

# EU Dairy Markets, Situation and Outlook

## January-June 2018

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*Special report produced for CLAL*

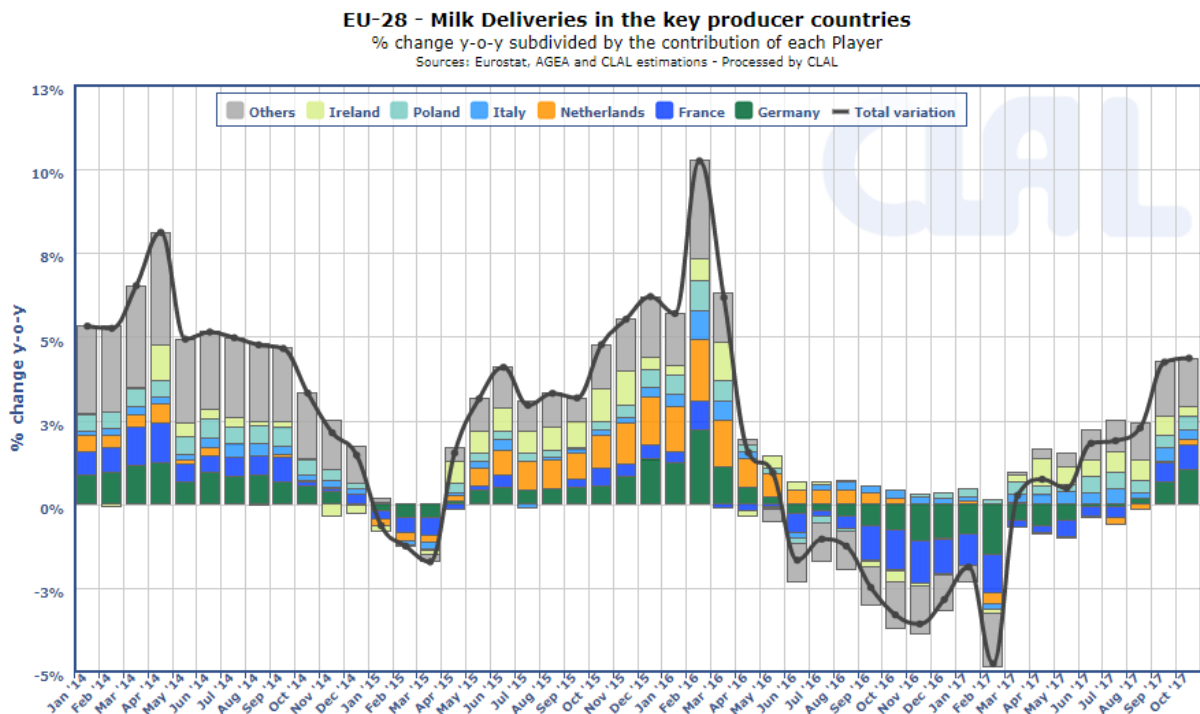
### Highlights:

Milk and dairy markets will be characterized in the first half of 2018 by increasing supplies of milk resulting in ongoing growth of dairy production.

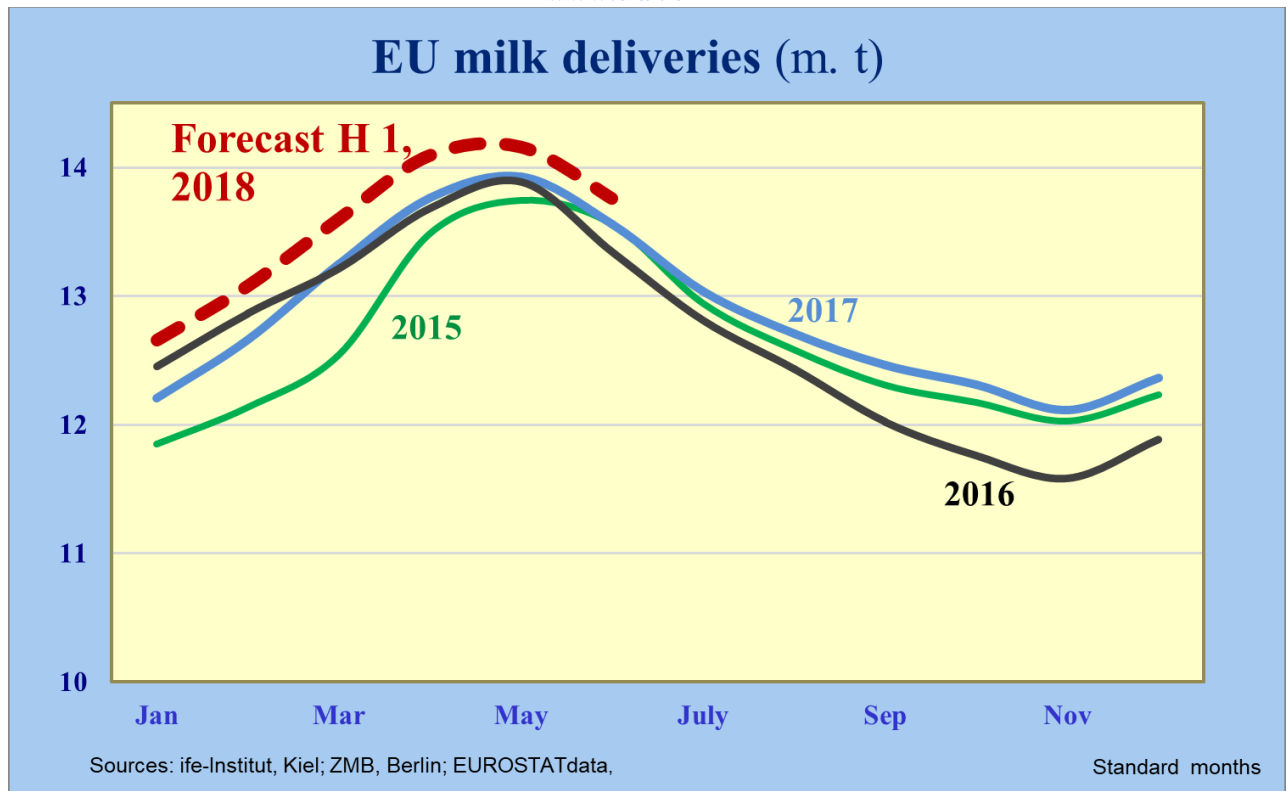
- Like in past years most of all additional milk supplies in the EU will be used for additional cheese production and more whole milk powder, absorbing most of all raw milk including the major parts of the additional volumes.
- Also output of butter and SMP will expand in the first half of 2018.
- Outside EU milk production will continue to grow, but not as fast as in Europe.
- Domestic demand in the EU will continue to increase at modest rates, which in absolute terms will require a large part of the additional milk volumes.
- Demand for exports will remain strong, also since commodity prices will be closer to international levels than they were in 2017.
- The butter prices will display moderate fluctuations when compared to 2017, but will continue to move significantly above the intervention level.
- Cheese prices will be lower in the first half of 2018.
- EU prices of SMP and other nonfat dairy commodities EU will be the lowest of the last decade and continue to be very close to the international level.
- Milkfat values are underpinning farm milk prices, but...
- ...large stocks of SMP are overshadowing the markets and do not leave space for a sustainable recovery of prices in the nonfat sector.

## Ongoing growth of milk production

Most of the growth of EU milk supplies in 2018 will happen in the first half of the year, since 2017 ended with strong rates which might go on for some time. Until mid of May the seasonal pattern will go along with cyclical growth. The cyclical growth is likely to continue after the peak, but at reduced rates compared to the first trimester. On average of the whole EU area, the usual seasonal peak will be reached in May, with France and Italy earlier and North Eastern member states later.



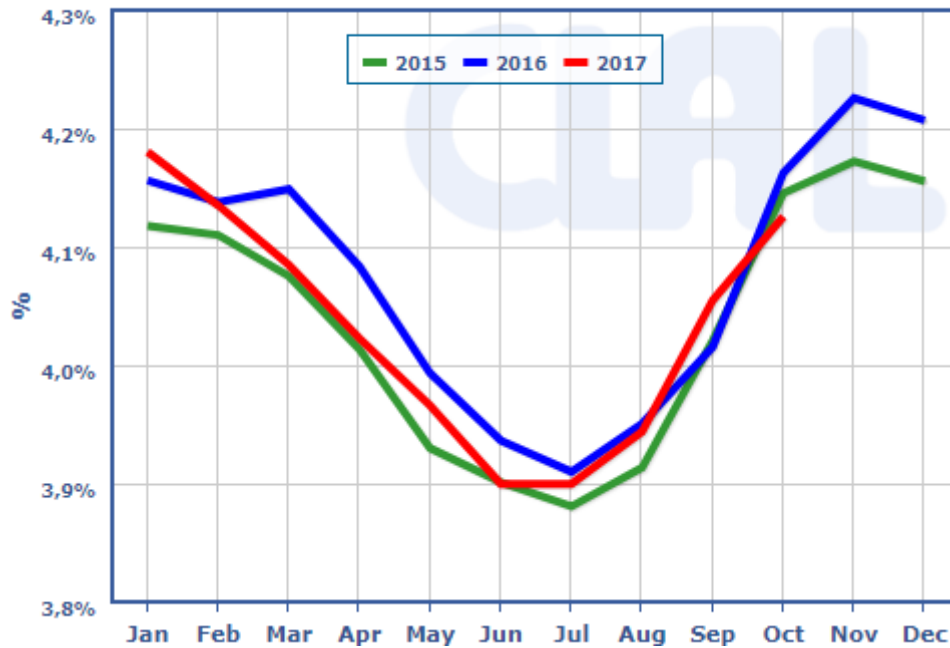
The major reason for the expected slowdown of the growth is that it is easier to increase milk yields in the lower season by advanced calving and use of concentrates, in particular in those farms where the feed management is traditionally based mainly on spring and summer pasturing or daily harvested fresh forages supplied to the animals in the stables. This is different to the situation under quotas, when efforts toward the end of the quota years to increase milk yields were not useful, when they ended up in over quota fines.



As experienced in the cyclical fluctuations of milk prices and milk supplies, the response of dairy farmers to poorer prospects regarding the payout prices for raw milk will come later, if there should be a significant one anyway. It might happen in the second half of 2018, depending on whether the market turns into a longer ongoing depression of milk prices. To recognize that already now just at the beginning of 2018 seems to be premature. The difference of 2017 to earlier observed market situations with high price levels is that it is unilaterally based on the fat component of the milk. The returns for milkfat have declined from the all time high levels of mid and fall of 2017, but they are still higher than at any bullish butter market situation in the past.

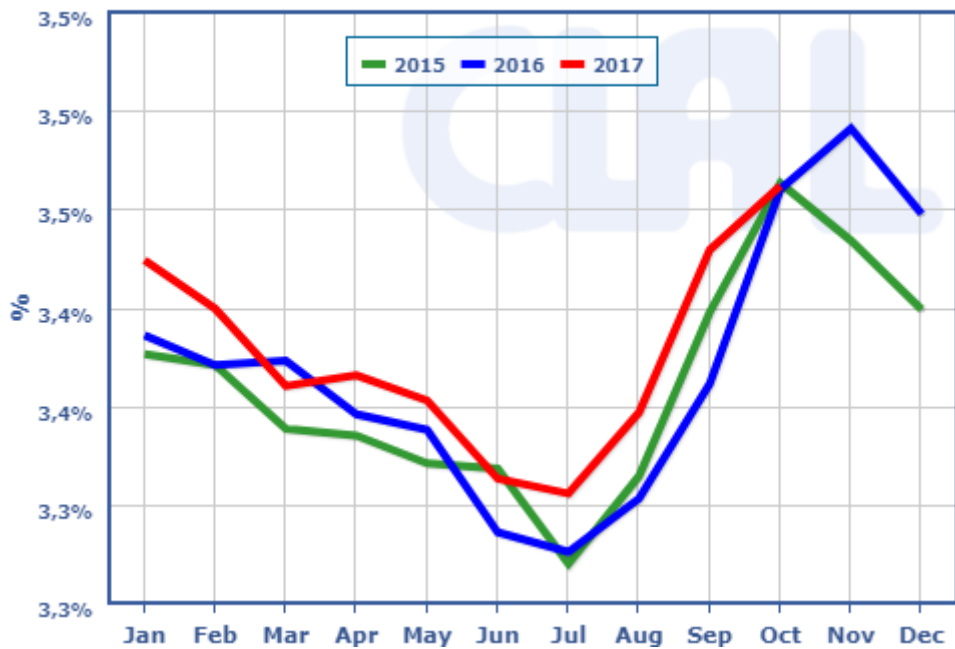
## EU-28: Triennial overview of % fat content in milk

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## EU-28: Triennial overview of % protein content in milk

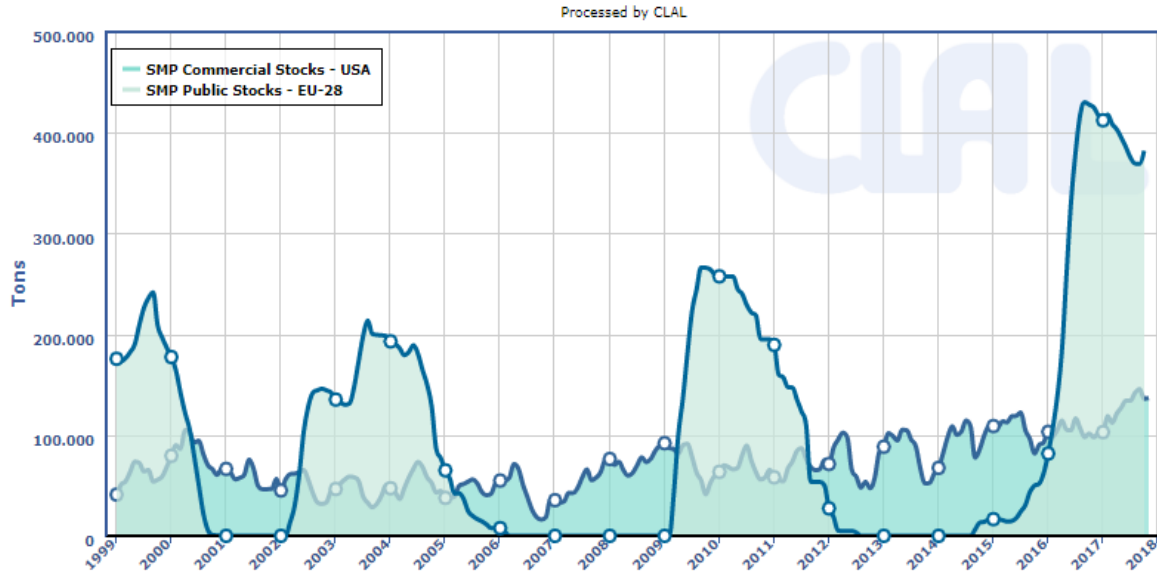
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The contrast to the milkfat situation are the markets of the nonfat components. Large public stocks of SMP (skim milk powder) are the major obstacle that prices might stabilize at higher levels, and therefore volatility in this sector will be limited. The returns from the different dairy products will adjust with some delay, to the mix of **prices for milkfat**, which are mainly depending on butter, and the **prices realized in the nonfat part** which will mainly depend on the situation in the SMP market. It is not clear yet what will be the impacts of the

proceedings of the EU Commission regarding buying into intervention and selling out of intervention.

**Comparative historical overview on SMP Stocks in the EU-28 and US**



In the first months of 2018, it seems to be very likely that temporary surpluses have to be removed from the market: Selling to intervention at conditions which provide lower returns than in 2017 is the one option, another could be the increased use of raw milk for other for other dairy products, notably for cheese and WMP (whole milk powder) manufacturing. More cheese and more WMP would also absorb larger volumes of milkfat which are not available for butter and cream. Thus the split market evolution between the fat and nonfat might continue in 2018.

## Major exporters beyond EU: Modest Growth

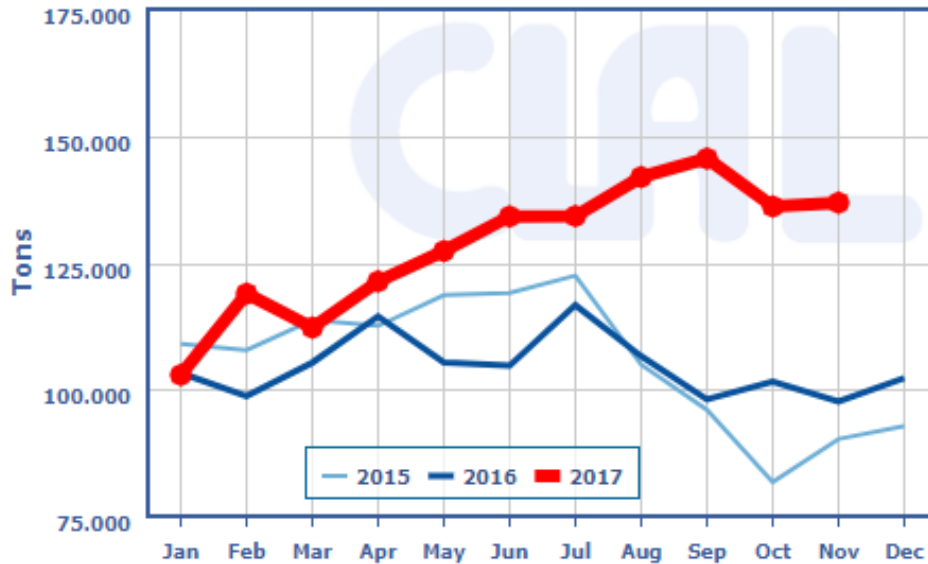
The price evolution will also largely depend on the ability of foreign markets to absorb additional EU milk volumes, which itself is also depending on what can be supplied from major exporting competitors and the demand which can not be covered by the domestic production of the major importing countries.

In the United States, a smaller increase of milk production is expected than in 2017, mainly resulting from lower price prospects. Domestic demand is developing in view of favorable economic fundamentals, which all together could result in stagnation of exportable surpluses from current production. But

also here larger SMP stocks are available, mainly in the industry and not in public stores.

## USA - SMP Storage warehouses

Source: USDA



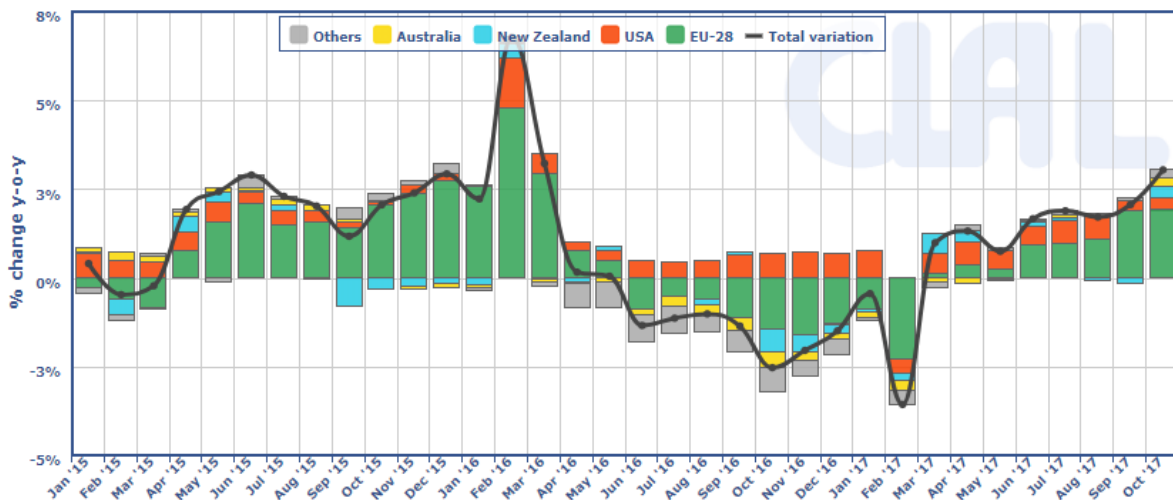
The milk production of Oceania has recovered in H2 of 2017 from the depressed situation of the year before. But the prospects for the remainder of the dairy years(ending in New Zealand May 31<sup>st</sup> and in Australia June 30, 2018) are mixed since they depend on weather conditions which can change within short periods.

## World - Global Supply Variation in the Key Exporters of Dairy Products

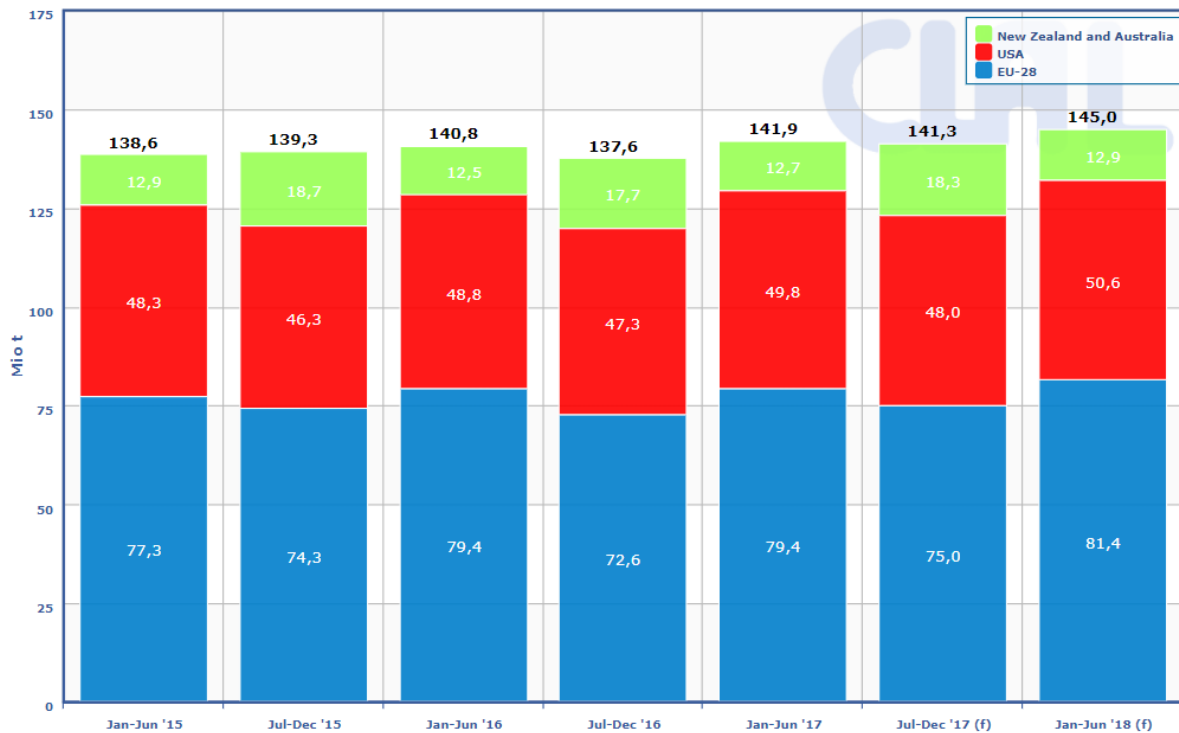
% change y-o-y subdivided by the contribution of each Player

Players considered: EU-28, USA, New Zealand, Australia, Others: Argentina, Ukraine, Belarus, Chile, Uruguay, Turkey

Processed by CLAL



Combined milk supplies of EU-28, USA, New Zealand and Australia  
©ife 2017

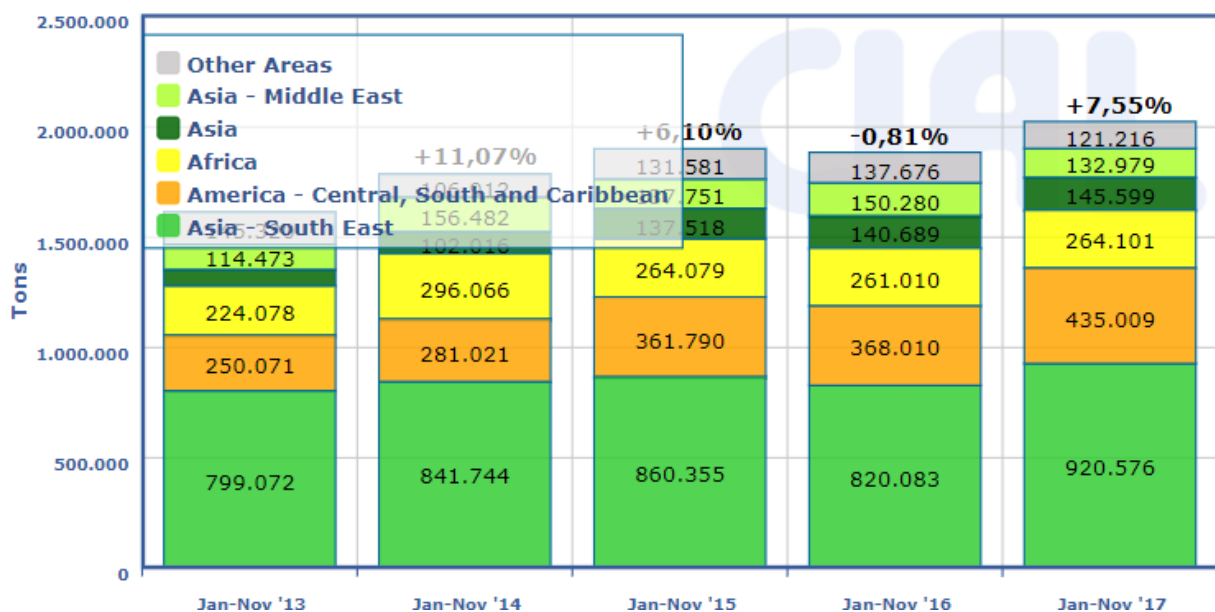


For the first half year it is supposed that EU milk supplies will increase by 2,0 million metric tons and the total of the U. S. and Oceania by 1,0 m. metric tons.

## 040210 - SMP IMPORT sorted by Geographical Area

Cumulative monthly data

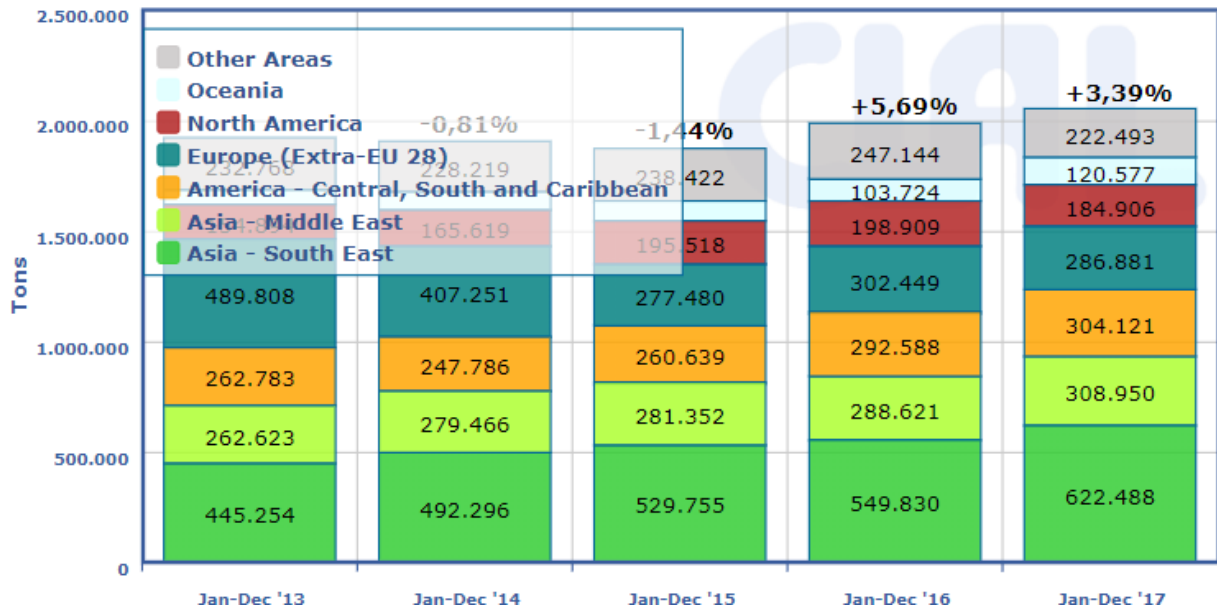
GTIS data processed by CLAL



## 0406 - CHEESE IMPORT sorted by Geographical Area

Cumulative monthly data

GTIS data processed by CLAL

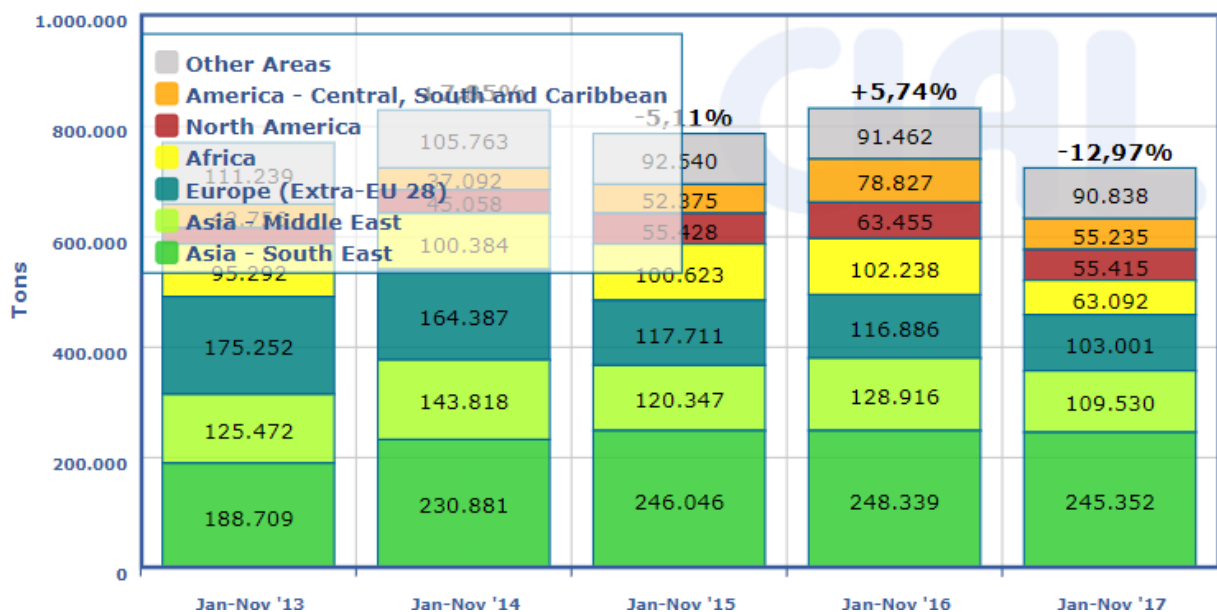


Taking into account modest increases of domestic consumption on both sides of the Atlantic Ocean, the exportable volumes resulting from bigger productions are likely to keep pace with the demand of the international markets, in particular since prices are more favorable for buyers now. The major growth of the international dairy trade could be observed in SMP and cheese volumes. Also the trade in fresh products like liquid milk, yogurt, cream and other items is developing with strong rates, but modest in terms of milk equivalents when compared to milk powders, butter and cheese.

## 0405 - BUTTER IMPORT sorted by Geographical Area

Cumulative monthly data

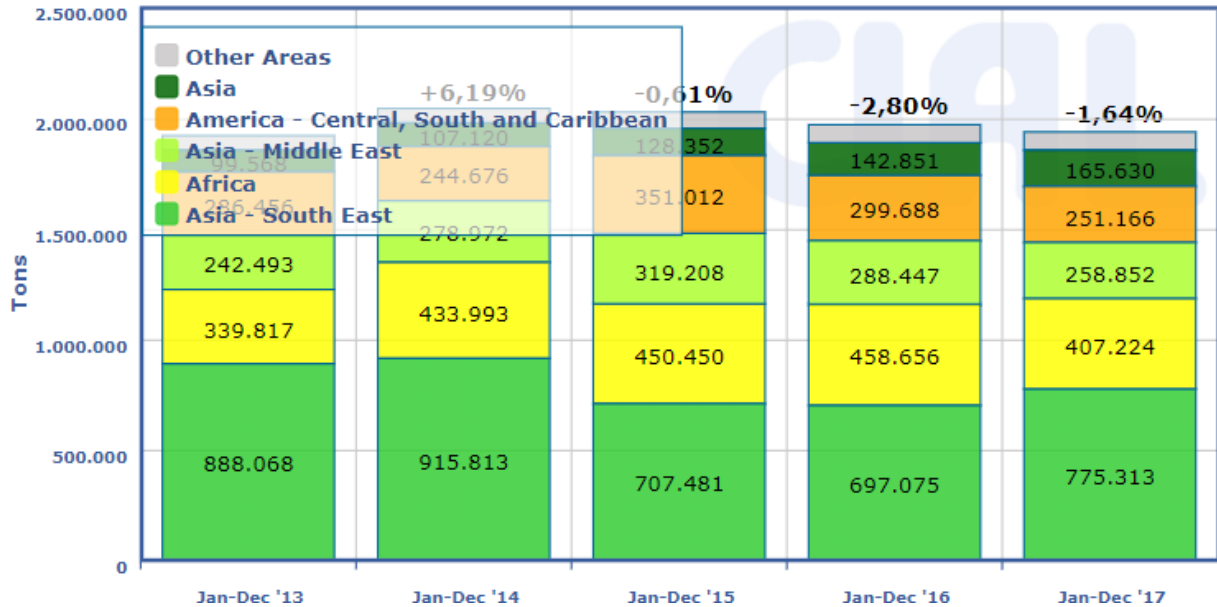
GTIS data processed by CLAL





## 040221 040229 - WMP IMPORT sorted by Geographical Area Cumulative monthly data

GTIS data processed by CLAL

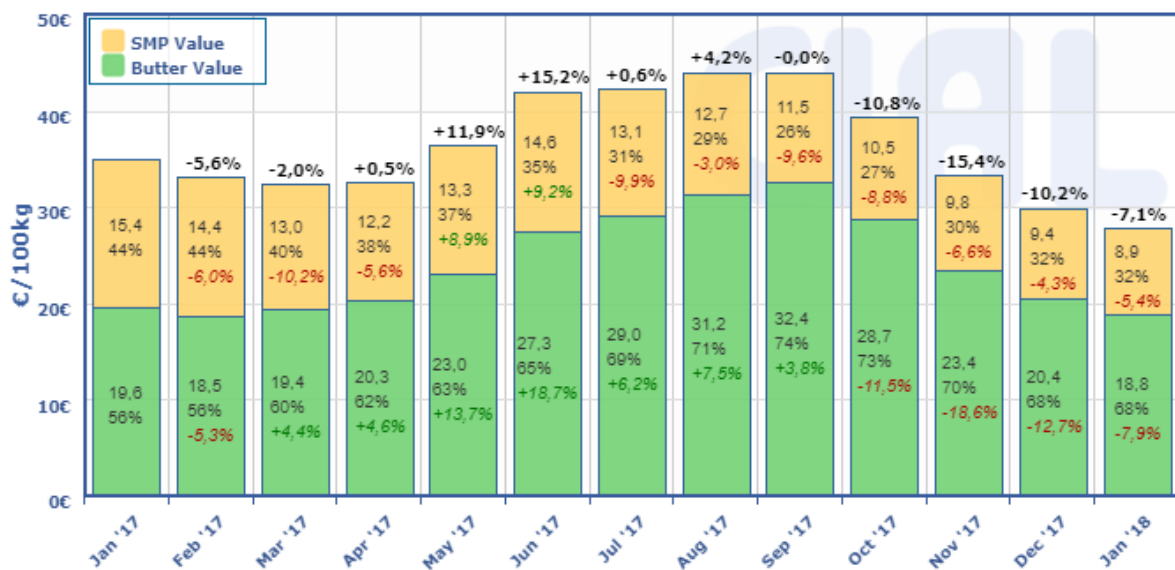


The trade in butter and WMP has declined in 2017, which is mainly due to the reduced availability for exports and high prices.

## Milk prices with strong short term fluctuations

### Composition of farm-gate milk price derived from the returns of SMP + BUTTER processing

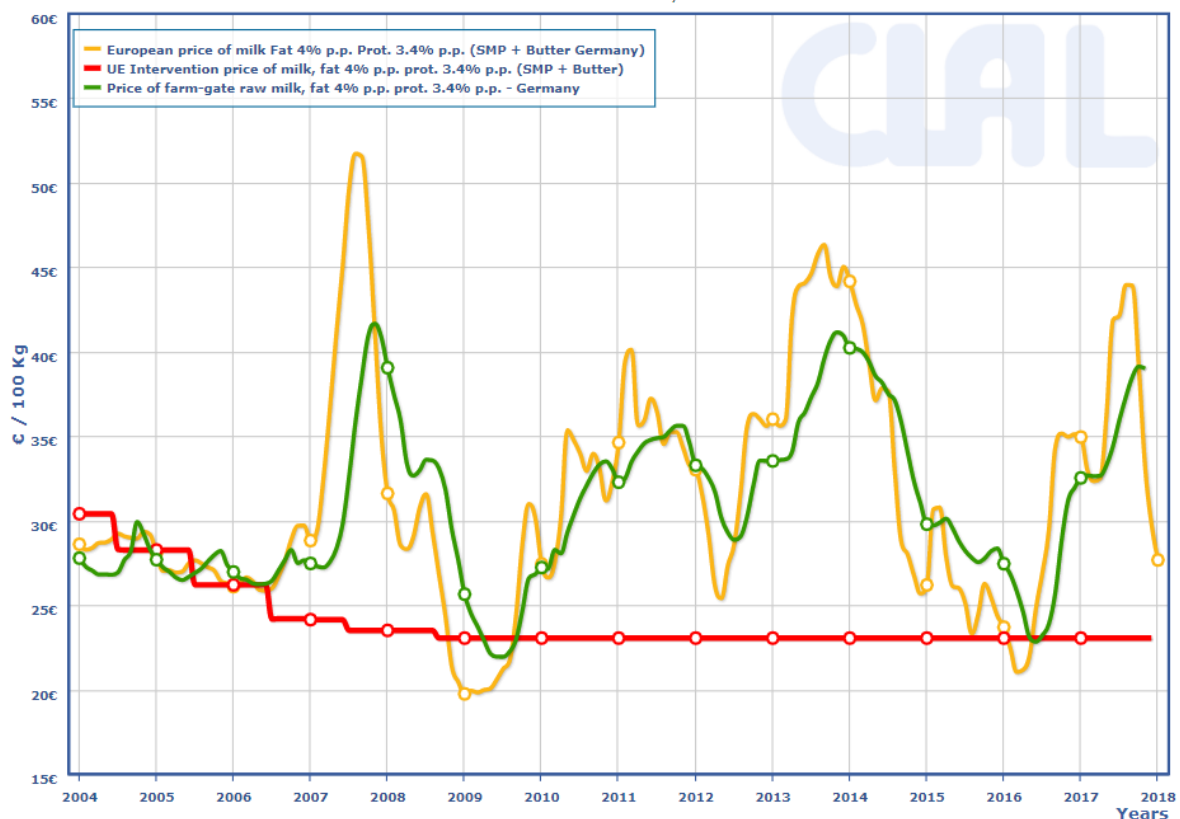
Above the columns the % variation of the total cost  
Inside the columns the % weight of each component on the total cost and % variation versus the previous month  
Processed by CLAL | Latest update: 12/01/2018



Towards the end of 2017, milk prices paid to farmers were close to the high levels of 2007 and 2013, but unlike four years ago the hausse was not as sustainable as it had been then. The main reason is that it was only based on the milkfat side with an extraordinary and historically high level. The contribution of milkfat to the overall value of raw milk reached in Germany 73% in October 2017, which similar to the first years of the European milk regime in the early Seventies of the 20<sup>th</sup> Century. But the difference to that time is that this relationship is mainly resulting from the markets and not from the policy.

**EU-28: Farm-gate milk price competitiveness**

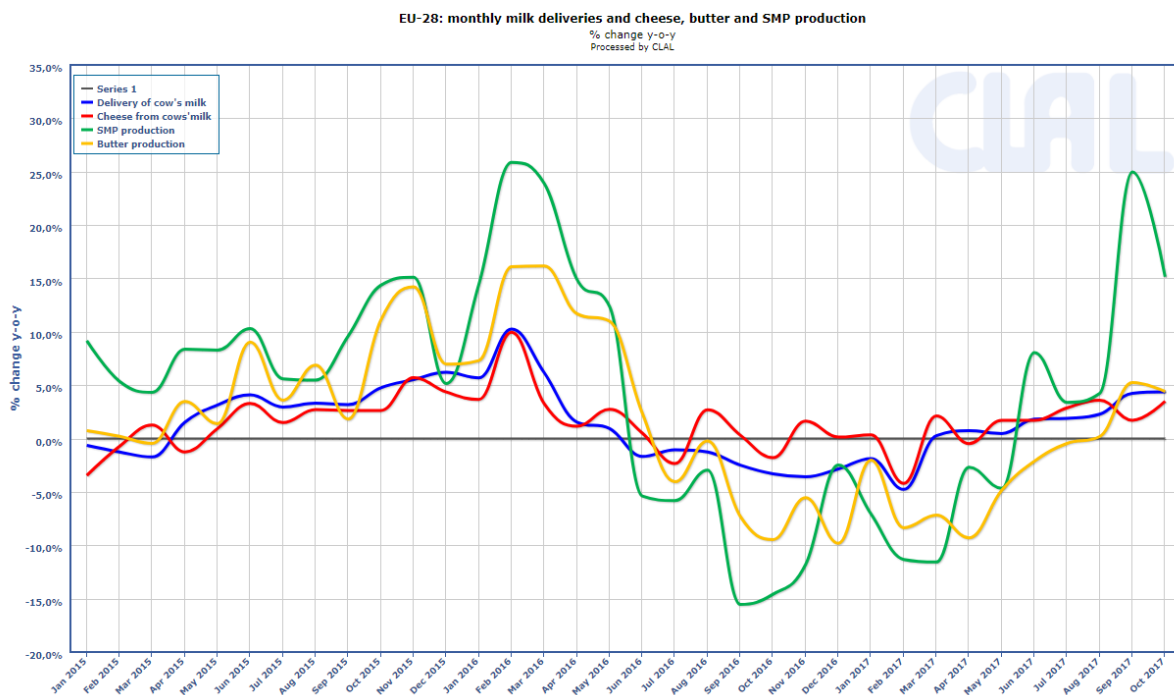
Source: Processed by CLAL



The equivalent of butter and SMP prices in terms of whole milk is a major indicator of the direction where the overall prices are moving to, but not in general displaying the lowest or highest levels in advance. Therefore it remains to be seen if and when milk payout prices (for milk containing 4% fat) will go down to the levels of around 28Ct/kg which result from recently quoted EEX futures of butter and SMP for the first half of 2018. Contracts of cheese and liquid dairy products are still providing higher returns, but further producer milk price reductions can not be ruled out later in the year. But a general change of the market situation is not in sight yet.

## Milk utilisation: Most of the milk for cheese

As already happened in recent years, cheese manufacturing will absorb most of all milk which is delivered to dairy companies. With the ongoing growth of demand from both domestic and foreign markets also the major part of the expected additional supplies will be used for cheese and WMP, leaving some volumes to produce more butter and SMP.



## Volatile butter prices, but significantly above intervention level

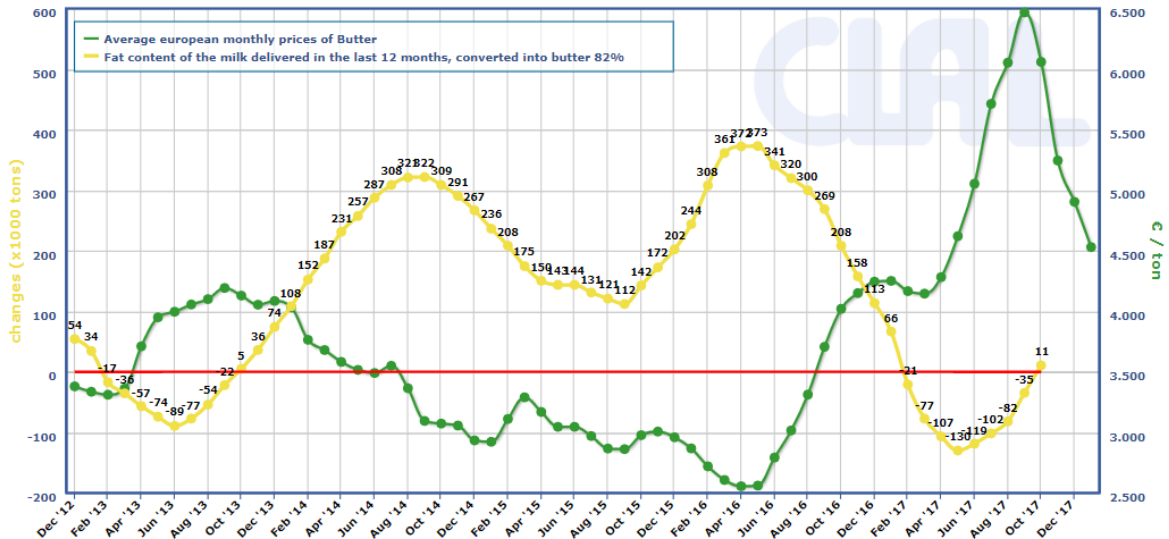
As mentioned the increase of butter production will not use the total additional milkfat which is available from the additional milk volumes. With poor prospects of the SMP market more volumes of milk will be processed into cheese and WMP. Therefore EU butter production will mainly grow in the first half of 2018 and be reduced in the second half, even if milk production should continue to expand. Export markets might develop also more demand since also here tight supplies are expected. With lower prices in spring and prospects of higher prices later in the year, taking butter in storages can be attractive, even if the prices do not develop in a similar way as they did in 2017. For the first half, the future prices of butter quoted at the EEX in Leipzig are moving around 4,00€/kg, which can be regarded as high level when it is compared to earlier years. The domestic EU price level has come close to the international level, which might enable Europe to export even more volumes than in 2018. Low prices are also attractive to attract more demand from internal markets. Consequently the

expected higher production will not necessarily bring prices down close to intervention.

**EU-28: changes in fat content of milk deliveries compared to butter price of EU-28**

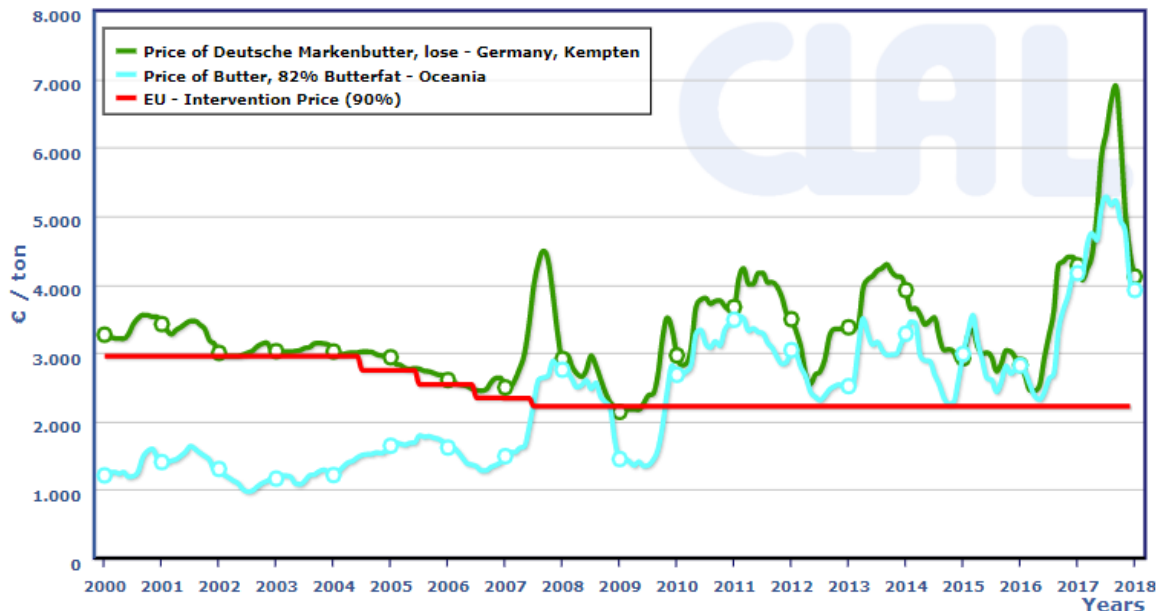
Changes in fat content are calculated on a moving year

Processed by CLAL based on Eurostat data - Last Update: January 11th, 2018, h: 00:00



**Historical comparative overview between Butter prices in Germany and Oceania with EU intervention price**

Processed by CLAL



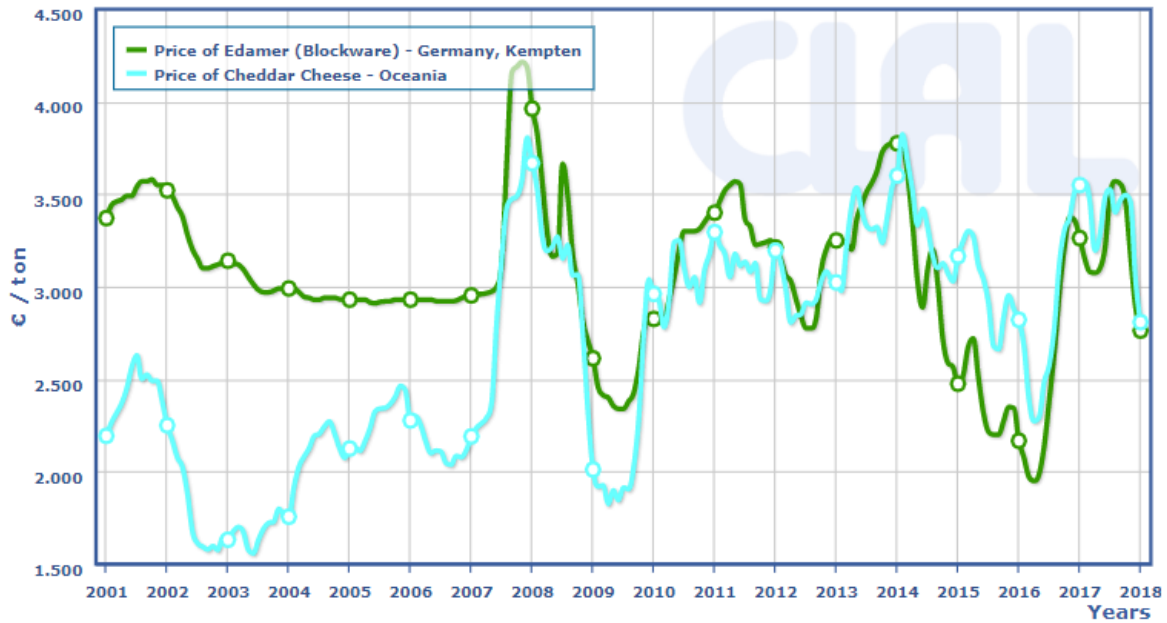
## Ongoing expansion of cheese manufacturing

As mentioned above, cheese manufacturing will go up and will not always follow just the market opportunities, since it can be necessary to process increasing milk volumestemporarily. In the late months of 2017, prices of commodity type block cheeses have come down from higher levels which were not far from the historical peaks of 2014. In the first half of 2018 there is no

scope for a recovery of the prices back to the level of August/ September 2017; further weaknesses seem to be more realistic.

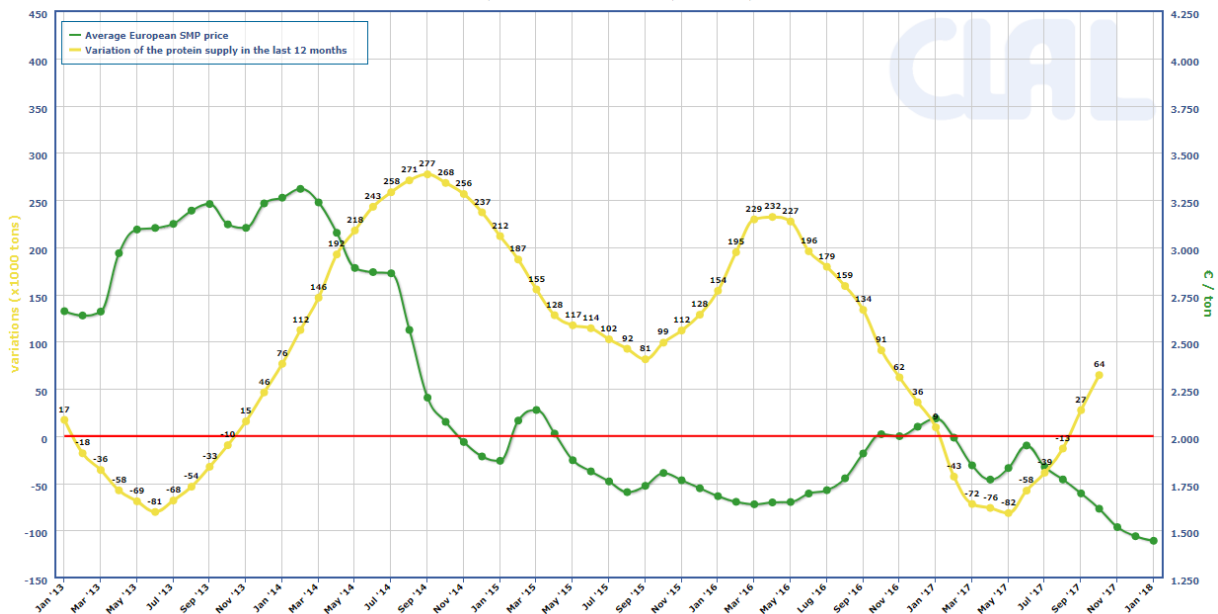
## Historical comparative overview of prices of Edamer(Germany) and Cheddar Cheese (Oceania)

Source: ZMP; since 6 May 2009: Sddeutsche Butter - und Kasebörse eV, Kempten



## Weak EU milk powder markets

EU-28: Variation of the protein content of milk deliveries compared to the SMP price of EU-28  
Changes in protein content is calculated on a moving year  
Processed by CLAL based on Eurostat data - Latest Update: 12 January 2018, h: 00:00



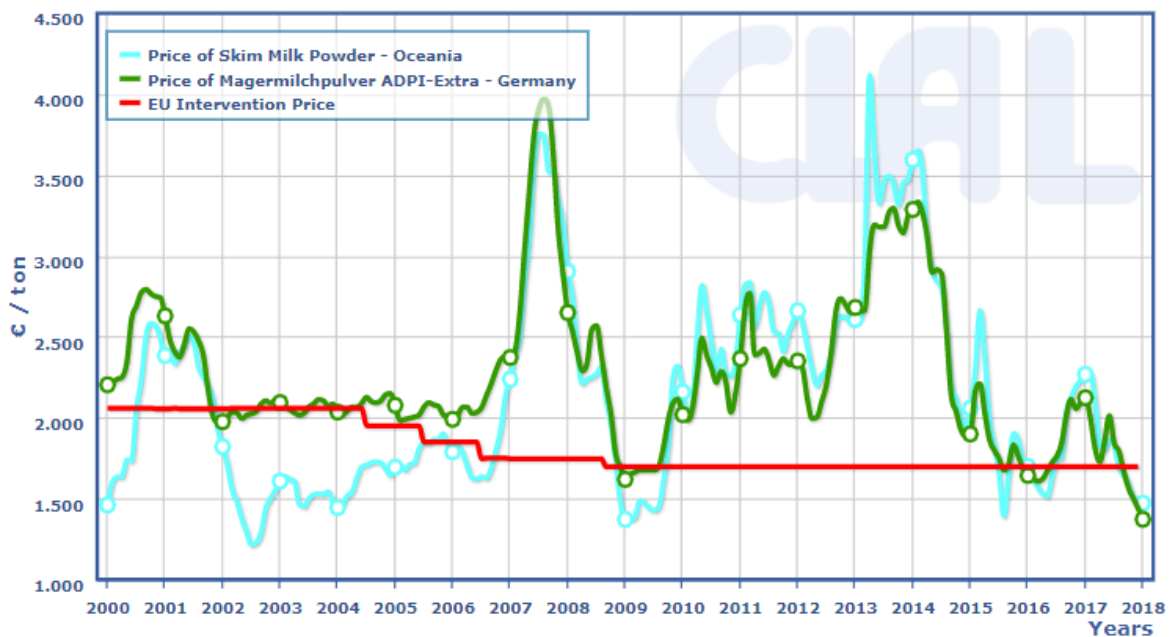
Despite the expected increases of cheese and WMP output, also more skim milk will be available for drying in the first half of 2018. The final proceedings of buying into intervention are not clear yet, but it is doubtful it will be managed at the fixed intervention price. After intervention buying in has been ended in August, market prices have fallen and the prospect that they will recover in the

first half of 2018 is poor. So far only small volumes have been sold out of the stocks. Demand for SMP is expected to grow on the domestic market but even stronger for exports. Nevertheless stocks will grow in the first half year, but a lot of them will be cleared in the second half. For the international market also stocks in the United States have to be taken into account. Together with European stocks of 380.000 tons more than a half million tons have to be reduced significantly before prices can find back from the lowest level of the decade since 2007. And substantial reduction of the stocks seems to be unlikely in 2018, but it could start in the second half.

Also whole milk powder prices are expected to stay at reduced levels, as consequence of the expected production growth and reduced values of milkfat – though at high level - and nonfat components at low level.

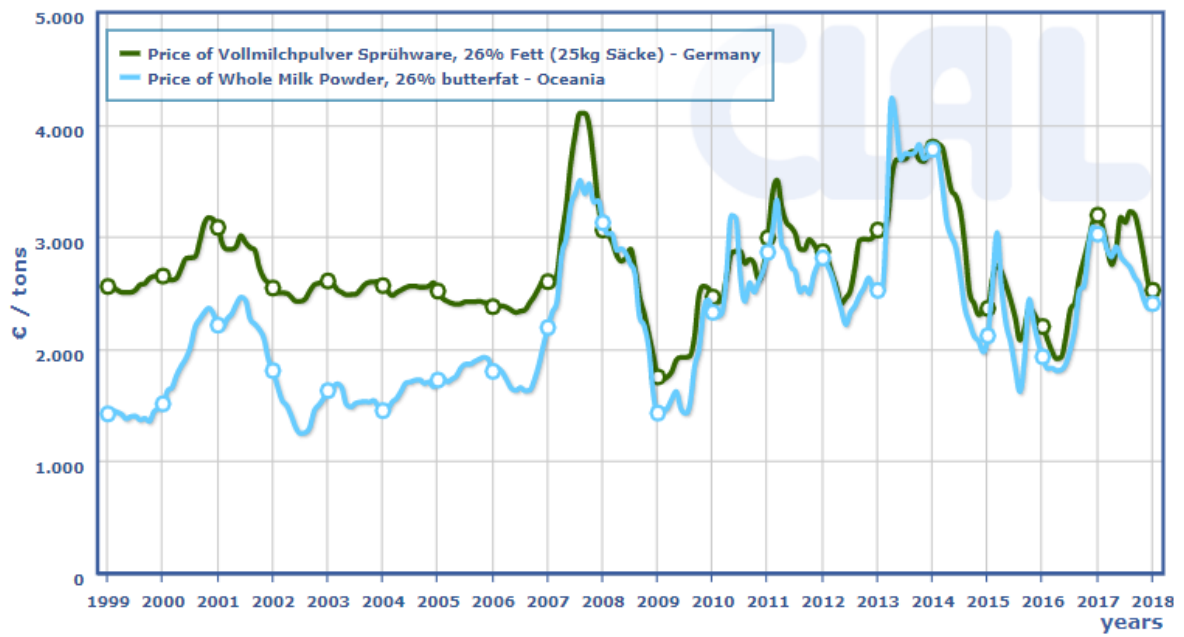
**Comparative historical overview between SMP market prices in Germany and Oceania and EU intervention price**

Processed by CLAL



## World - Comparative historical overview of Whole Milk Powder (WMP) prices

Processed by CLAL



## Annex

Table 1

### EU 28: Dairy Markets 2013 - 2017 and Forecast 2018

1.000 t	2013	2014	2015	2016*	2017*	2018**
<b>Milk deliveries</b>	141.887	148.787	151.600	152.327	154.400	157.000
<b>Liquid products</b>						
Production	46.761	46.467	46.920	47.080	47.020	47.200
Consumption	46.159	45.713	46.024	45.974	46.110	46.110
<b>Butter</b>						
Production	2.127	2.237	2.341	2.390	2.320	2.400
Consumption	2.042	2.106	2.168	2.230	2.220	2.220
<b>Cheese</b>						
Production	9.529	9.702	9.950	10.148	10.260	10.360
Consumption	9.061	9.217	9.392	9.659	9.680	9.760
<b>Skim Milk Powder</b>						
Production	1.220	1.550	1.670	1.680	1.620	1.700
Consumption	805	830	860	890	902	920
<b>Whole Milk Powder</b>						
Production	732	766	735	730	740	770
Consumption	351	359	349	355	345	340
<b>Resident Population,</b>						
Jan 1 <sup>st</sup> , m. head	505,2	506,9	508,3	510,1	512,0	513,4
*)Provisional. **) Forecast					ife, December 2017	

Sources: ife, Kiel, according to ZMB, Berlin, Milk Market Observatoy, Brussels, own calculations.

Table 2

### EU 28: Balance Sheet of Liquid Dairy Products

1.000 t	2013	2014	2015	2016*	2017**	2018**
Production	46.761	46.467	46.920	47.080	47.100	47.200
Imports	33	19	12	14	10	10
Exports	635	773	908	1.120	1.000	1.100
Consumption	46.159	45.713	46.024	45.974	46.110	46.110
- per capita (kg)	91,4	90,2	90,5	90,1	90,1	89,8
*)Provisional. **) Forecast					ife, December 2017	

Sources: ife, Kiel, according to ZMB, Berlin, Milk Market Observatoy, Brussels, own calculations.



Table 3

**EU28: Butter Balance Sheet**

1.000 t	2013	2014	2015	2016*	2017**	2018**
Production	2.127	2.237	2.341	2.390	2.320	2.400
Imports	45	53	27	23	15	20
Exports	130	154	180	208	170	180
Final stocks	100	130	150	125	70	90
Consumption	2.042	2.106	2.168	2.230	2.220	2.220
- per capita (kg)	4,0	4,2	4,3	4,4	4,3	4,3
*)Provisional. **) Forecast					ife, December 2017	

Sources: ife, Kiel, according to ZMB, Berlin, Milk Market Observatoy, Brussels, own calculations.

Table 4

**EU Cheese Balance Sheet**

1.000 t	2013	2014	2015	2016*	2017**	2018**
Production	9.529	9.702	9.950	10.148	10.260	10.360
Processed cheese						
impact	240	210	200	180	180	190
Imports	75	76	61	71	60	60
Exports	788	721	720	800	820	850
Stock change	-5	50	100	-60	0	0
Consumption	9.061	9.217	9.392	9.659	9.680	9.760
- per capita (kg)	17,9	18,2	18,5	18,9	18,9	19,0
*)Provisional. **) Forecast					ife, December 2017	

Sources: ife, Kiel, according to ZMB, Berlin, Milk Market Observatoy, Brussels, own calculations.

Table 5

**EU SMP Balance Sheet**

1.000 t	2013	2014	2015	2016*	2017**	2018**
Production	1.220	1.550	1.670	1.680	1.620	1.700
Imports	5	2	3	4	0	0
Exports	408	646	684	574	770	800
Final stocks	77	153	282	502	450	430
- in intervention	0	0	29	351	370	350
Consumption	805	830	860	890	902	920
- as Feed	120	120	130	140	180	180
*)Provisional. **) Forecast					ife, December 2017	

Sources: ife, Kiel, according to ZMB, Berlin, Milk Market Observatoy, Brussels, own calculations.

Table 6

**EU WMP Balance Sheet**

1.000 t	2013	2014	2015	2016*	2017**	2018**
Production	732	766	735	730	740	770
Exports	374	389	400	390	400	430
Stock change	10	20	-10	-10	0	0
Consumption	351	359	349	355	345	340
*)Provisional. **) Forecast					ife, December 2017	

Sources: ife, Kiel, according to ZMB, Berlin, Milk Market Observatoy, Brussels, own calculations.