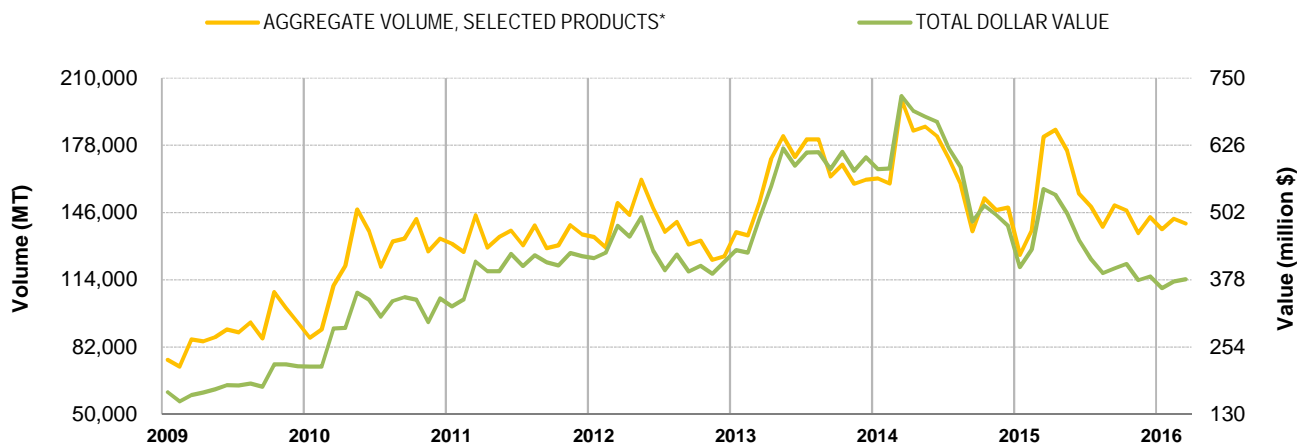
\* Aggregate volume includes the products listed above, except fluid milk. Total value includes other products in addition to the ones listed here.

Source: USDA, USDEC.

# U.S. Exports

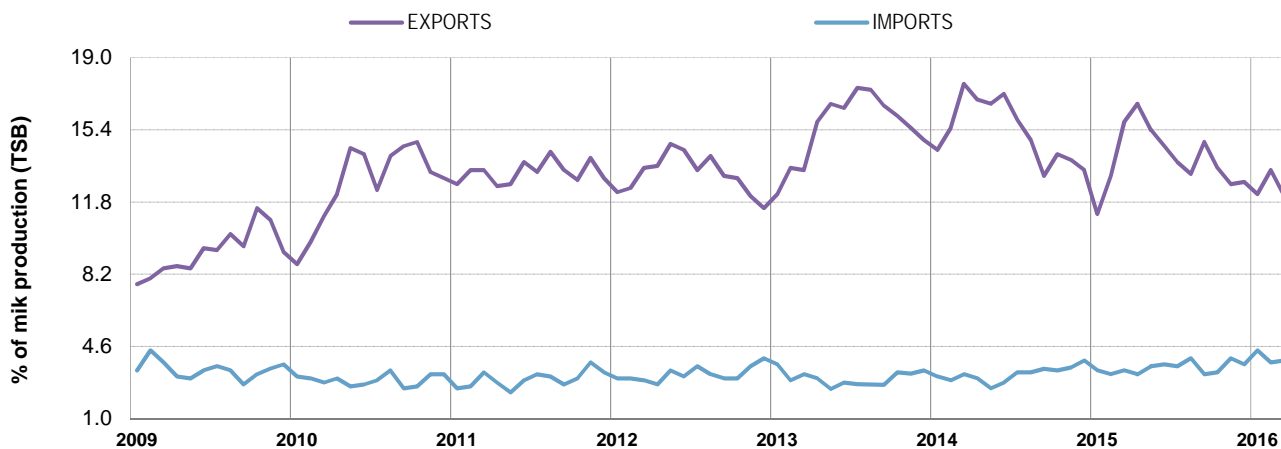
## U.S. EXPORTS

## 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 \$)	Mar 16	vs. yr ago
Mexico	\$ 101.3	-23%
Canada	56.1	+5%
Southeast Asia	42.1	-51%
China	25.6	-40%
South America	25.2	+11%
Caribbean	22.4	+20%
Japan	19.3	-29%
So. Korea	18.4	-60%
Middle East/North Africa	16.3	-52%
Oceania	12.8	-55%

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

	March	yr ago	Jan-Mar 16	yr ago
NDM/SMP	43%	55%	48%	45%
Total cheese	5.5%	7.5%	5.3%	6.7%
Butterfat	3.9%	3.4%	4.0%	3.3%
Dry sweet whey	29%	45%	34%	42%
Lactose	67%	84%	71%	69%
Total milk solids	12.1%	15.8%	12.6%	13.4%

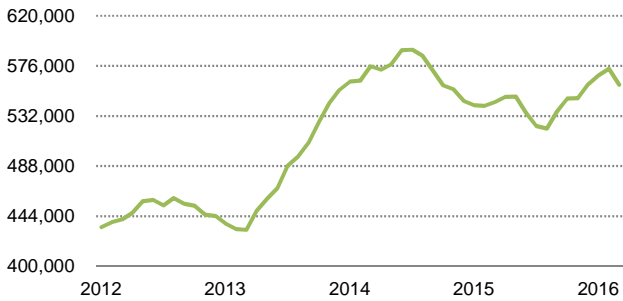
#### ACCESS U.S. EXPORT DATA ONLINE

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

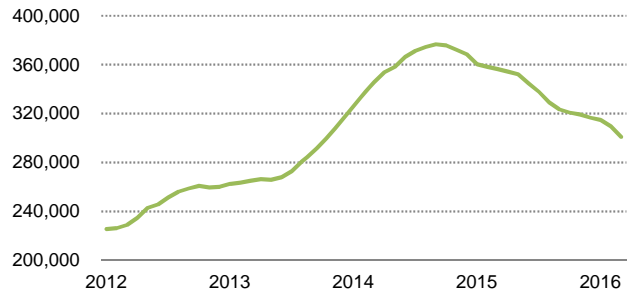
Source: USDA, USDEC, National Milk Producers Federation.

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

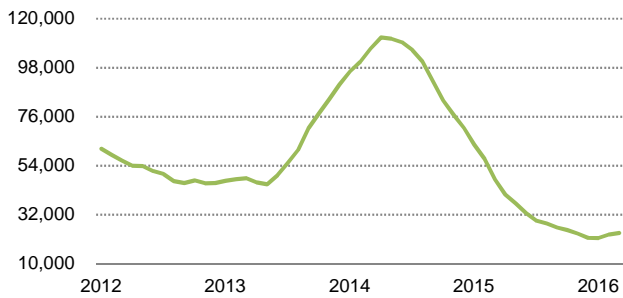
**U.S. NDM/SMP EXPORTS (MT)**



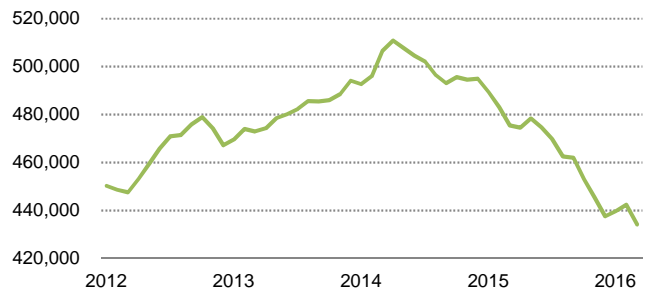
**U.S. CHEESE EXPORTS (MT)**



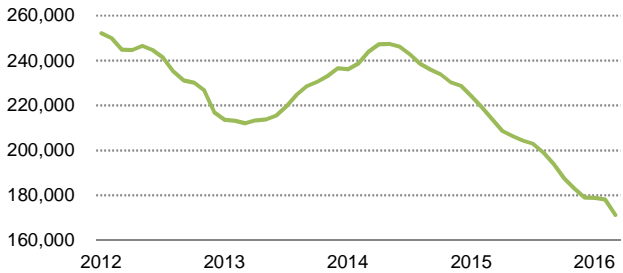
**U.S. BUTTERFAT EXPORTS (MT)**



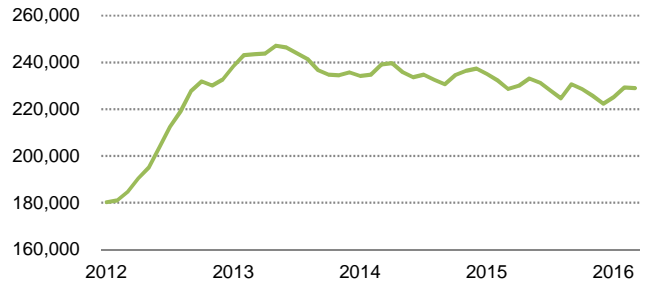
**U.S. TOTAL WHEY EXPORTS (MT)**



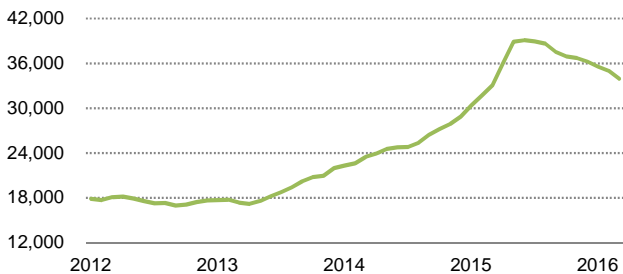
**U.S. DRY WHEY EXPORTS (MT)**



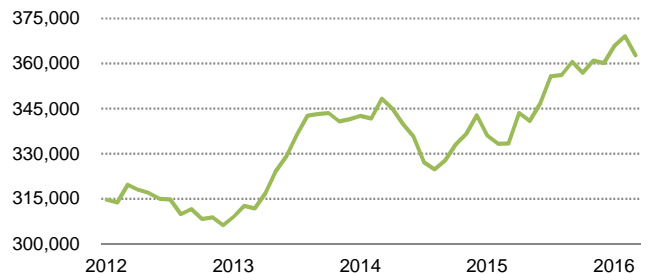
**U.S. WPC EXPORTS (MT)**



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



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



Source: USDA, USDEC.

# U.S. Market Situation

## Heavy flush pressures U.S. markets

U.S. markets are weaker in the face of heavy spring flush milk production and a shrinking trade balance.

In the first quarter, U.S. milk production was 23.8 million tons, up 1 percent from a year ago (adjusting for leap day). Cow numbers increased by 5,000 from the end of 2015, while production-per-cow ran 2 percent above prior-year levels. Production in Wisconsin was up 4.8 percent, offsetting a 2.7-percent decline in output from California.

As a result, cheese and butter production are higher. U.S. cheese production was up 1.8 percent and butter production was up 5.9 percent in the first quarter. In contrast, production of nonfat dry milk/skim milk powder (NDM/SMP) was down 6.3 percent.

U.S. inventories are swelling. Cheese stocks at the end of March were a record high 541,000 tons, up 11 percent year-on-year. Butter holdings were 111,000 tons, up nearly one-third from the year before. NDM stocks were 105,000 tons, down slightly from last year's record high, but still higher than any other year.

Inventory build-up has occurred despite very good domestic consumption: in the first quarter, domestic cheese use was up 6 percent and domestic butter use was up 7 percent.

However, the U.S. trade balance has shifted. In the first

quarter, U.S. net cheese exports were just 19,000 tons, a sharp decline from net exports of 47,000 tons in Q1-2015 and 67,000 tons in Q1-2014. Meanwhile, the United States imported 6,000 tons more butter than it exported in the first quarter, compared with net imports of 1,300 tons in Q1-2015 and net exports of 28,000 tons in Q1-2014.

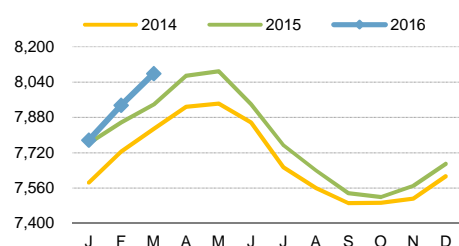
These dynamics have put downward pressure on U.S. cheese prices. Last week at the CME, the benchmark block cheddar cheese price fell to its lowest level since September 2009. On May 13 blocks settled at \$2822/ton, down \$529 from 10 weeks earlier.

The butter market, on the other hand, remains resilient. On May 13, the CME butter price closed at \$4492/ton, close to the middle of the 2016 trading range (\$4233 to \$4960/ton).

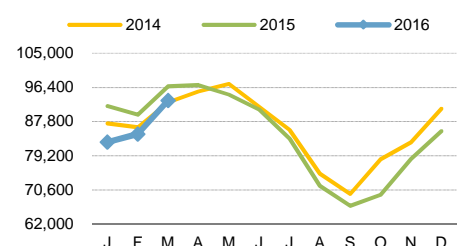
The Grade A NDM price has crawled higher over the last month, settling at \$1797/ton on May 13. This is up \$276 since bottoming out in early April, though it remains near historic lows. By staying competitive with international price levels, U.S. powder exports have maintained their pace from prior years.

The dry whey market has been steady since late January. Current pricing is \$500-550/ton. WPC has steadied as well, at around \$1350/ton. Meanwhile, the lactose market has tightened, with prices around \$550/ton, the highest in more than a year.

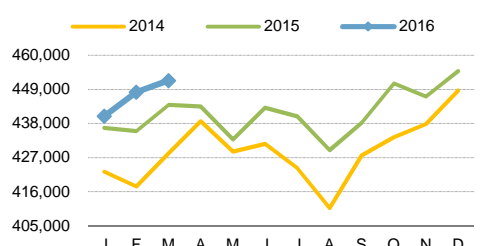
**U.S. MILK PRODUCTION** (000 MT; 30-DAY MOS.)



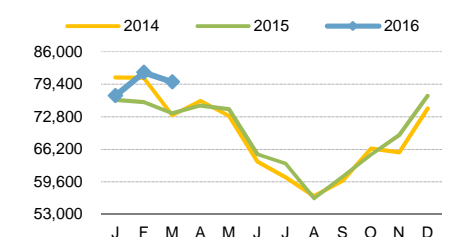
**U.S. NDM/SMP PROD.** (MT; 30-DAY MOS.)



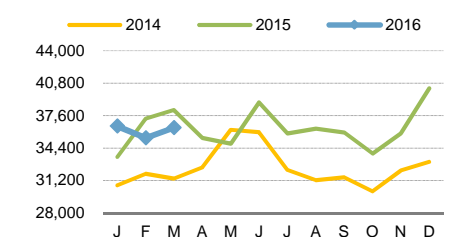
**U.S. CHEESE PRODUCTION** (MT; 30-DAY MOS.)



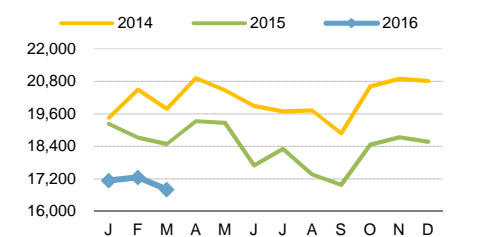
**U.S. BUTTER PRODUCTION** (MT; 30-DAY MOS.)



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



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



Source: USDA, USDEC.