

DAIRY MARKET UPDATE

MARCH, 2017

BY RICHARD BRADFIELD



INTERNATIONAL
INGREDIENT
CORPORATION

Welcome to our seminar

欢迎参加我们的研讨会



Company Introduction

企业介绍

- A family owned business based in St. Louis, USA.

总部为于美国圣路易斯的家族企业

- In business since 1974.

创立于1974年

- Manufacturer and marketer of specialty ingredients to the animal and pet food industry, both in the US and in export markets.

在美国及全球市场, 为动物和宠物食品行业提供特殊原料的生厂商和推广商

- Ten production facilities throughout the US.

10个生产工厂遍及美国

- Research-proven products.

均为研究实证后的产品

- Conduct business in a professional, yet friendly manner.

奉行专业, 友好的商业原则



Primary Product Mix 主要产品

- Dairylac[®] 80 乳宝80
- Nutri-Gold[®] Dried Milk 营养金奶粉
- Five Star Booster 五星宝
- Carbo Pal 宝宝派
- Milk Chocolate Product 巧饲粉
- Nutri-Pal 营养派
- Cheese Plus Cheese Product 奇饲粉
- Cheese-Whey (CW-11) 乳亲宝
- GroBiotic[®] 百泰系列



IIC Plant Locations

工厂位置



Agenda

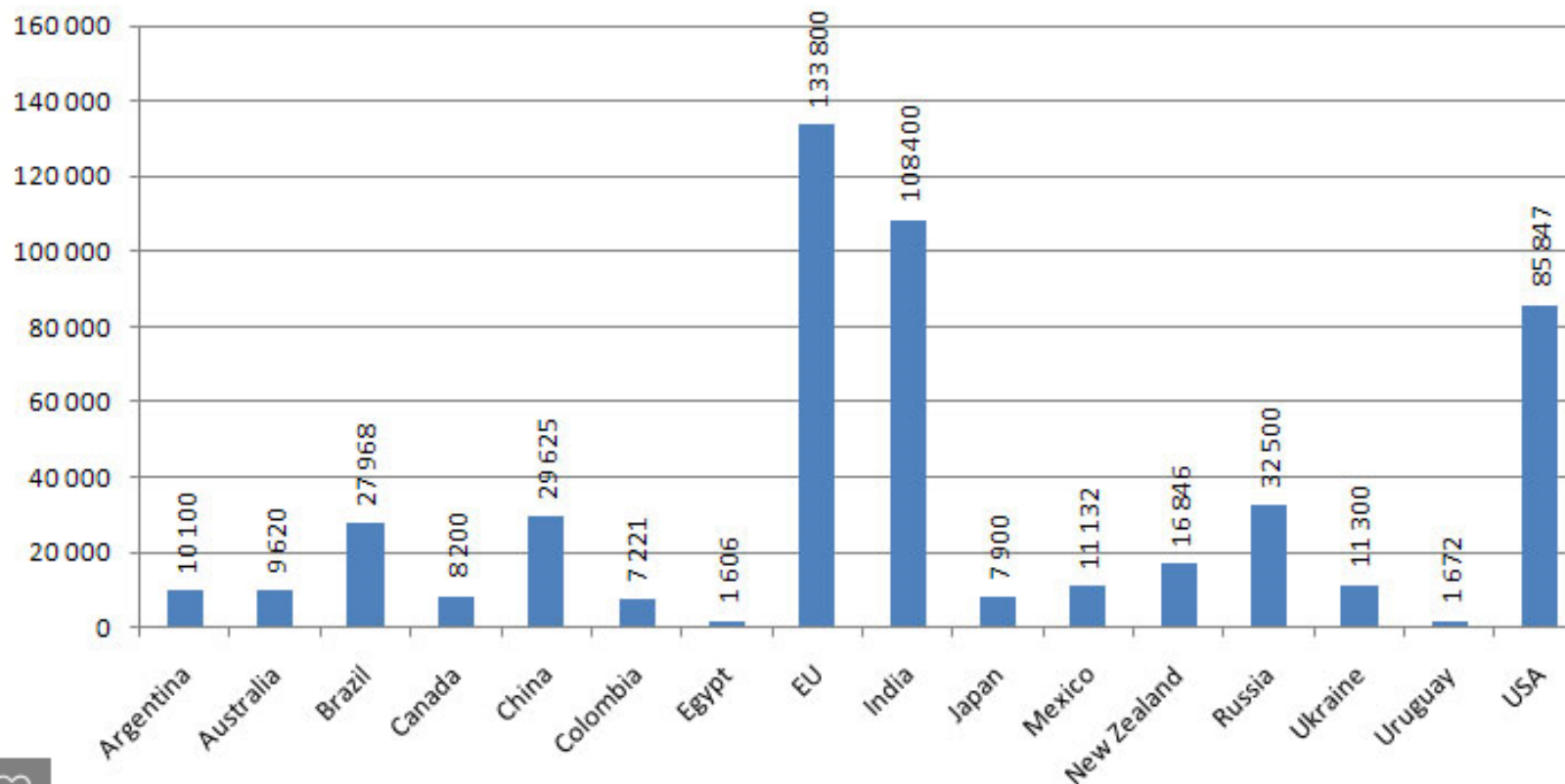
提纲

- **Global milk production**
全球牛奶生产形势
- **Export markets**
出口市场形势
- **Dairy powder situation**
乳粉状况
- **Outlook**
未来展望



World Milk Production 全球牛奶产量

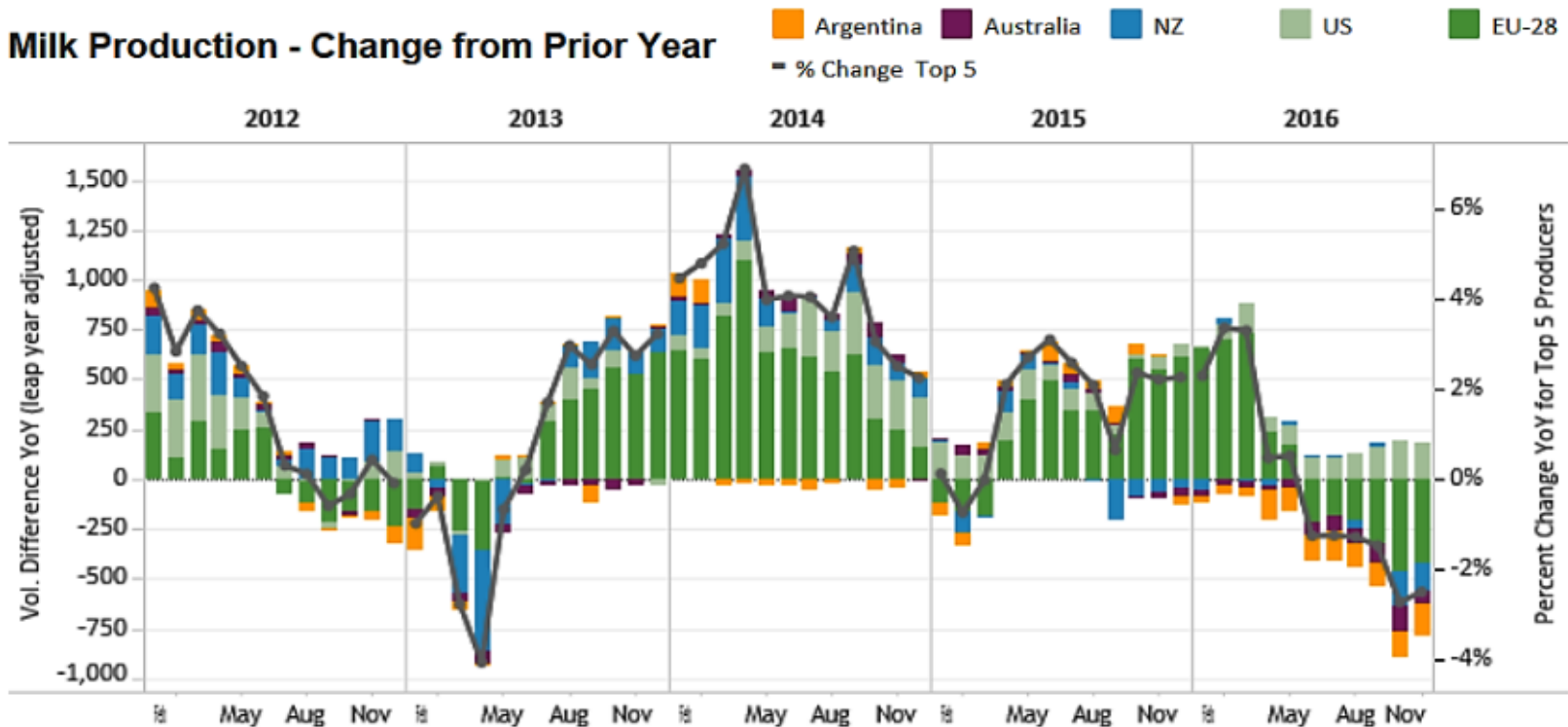
Cow Milk Production (thousand metric tons)



World Milk Production 全球牛奶产量

Milk Production from Major Exporters (000 MT)

Milk Production - Change from Prior Year



Editor's note: This analysis is based on data available on January 24.



EU Milk Production 欧盟牛奶生产形势

- The EU milk quota system was removed in April 2015, allowing dairy farmers to increase production without fear of Gov. penalties .
2015年4月，欧盟牛奶配额制度被取消；开始允许奶农去增加牛奶产量，而免受政府处罚的恐惧。
- After strong growth in 2015 and the first half of 2016, EU milk production, starting in the second half of year has declined due to low milk prices.
欧盟牛奶产量在2015年和2016年上半年获得强势增长，但是自从2016年下半年开始，由于牛奶价格过低，产量开始下滑。
- Milk prices rose to an average of 32 euro per kg in December, the highest level in two years, and these higher milk prices may encourage milk growth.
牛奶价格在2016年12月份，平均涨至32欧元/kg，创两年新高；较高的牛奶价格很可能刺激牛奶产量的增长。
- There are large supplies of Skimmed milk powder (350,000 MT) in Government storage which will slow any dramatic price recovery as this product will re-enter the market.
政府储备有35万吨脱脂奶粉去应对奶价巨大波动，必要时候会重新投放市场。
- New Dutch regulations intended to reduce phosphate emissions will require the slaughter of as many as 170,000 cows in 2017 which will reduce their milk production by 10% or 0.8% of EU production.
新的荷兰法规旨在减少磷酸盐排放量，而此法规将需要在2017年屠宰多达17万头奶牛，这将减少他们的牛奶产量的10%，整个欧盟产量的0.8%。
- EU milk production is expected to grow by 0.8% in 2017.
2017年欧盟牛奶产量预计同比增长0.8%。



European Milk Production

EU Milk Production										
	EU-28		Germany		France		Netherlands		Ireland	
	Output	YOY Change	Output	YOY Change	Output	YOY Change	Output	YOY Change	Output	YOY Change
Jan-16	12,701	5.5%	2,762	5.8%	2,242	1.8%	1,215	15.5%	159	34.6%
Feb-16	12,289	6.3%	2,633	6.7%	2,102	1.2%	1,161	17.5%	318	38.5%
Mar-16	13,475	5.7%	2,824	5.3%	2,233	-0.5%	1,240	16.8%	607	29.8%
Apr-16	13,531	1.8%	2,779	2.4%	2,241	-1.0%	1,219	10.7%	783	-3.0%
May-16	14,191	1.3%	2,886	1.1%	2,291	-0.4%	1,263	8.3%	957	6.2%
Jun-16	13,184	-1.6%	2,716	-1.3%	2,050	-3.6%	1,200	4.7%	879	4.1%
Jul-16	13,063	-1.4%	2,749	-0.9%	2,011	-1.0%	1,219	4.9%	806	1.8%
Aug-16	12,639	-1.6%	2,670	-1.8%	1,929	-2.2%	1,202	4.8%	720	0.8%
Sep-16	11,857	-2.7%	2,489	-3.0%	1,809	-6.7%	1,134	3.9%	600	-3.6%
Oct-16	11,983	-3.7%	2,504	-3.7%	1,914	-7.4%	1,154	2.0%	517	-6.4%
Nov-16	11,454	-3.6%	2,392	-5.2%	1,880	-7.6%	1,113	0.0%	360	0.5%
Dec-16							1,205	0.0%		
Rolling 12-months	152,832	0.9%	32,102	0.9%	24,893	-2.0%	14,324	7.2%	6,892	5.1%

Thousand Metric Tons, Leap Year Adjusted



Oceania Milk Production 大洋洲牛奶生产

- NZ dairy farmers have suffered the most from weak global dairy markets in recent years.
近些年来，面对不景气的全球乳制品市场行情，新西兰奶农最为艰难。
- New Zealand milk prices are now firming – with projected payout for current season almost 40% ahead of last season.
新西兰牛奶价格正在趋稳—当季支付奶农的预计多于上季40%。
- NZ production declined 4.5% year over year in November.
新西兰牛奶产量2016年11月份同比下降4.5%。
- Australia production continues to decline and was down 7% in 2016.
澳大利亚牛奶产量继续下降，2016年同比下降7%。
- Current forecasts expects NZ milk production to fall 3% in the 2016/17 season.
目前预计新西兰牛奶产量在2016/17季会下降3%。
- Milk production in Oceania is highly dependent on weather.
大洋洲的牛奶产量高度依赖天气状况。



Oceania Milk Production

	New Zealand		Australia	
	Output	YOY Change	Output	YOY Change
Dec-15	2,765	-1.6%	938	-4.3%
Jan-16	2,428	-2.1%	830	-3.7%
Feb-16	1,966	2.0%	698	-4.6%
Mar-16	1,735	-0.8%	684	-4.4%
Apr-16	1,361	-2.5%	674	-2.4%
May-16	824	3.5%	693	-5.5%
Jun-16	147	0.0%	642	-8.7%
Jul-16	231	0.9%	648	-10.1%
Aug-16	1,342	-2.7%	752	-9.2%
Sep-16	2,570	1.1%	902	-10.1%
Oct-16	3,036	-5.5%	1,002	-11.4%
Nov-16	2,845	-4.5%	967	-6.3%
Rolling 12-months	21,250	-1.8%	9,429	-7.0%

Thousand Metric Tons, Leap Year Adjusted



US Milk Production 美国牛奶生产

- Total US milk production in December was up 2.4% compared to December 2015, and up 1.6% for the year.

2016年12月美国牛奶产量环比增长2.4%，同比增长1.6%。

- Current feed prices are low which helps US farmers income.

目前较低的饲料价格有利于美国农民收入。

- US milk prices have been buffered from world markets due to strong butter and cheese prices.

由于强势的黄油和奶酪价格，美国牛奶价格受到世界市场价格的影响不大。

- The US ROFC for December was \$11.84/cwt. which indicates continued milk growth.

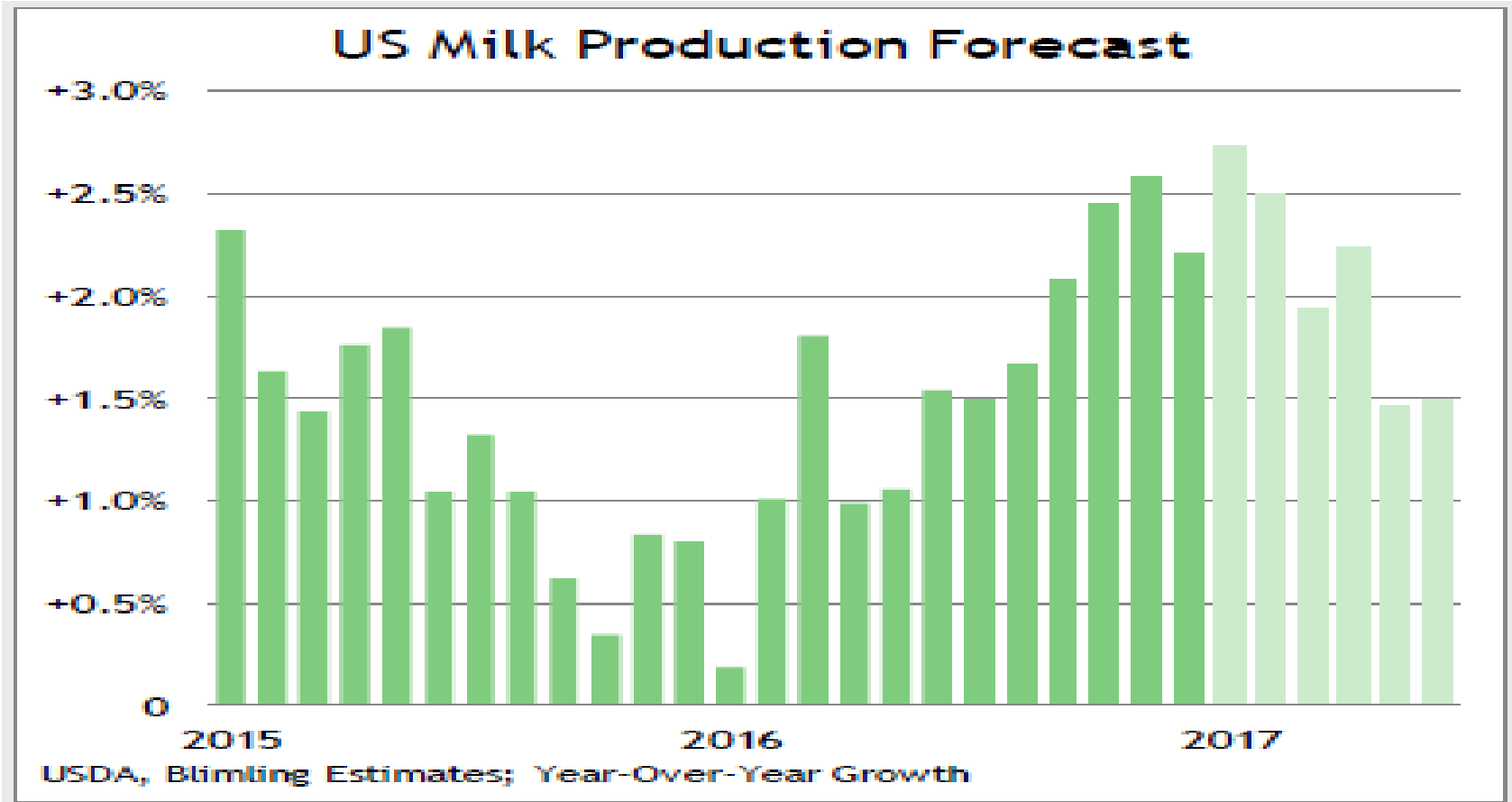
美国2016年12月的ROFC为\$11.84/cwt，这表明牛奶产量会继续增长。

- US milk production is forecast to grow 1.9% in 2017

预计美国牛奶产量在2017年增长1.9%。



US Milk Production 美国牛奶产量



US Dairy Exports 美国乳制品出口



Exports 出口

- Total US exports were up 43% in December, compared to prior year, lead by record sales to China.

2016年12月份美国总出口同比增长43%，由对中国的出口创记录而导致。

- US whey sales to Southeast Asia were up 26% in December.

十二月美国乳清销售增长26%。

- In the last 7 months of 2016, US whey exports were up 71% vs 2015.

在2016年最后的7个月里，和2015年相比，美国乳清产品出口增长71%。



US Dairy Exports 美国乳制品出口

	LATEST MONTH		DECEMBER (VOLUME, MT)	
	2014	2015	2016	% CHG
NDM/SMP*	34,134	46,179	47,514	+3
WMP*	4,275	776	3,053	+294
Cheese	27,332	24,705	28,602	+16
Butterfat	3,798	1,856	2,358	+27
Total Whey	39,549	32,967	47,162	+43
-Dry whey	16,431	12,776	18,894	+48
-WPC	8,264	8,378	11,886	+42
-Modified whey	11,376	8,800	12,893	+47
-WPI	3,477	3,014	3,489	+16
Lactose	30,946	30,362	31,212	+3
MPC	3,872	2,624	2,507	-4



US Exports 出口

	YEAR-TO-DATE	JANUARY-DECEMBER (VOLUME, MT)		
	2014	2015	2016	% CHG
NDM/SMP*	544,541	557,991	602,268	+8
WMP*	54,479	33,807	25,456	-25
Cheese	368,200	316,935	287,028	-9
Butterfat	70,913	21,535	24,332	+13
Total Whey	494,752	440,222	501,751	+14
-Dry whey	228,615	179,284	191,763	+7
-WPC	100,918	103,987	141,402	+36
-Modified whey	136,348	120,587	134,013	+11
-WPI	28,872	36,364	34,573	-5
Lactose	342,652	359,725	362,110	+1
MPC	51,724	30,757	21,577	-30



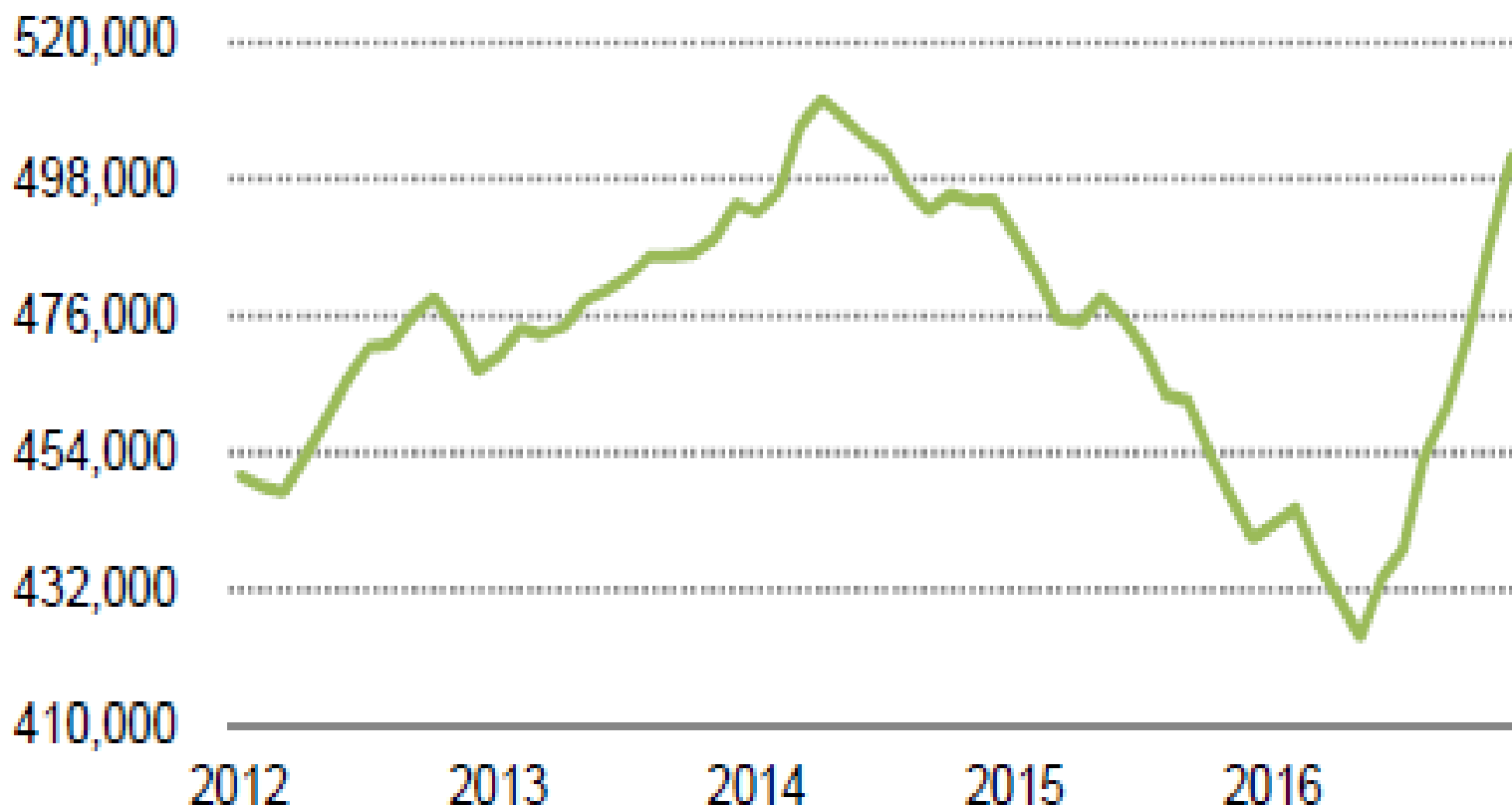
US Exports as % of Production 出口占比

	December	yr ago	Jan-Dec 16	yr ago
NDM/SMP	50%	52%	54%	54%
Total cheese	6.0%	5.3%	5.2%	5.9%
Butterfat	3.1%	2.3%	2.8%	2.6%
Dry sweet whey	52%	31%	44%	41%
Lactose	74%	73%	73%	76%
Total milk solids	14.5%	12.9%	14.2%	14.0%



US Total Whey Exports (MT)

美国乳清产品出口 (吨)

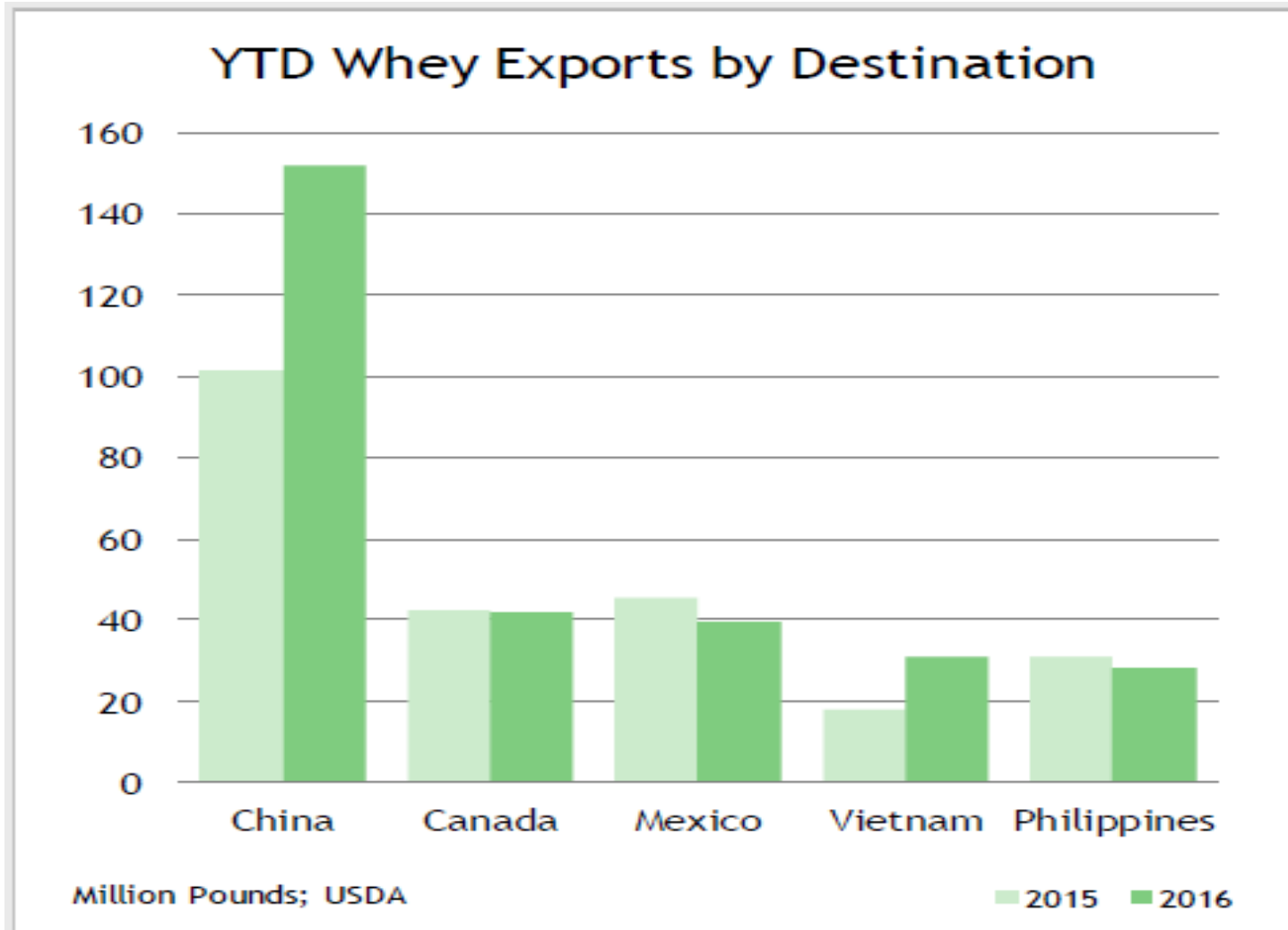


US Whey Exports 美国乳清产品出口

Whey Exports (million pounds)															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	YTD	Change
2016	29.6	29.5	23.8	28.0	35.8	37.3	36.9	45.1	33.5	43.0	38.5	41.7	422.8	422.8	7%
2015	28.7	31.1	39.7	38.9	45.3	38.3	36.4	30.8	24.7	27.8	25.4	28.2	395.2	395.2	-22%
2014	40.4	41.7	50.8	50.2	49.6	43.1	39.5	38.9	36.6	40.5	36.5	36.2	504.0	504.0	
Whey Exports to China (million pounds)															
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	YTD	Change
2016	6.7	6.5	5.8	5.3	11.9	14.5	15.4	20.5	13.4	16.1	17.4	18.4	152.1	152.1	51%
2015	9.9	6.1	11.3	12.7	14.8	12.6	10.1	4.6	4.3	4.4	4.4	5.6	100.6	100.6	-39%
2014	10.9	15.2	17.1	17.1	14.1	14.7	14.3	14.1	11.8	12.5	11.2	12.0	165.1	165.1	



US Whey Exports 美国乳清产品出口



Dairy Powder Situation

乳粉形勢



Dried Whey Market 干乳清市场

- US Dried Whey production was down 13.3% in December when compared to December 2015, and down 1.8% for the year.
美国干甜乳清粉产量2016年12月环比下降13.3%，同比下降1.8%。
- Dried Whey stocks were down 2.3% in December compared to December 2015.
干乳清库存量2016年12月同比下降2.3%。
- US whey production is down because some manufacturers have switched from drying whey to fractionating the whey solids.
美国甜乳清产量下降是由于一些制造商已经从干燥乳清转换为分离乳清固体。
- US Dried Whey prices continue to firm.
美国干乳清价格继续稳定。



Lactose Market 乳糖市场

- Lactose production in December 2016 was up 2.5% compared to prior year and up 7.1% compared to prior month.

2016年12月乳糖产量同比增长2.5%，环比增长7.1%。

- Lactose stocks were down 1.7% in December compared to prior year, and down 0.4% compared to prior month.

2016年12月乳糖库存，同比下降1.7%，环比下降0.4%。

- Continued strong demand from infant formula business and standardization.

婴幼儿配方奶粉以及奶粉标准化造成乳糖需求持续强劲。



Dried Whey Permeate Market 干乳清渗透物市场

- Dried permeate prices have moved higher along with Whey and Lactose.
低蛋白乳清粉(干乳清渗透物)价格随着乳清和乳糖价格上涨的更高。
- Permeate demand from Asia, and in particular China has been very strong in 2016 due to strong demand from the pork industry.

由于养猪行业的强势需求, 亚洲对低蛋白乳清粉的需求, 特别是中国的需求, 在2016年是非常的强势。

- US dried permeate demand is relatively flat.
目前美国对低蛋白乳清粉的需求相对平稳。
- US manufacturers have sold any excess inventories and are in good balance.

美国制造商已出售了多余的库存, 目前库存处于良好的平衡状态



Dairy Powder Outlook

乳粉市场未来展望



Dairy Market Outlook

Bearish Outlook: 不利因素

- EU has large inventories of skimmed milk powder which at some point will re-enter the market
欧盟拥有巨大的脱脂奶粉库存，在某些时点，它们会重新进入市场。
- Low corn prices help keep cost of production down and therefore encourage US milk output.
低廉的玉米价格让生产成本下降，因此助推美国牛奶产量。
- Improved milk prices will spur world milk production.
已改善的牛奶价格将会刺激全球牛奶产量。
- Trade barriers
各种贸易壁垒
- Strong \$US
强势美元
- Weak oil prices
弱势的原油价格
- No weather problems.
良好的天气状况



Dairy Market Outlook

Bullish Outlook: 有利因素

- Weather problems in dairy producing regions of the world.

乳制品产区的天气问题

- The Netherland Phosphate reduction plan.

荷兰磷酸盐调减计划

- Overall slowdown in world milk supplies.

全球牛奶供应整体下降

- Higher oil prices.

更高的原油价格



CME Whey Futures 芝加哥商品交易所乳清期 货价格

02/10/17 \$/cwt.

Feb. 2017	48.25	Aug.	50.00
Mar.	49.98	Sept.	50.00
April	50.00	Oct.	50.00
May	50.03	Nov.	49.75
June	50.20	Dec.	50.00
July	49.90	Jan. 2018	50.00



US Dairy Economist # 1

Forecast for 2017 \$/cwt.

	Dried Whey	Lactose
Q 1, 2017	48.50	38.50
Q 2	50.50	43.50
Q 3	50.00	47.50
Q 4	48.00	49.00
Average	49.25	44.60



US Dairy Economist # 2

Forecast for 2017 \$/cwt.

		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ave
Cheese (\$/Lb)	2016	1.518	1.517	1.516	1.504	1.410	1.448	1.642	1.812	1.751	1.583	1.760	1.799	1.605
	2017	1.701	1.690	1.680	1.650	1.600	1.650	1.750	1.850	1.850	1.825	1.825	1.775	1.737
	2018	1.700	1.700	1.700										
Whey (\$/Lb)	2016	0.235	0.247	0.248	0.247	0.251	0.260	0.274	0.285	0.306	0.330	0.369	0.399	0.287
	2017	0.442	0.473	0.465	0.473	0.480	0.485	0.490	0.495	0.500	0.500	0.500	0.475	0.481
	2018	0.475	0.460	0.450										
Class III (\$/Cwt)	2016	13.72	13.80	13.74	13.63	12.76	13.22	15.24	16.91	16.36	14.82	16.76	17.40	14.86
	2017	16.77	16.83	16.70	16.47	16.03	16.54	17.54	18.54	18.57	18.33	18.31	17.66	17.36
	2018	16.92	16.80	16.72										
Butter (\$/Lb)	2016	2.08	2.14	1.99	2.02	2.06	2.16	2.32	2.23	2.08	1.86	1.91	2.10	2.08
	2017	2.26	2.21	2.25	2.28	2.28	2.28	2.30	2.30	2.30	2.33	2.25	2.20	2.27
	2018	2.15	2.10	2.05										
Nonfat Dry Milk (\$/Lb)	2016	0.78	0.77	0.75	0.73	0.76	0.79	0.84	0.86	0.88	0.92	0.91	0.96	0.83
	2017	1.02	1.00	0.99	1.01	1.03	1.05	1.10	1.05	1.05	1.05	1.00	1.00	1.03
	2018	1.00	1.00	1.00										
Class IV (\$/Cwt)	2016	13.31	13.49	12.74	12.68	13.09	13.77	14.84	14.65	14.25	13.66	13.76	14.97	13.77
	2017	16.19	15.76	15.88	16.15	16.29	16.46	17.04	16.61	16.61	16.71	15.97	15.76	16.29
	2018	15.55	15.33	15.12										



US Dairy Markets (DMN) \$/cwt.

	Dried Whey	Lactose
2012	58.28	84.25
2013	55.57	65.80
2014	62.50	52.70
2015	34.10	22.48
2016	27.74	28.05
2017 (F)	48.00	45.00



Overall Outlook 展望

- Dairy supply & demand are getting in balance.
乳制品供需正在趋于平衡。
- Dairy prices in 2017 are expected to be higher than 2016.
2017年乳制品价格预计高于2016年。
- There is always the opportunity for volatility in the dairy markets.
乳制品市场的变化中始终蕴藏着机会和不稳定性。
- Export demand is always a major driving factor in US dairy powder prices.
对于美国乳粉价格而言，出口方面的需求总是一个重要驱动因素，。
- We do not expect major price increases.
我们预计价格会上涨，但是不会出现大幅上涨。



Thank You !
谢谢 !

