

# MMO Economic Board

## Meeting of 28 March 2017

- o The 20th meeting of the MMO Economic Board took place on 28 March 2017, with the participation of experts from the various steps in the milk supply chain: CEJA (young farmers), COPA-COGECA (producers and cooperatives), ECVC (Via Campesina), EMB (European Milk Board), EDA (dairy industry), Eucolait (dairy trade) and Eurocommerce (retail). Presentations and information exchanged during the meeting showed the following.
  - o EU milk collection increased by 0.4% in 2016 (0.5 mio t, compared to 3.7 mio t in 2015 and 6.5 mio t in 2014). Contraction in milk deliveries continued in January 2017 by 2.4%. Provisional figures for February confirm the trend, with vast decreases in main producing Member States.
  - o Average EU farm gate milk prices reached 33.4 c/kg in January 2017. Estimates for February point to a further increase cumulating some 31% rise since July, up to a level equivalent to the 5-year average.
  - o EU dairy product prices are generally in a downward trend since the beginning of the year, but still maintain levels well above one year ago (+76% for whey powder, + 57% for butter, +41% for WMP, +11% for SMP and +30/40% for cheeses). Prices in Oceania have converged with those in the EU and the US, following several weeks being overvalued specially for milk powders and cheese. The EU is fairly competitive for butter and cheese, but for SMP the US are 11% cheaper.
  - o Neither sales from public intervention nor offers for buying-in have been recorded so far this year for SMP. With no PSA schemes in operation, SMP, butter and cheese volumes benefiting from PSA continue to decrease.
  - o The assessment of EU stock levels based on a residual approach (production + imports - consumption - exports) reveals a slight rebuilding of private stocks for SMP. In view of the seasonal production ramp-up, offers to public intervention are expected in the coming weeks. Butter stocks remain at historical low levels, with shortage exacerbating in the second half of the year. Butter prices are therefore expected to stay firm. Low stock levels for cheese, coupled with strong domestic consumption and exports, should push prices upwards especially after the spring flush.
  - o World milk production closed 2016 with a slight decrease (-0.05%). Following a significant drop in Q4 2016 mainly driven by the EU, developments in the last months lead to a new equilibrium (despite US production in continuous expansion and NZ picking up). Combined growth in January 2017 reached -1.17%. US herd and yield per cow continue to grow; production could increase by 2.4% in 2017. NZ is expected to end the season with negative growth, but at a -1%/-2% rate (compared to the earlier forecasted -7%). Strong production declines are reported in Australia, Argentina and China.
  - o Global imports have been rather sluggish in recent months. Despite weaker demand for SMP in the Middle East and Asia, US and NZ exports have generally expanded, to the detriment of the EU. Butter trade has decreased in recent months due to high prices but demand is still strong, with consumption in the US reaching a 50-year peak. Global demand for cheese is also healthy, with the EU improving its position in main markets (US, Japan, South Korea) and good prospect with the entry into force of the CETA agreement. EU whey powder exports increased in 2016 by 3% and the trend continues early 2017; the US nevertheless became the main world exporter last year. Exports of milk and cream from the EU raised by 26% last year, with bigger competition from Oceania, especially in China where NZ is gaining market share.
  - o After a rather weak start in January 2017, China imports improved in February for all product categories except for butterfat. Analysts project an overall increase of dairy imports in China this year. Demand in the US remains strong, although cheese consumption has decreased slightly in recent weeks and stocks have built up. Following a steady increase in cheese imports, Japan became the second export market for the EU in 2016. A new feature is that some 20% of Japanese imports of SMP and whey powder originate in Turkey. Mexico continues expanding SMP imports, to the benefit of the US; EU exports of cheese, caseinates and infant formula are increasing.
  - o With regard to EU retail sales, liquid milk consumption is generally declining in volume (although higher prices are pushing value up). Demand for butter, cheese and other value-added products (milk shakes, desserts) is steadily increasing both in volume and value. Sales of organic dairy products increase at double digit rate in France, reaching a 7,3% market share for liquid milk. Increased competition is reported in the UK from substitute products based on vegetable protein.
  - o Cow slaughtering in the EU increased by 7% in 2016, but the number of dairy cows was still high in December (only -0.4% compared to 2015) with many farmers replacing cows with more productive heifers. In view of the herd situation and other market factors, a 0.6% increase in EU milk collection can be expected in 2017 with most of it taking place in the second half of the year.
  - o The functioning of futures markets was discussed as one of the tools that can help the dairy sector cope with price volatility. Complexity and lack of knowledge were mentioned among the obstacles to its development in the EU, although growing interest has been observed in recent months especially for SMP contracts. Details are available in the market brief published in March by the Commission.
  - o The market is characterized by an unprecedented price gap between fat and protein. Market sentiment is negatively impacted by SMP price developments, despite its limited weight in EU production (less than 10%). Global market balance appears uncertain with production picking up in the US and NZ, and a rather modest demand expansion.

# **ANNEX 1**

## **Milk Market Situation**

***European Commission***



European  
Commission



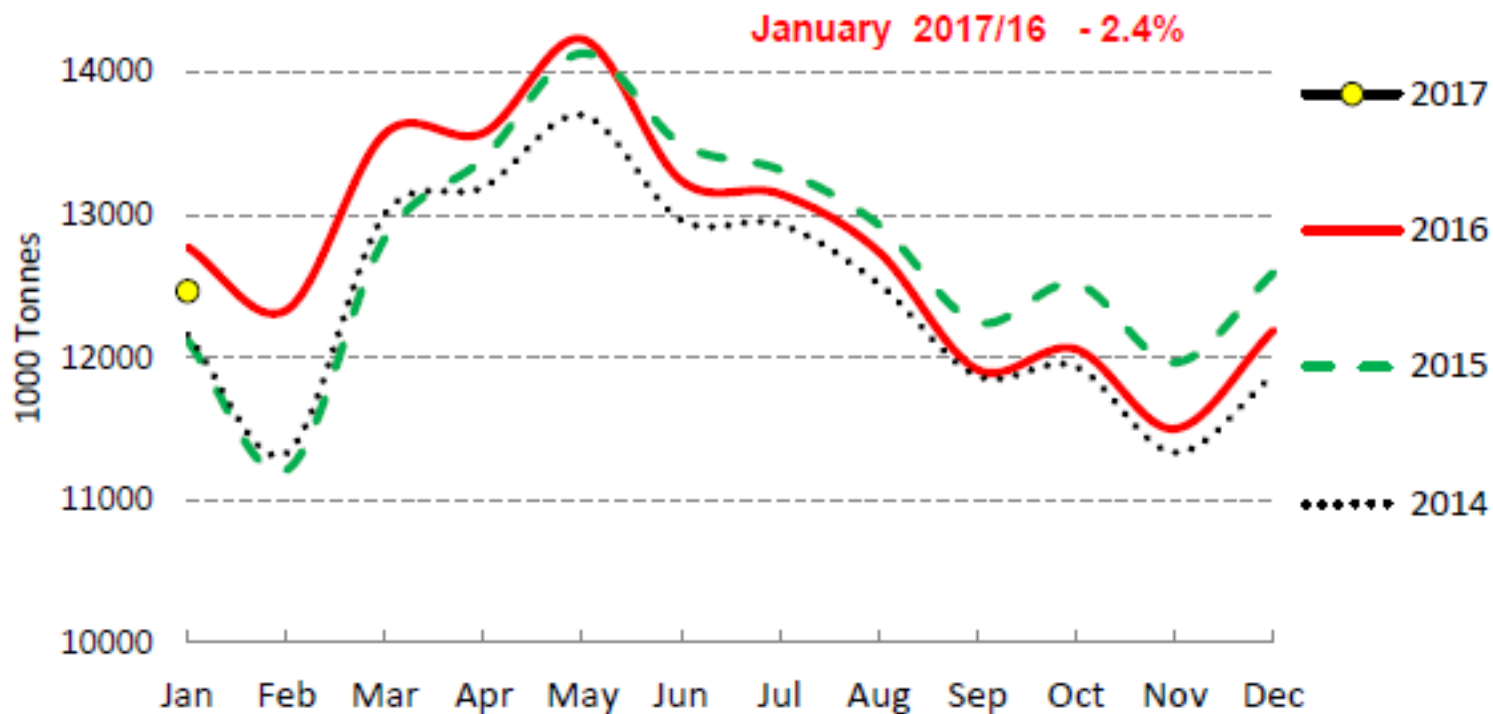
# Milk Market Situation

*Brussels, 28 March 2017*

# EU Milk deliveries



## EU - Cows' milk collected



Source : Estat - Newcronos

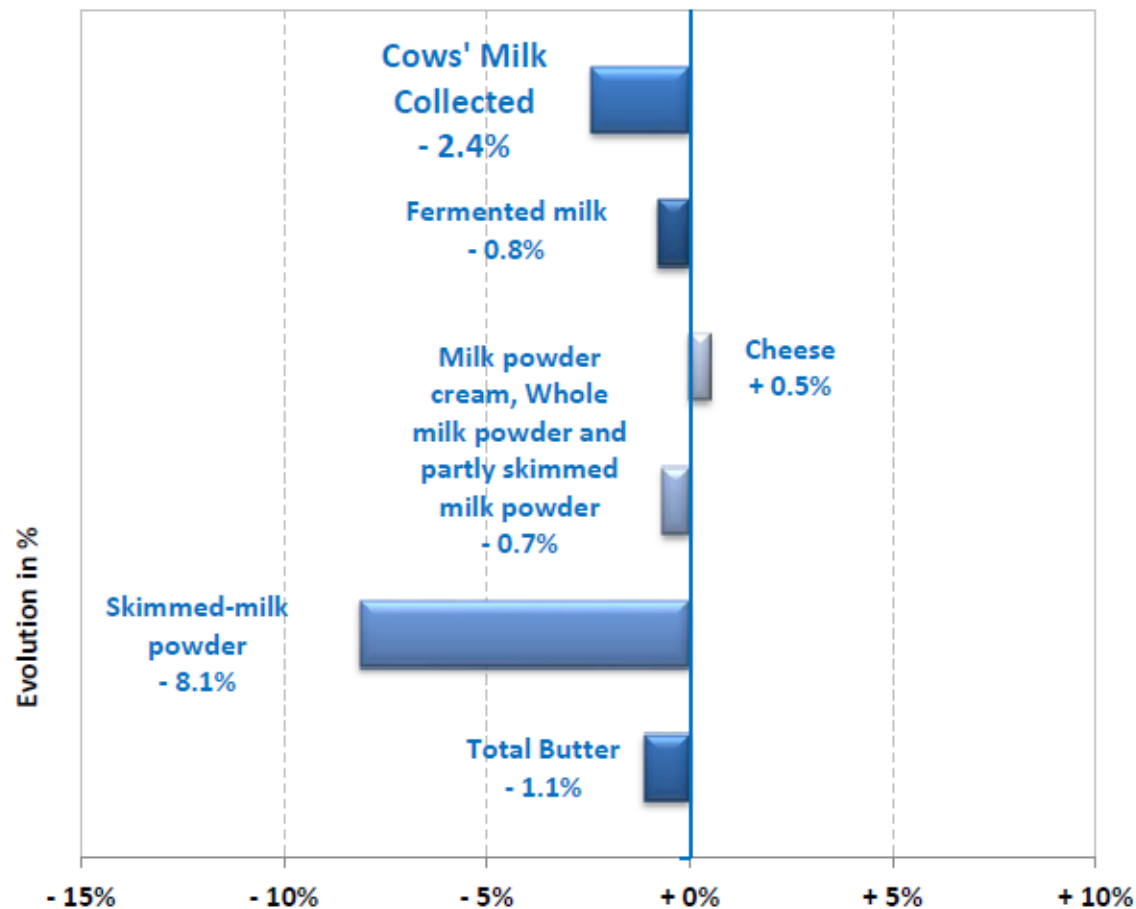
Last update : January

**!!! Data from some Member States are confidential and are NOT included in this table !!!**

# EU Productions



## EU-28 Deliveries/Productions development (Jan 2017 compared to Jan 2016)



Butter Finland estimated for Jan 2017

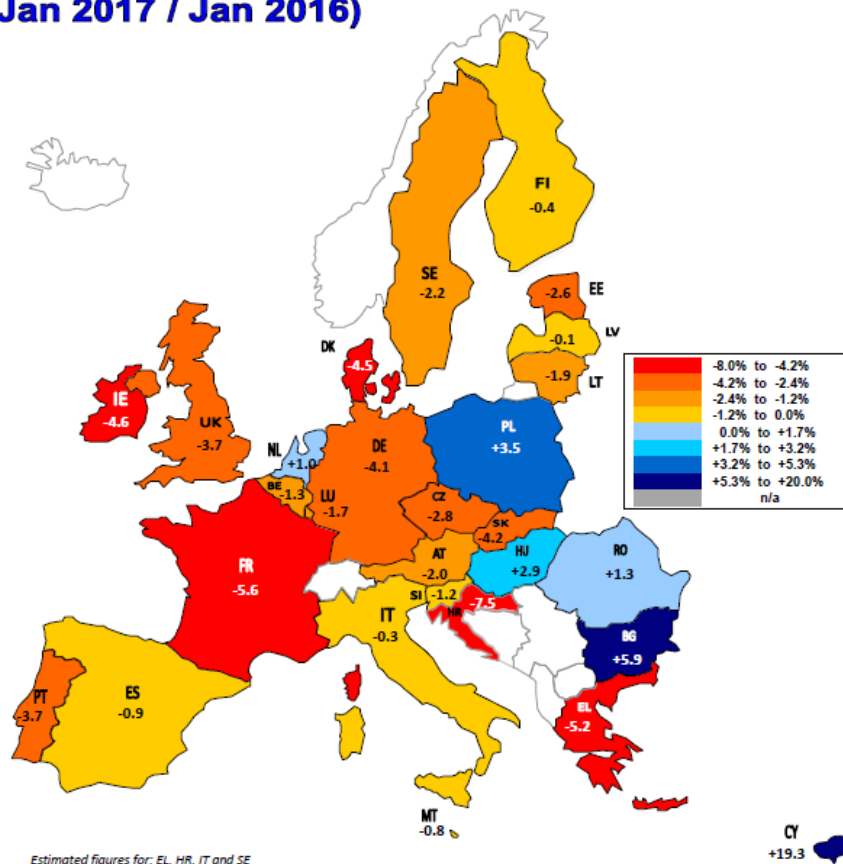
Source : MS' Communications to Eurostat,  
and, for milk : AGEA, FEQA,  
Reg. 479/2010.Art1(a)1

# EU Milk deliveries



## EU Milk Deliveries compared to last period (in %)

(Jan 2017 / Jan 2016)



Estimated figures for: EL, HR, IT and SE

Source : MS' Communications to Eurostat, FEGA, AGEA, Reg.479/2010.1[a]1

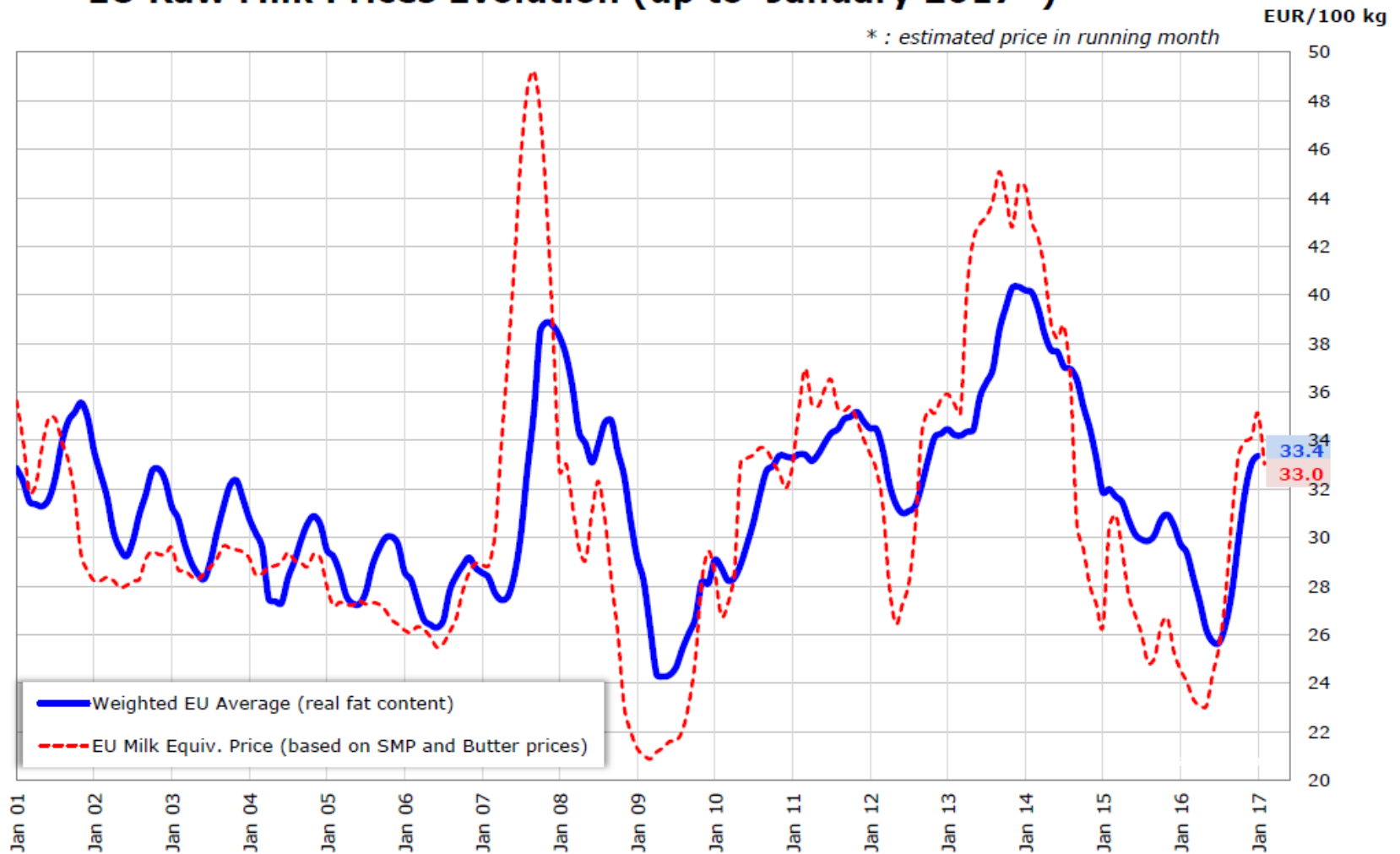
28/03/2017

## Jan 17 compared to Jan 16

Rank	evolution in %		evolution in 1000 Tons	
	MS	%	MS	Tons
1.	CY	+ 19,3%	PL	+ 32
2.	BG	+ 5,9%	NL	+ 13
3.	PL	+ 3,5%	HU	+ 4
4.	HU	+ 2,9%	CY	+ 3
5.	RO	+ 1,3%	BG	+ 2
6.	NL	+ 1,0%	RO	+ 1
7.	LV	- 0,1%	MT	- 0
8.	IT	- 0,3%	LV	- 0
9.	FI	- 0,4%	LU	- 1
10.	MT	- 0,8%	SI	- 1
11.	ES	- 0,9%	FI	- 1
12.	SI	- 1,2%	EE	- 2
13.	BE	- 1,3%	LT	- 2
14.	LU	- 1,7%	IT	- 3
15.	LT	- 1,9%	EL	- 3
16.	AT	- 2,0%	SK	- 3
17.	SE	- 2,2%	HR	- 3
18.	EE	- 2,6%	BE	- 4
19.	CZ	- 2,8%	ES	- 5
20.	PT	- 3,7%	AT	- 5
21.	UK	- 3,7%	SE	- 6
22.	DE	- 4,1%	PT	- 6
23.	SK	- 4,2%	IE	- 7
24.	DK	- 4,5%	CZ	- 7
25.	IE	- 4,6%	DK	- 20
26.	EL	- 5,2%	UK	- 46
27.	FR	- 5,6%	DE	- 114
28.	HR	- 7,5%	FR	- 126
	EU28	- 2,4%	EU28	- 310

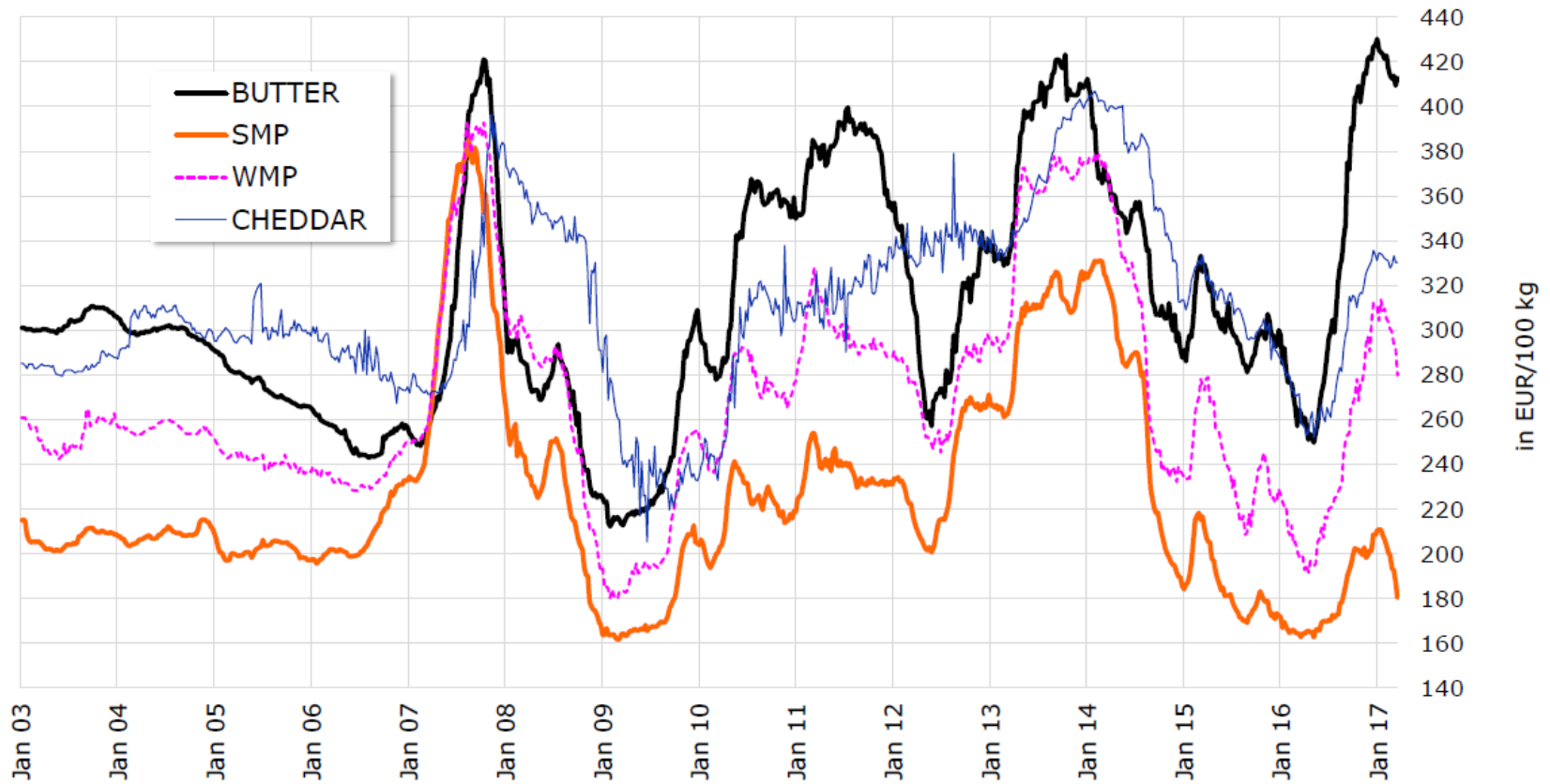
## EU Raw Milk Prices Evolution (up to January 2017\*)

\* : estimated price in running month



# EU Dairy Quotations

(EU Average Prices based on MS communication and weighted by production)

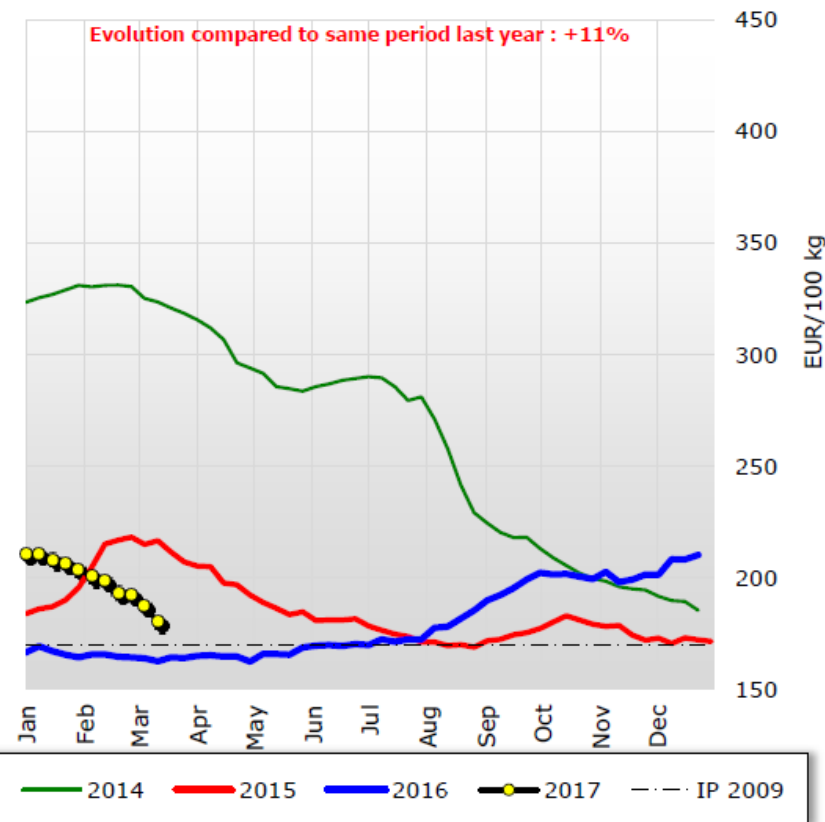




## Prices of EU Dairy commodities (Source : Reg. (EC) No 479/2010 Art. 2)

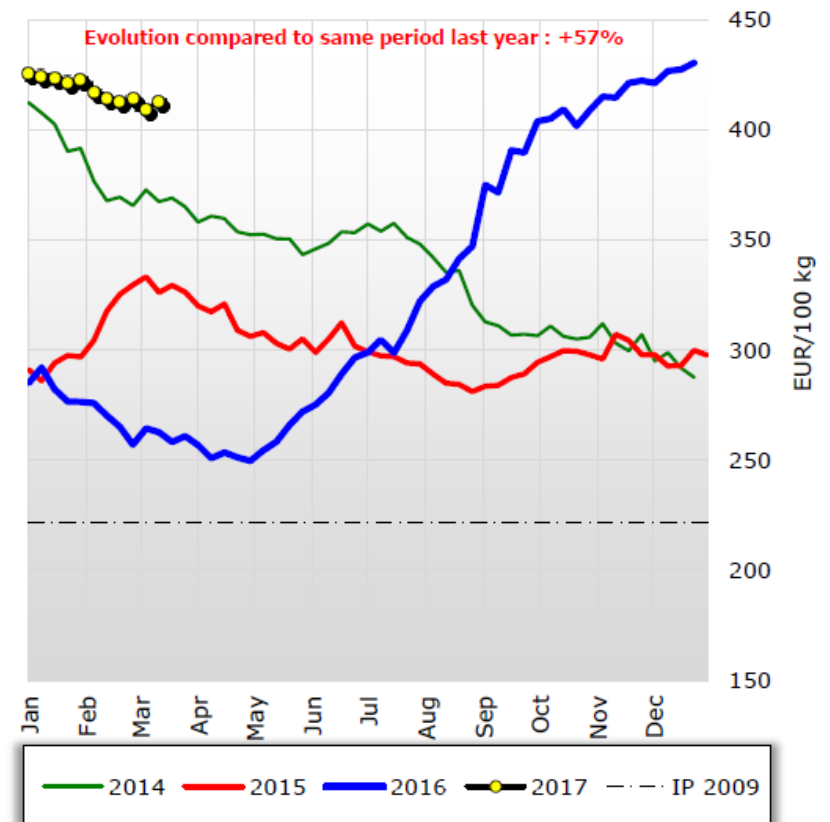
### Weekly EU SMP Prices

Latest price : 180 EUR/100kg

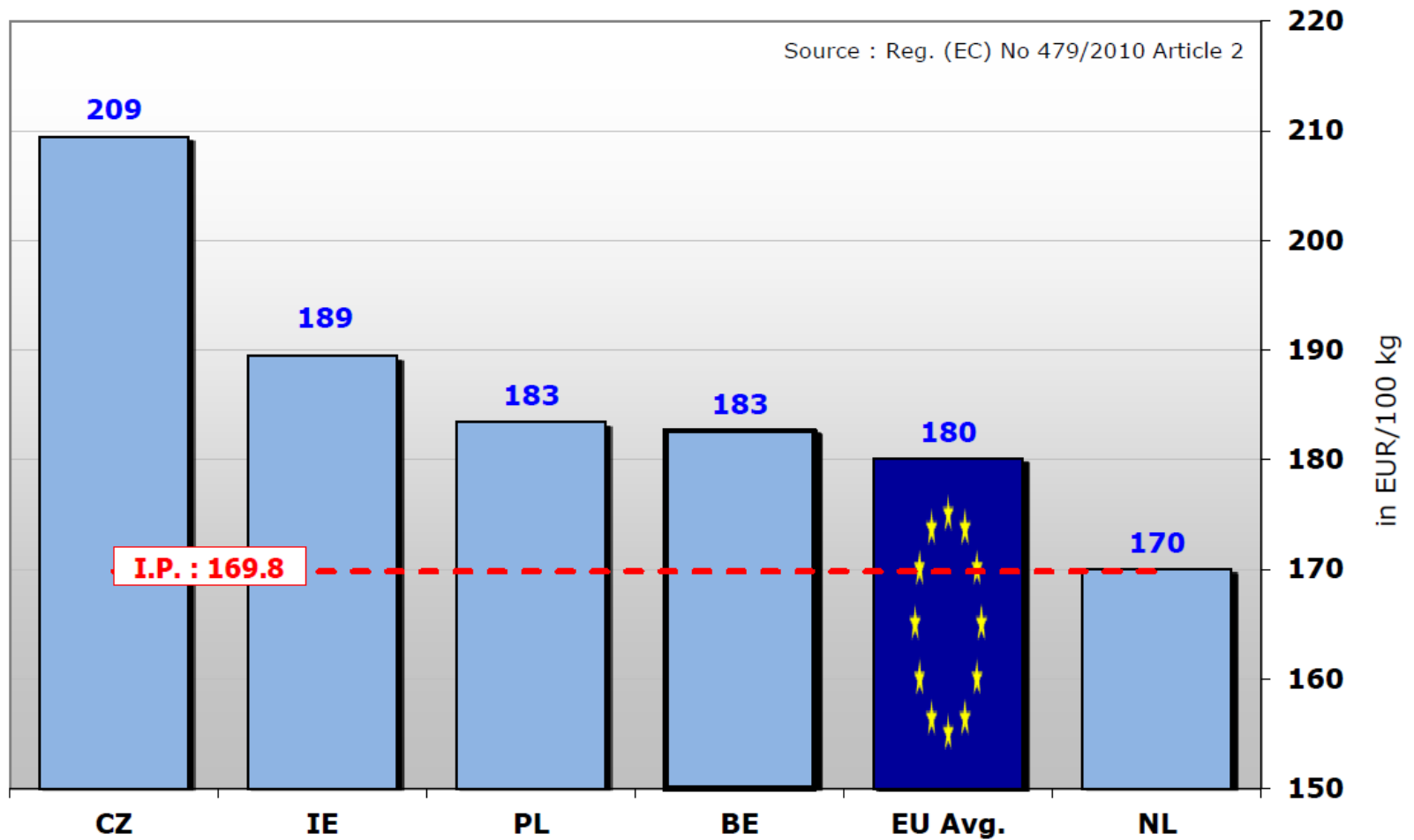


### Weekly EU BUTTER Prices

Latest price : 413 EUR/100kg

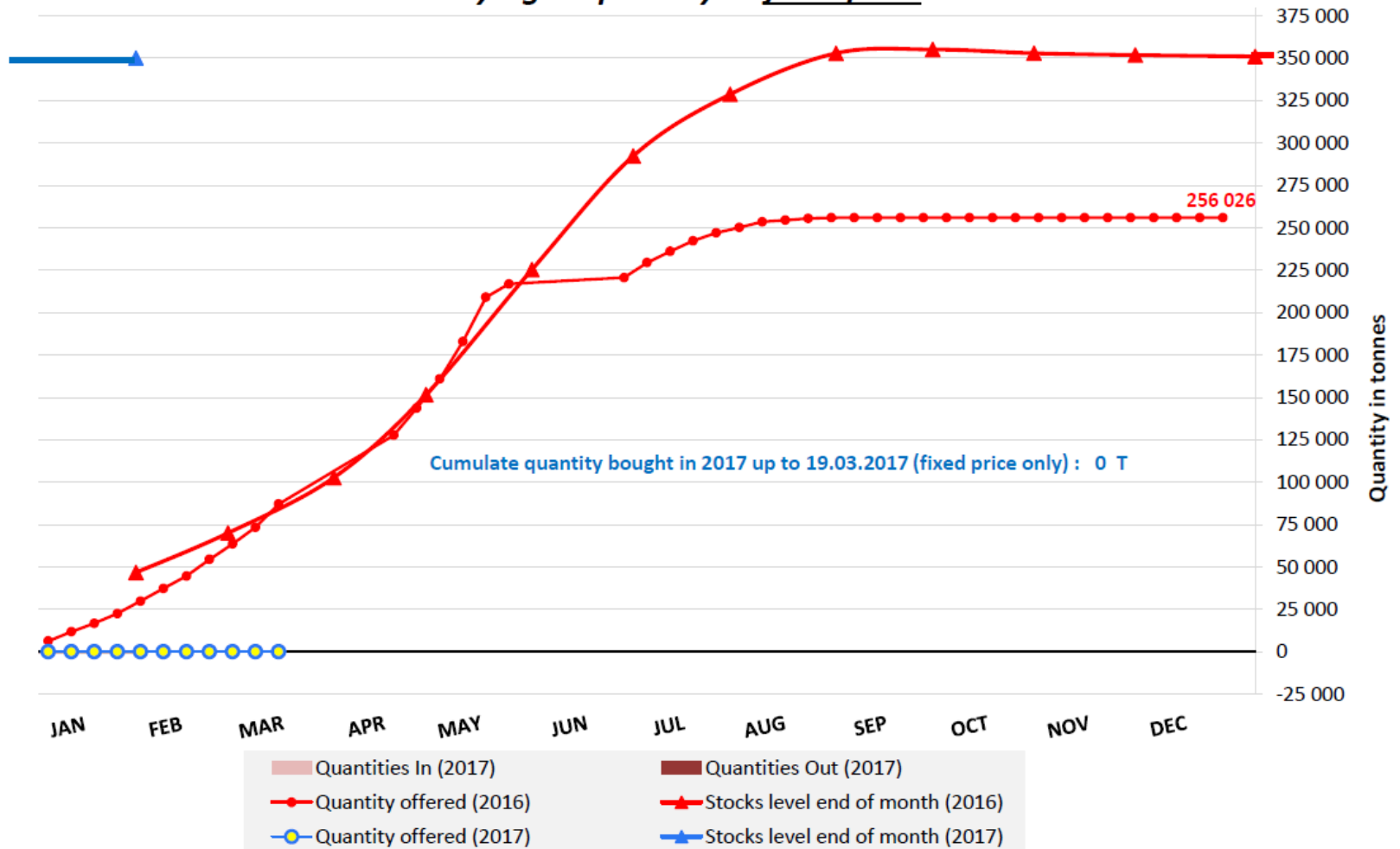


## EU S.M.P. Prices (up to 19.03.2017)



## Public SMP Intervention scheme (2016-2017)

### Buying-in quantity at fixed price



# PSA ending stocks 2017



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b>SMP</b>	62,1											
<b>BUTTER</b>	15,9											
<b>CHEESE</b>	13,5											

(x 1000 t)

### Latest World Quotations of Dairy Products

In US\$/t	Latest Quotations			Week - 2						Year - 1					
	19/03/2017			05/03/2017			% change (previous quotation)			March 2016			% change (1 year)		
	EU	Oceania	USA	EU	Oceania	USA	EU	Oceania	USA	EU	Oceania	USA	EU	Oceania	USA
Butter	4 387	4 738	4 732	4 376	4 675	4 805	→ +0.3%	↗ +1.3%	↘ -1.5%	2 932	2 750	4 275	↑ +50%	↑ +72%	↑ +11%
SMP	1 983	2 188	1 767	2 052	2 550	1 782	↘ -3.4%	↘ -14.2%	→ -0.9%	1 818	1 738	1 621	↑ +9%	↑ +26%	↑ +9%
WMP	3 094	2 963	3 252	3 175	3 288	3 252	↘ -2.6%	↘ -9.9%	→ nc	2 199	2 063	2 863	↑ +41%	↑ +44%	↑ +14%
Cheddar	3 536	3 613	3 024	3 490	3 838	3 321	↗ +1.3%	↘ -5.9%	↘ -9.0%	3 011	2 550	3 280	↑ +17%	↑ +42%	↘ -8%

Source : Member States Notifications, USDA

# **ANNEX 2**

## **EU dairy products monthly stock estimates at the end of January 2017**

***EDA***



**EU dairy products  
monthly stock estimations  
at the end of January 2017**

**Milk Market Observatory**

**Economic Board**

**March 28<sup>th</sup>, 2017**

# Methodology

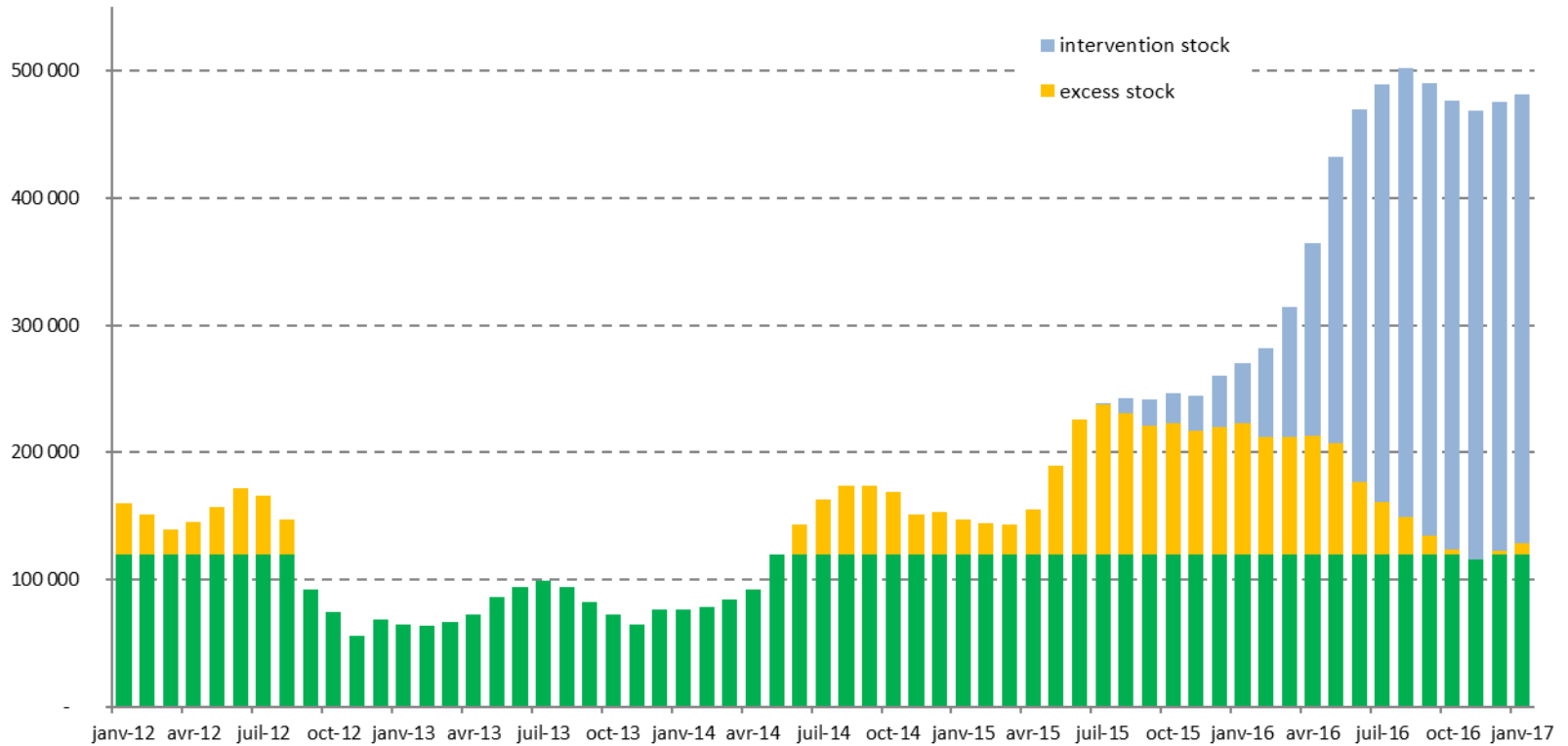
- For each dairy product and each month, the stock estimates are based on the equation:
  - **Stock variation** = EU production + EU import – EU internal consumption – EU exports
- ZMB balance sheets and forecasts have been used as references for :
  - End of year stocks levels in 2012 and 2013
  - Yearly consumption levels in 2012, 2013, 2014 and forecast for 2015
- Monthly production statistics are based on ZMB Dairy World publications.
- Exports and imports figures are based on MMO website figures.
- The initial stocks entered in the model at the beginning of 2012 are :
  - SMP: 152 000 t
  - Butter: 80 000 t
  - Cheese: 200 000 t (arbitrary basis)
- The green parts in each graph mean that this stock level can be considered as normal for the month.
- The orange part means that this stock level can be considered as too high for the month
- These qualifications are based on the EDA analysts' personal views and past market observation.



stock level  
in tons

## European stock level estimates - SMP

Calculations based on Eurostat production, export and import statistics  
and EU internal consumption annual estimates subject to revisions

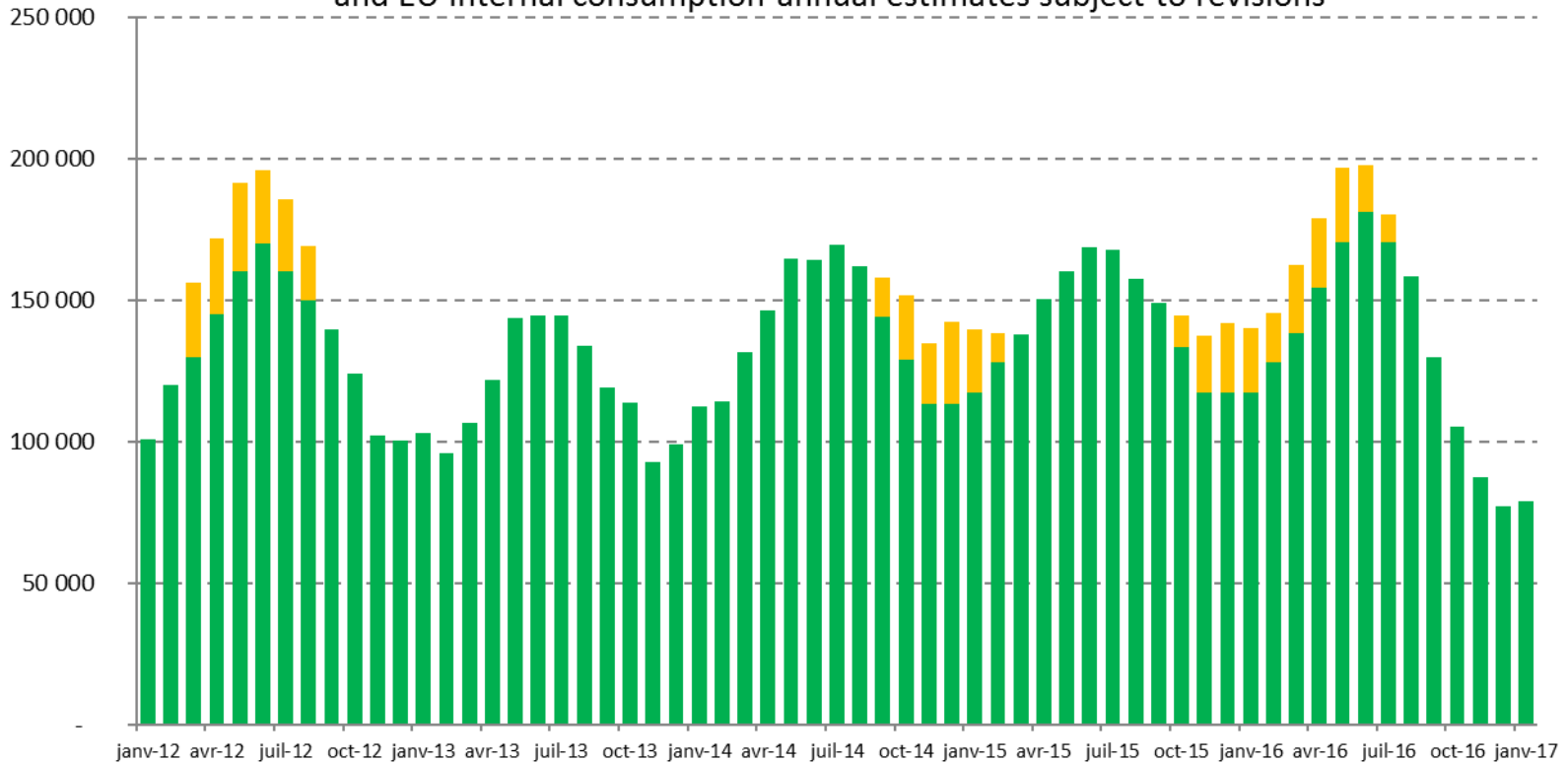


# European stock level estimates - Butter

Calculations based on Eurostat production, export and import statistics  
and EU internal consumption annual estimates subject to revisions



stock level  
in tons

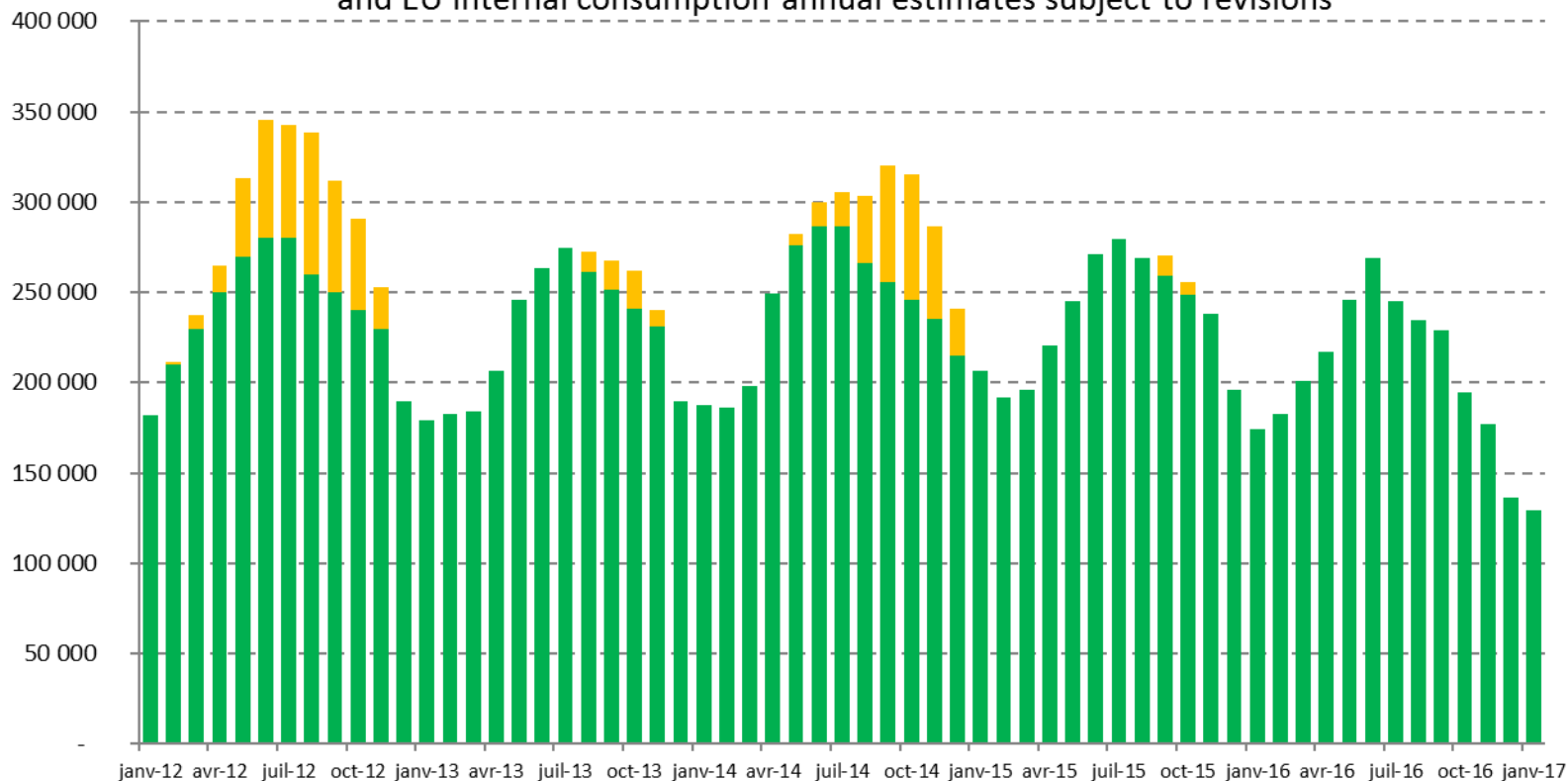


## European stock level best estimates - Cheese

Calculations based on Eurostat production, export and import statistics  
and EU internal consumption annual estimates subject to revisions



stock level  
in tons



# **ANNEX 3**

## **Perspectives from the Dairy Trade**

***Eucolait***



# Perspectives from the Dairy Trade

MMO Economic Board

28 March 2017



## Outline



- Global Supply
- Global exports & demand
- Development in key import markets
- Conclusions

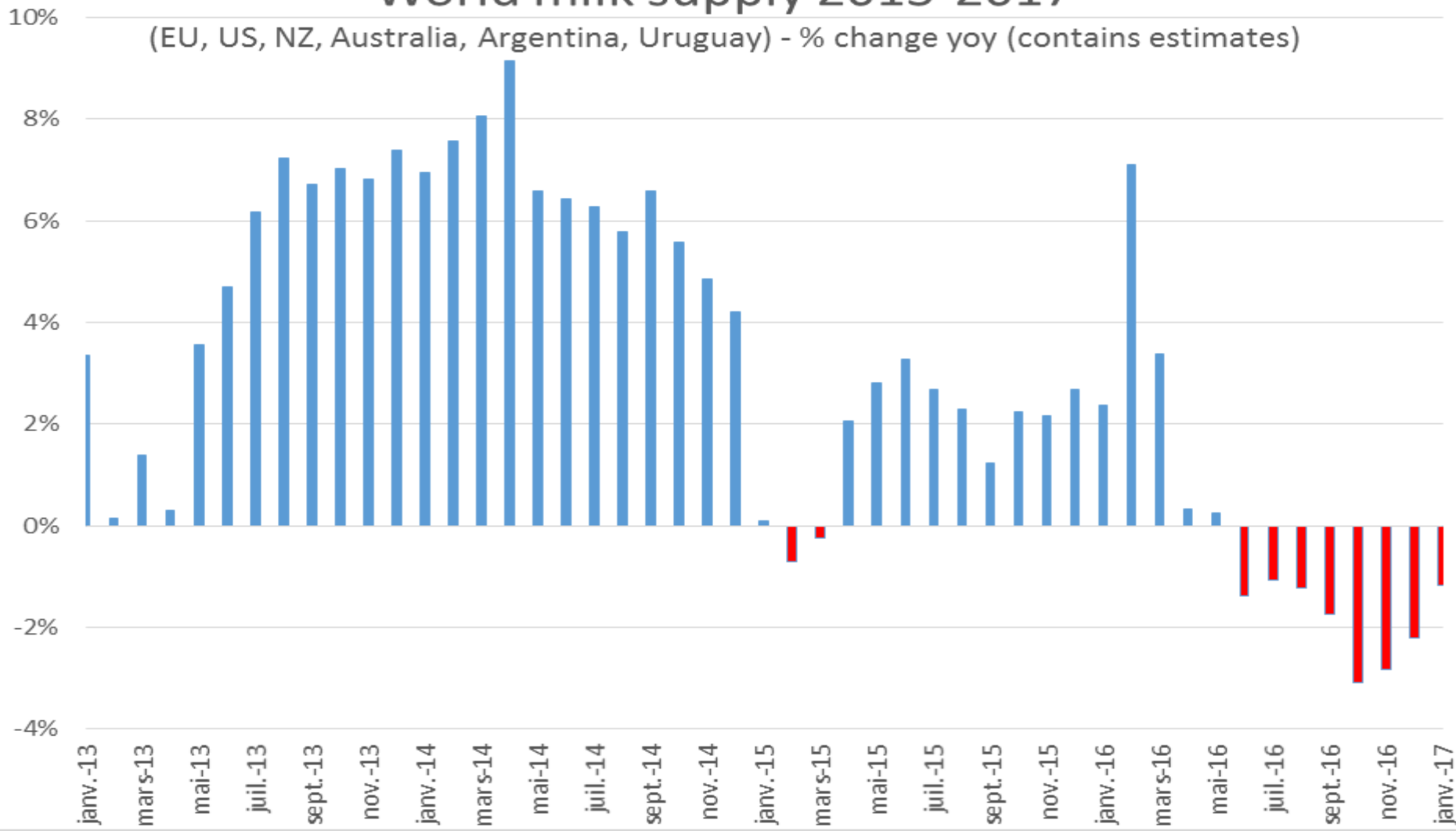


# Milk production in key export regions 2013-2016 (% change yoy)



## World milk supply 2013-2017

(EU, US, NZ, Australia, Argentina, Uruguay) - % change yoy (contains estimates)

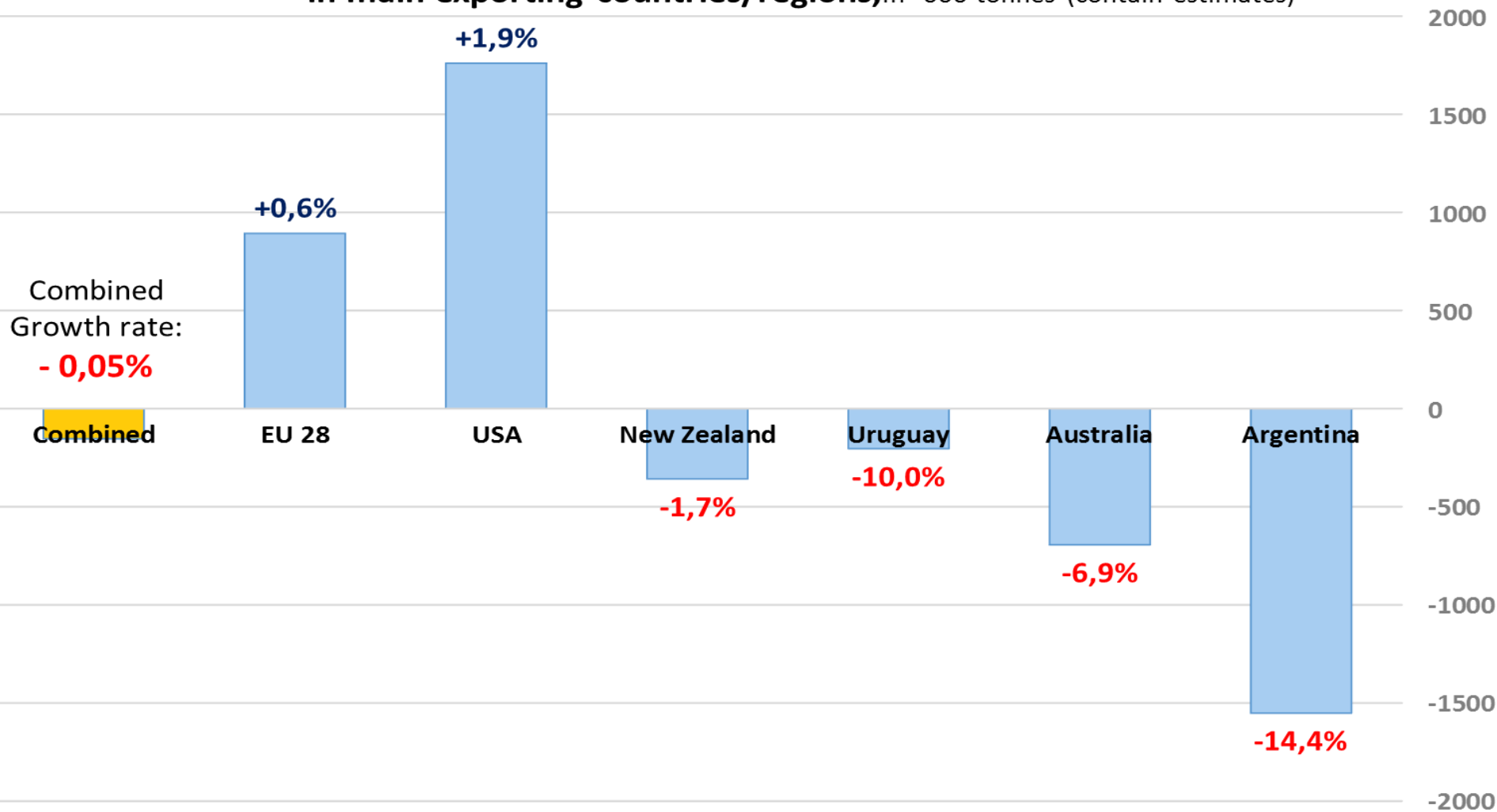




# Milk production in 2016 in key export regions



Comparing Jan-Dec 2016 milk production with Jan-Dec 2015  
in main exporting countries/regions, in '000 tonnes (contain estimates)



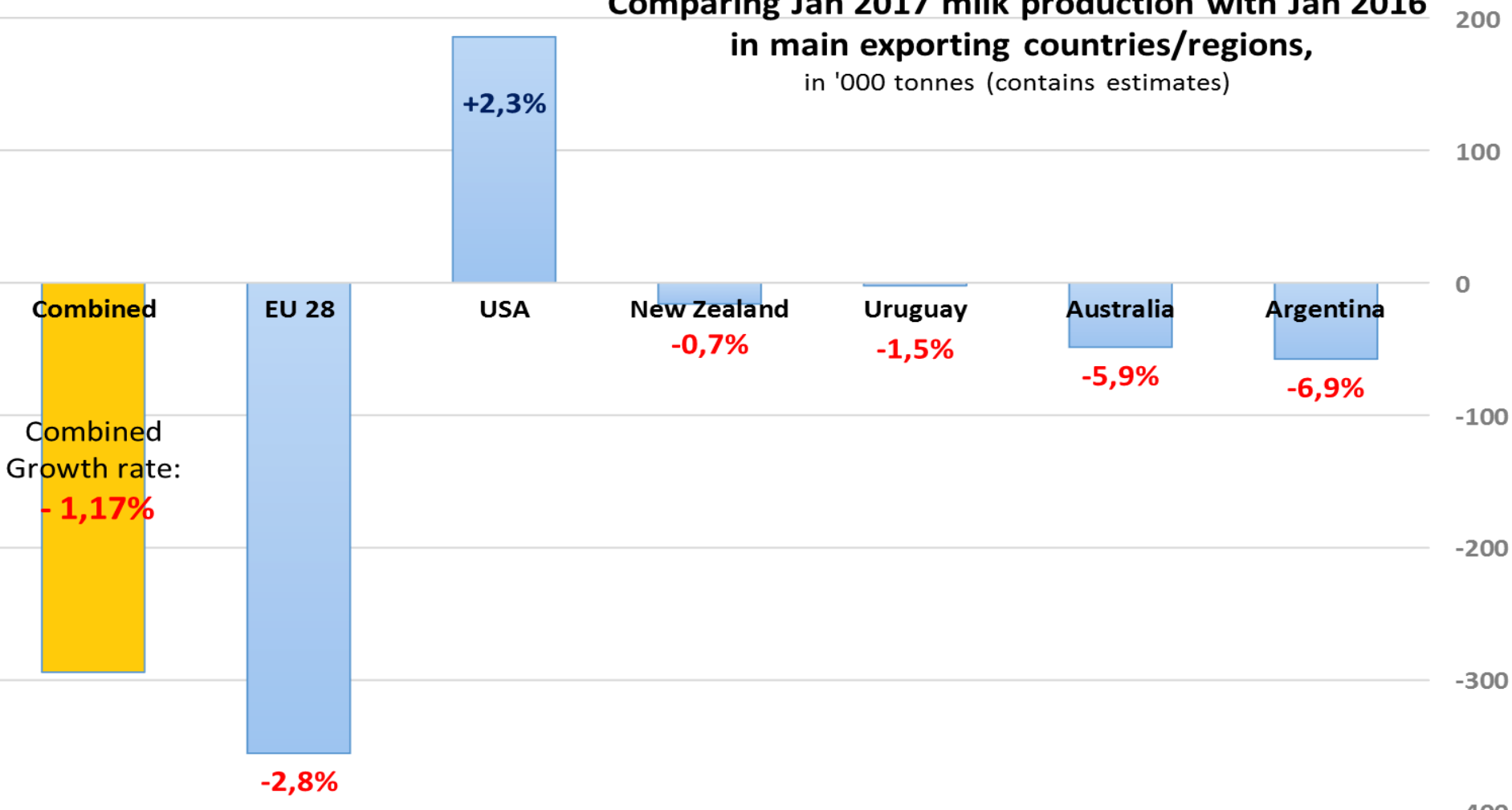




# Milk production in key export regions in January 2017



**Comparing Jan 2017 milk production with Jan 2016**  
**in main exporting countries/regions,**  
in '000 tonnes (contains estimates)





## Production outlook



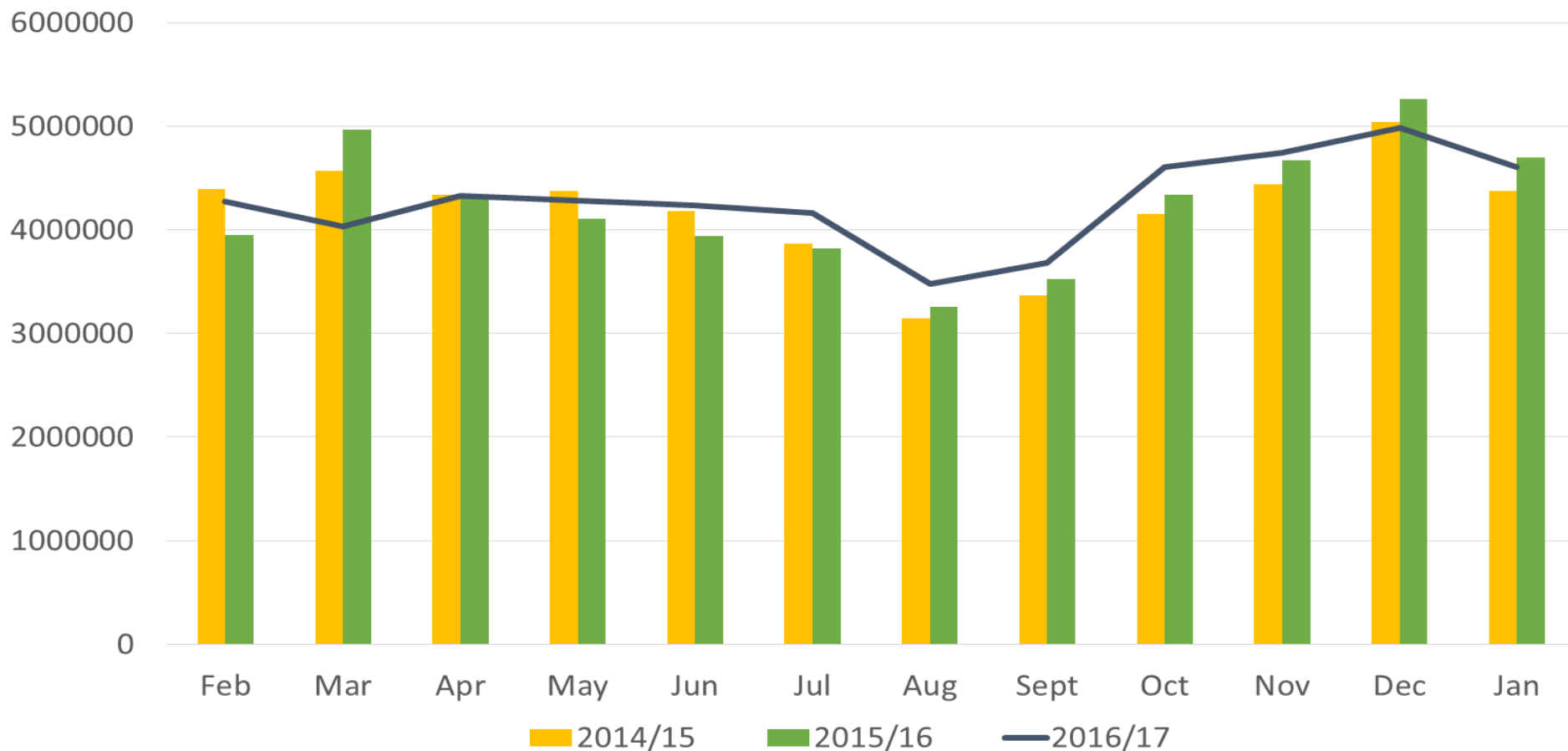
- **EU volumes** have fallen for 7 months in a row (largest declines in volumes in FR, DE, UK; NL +1% in Jan). Rising farm-gate milk prices is putting milk production decrease to an end. EU milk deliveries could recover already in Q2. **Outlook for 2017: +0,6%.**
- **NZ milk production down -0,7% in January.** Season do date -2,61% (Jun-Jan). Higher farm-gate prices might have encouraged production to make up for early season losses. **Outlook: between -1% and -2% for the season** (instead of the earlier announced -7%).
- **Australia milk production continues to struggle in February, down -6,8% yoy. Season to date -8,4%** (Jul-Feb). Full season milk supply Jul 16 – Jun 17 is likely to be down by -6,8% and will continue to limit export capacity.
- **US production for February stayed ahead of last year with +2,3%** (down in California & Pacific Northwest, Southwest leads with +14,4%). US herd is at its highest since 1980s & yield-per-cow continues to grow (+1,8% in Jan). **USDA raised total output for 2017 slightly to +2,4%** (98,7 mio tonnes)
- **Others:** Slow recovery in Brazil, further declines likely in Argentina (-20,1% in Q4), China milk production in 2016 (-4,1% yoy) according to government statistics



# Dairy exports of main market players in ME



Monthly global exports - all products  
EU+USA+NZ+Aus+Arg+Uru  
(Milk equivalents)





# Main EU export markets for all dairy products (in value - €)



2014



2015



2016





# SMP trade

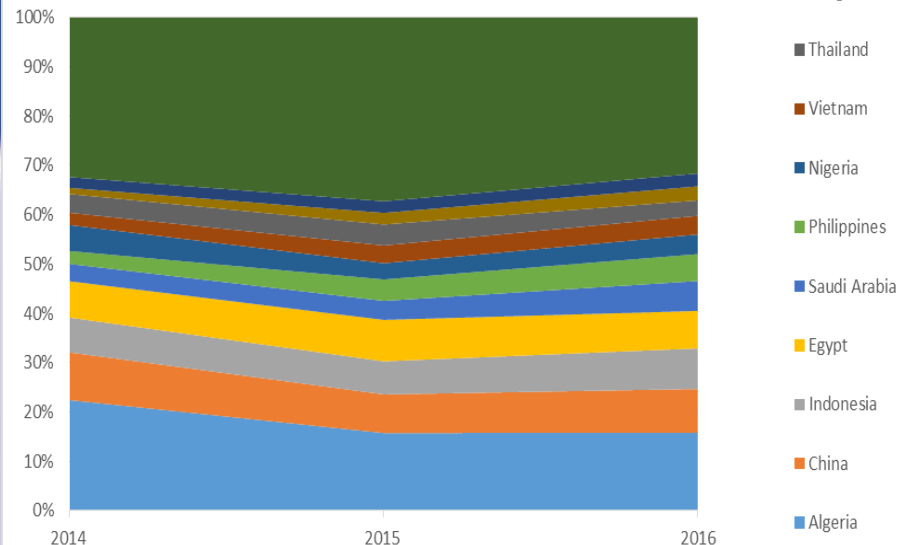
## EU SMP exports:

- Growth rate Jan-Dec 16/15: -16,7% (-7,8% for Jan 17 yoy)

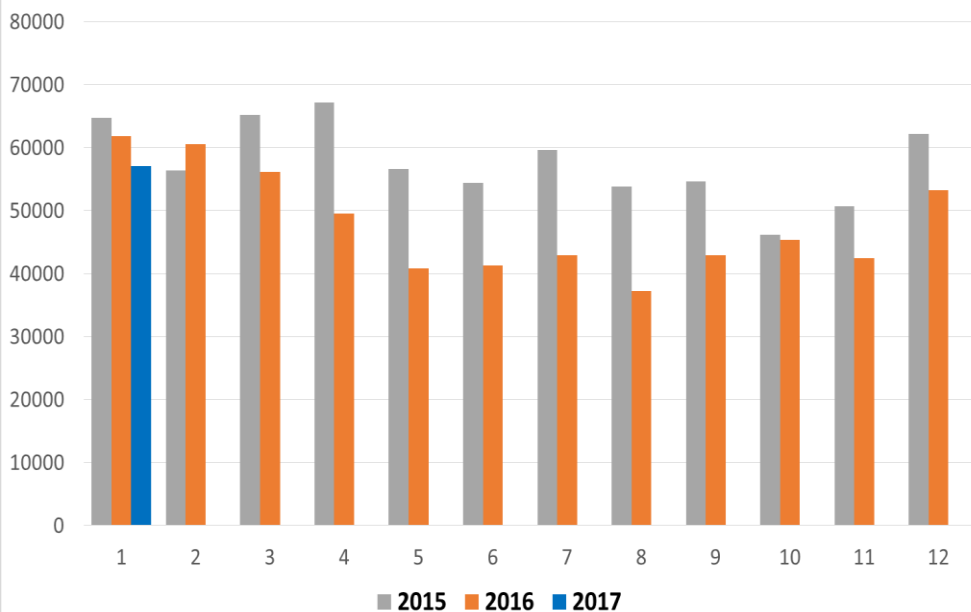
## Combined SMP exports:

- Growth rate Jan-Dec 16/15: -6,0%

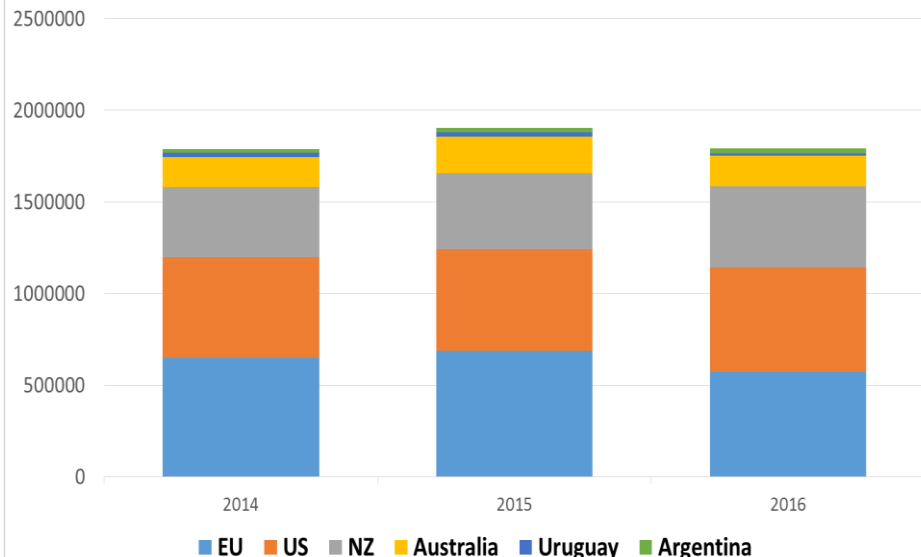
Development of EU export destinations for SMP  
Jan-Dec 2014, 2015, 2016  
(total exports Jan-Dec 2016: 574 207 tonnes )



EU SMP Exports  
(tonnes)



Cumulated SMP Exports for Jan-Dec 2014, 2015 & 2016 of major Exporters  
(tonnes)





# WMP trade

## EU WMP exports:

- Growth rate Jan-Dec 16/15: -0,7% (+18,1% for Jan 17 yoy)

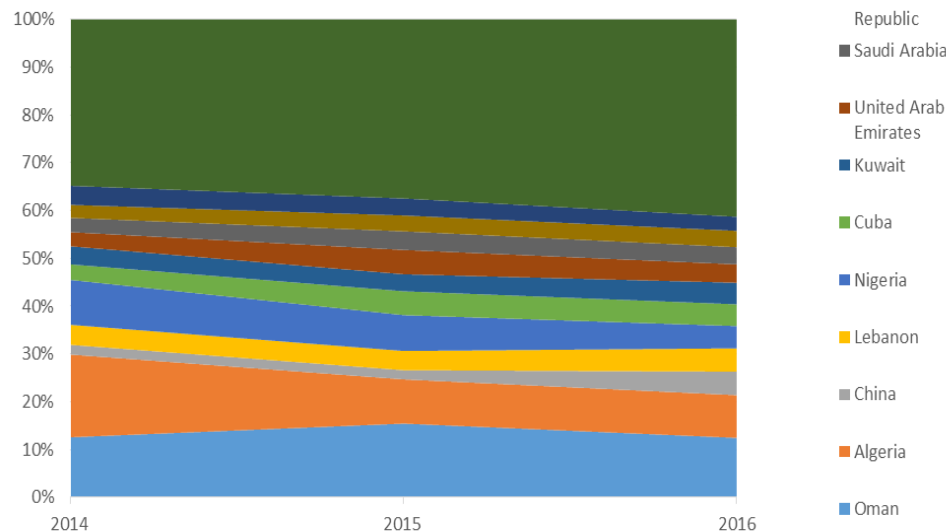
## Combined WMP exports:

- Growth rate Jan-Dec 16/15: +0,4%

## Development of EU export destinations for WMP

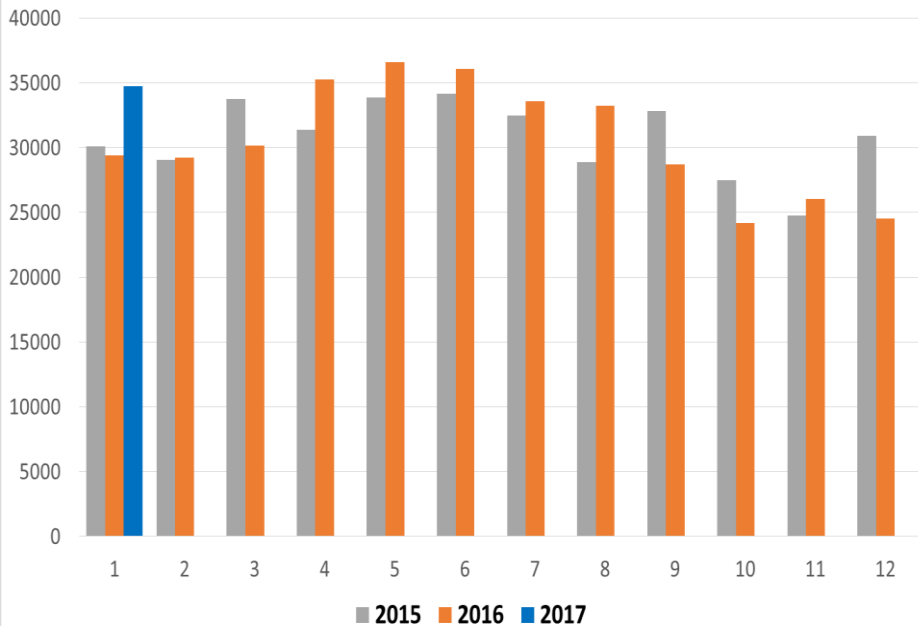
Jan-Dec 2014, 2015, 2016

(total exports Jan-Dec 2016: 367 140 tonnes )



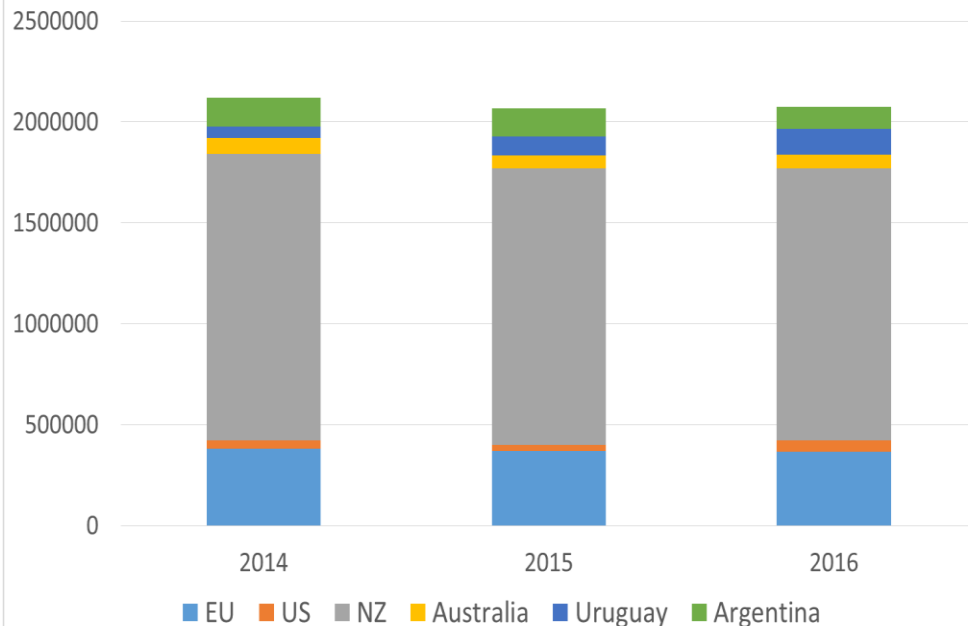
## EU WMP Exports

(tonnes)



## Cumulated WMP Exports for Jan-Dec 2014, 2015 & 2016 of major Exporters

(tonnes)





# Whey powder trade

EU whey powder exports:

- Growth rate Jan-Dec 16/15: +3% (+2,4% for Jan 17 yoy)

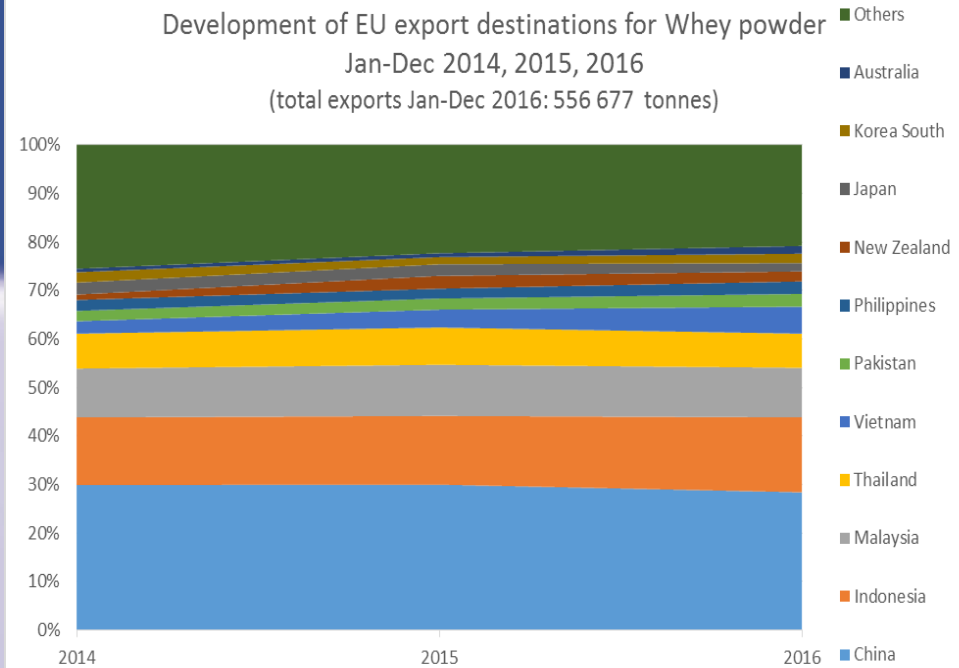
Combined whey powder exports:

- Growth rate Jan-Dec 16/15: +9,3%

## Development of EU export destinations for Whey powder

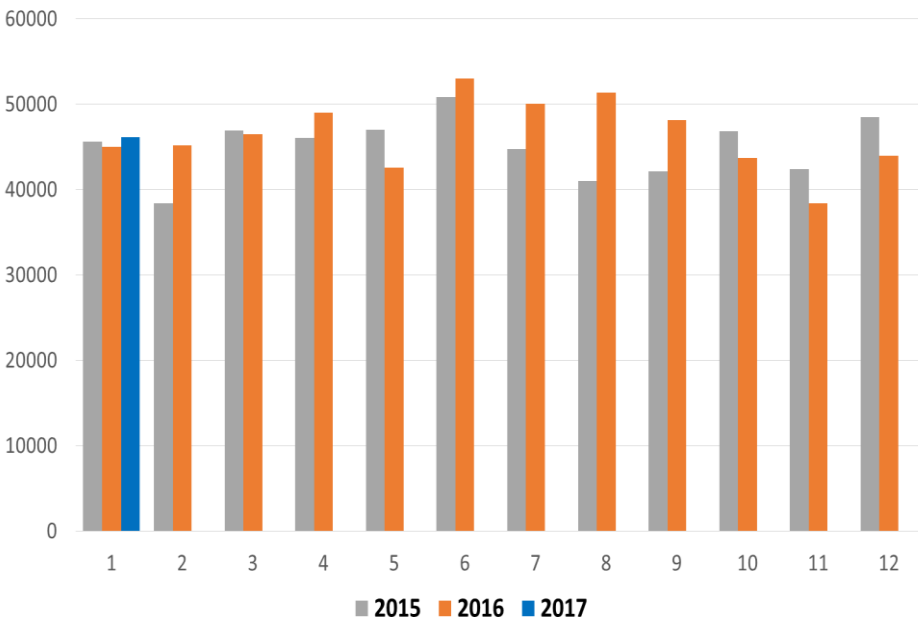
Jan-Dec 2014, 2015, 2016

(total exports Jan-Dec 2016: 556 677 tonnes)



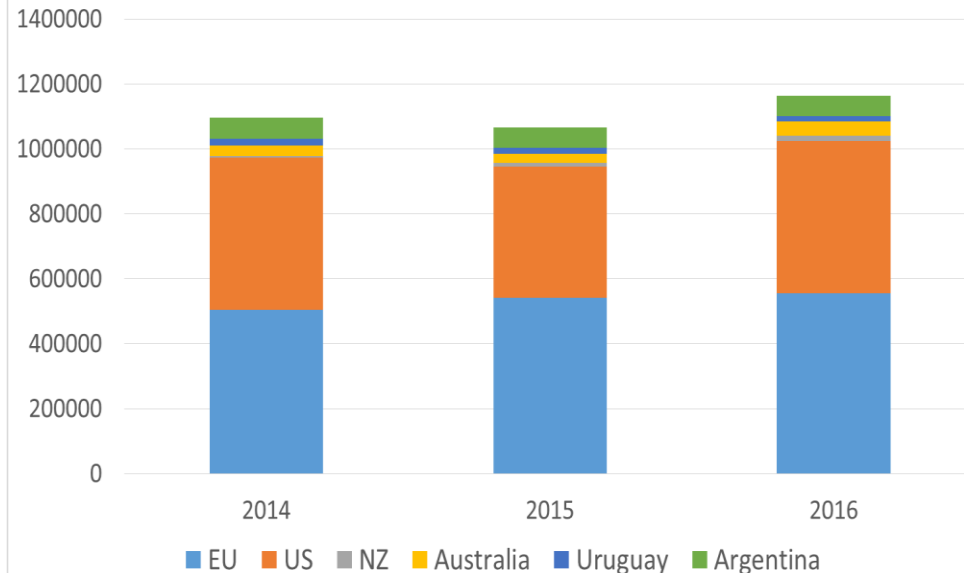
## EU Whey powder Exports (tonnes)

(tonnes)



## Cumulated Whey powder Exports for Jan-Dec 2014, 2015 & 2016 of major Exporters (tonnes)

(tonnes)





# Butter trade

EU butter exports:

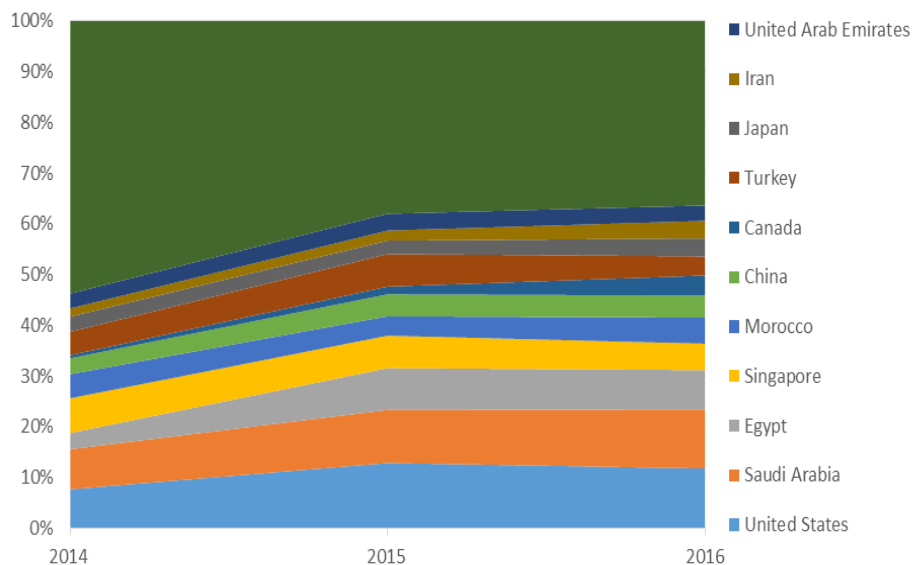
- Growth rate Jan-Dec 16/15: +20,8%  
 (-10,5% for Jan 17 yoy)

Combined butter exports:

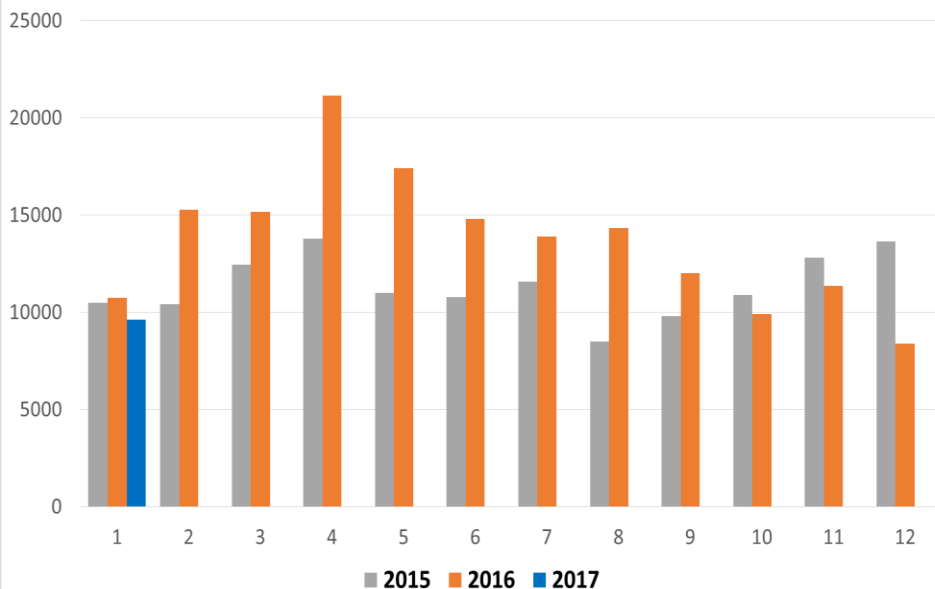
- Growth rate Jan-Dec 16/15: +4,7%

Development of EU export destinations for butter  
 Jan-Dec 2014, 2015, 2016

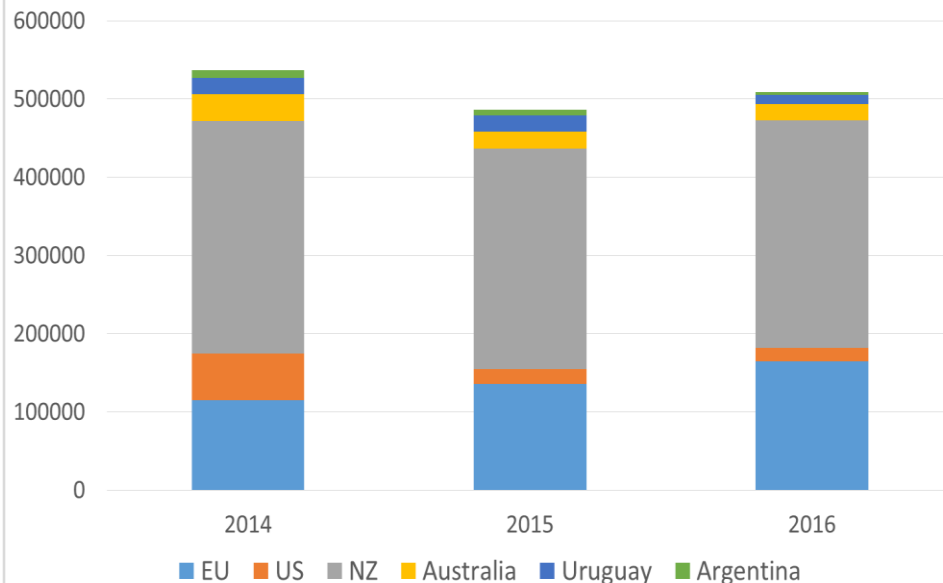
(total exports Jan-Dec 2016: 164 345 tonnes)



EU Butter Exports  
 (tonnes)



Cumulated Butter Exports for Jan-Dec 2014, 2015 & 2016  
 of major Exporters (tonnes)







# Cheese trade

## EU cheese exports:

- Growth rate Jan-Dec 16/15: +11,4%  
 (+13% for Jan 17 yoy)

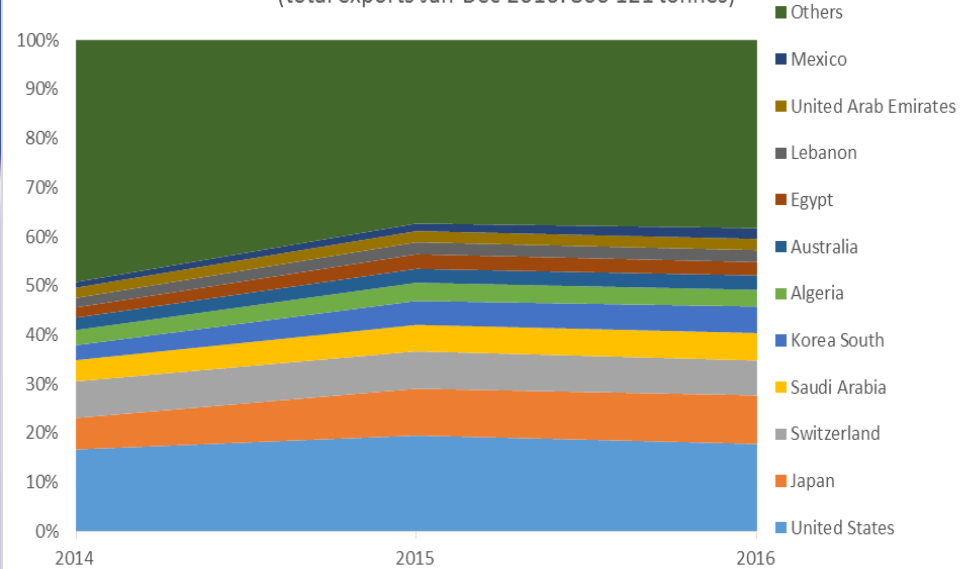
## Combined cheese exports:

- Growth rate Jan-Dec 16/15: +4,8%

## Development of EU export destinations for cheese

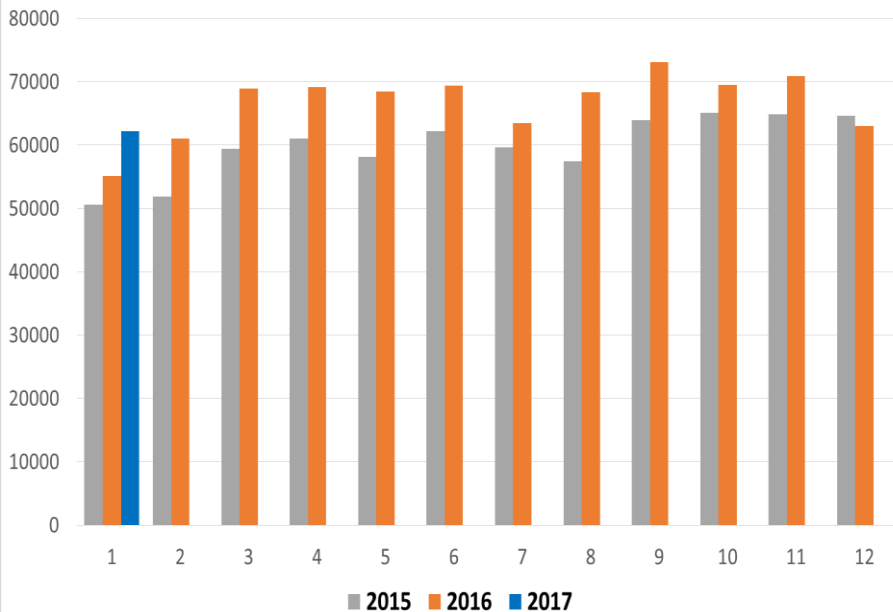
Jan-Dec 2014, 2015, 2016

(total exports Jan-Dec 2016: 800 121 tonnes)

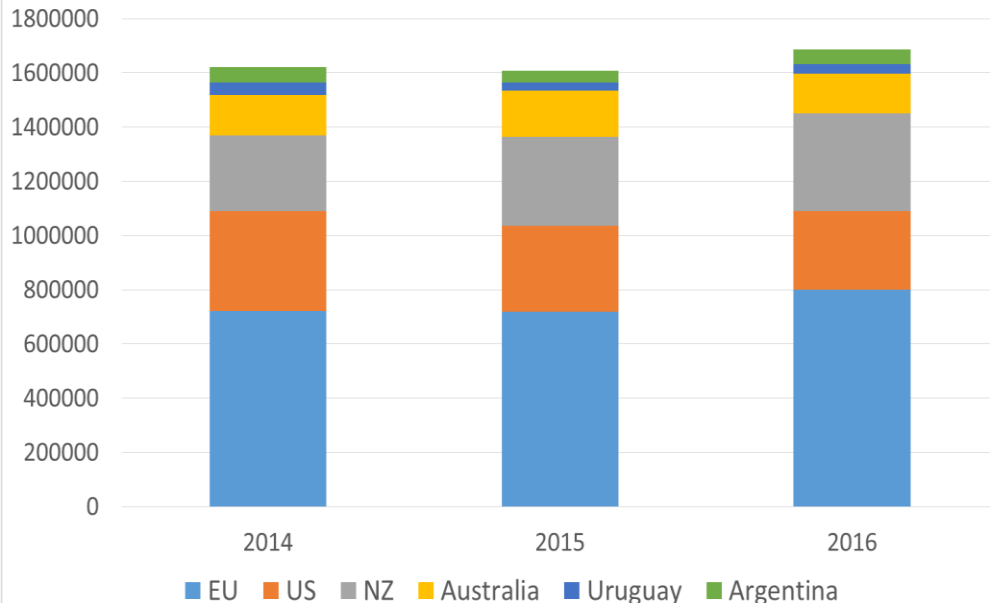


## EU Cheese Exports

(tonnes)



## Cumulated Cheese Exports for Jan-Dec 2014, 2015 & 2016 of major Exporters (tonnes)





# Trade of milk & cream

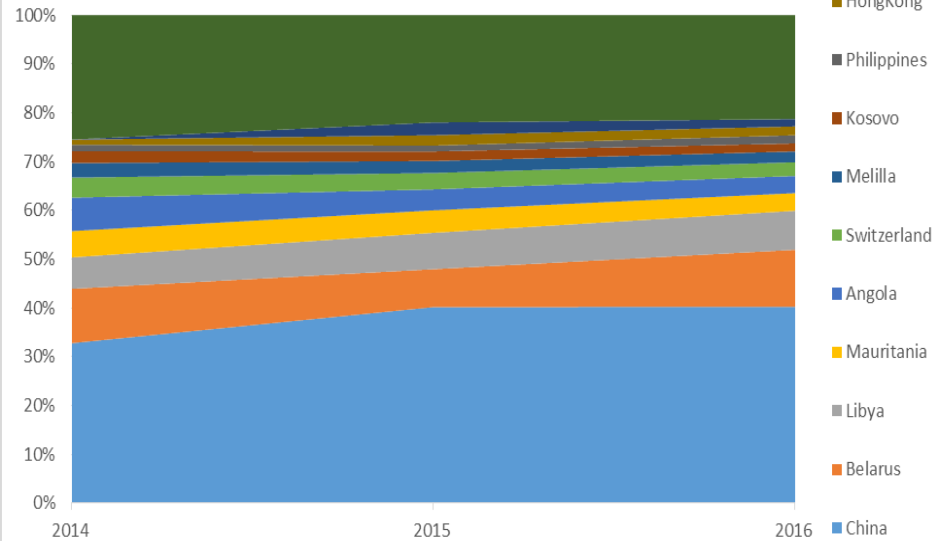
## EU milk & cream exports

- Growth rate Jan-Dec 16/15: +25,6%  
 (+2,3% for Jan 17 yoy)

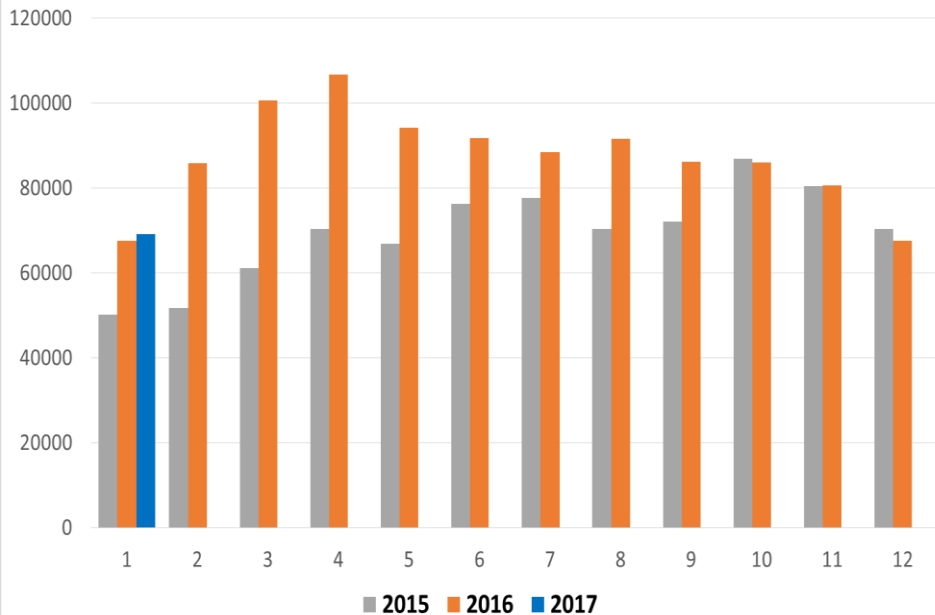
## Combined milk & cream exports

- Growth rate Jan-Dec 16/15: +24,9%

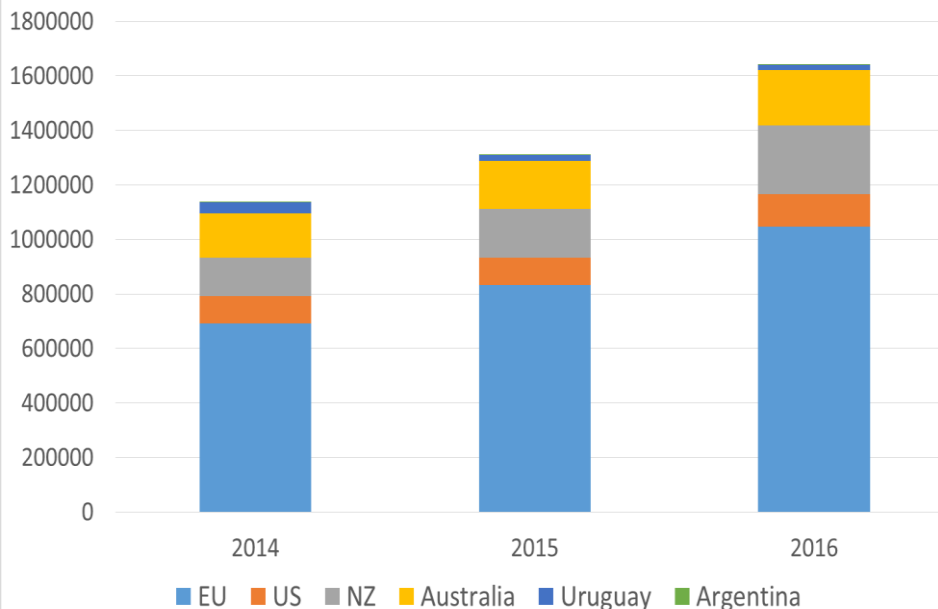
Development of EU export destinations for Liquid milk (040120 & 040110) Jan-Dec 2014, 2015, 2016 (total exports Jan-Dec 2016: 893 649 tonnes)



EU Milk & Cream Exports (tonnes)



Cumulated Milk & Cream Exports for Jan-Dec 2014, 2015 & 2016 of major Exporters (tonnes)





# Infant formula trade

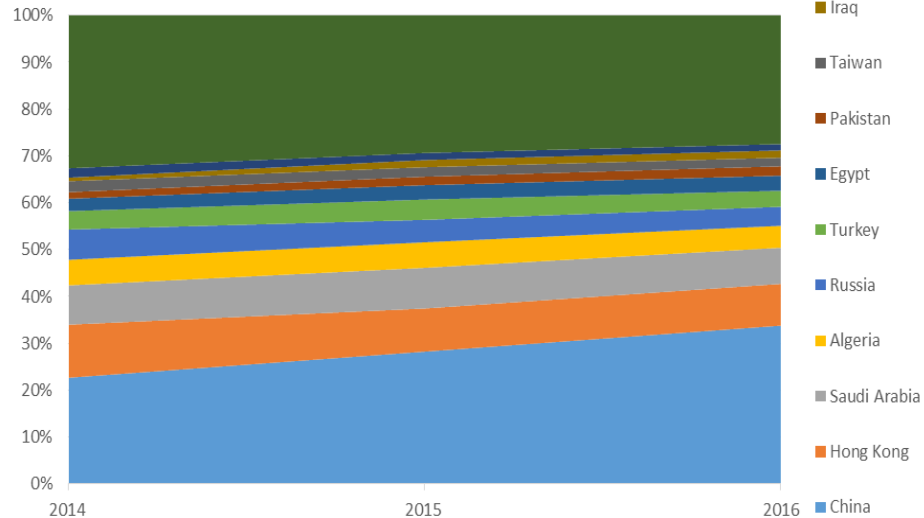
EU infant formula exports:

- Growth rate Jan-Dec 16/15: +12,2% (+11,1% for Jan 17 yoy)

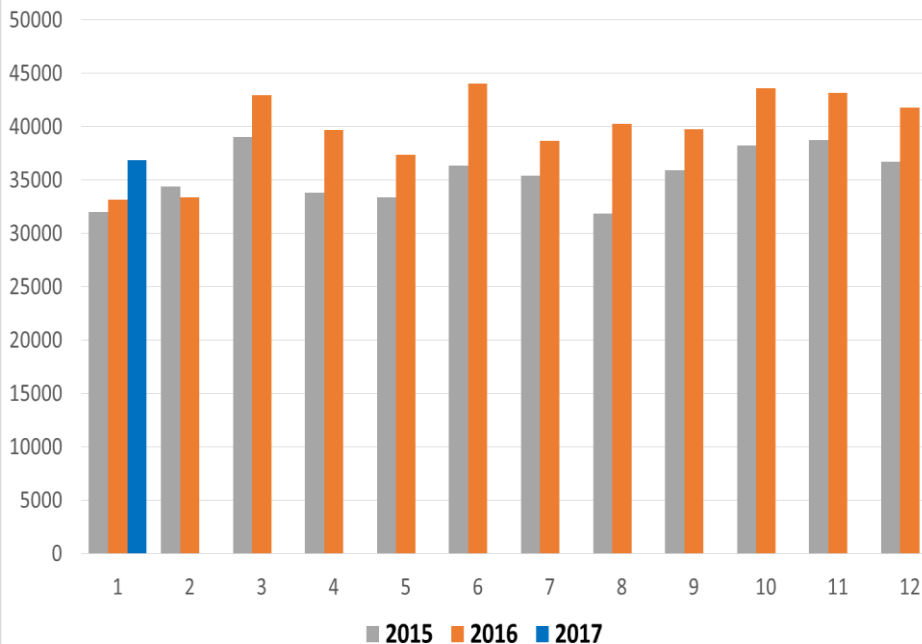
Combined infant formula exports:

- Growth rate Jan-Dec 16/15: +15,5%

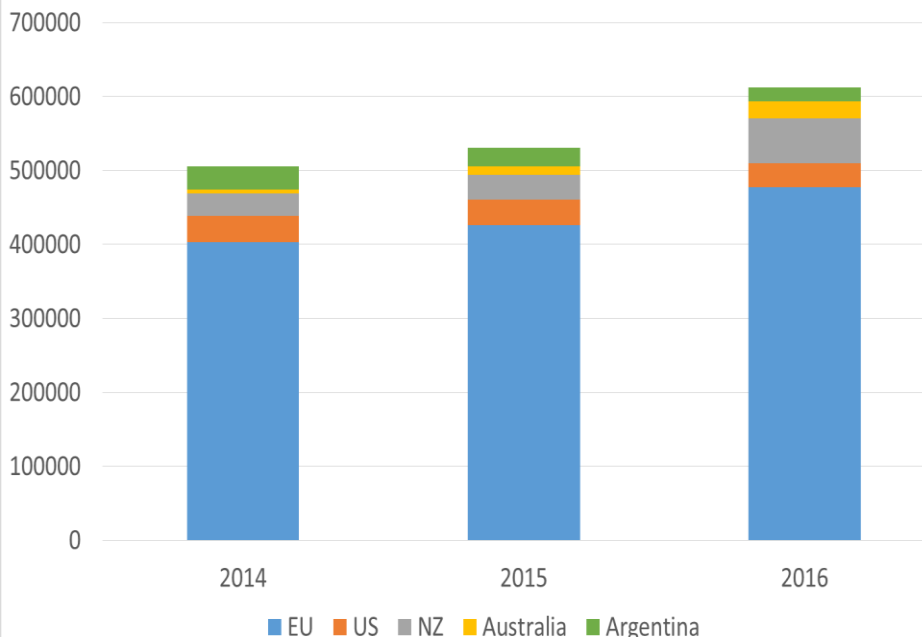
Development of EU export destinations for Infant formula  
Jan-Dec 2014, 2015, 2016  
(total exports Jan-Dec 2016: 477 465 tonnes)



EU Infant formula Exports  
(tonnes)



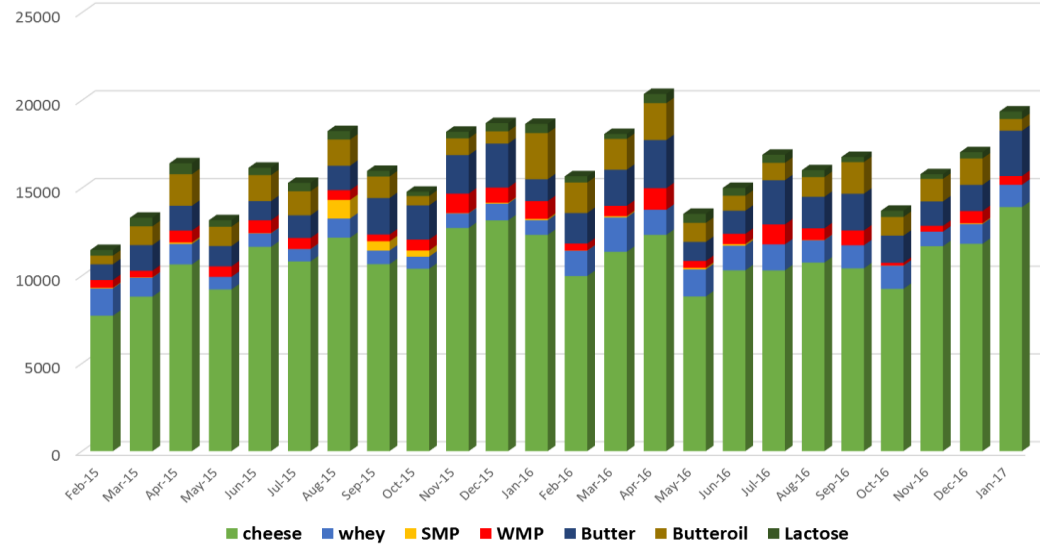
Cumulated Infant formula Exports for Jan-Dec 2014, 2015 & 2016 of major Exporters (tonnes)



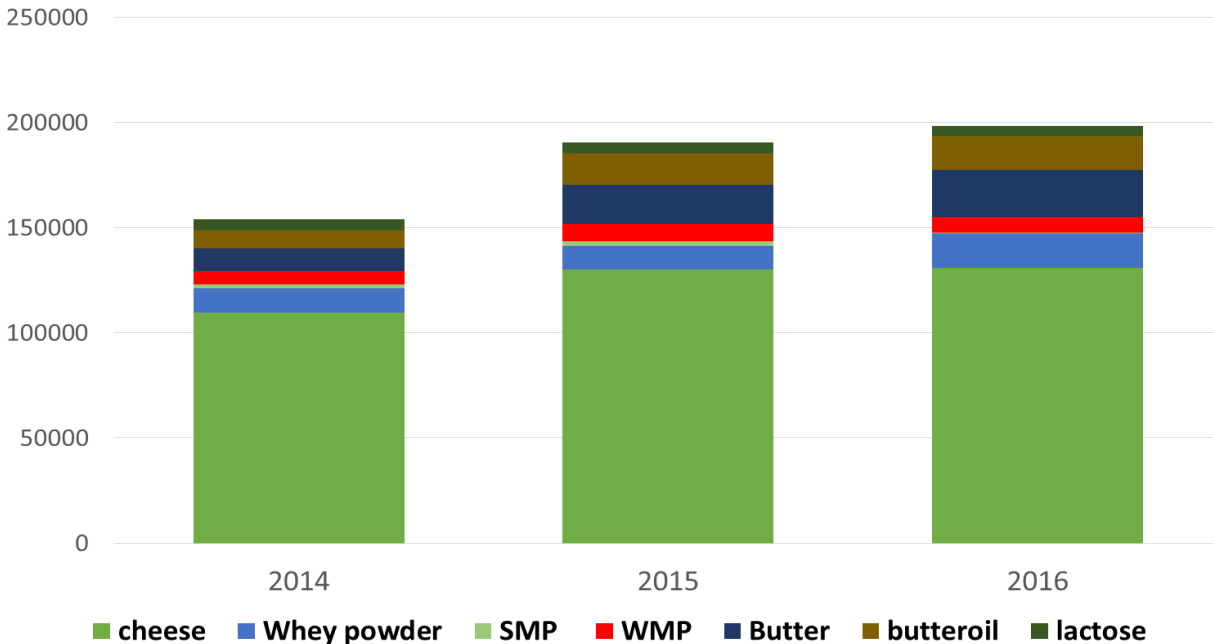


# USA Imports

USA monthly imports (tonnes)



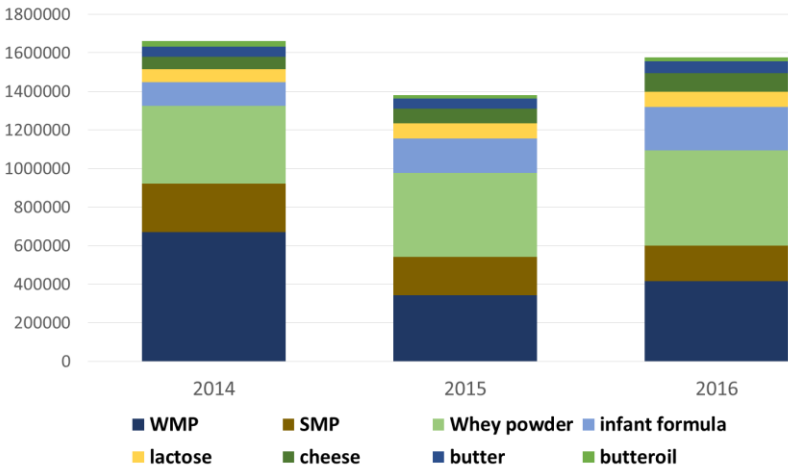
Cumulated USA imports for Jan-Dec 2014, 2015 & 2016 (tonnes)



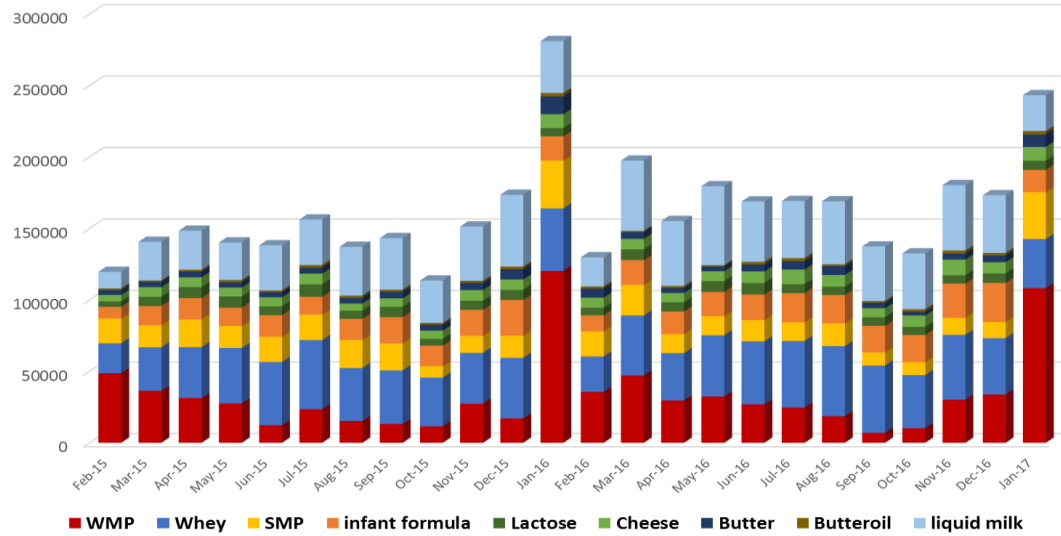


# China Imports

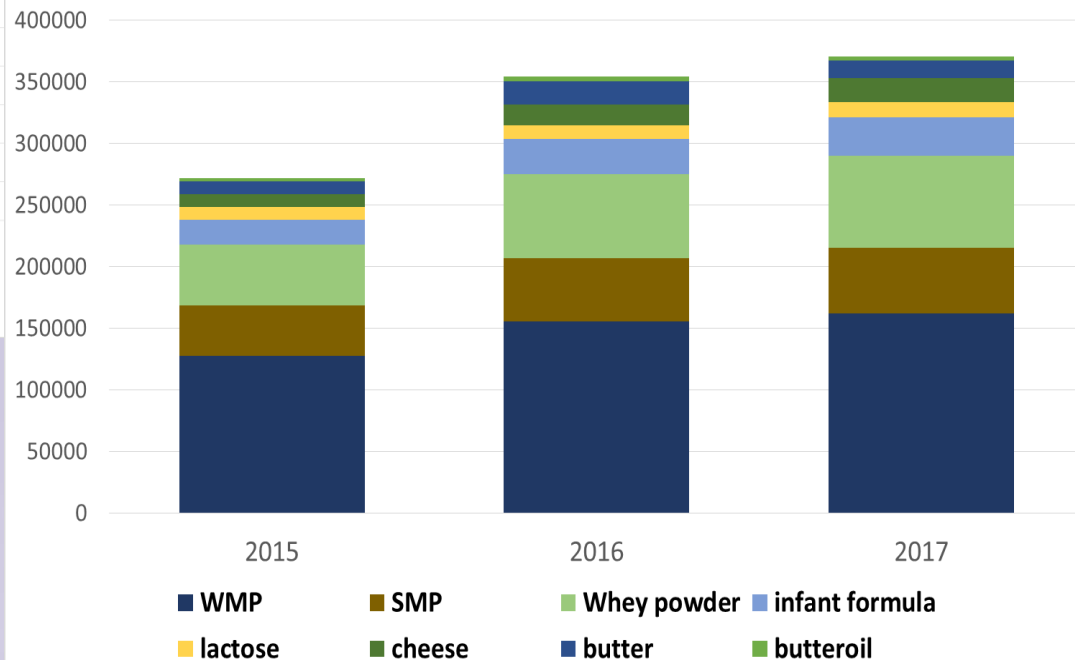
Cumulated China imports for Jan-Dec 2014, 2015 & 2016 (tonnes)



Chinese dairy imports (tonnes)

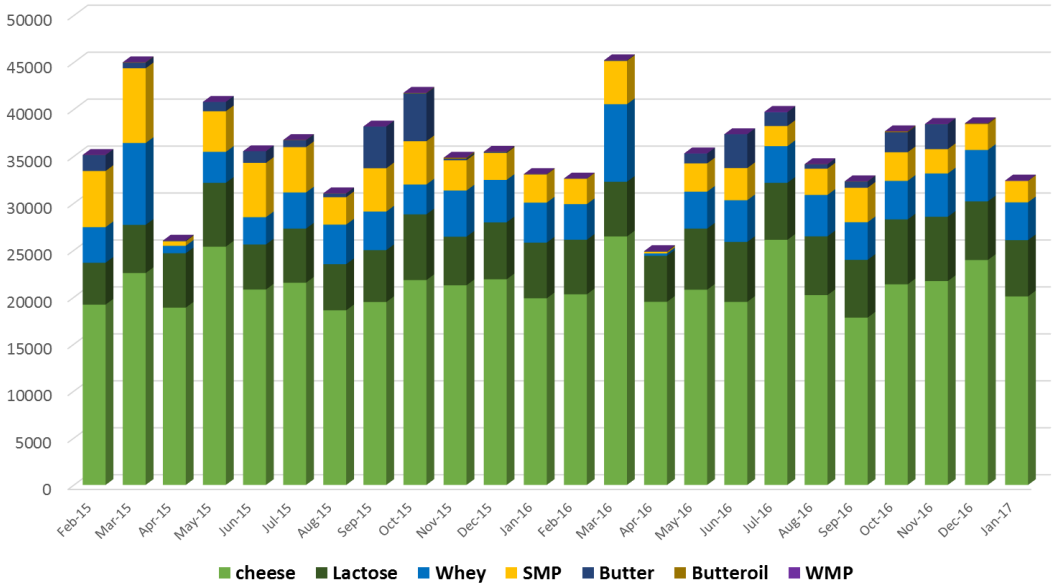


Cumulated China imports for Jan-Feb 2015, 2016 & 2017 (tonnes)

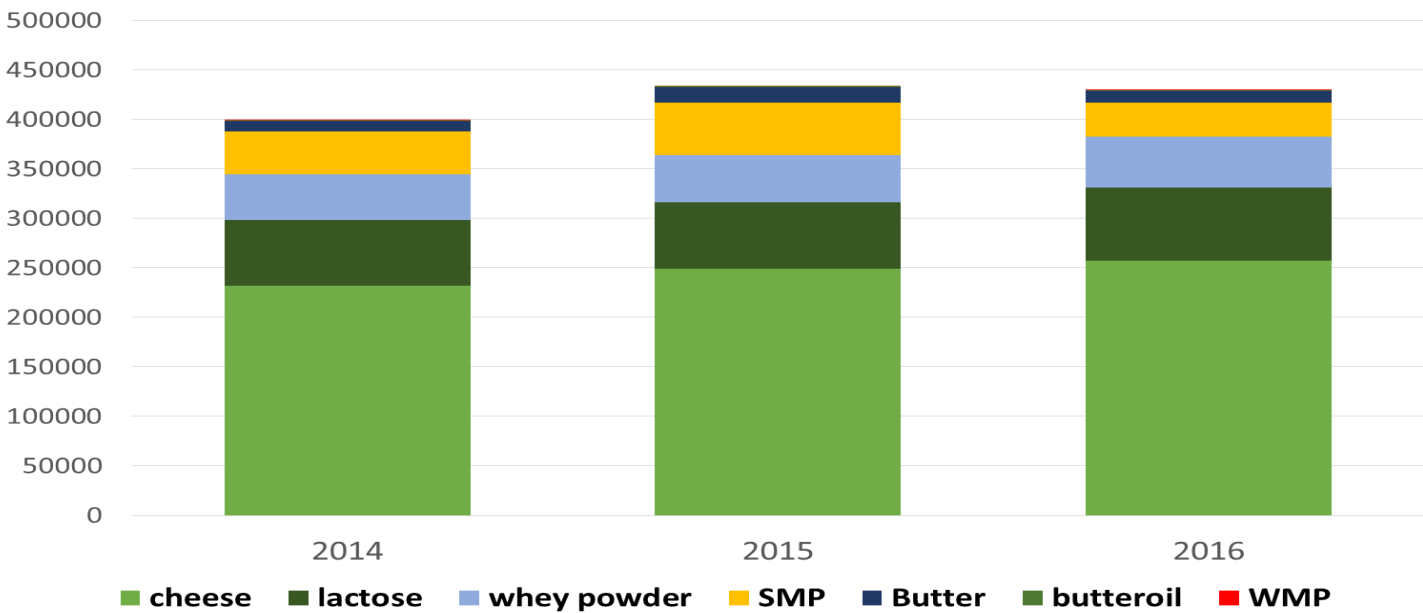




Japan monthly imports  
(tonnes)



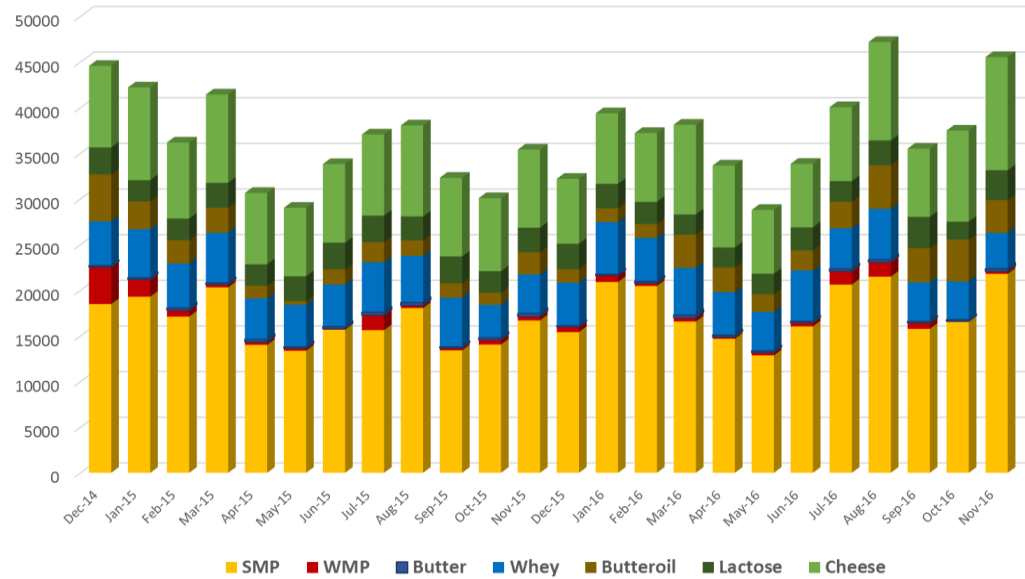
Cumulated Japan imports for Jan-Dec 2014, 2015 & 2016  
(tonnes)



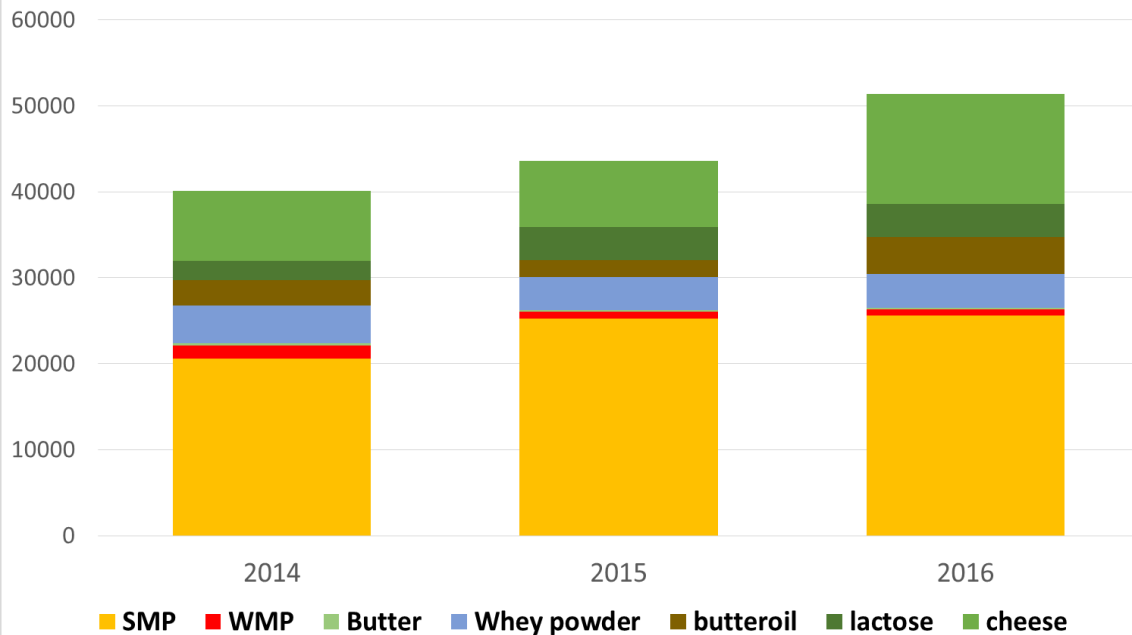


# Mexico imports

Mexico monthly imports (tonnes)



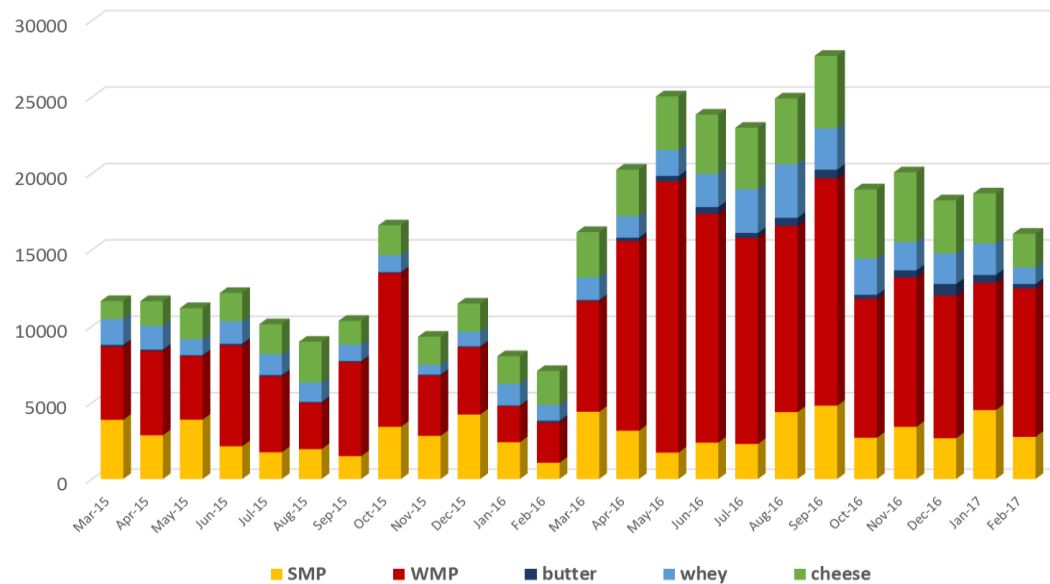
Cumulated Mexico imports for Jan-Nov 2014, 2015 & 2016 (tonnes)



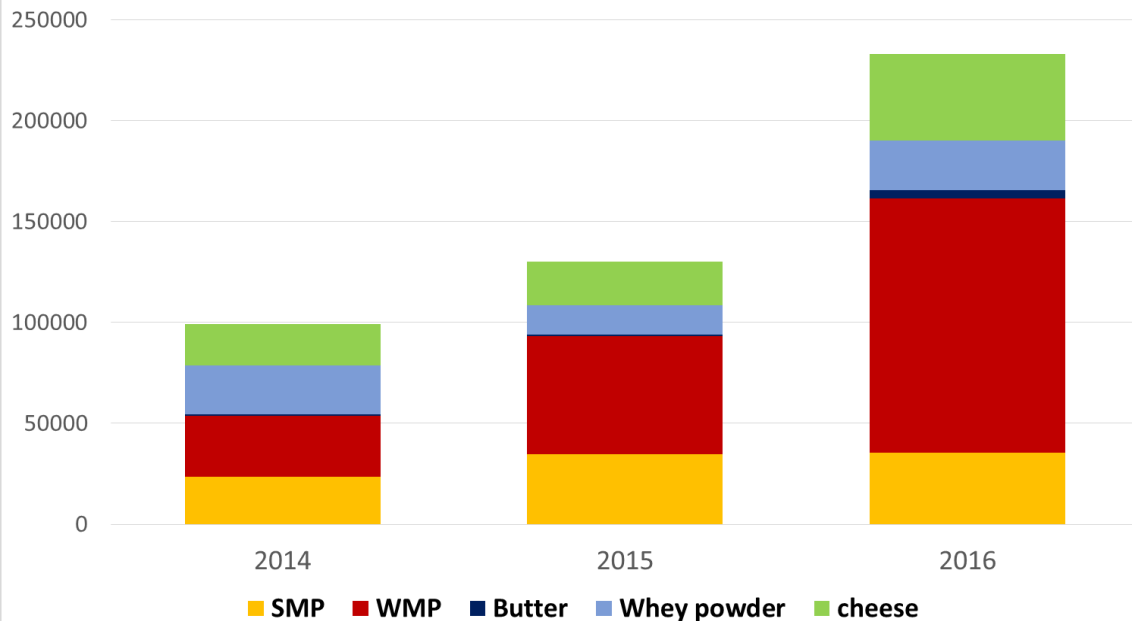


# Brazil imports

Brazil monthly imports (tonnes)



Cumulated Brazil imports for Jan-Dec 2014, 2015 & 2016 (tonnes)







## Conclusions



- **Reduction of global milk production since June brought markets close to an equilibrium, but outlook very uncertain** as US production continues strong, NZ recovers sooner than anticipated and EU production gradually increasing
- **Record gap between fat and protein**
  - **Protein:** huge SMP stocks, subdued demand, low prices and new SMP will enter intervention very soon.
  - **Fat:** demand for butterfat solid but suffering from the high prices
- **Global demand quite sluggish** with relatively low oil price keeping demand of Middle East, Africa, Russia & Venezuela muted. Chinese buying expected to grow at a slower rate



## Conclusions



- **EU as an exporter is benefitting from the weakening of the Euro** but continued strong US Dollar creates more expensive imports for emerging markets
- **A lot of political uncertainty** also in advanced economies (US politics, Brexit, EU elections)
- **Boost for EU cheese exports if CETA enters into provisional application in May or June**
- Further downward pressure on SMP and increasing milk flows could depress the cheese and butter markets as well



# Thank You

*Sources used in presentation: Global Trade Atlas, Eurostat, USDA, Dairy Australia, DCANZ, CLAL*

Eucolait

[www.eucolait.eu](http://www.eucolait.eu)

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# **ANNEX 4**

## **Trends in sales of Milk & Dairy products – a retail perspective**

***EuroCommerce***



# TRENDS IN SALES OF MILK & DAIRY PRODUCTS – A RETAIL PERSPECTIVE

**Milk Market Observatory**  
**28 March 2017**

# Belgium

Product	February 2017 vs. February 2016 Consumer Price Index
Whole milk	-9,15%
Semi-skimmed milk	-7,97%
Concentrated and powdered milk	+3,72%
Yoghurt	-0,15%
Butter	+11,13%

	% change in volume	% change in value	% change in price
Dairy products	-1,1%	-0,9%	+0,2%

Source: SPF Economie

# France

Period ending February 2017

Product category	Volume (% change) 4 weeks period (P2'16/P2 '17)	Volume (% change) Year on year (P2 '15-P2 '16 / P2 '16 -P2 '17)	Price (% change) 4 weeks period (P2'16/P2 '17)	Price (% change) Year on year (P2 '15-P2 '16 / P2 '16 -P2 '17)
Total liquid milk	-4,2%	-3,4%	-1,1%	+1,8%
Of which UHT semi-skimmed milk	-5,7%	-6,1%	-1,7%	+2,0%
Yoghurt & fresh cheese	-0,3%	-1,0%	-0,3%	-0,8%
Butter	-0,4%	+0,1%	-0,3%	+1,2%
Cream	-1,8%	-1,7%	-0,2%	+0,4%
Cheese	+0,6%	+1,4%	-0,4%	-0,6%

Source: Kantar World Panel via FranceAgriMer (Min. de l'Agriculture)

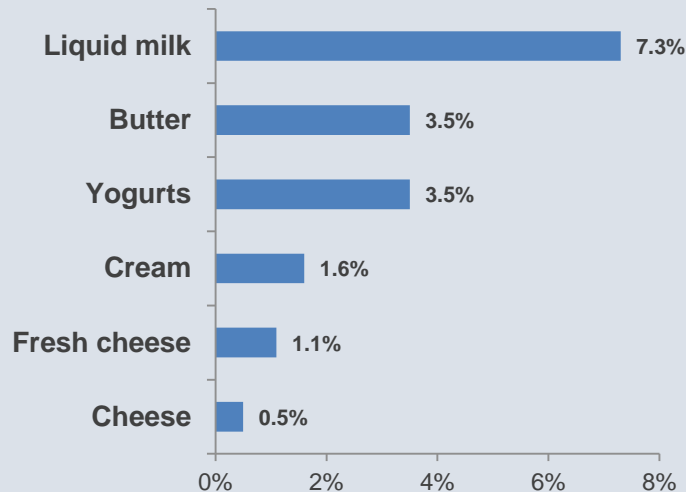
# France

## Sales of organic versus conventional milk & dairy products

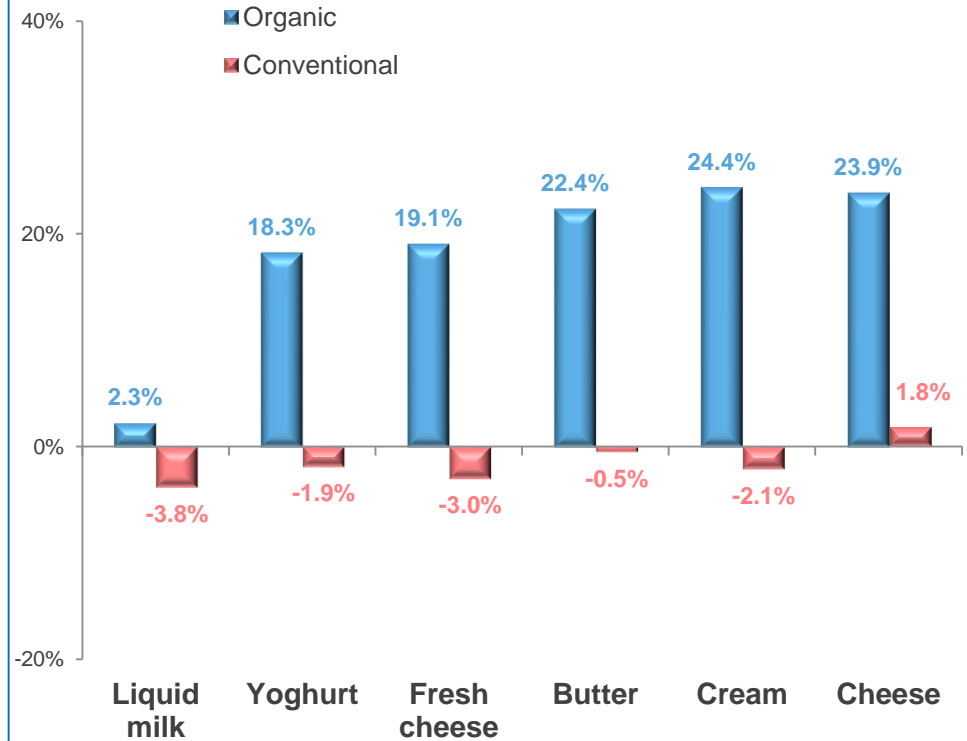
### Organic milk & dairy products

- ❖ Organic dairy products sales have continued to increase. The increase is registered on every product.

### Organic market shares (% vol. 19/02/2017)



### Consumption of organic versus conventional milk & dairy products % in volume, year to year 52 weeks 19/02/2017



Source: Kantar World Panel via FranceAgriMer (Min. de l'Agriculture)



# Germany

Product category	% change in volume (year to date, December 2016)	% change in value (year to date, December 2016)	Product category	% change in volume (year to date, December 2016)	% change in value (year to date, December 2016)
Butter	-0,3%	+3%	Half hard cheese	+1,1%	-2,2%
UHT Milk	-2,5%	-7,2%	Soft cheese	-0,6%	-1,6%
Fresh Milk	-0,5%	-2%	Fresh cheese	+2,2%	-0,2%
Quark	-0,3%	-3,5%	Grated cheese	+9,4%	+2,6%
Natural yoghurt	+2,1%	+0,4%	Cheese spread	-0,7%	-3,5%
Fruit yoghurt	-4,7%	-4,7%	Low-fat cheese	-2,6%	-4,5%
Desserts	-2,3%	-3,8%	Feta cheese	+1,9%	+3,3%
Milkshakes	+9,1%	+9%	Total	+1,8%	-1,3%
Total	-1,1%	-2,4%			

# Hungary

Product category	Value February 2017 vs February 2016	Value February 2017-March 2016 vs February 2016 – March 2015
Fresh and UHT milk	+8%	-0,5%
Milk products and cream	0,0%	-2,1%
Milk desserts and puddings	+9%	+4,5%
Cheese	+9%	+4,5%
Butter, margarine	+1%	-0,7%

Source: Nielsen

# Portugal

Period ending February 2017

Product category	Volume (% change, year-to-date)	Volume (% change, year-on-year)	Value (% change, year-to-date)	Value (% change, year-on-year)
Fresh milk	-12,8%	-11,3%	-12,1%	-10,8%
UHT milk	-6,8%	-7,3%	-0,4%	-7,6%
Yoghurt	-7,5%	-3,7%	-5,9%	-1,1%
Fresh cheese	-5,4%	0,0%	-3,0%	-0,2%
Butter	-4,1%	-1,7%	-0,2%	-2,4%
UHT cream	+0,2%	+1,2%	+0,9%	+0,1%
Fresh dessert	+8,5%	+12,1%	+12%	+15,4%
Cheese	+3,1%	+4,0%	+2,9%	+1,9%

Source: Nielsen

# Spain

Period ending January 2017

Product category	Volumes (% change January 2017 vs January 2016)	Volumes (% change February 2016- January 2017 vs February 2015 vs January 2016)	Value (% change January 2017 vs January 2016)	Value (% change February 2016- January 2017 vs February 2015 vs January 2016)	Price (% change January 2017 vs January 2016)	Price (% change February 2016- January 2017 vs February 2015 vs January 2016)
Standard liquid milk	-4,5%	-4,6%	-5,9%	-6,0%	-1,5%	-1,5%
Other types of milk	+5,3%	+4,0%	-0,7%	0,0%	-5,8%	-3,8%
Milkshakes	-0,7%	+5,8%	+1,5%	+5,0%	+2,1%	-0,8%
Yoghurts and fermented milk	-5,2%	-1,0%	-6,8%	-2,0%	-1,6%	-1,0%
Fresh desserts	-4,1%	-0,7%	-3,6%	-0,8%	+0,5%	-0,2%
Fresh cheese	-6,9%	-1,3%	-6,1%	+0,1%	+0,9%	+1,4%
Local, traditional cheese	+1,2%	+7,0%	-0,8%	+2,6%	-1,9%	-4,1%
Processed cheese	-6,8%	-2,7%	-6,1%	-2,1%	+0,8%	+0,7%
Imported cheese specialties	+0,3%	+2,8%	-0,8%	+0,1%	-1,1%	-2,6%

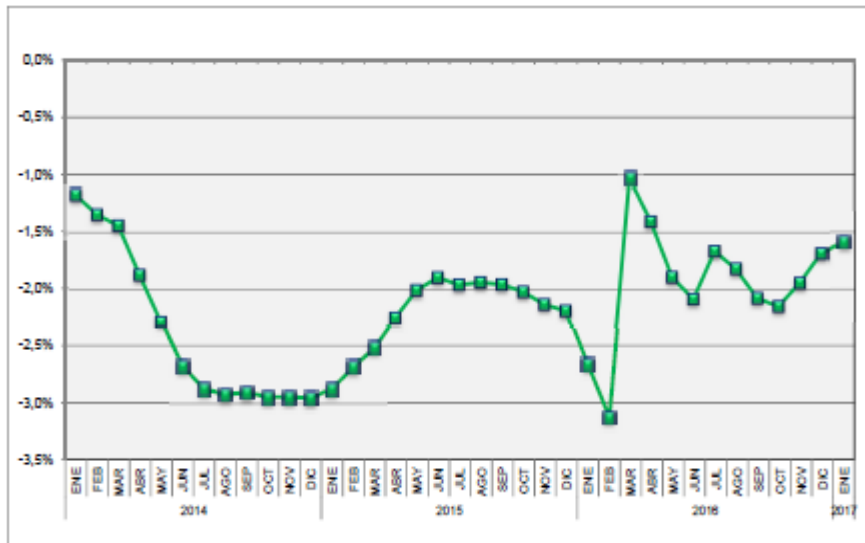
# Spain

Period ending January 2017

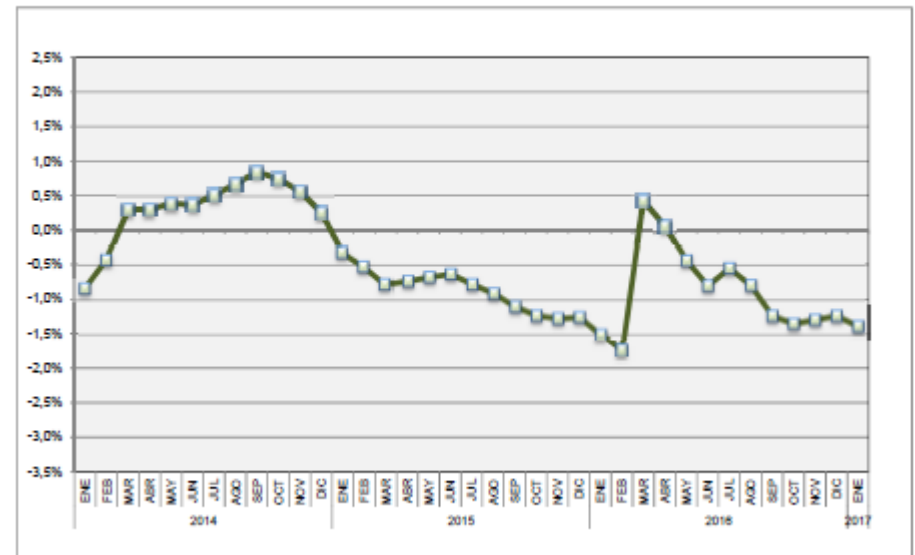
Product category	Volume (% change January 2017 vs January 2016)	Volumes (% change February 2016- January 2017 vs February 2015 vs January 2016)	Value (% change January 2017 vs January 2016)	Value (% change February 2016- January 2017 vs February 2015 vs January 2016)	Price (% change January 2017 vs January 2016)	Price (% change February 2016- January 2017 vs February 2015 vs January 2016)
Grated cheese	-3,3%	+2,6%	-1,9%	+2,8%	+1,5%	+0,2%
Other types of cheese	-2,0%	-0,1%	-2,9%	-1,4%	-0,9%	-1,2%
Cream	-5,7%	+0,2%	-7,9%	-1,7%	-2,3%	-1,8%
Butter	+8,6%	+5,7%	+8,5%	+4,4%	-0,1%	-1,2%
Desserts and yoghurt with long conservation	-9,5%	-21,7%	-1,6%	-35,5%	+8,8%	-17,7%
Non-liquid milk	-1,7%	+2,6%	-6,3%	+0,6%	-4,7%	-2,0%
Total dairy products	-2,8%	-1,6%	-4,2%	-1,4%	-1,4%	+0,2%

# Spain

1. Evolución de la variación del VOLUMEN DE VENTAS TAM. Total productos lácteos.



2. Evolución de la variación del VALOR DE VENTAS TAM. Total productos lácteos.



Source: Nielsen and FeNIL

# Sweden

Period ending February 2017

Product category	Volume (% change in the last 4 weeks)	Volume (% change last 52 weeks)	Value (% change in the last 4 weeks)	Value (% change last 52 weeks)
Milk	-2,9%	-1,5%	-1,0%	+0,7%
Hard cheese	-2,3%	+0,2%	+3,5%	-1,3%
Cream	-1,8%	+0,8%	+1,1%	+0,6%
Yoghurt	-0,9%	-0,4%	-1,2%	-0,7%
Cottage cheese/curd	-6,0%	+0,4%	-7,3%	-1,9%
Cold desserts	+18,2%	+12,8%	+18,8%	+19,3%
Butter	-3,5%	+6,5%	-3,1%	+4,2%

Source: Nielsen

# United Kingdom

## UK Dairy Product Retail Price Indices

In February 2017, the RPI increased by 1,09% compared with January and is 3,23% higher than the same month last year. The fresh milk price index increased 0,99% on the month and was also up 1,54% on the year. The butter index decreased on the month by 0,89% but increased on the year by 4,94%. Cheese saw an increase on the month of 0,64% and a fall of 1,45% on the year.

PRODUCT PRICE INDICES			
		compared with	
	Feb-17	1 month before	12 months before
RPI price index	268.4	1.09%	3.23%
Fresh Milk	224.7	0.99%	1.54%
Butter	322.7	-0.89%	4.94%
Cheese	237.2	0.64%	-1.45%

Source: Office for National Statistics (ONS)

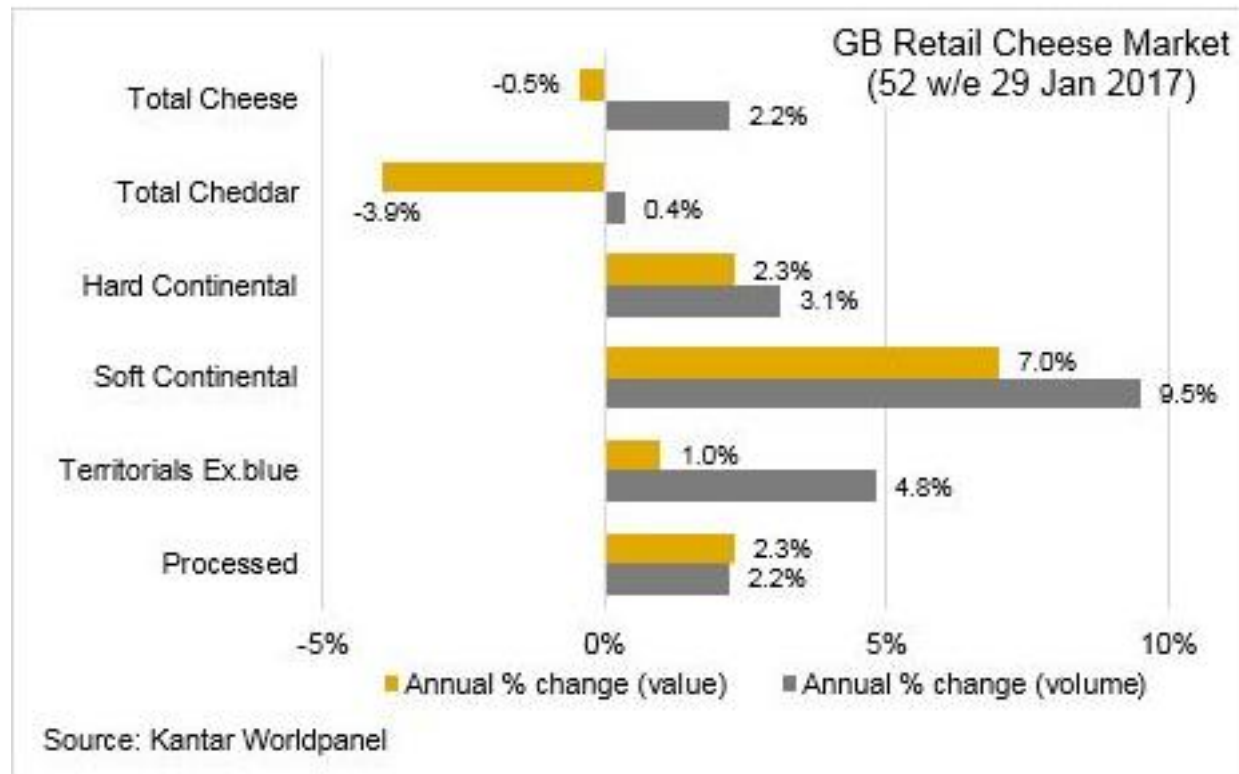
Please note: the reference base is January 1987.



# United Kingdom

52 weeks ending 01 January 2017						
	Volume (000 Litres)	YOY diff	Spend (£000s)	YOY diff	Average price (£/Litre)	YOY diff
Total milk market	5,481,303	-0.3%	3,136,408	0.8%	0.57	1.1%
Pasteurised*	4,758,946	-0.6%	2,524,978	0.3%	0.53	0.9%
Filtered	283,419	-0.1%	220,204	-0.5%	0.78	-0.3%
UHT	233,714	-3.8%	153,091	-5.6%	0.66	-1.9%
Sterilised	7,156	-6.5%	7,362	-7.2%	1.03	-0.8%
Other milk substitutes	111,985	25.0%	151,712	22.6%	1.35	-1.9%
Milk substitute - Soya	86,084	3.1%	79,062	1.2%	0.92	-1.8%
Source: Kantar Worldpanel						

# United Kingdom



# United Kingdom: contract league table

## MILK PRICES - AHDB Dairy League table for January 2017

League Table	Monthly Price	Annual Price
<b>Aligned Liquid Milk</b>		
Arla Foods - Sainsburys 4	27,16	26,96
Müller Direct Milk - M&S (Profile) 2	30,03	29,59
Müller Direct Milk - M&S (Seasonal) 2	30,03	29,51
Müller Direct Milk - Sainsbury (Profile) 2	27,74	27,30
Müller Direct Milk - Sainsbury (Seasonal) 2	27,74	27,23
Müller Direct Milk - Waitrose (Profile)	30,75	30,31
Müller Direct Milk - Waitrose (Seasonal)	30,75	30,23
Müller Milk Group - Booths	30,56	30,42
Müller Milk Group - Co-operative	25,59	25,44
Müller Milk Group - M&S	28,72	28,56
Müller Milk Group - Sainsbury	27,40	27,25
Müller Milk Group - Tesco	28,55	28,47
<b>Standard Liquid Milk</b>		
Crediton Dairy	27,19	26,76
Müller Direct Milk - Core Formula (Profile)	31,53	31,09
Müller Direct Milk - Core Formula (Seasonal)	31,53	31,01
Müller Direct Milk - Liquid (Profile)	26,87	26,44
Müller Direct Milk - Liquid (Seasonal)	26,87	26,36
Müller Milk Group - Partnership	26,48	26,33
Pensworth	25,10	25,06
UK Arla Farmers Liquid 3	25,11	24,74

# United Kingdom

unit price (p)		Feb-17	Jan-17	Month Diff.	Feb-16	Annual Diff.
Liquid milk†	Retail (4 pints)*	103	103	n/c	100	+3
	Doorstep (1 pint)**	81	81	n/c	81	n/c

ppl		Feb-17	Jan-17	Month Diff.	Feb-16	Annual Diff.
Cream††	Total Cream	252	251	1	241	+11
	Double Cream	226	226	1	213	+13
	Single Cream	215	211	4	191	+24

p/kg		29-Jan-17	1-Jan-16	Month Diff	31-Jan-16	Annual Diff.
Cheddar††	Total market	575	598	-23	596	-21
	Mature	571	577	-6	598	-27
	Mild	530	532	-2	543	-13

† updated monthly ; †† updated quarterly ; \*pasteurised (private label)

\*\*milkandmore monthly spot price - semi-skimmed glass bottle

Source: Kantar Worldpanel Online

# **ANNEX 5**

## **Dairy production Short-term Outlook**

***European Commission***



European  
Commission



# Dairy production Short-term Outlook

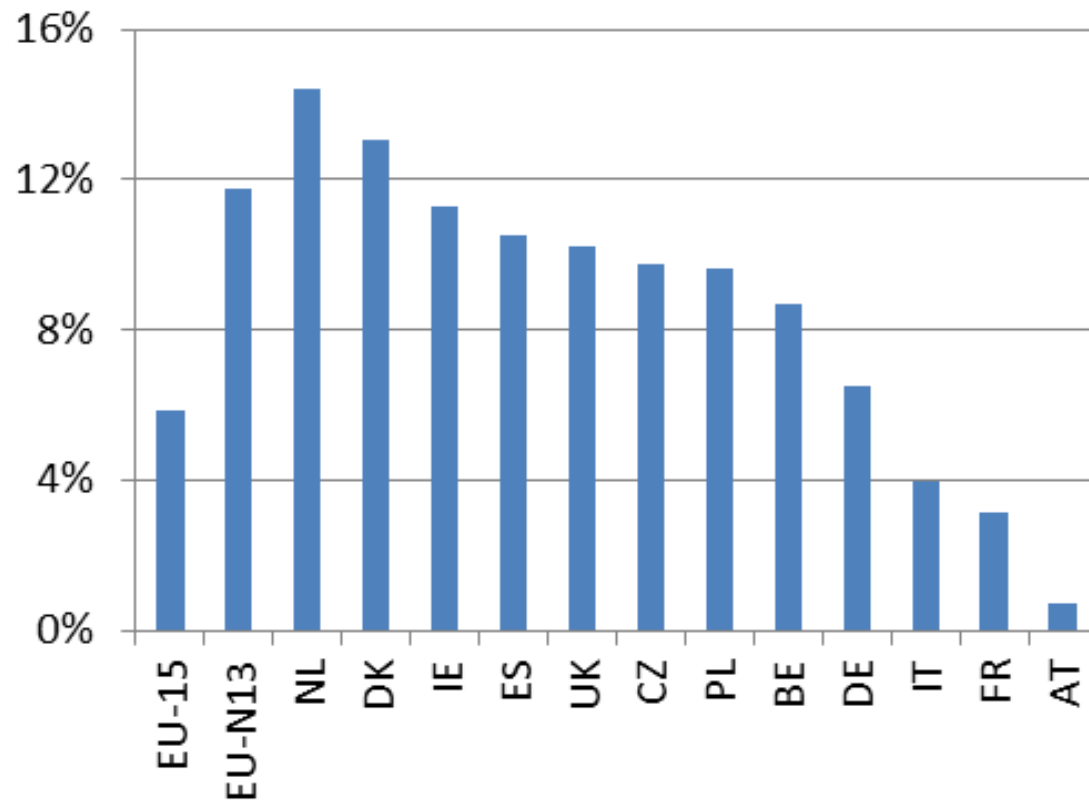
**MMO 28 March 2017**

*Sophie H elaine*

*DG Agriculture and Rural Development  
European Commission*

Agriculture  
and Rural  
Development

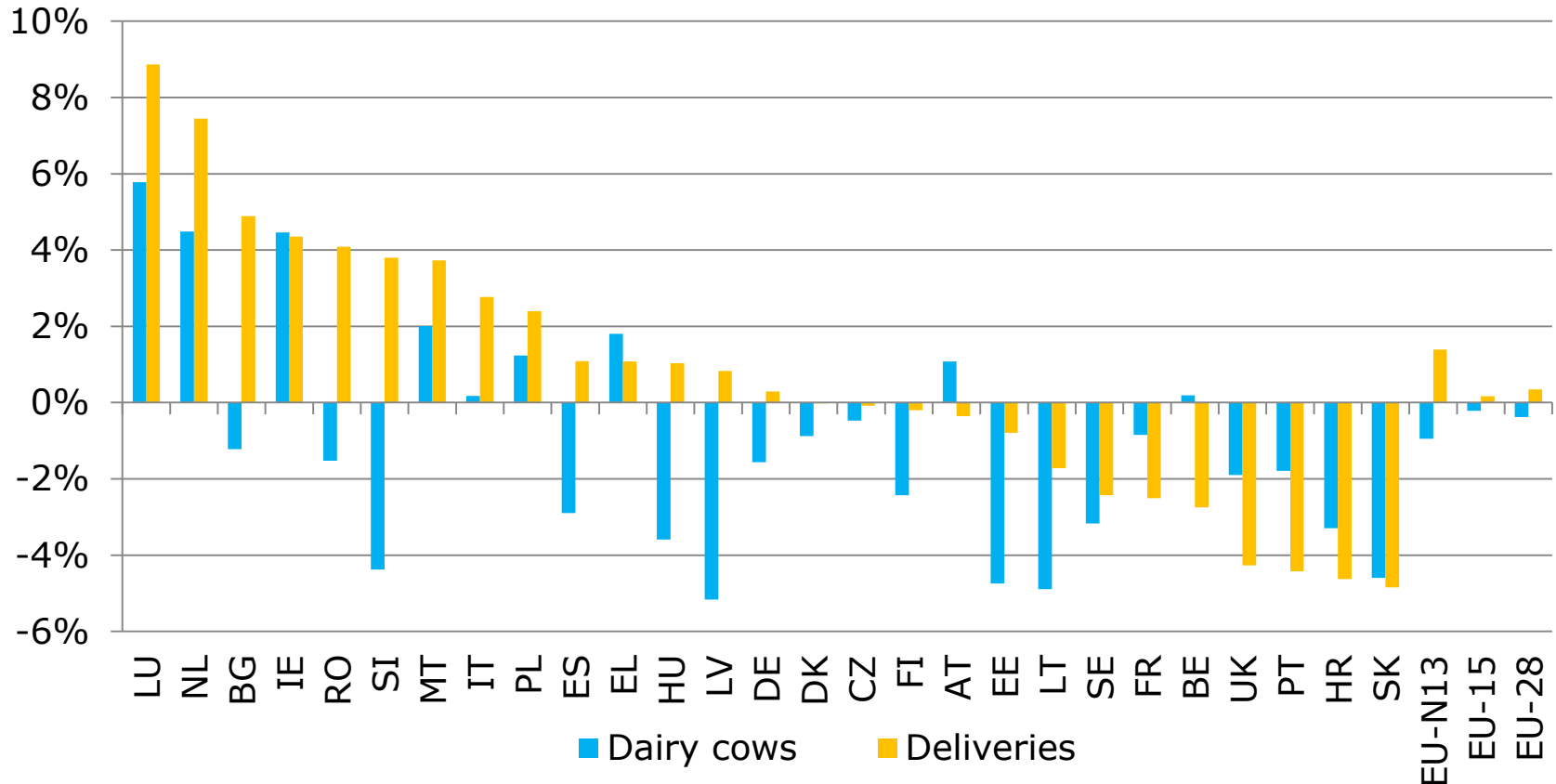
## High cow slaughterings in 2016/2015



Note: Dairy and beef cows  
Feb. corrected  
Source: Eurostat

# A sizeable EU dairy herd = more milk to come

2015/2016 change in deliveries and dairy cow numbers (%)

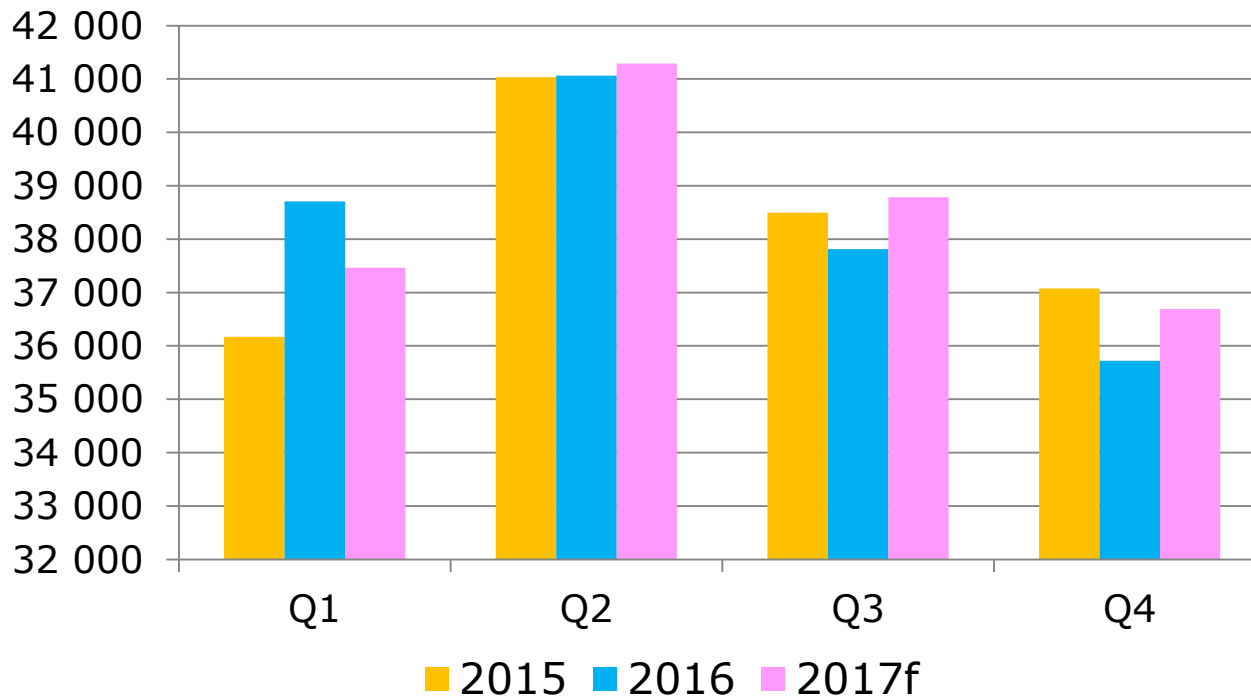


Source: DG AGRI based on Eurostat



## 2017 EU milk collection +0.6%

EU milk collection forecast by quarter (1000 t)



EU prospects report and data available in December at:

[http://ec.europa.eu/agriculture/markets-and-prices/medium-term-outlook/index\\_en.htm](http://ec.europa.eu/agriculture/markets-and-prices/medium-term-outlook/index_en.htm)

OECD-FAO Outlook at:

<http://www.agri-outlook.org/>

Short term outlook at:

[http://ec.europa.eu/agriculture/markets-and-prices/short-term-outlook/index\\_en.htm](http://ec.europa.eu/agriculture/markets-and-prices/short-term-outlook/index_en.htm)

Thanks

Sophie.helaine@ec.europa.eu

# **ANNEX 6**

## **Managing risk in the dairy sector: How futures markets could help**

***European Commission***



European  
Commission



# ***Managing risk in the dairy sector: how futures markets could help***

**MMO**  
**Brussels, 28 March 2017**

***Sophie Helaine and Adamo Uboldi***

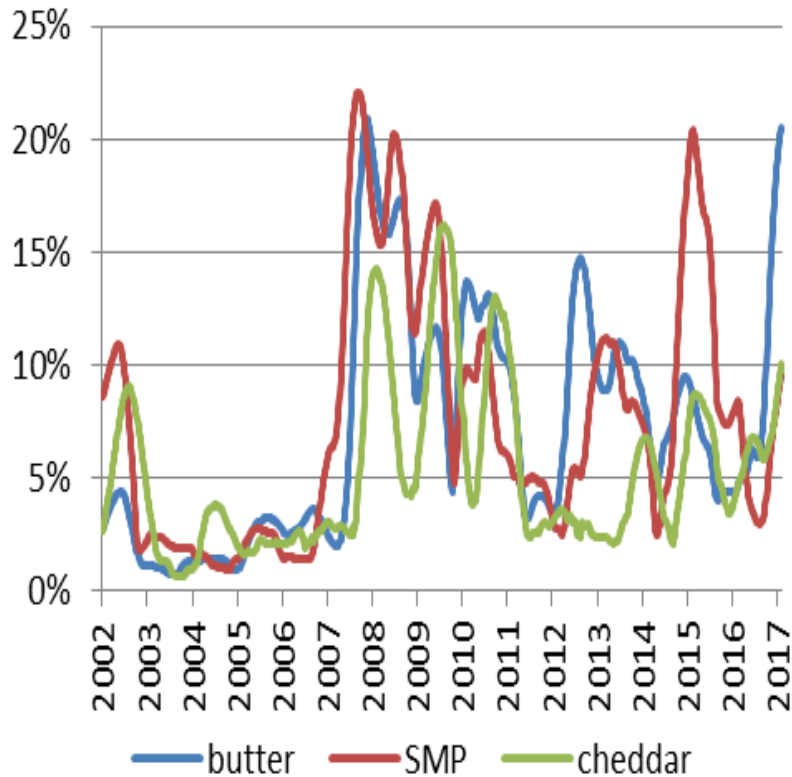
*Analysis and Outlook  
DG Agriculture and Rural Development  
European Commission*

## Outline

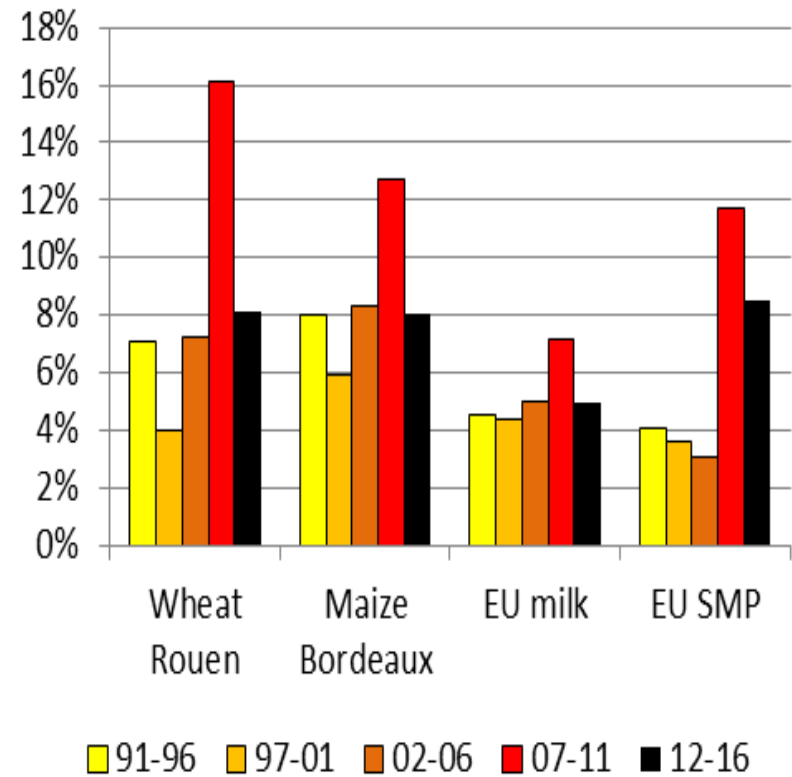
- 1. Price volatility vs price levels**
- 2. Financial instruments**
- 3. Use of dairy futures in EU, US and NZ**
- 4. Obstacles to the growth of future markets**

# EU dairy volatility (1-y CoV): products comparison

## Dairy products...



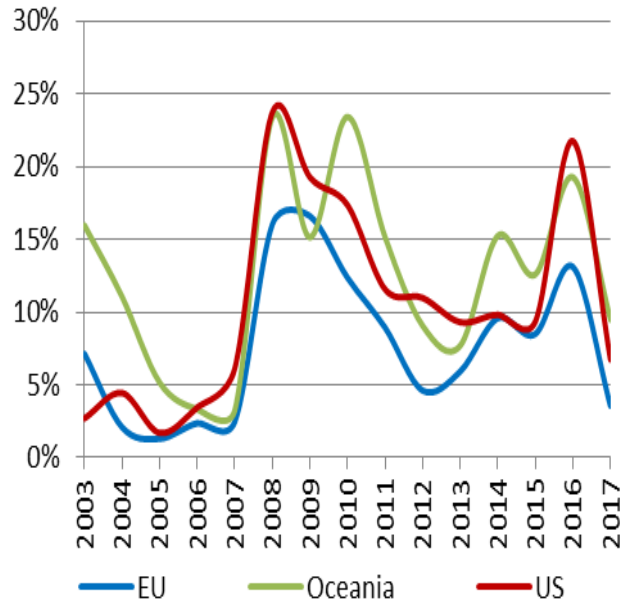
## ...and crops



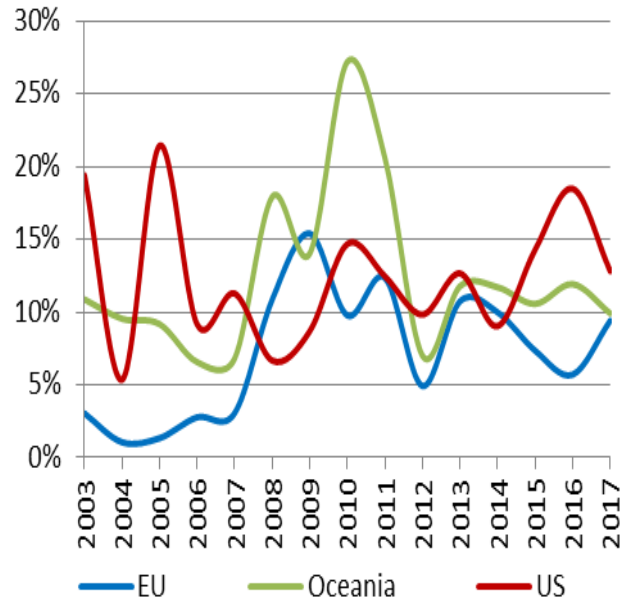
Source: DG Agriculture and Rural Development calculations

## Dairy volatility: geo comparison

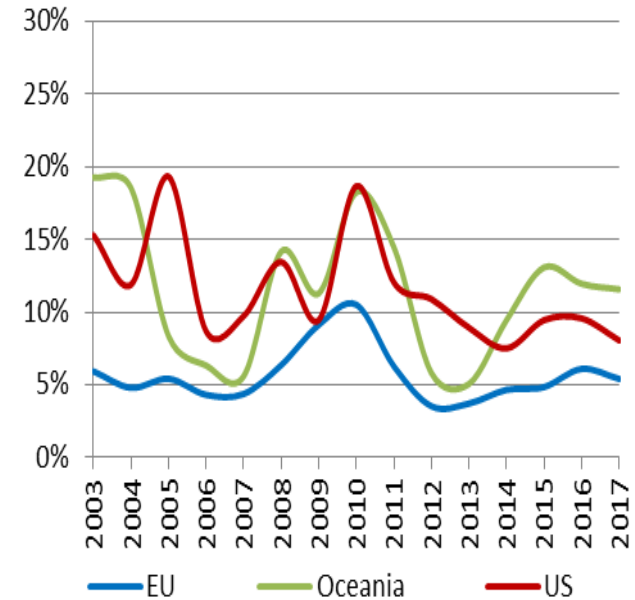
### SMP



### Butter



### Raw milk



Source: DG Agriculture and Rural Development calculations

# Financial instruments

## Forward contract

A forward contract is a contract between two parties *to buy (or sell) an asset at a specified future time at a price agreed upon today*, typically traded Over-The-Counter (OTC).

## Future contract

Futures are *standardised* (by quality, quantity, delivery date etc...) forward contracts *centralized/negotiated* at Exchanges. Futures can be based on *physical delivery* of the underlying asset or on *cash-settlement*, i.e. by only making a payment in cash when the contract expires, without physical exchange of goods.

## Option contract

An option *gives the buyer the right, but not the obligation, to buy or sell an underlying asset: the purchase, if the option is exercised, happens at a pre-specified strike price on a pre-specified maturity date. Important asymmetry: the seller of the option has the corresponding obligation to fulfil the transaction (to sell or buy) if the buyer exercises the option.*



## Financial dairy products available, worldwide

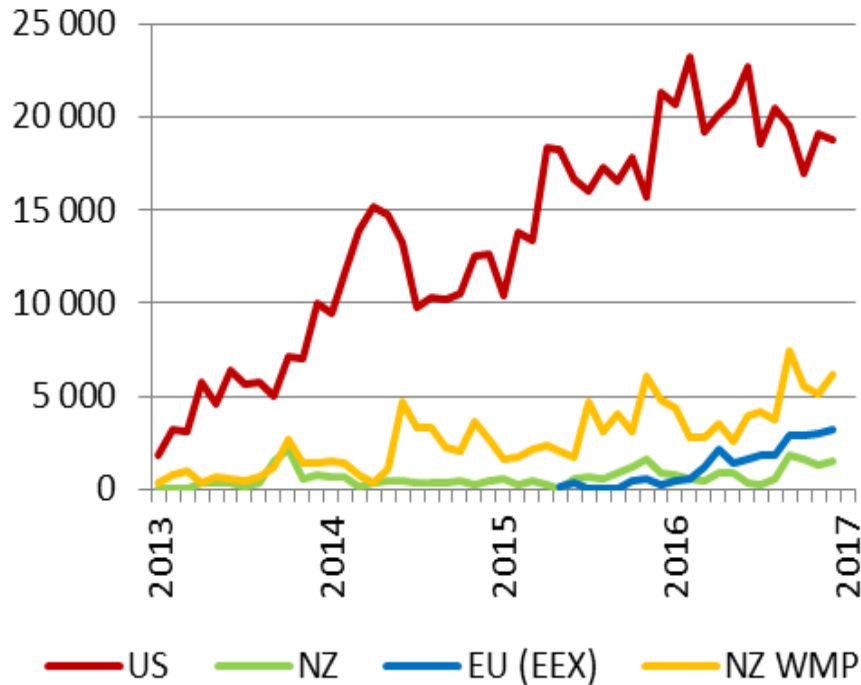
Colour code: **orange** means physical delivery, **light-blue** is cash-settled, **dark-blue** is cash-settled with options available.

	<b>Milk Class III</b>	<b>Milk Class IV</b>	<b>Milk MKP</b>	<b>Butter</b>	<b>Butter oil, AMF, Anhydrous Milk Fat</b>	<b>SMP</b>	<b>WMP</b>	<b>Standard Whey Powder</b>	<b>Cheddar Cheese</b>
<b>New Zealand (USD)</b>			6 000 kg milk solid, yearly (5y) 2016	1 t 18 months 2014	1 t 18 months 2011	1 t 18 months 2011	1 t 18 months 2010		
<b>US (USD)</b>	90 t 24 months 2000	90 t 24 months 2000		9 t 24 months 2005		20 t 24 months 1993		20 t 24 months 2007	9 t 24 months 2010
<b>EU EEX (EUR)</b>				5 t 18 months 2015		5 t 18 months 2015		5 t 18 months 2015	
<b>EU Euronext (EUR)</b>				6 t 18 months 2015		6 t 18 months 2015		6 t 24 months 2015	

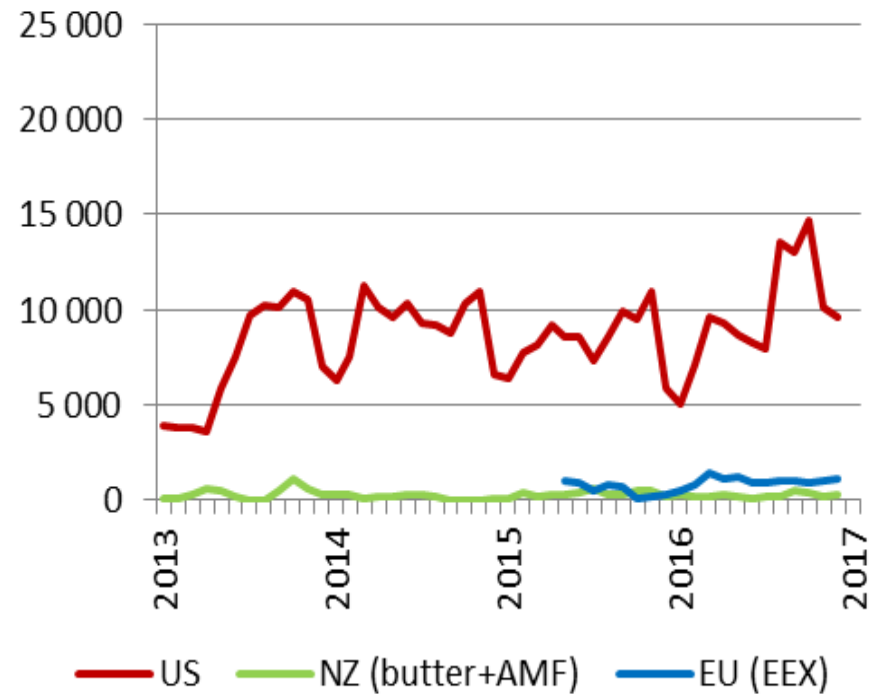
Source: Euronext, EEX, CME, NZX.

# Open interest (nearby future, converted into tonnes)

## SMP



## Butter



Source: DG Agriculture and Rural Development based on Thompson Reuters

## Use of dairy futures: larger in the US than in the EU

### Share of open interest over production

	2012	2013	2014	2015	2016
<b>EU SMP</b>				0.2%	0.9%
<b>US SMP</b>	3.0%	3.8%	8.0%	11.6%	12.1%
<b>NZ SMP</b>	0.1%	0.7%	0.2%	0.7%	1.1%
<b>NZ WMP</b>	0.3%	0.3%	0.5%	1.1%	1.5%
<b>EU butter</b>				0.1%	0.2%
<b>US butter</b>	4.6%	5.1%	6.3%	6.6%	6.4%
<b>NZ butter</b>	1.7%	0.7%	0.3%	0.7%	0.7%
<b>US milk</b>	2.8%	2.6%	3.8%	3.5%	3.4%
<b>US cheese</b>	1.3%	1.2%	2.8%	4.9%	4.6%

Source: DG Agriculture and Rural Development based on Thompson Reuters and USDA PSD

## Use of futures for crops: another planet...

### Share of open interest over production

	2012	2013	2014	2015	2016
<b>EU wheat</b>	11%	8%	8%	9%	10%
<b>US wheat</b>	100%	95%	96%	97%	95%
<b>US maize</b>	56%	43%	45%	48%	44%
<b>US soybeans</b>	111%	85%	82%	87%	83%
<b>EU rapeseed</b>	21%	14%	13%	17%	19%

Source: DG Agriculture and Rural Development based on Thompson Reuters and USDA PSD

## How hedging works in practice

- **FOR THE BUYER:** a hedging strategy on a **long position** is rather easy. The owner of a contract will buy in the future (precisely at maturity) the underlying asset at a price known today.
- **FOR THE SELLER:** viceversa, a hedging strategy on a **short position** could be slightly more complicated...  
*In growing order of complexity, we go through a series of*
- **WORKED EXAMPLES:** 'today' is the negotiation day, explicitly stated, around Aug-Sep 2016. Maturities have been selected for particular intrinsic interest: May 2017 for the next seasonal peak in production, and December 2016 for a complete ex-post evaluation.
- **REAL MARKET DATA:** figures quoted are rounded to make them more readable.



## Example 1, "the locker"

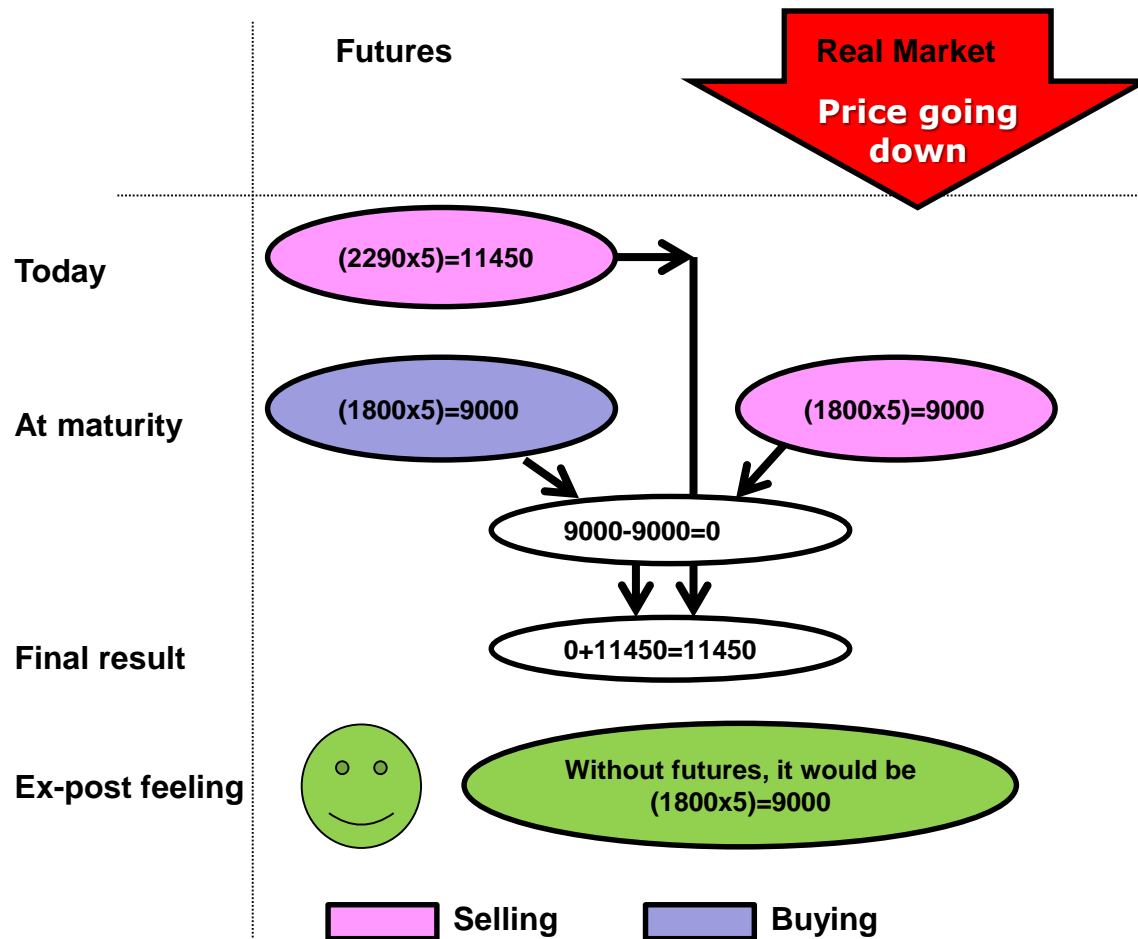
- **TARGET:** a dairy processor wants to secure his revenue for selling 5 t of SMP by fixing the selling price of his dairy commodity in advance.
- **MARKET DATA:** on the **9th of September 2016** the EU market price for SMP is 1 900 EUR/t. On the same day, these are the prices of SMP contracts:

Maturity	Sept 2016	Oct 2016	Nov 2016	May 2017
SMP (EUR/t)	2 090	2 140	2 130	<b>2 290</b>

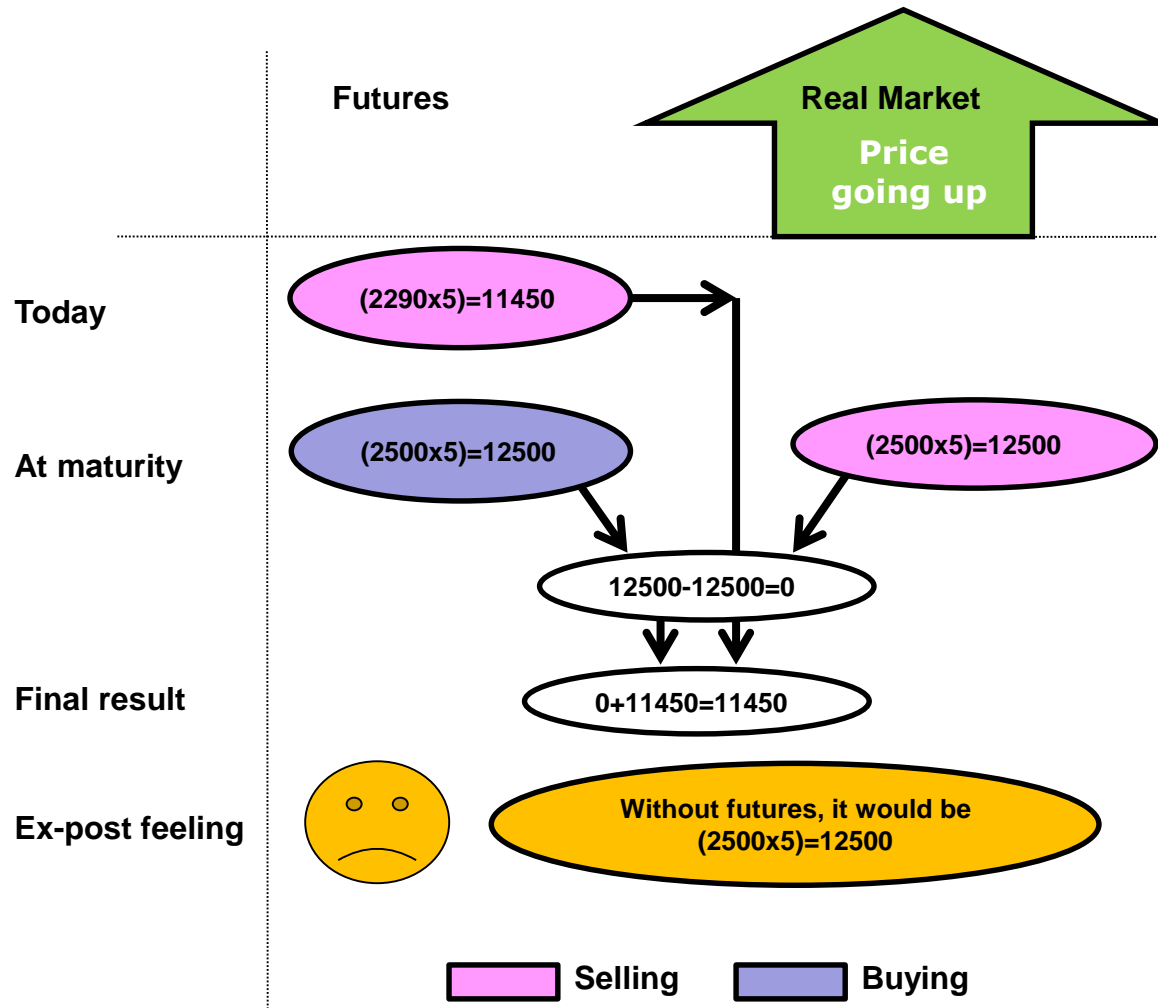
Source: EEX.

- **HEDGING STRATEGY:** regardless of the physical price today, the processor **sells today a contract of SMP** with expiry date May 2017. **At maturity, the processor physically sells his SMP** on the physical market, **AND buys back the SMP contract** at market price, thus cancelling the previous commitment (i.e. netting his 'financial' position).
- **2 SCENARIOS:** "up" from 1 900 EUR/t today to 2 500 EUR/t (**+600 EUR/t**), and "down" from 1 900 EUR/t today to 1 800 EUR/t (**-100 EUR/t**).

## Example 1, "the locker": scenario "down"



# Example 1, "the locker": scenario "up"





## Wrap up: Example 1, "the locker"



**Whatever the future outcome on the market** (scenario 1 assumes an increasing price while scenario 2 assumes a decreasing one), **the net final result in both cases is exactly the initial value of the futures contract**, an amount already known since the beginning (EUR 11 450).

This is exactly what **'securing revenues'** means: the original target of the processor was exactly to have a known and **market-evolution-unrelated guaranteed price**.

The hedging strategy works perfectly, provided that:

- at maturity futures contract price and spot price **converge**;
- the underlying price of the futures contract is a **'representative price'**, really reflecting the specific spot market's conditions.



## Example 2, the "shock absorber"

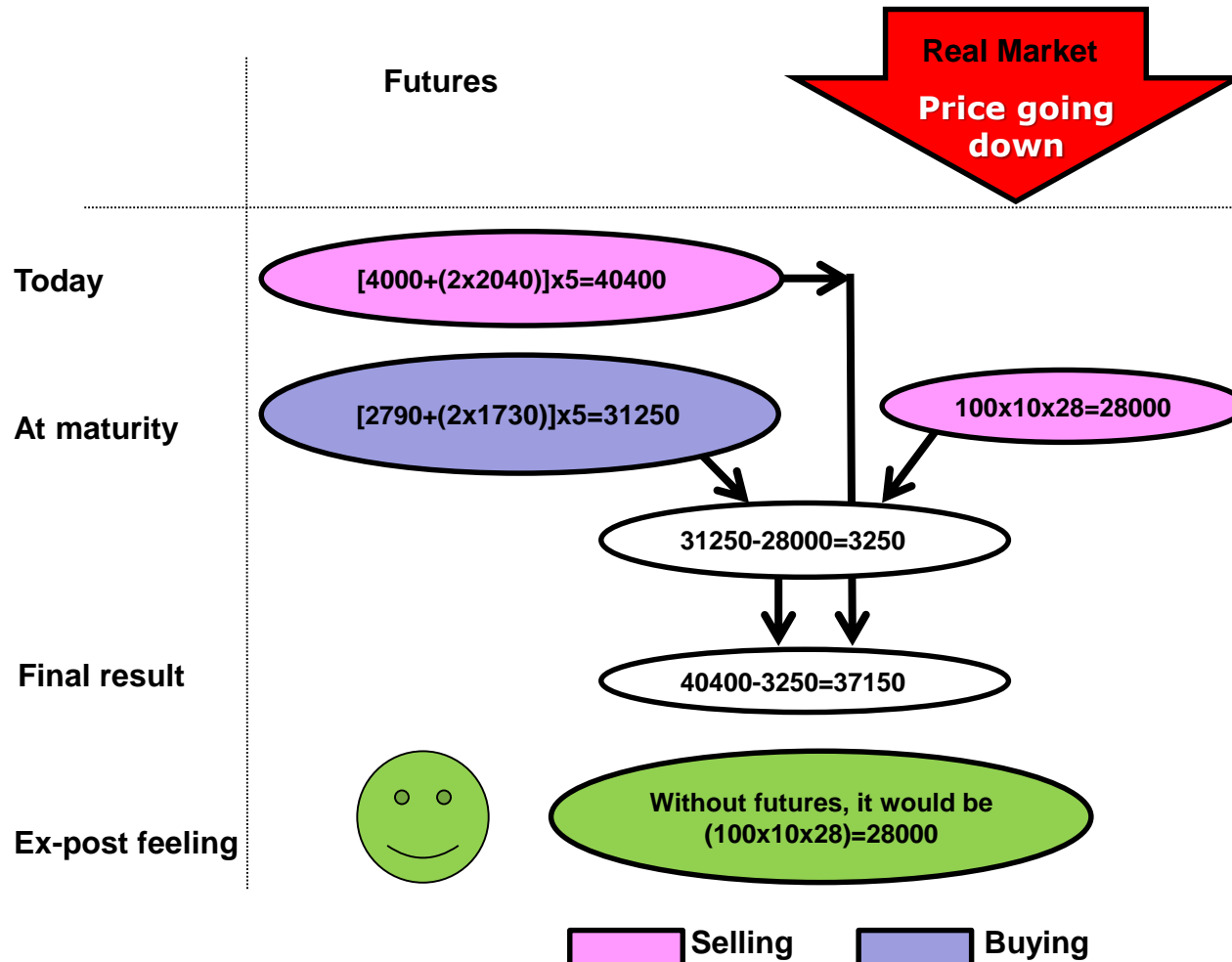
- **TARGET:** a cooperative is selling raw milk but since there is no milk futures contract in Europe it has to hedge on dairy products such as butter and SMP.
- **MARKET DATA:** on the **14th of August 2016** the EU market price for SMP and butter is respectively 1 780 EUR/t and 3 290 EUR/t. On the same day, these are the prices of SMP and butter contracts:

Maturity	Sept 2016	Oct 2016	Nov 2016	Dec 2016
SMP (EUR/t)	1 940	2 000	2 020	<b>2 040</b>
Butter (EUR/t)	4 100	3 990	3 960	<b>4 000</b>

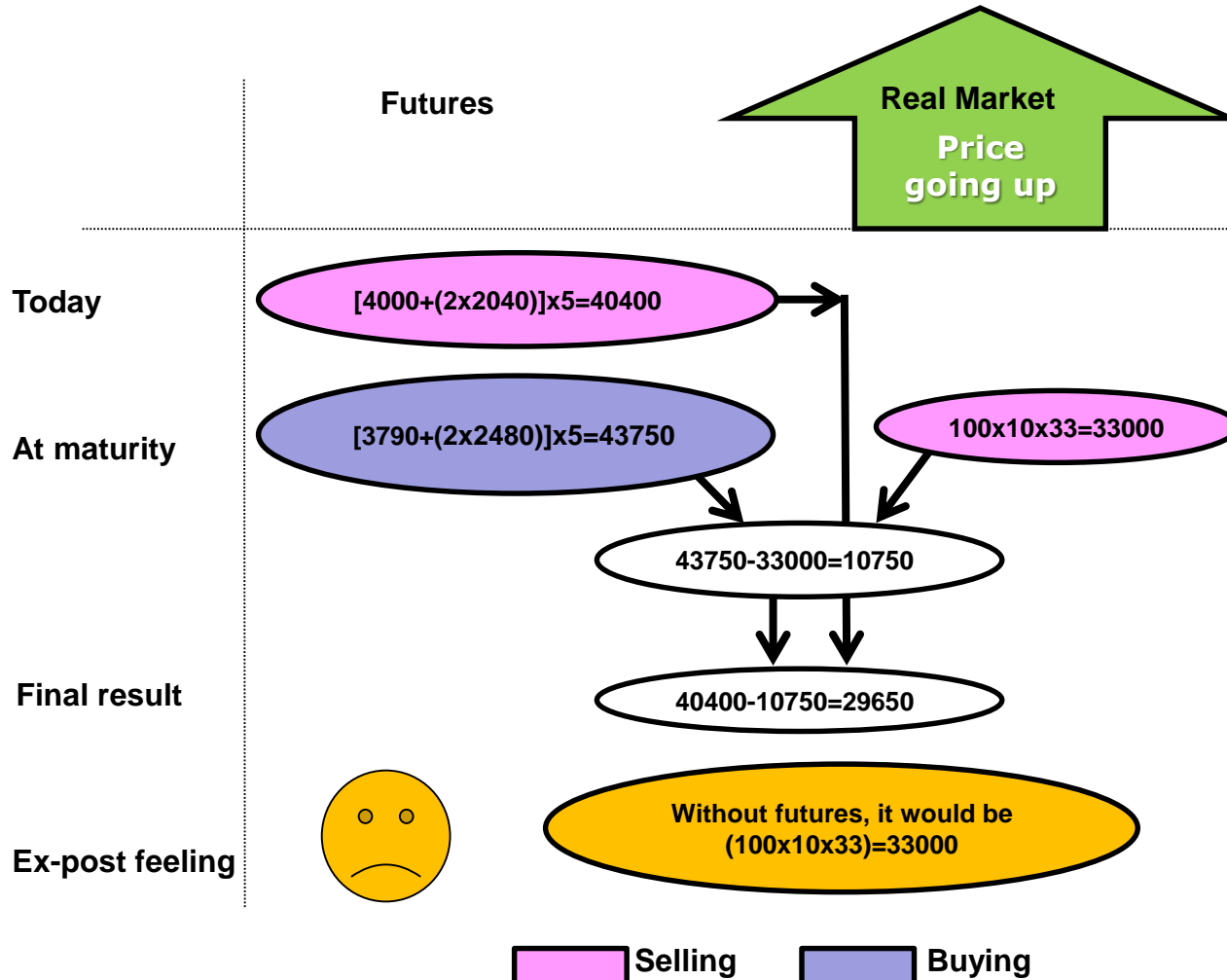
Source: EEX.

- **HEDGING STRATEGY:** regardless of the physical price today, the cooperative **sells today a portfolio made of 1 contract of butter and 2 contracts of SMP** at December prices. **At maturity**, the cooperative **sells its milk production** according to prevalent market condition **and buys back the portfolio** (1 contract of butter and 2 of SMP) at market prices, thus cancelling the previous commitment.
- **2 SCENARIOS:** "up" and "down" for both SMP and butter.

## Example 2, "shock absorber": scenario "down"



## Example 2, "shock absorber": scenario "up"



## Wrap up: Example 2, the "shock absorber"

**Whatever the future outcome on the market** (scenario 1 has increasing prices while scenario 2 has decreasing ones), **the net final result** in both cases **is not too far from 33 EUR/100 kg** (i.e. the expected future milk value implied by the December contracts on SMP and butter), an amount already known today.

This is exactly what **'protect revenues'** means: the original target of the processor was exactly to have a known and **market-evolution-softened guaranteed price**.

The hedging strategy works perfectly, provided that:

- at maturity futures contract price and spot price **converge**;
- the underlying price of the futures contract is a **'representative price'**, really reflecting the specific spot market's conditions.

## Conclusions

- *Volatility of dairy products prices is significantly higher than the historical level of the early 2000s (though lower than in 2007).*
- *Financial tools, such as futures and options could really contribute to reduce risks for dairy farmers/processors, especially in times characterized by relatively high volatility and low prices.*
- *Specific futures for dairy markets have recently been introduced in the EU. The volumes traded are still low but a growing interest for these contracts is observed, especially by the end of 2016.*
- *In the dairy sector, cash-settled contracts may be more suited rather than physical delivery contracts.*
- *In the US, where dairy futures have been available for a longer period, the open interest (number of open contracts) for SMP represents 12% of the domestic production. The open interest for SMP in EU futures is significantly increasing but only close to 1% of the EU production.*

## Main obstacles

*Several obstacles are reported to affect the expansion and the use of futures and options in the dairy sector:*

- *dairy products are not as homogenous as grains/crops;*
- *liquidity is still low;*
- *the amount of knowledge required to handle these instruments is high, and lacking in the sector.*

## **Other obstacles to the growth of future markets**

- *High transaction/intermediation/brokerage cost, plus margin calls*
- *Public support policies providing alternative methods of risk reduction*
- *Local prices are not strongly correlated with world or EU futures prices*
- *Convergence of spot and futures prices*

### **More specifically on dairy**

- *Size of contracts, too large for a single farmer*
- *Physical delivery vs cash-settled contracts*
- *Lack of a "Representative Price"*
- *Still perceived as speculative tools...*



## Final key message

**Many of the issues are already (on the way to be) solved or clearly reduced in impact. On the production side, cooperatives and producer organisations could play a crucial role, centralizing hedging thus reducing the burden for individual farmers.**