

Dairy Market Analysis

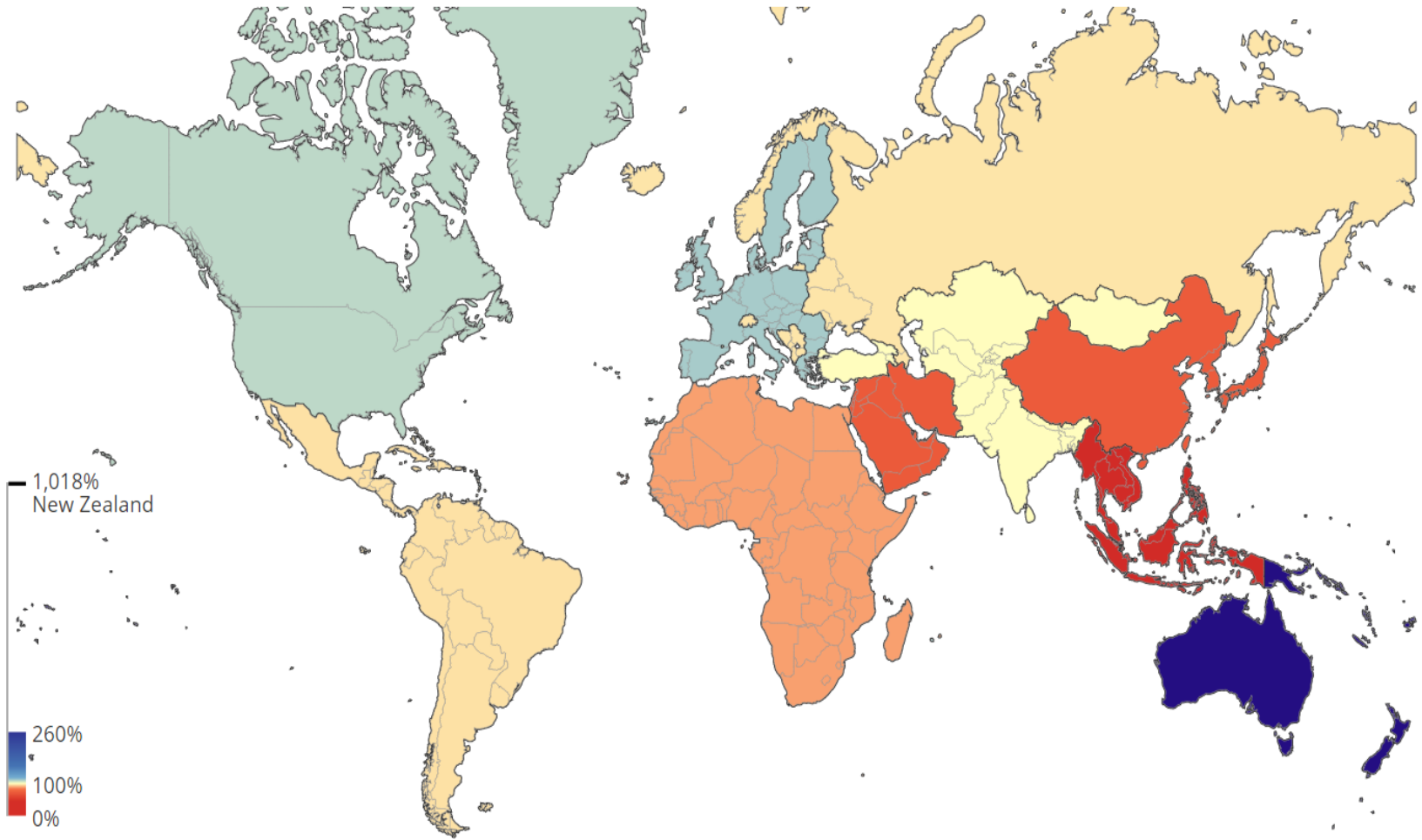
CIAL

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WORLD



World Milk self-sufficiency (map)



World Milk self-sufficiency

2013

	Self sufficiency	Cow's milk production (Ton)	Import (Ton ME)	Export (Ton ME)	Domestic use incl. stock (Ton ME)	Dairy Cows (Head)
Oceania	326,9%	28.475.109	1.025.046	20.789.117	8.711.038	6.525.201
European Union	111,2%	141.742.690 (1)	747.066 (2)	15.076.527 (2)	127.413.229	23.560.430
North America	108,4%	99.666.528	1.751.413	9.452.111	91.965.830	10.178.800
Europe (Others - extra EU)	96,8%	59.814.150	7.136.940	5.139.333	61.811.757	15.312.146
South Central America and Caribbean	96,3%	85.560.619	8.291.918	4.986.595	88.865.942	44.041.954
Asia - Middle East	71,4%	13.221.443	8.977.950	3.681.930	18.517.463	5.091.170
Asia - South East	71,9%	49.411.834	21.586.109	2.255.685	68.742.258	17.486.846
Asia	99,8%	112.904.776	2.435.621	2.245.164	113.095.233	81.970.197
Africa	88,5%	36.720.566	6.933.508	2.155.526	41.498.547	74.181.466

(1) For the European Union the **cow's milk deliveries** are considered, instead of production.

(2) Only for the European Union the data do not include exchanges between countries in the same area.

Source **Cow's milk production**: FAO ([Click here to see the production of all types of milk](#)); **Cow's milk deliveries** : Eurostat

Import/Export: IHS and UNComTrade

Population: FAO

Dairy Cows: FAO

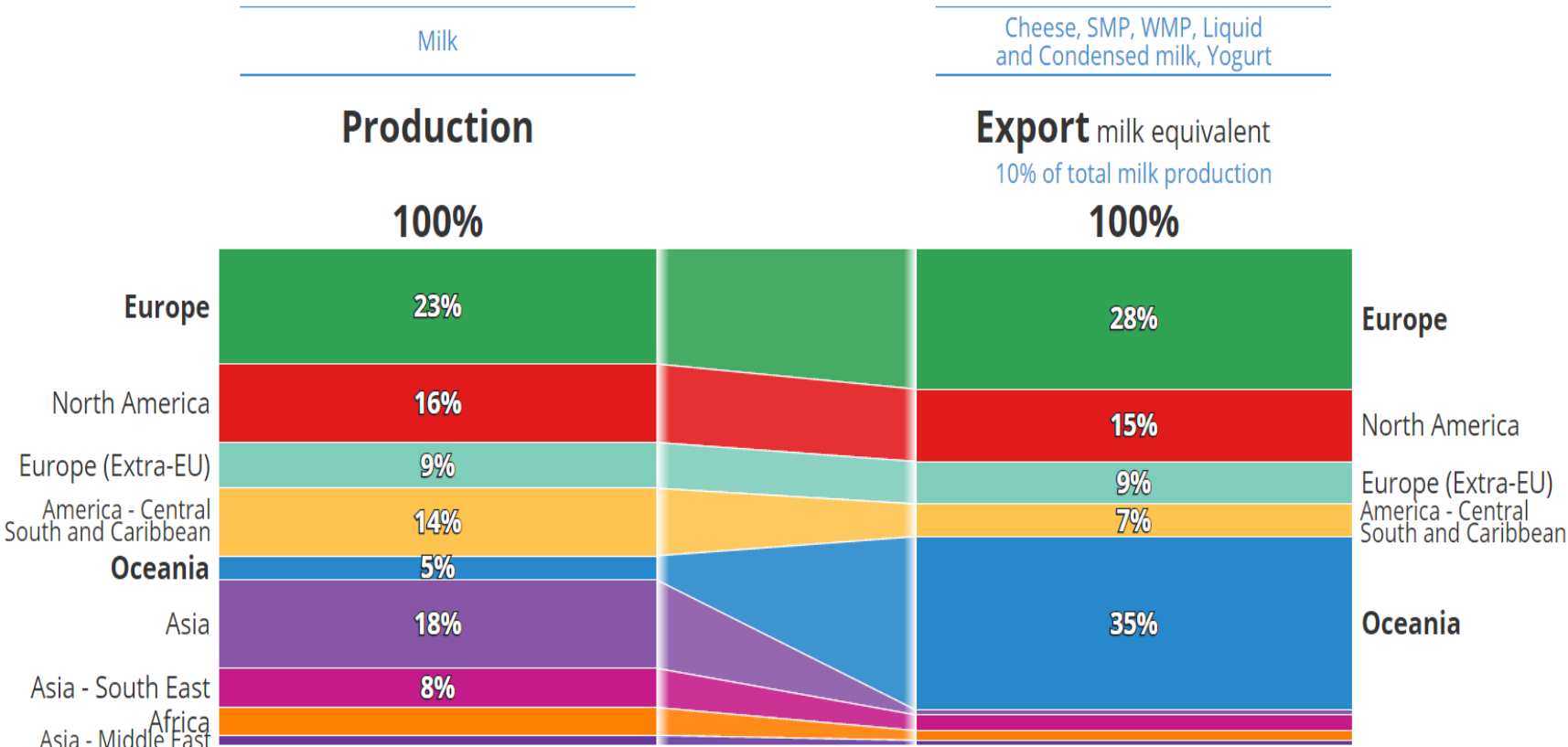
NOTE:

The products included in the calculation of the Import / Export data in **milk equivalent (ME)** are: liquid milk, yogurt, condensed milk, Cheese, SMP, WMP.

Domestic use in **milk equivalent (ME)** = Milk deliveries + Import in ME - Export in ME

WORLD: from milk produced to the Export in ME

The **Oceania** accounts for **5% of the world milk** production and **35% of the world dairy trade in ME**.



Main Players productions are updated to 2015 (refer to this web page)
Other Countries production source: FAO, 2013. Export: IHS data relating to the Main Players, year 2015

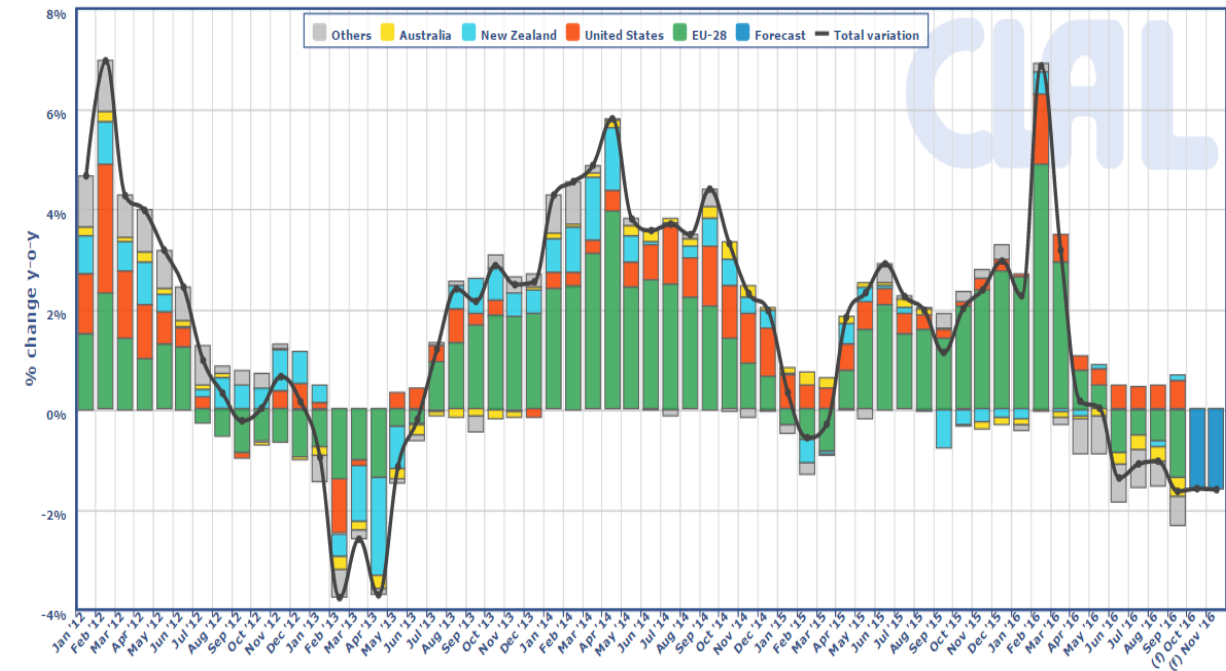
WORLD: Milk Supply Variation in the Key Exporters of Dairy Products and Forecast

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

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

Players considered: UE-28, Stati Uniti, Nuova Zelanda, Australia, Altri: Argentina, Ucraina, Bielorussia, Cile, Uruguay, Turchia

Processed by CLAL



CHANGE % PRODUCTION y-o-y				
COUNTRY	2015	2016	2017	Last Month
AUSTRALIA ¹	+5,4%	-2,0%	-9,9%	-10,2%
	[Jul '14 - Jun '15]	[Jul '15 - Jun '16]	[Jul '16 - Sep '16]	(Sep '16)
NEW ZEALAND ²	+2,8%	-1,6%	-0,2%	+1,1%
	[Jun '14 - May '15]	[Jun '15 - May '16]	[Jun '16 - Sep '16]	(Sep '16)
EU-28	+2,6%	+1,8%	-3,0%	
	(Jan - Dec)	(Jan - Sep)	(Sep '16)	
USA	+1,3%	+1,8%	+2,5%	
	(Jan - Dec)	(Jan - Oct)	(Oct '16)	
OTHER *	+0,5%	-3,5%	-4,3%	
	(Jan - Dec)	(Jan - Sep)	(Sep '16)	

¹ Dairy Season Year: from July 1 to June 30

² Dairy Season Year: from June 1 to May 31

* Argentina, Belarus, Chile, Turkey, Ukraine, Uruguay

Forecast information:

- USA: +1,9% [Jan - Dec '16] (USDA) (Last Update: 10-11-2016)
- +2,1% [Jan - Dec '17] (USDA) (Last Update: 10-11-2016)
- EU: +0,7% [Jan - Dec '16] (CLAL) (Last Update: 25-10-2016)
- NZ: -2,0% [Jun '16 - May '17] (BNZ) (Last Update: 06-10-2016)
- AUT: -5,0% [Jul '16 - Jun '17] (Dairy Australia) (Last Update: 14-10-2016)

Visit the page [WORLD: Milk Production/Deliveries Map](#)

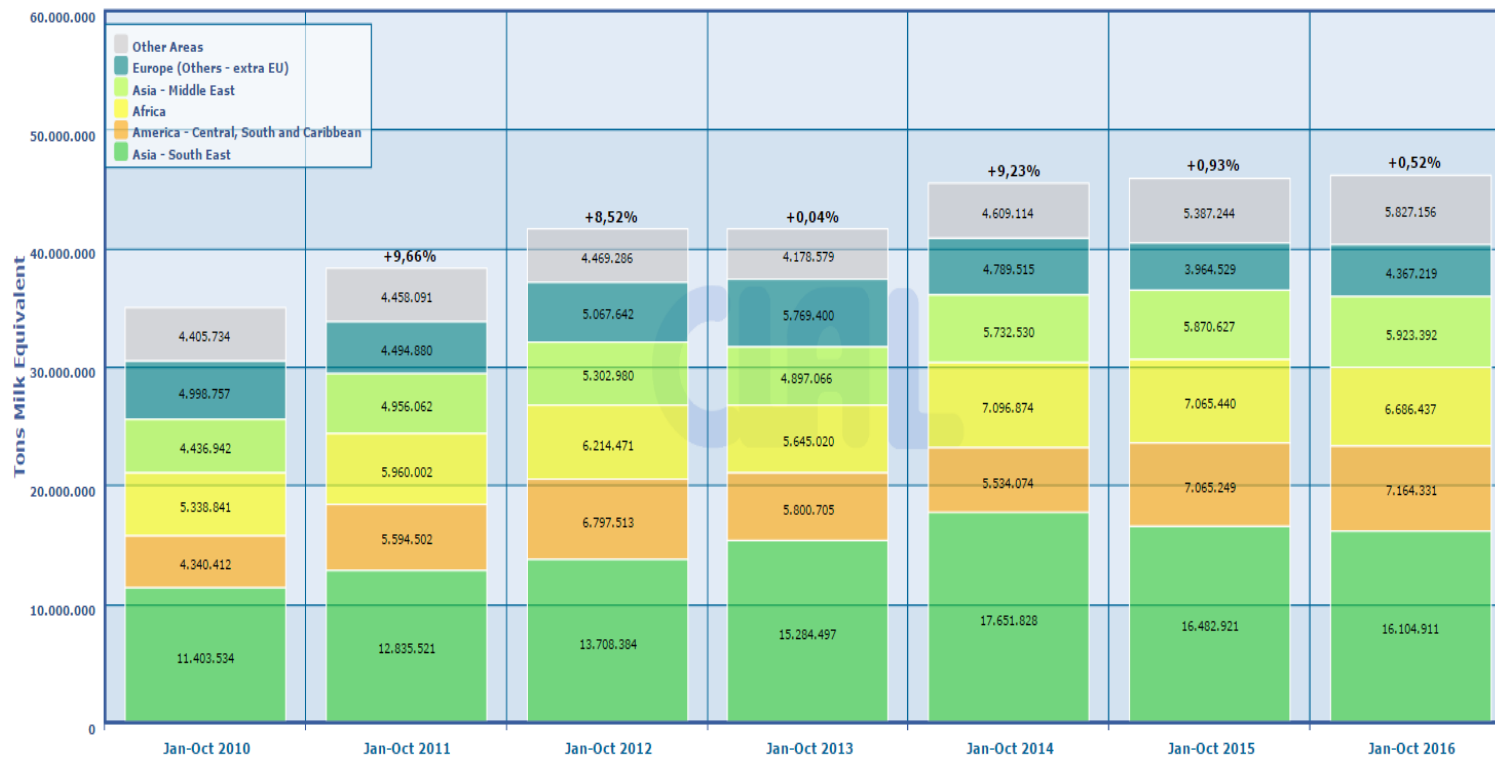
WORLD: Imports by Geographical Area in Milk Equivalent

Regional imports (Milk Equivalent)

(products: Liquid milk, WMP, SMP, Condensed milk, Yogurt, Cheese)

(+/- % on the same period of previous year)

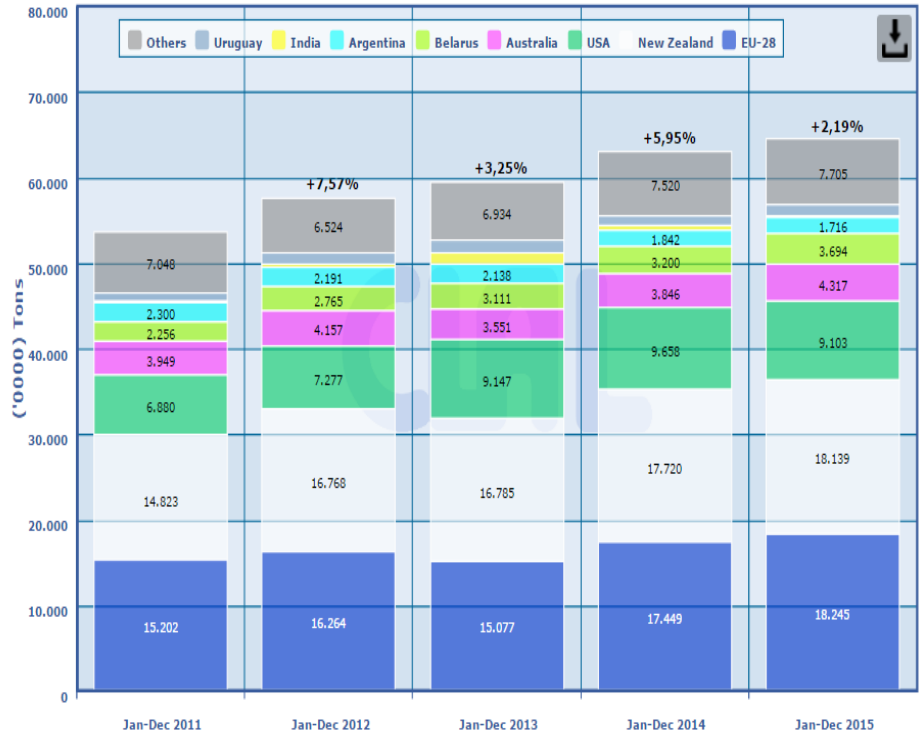
GTIS Data processed by CLAL - latest update: November, 19 2016



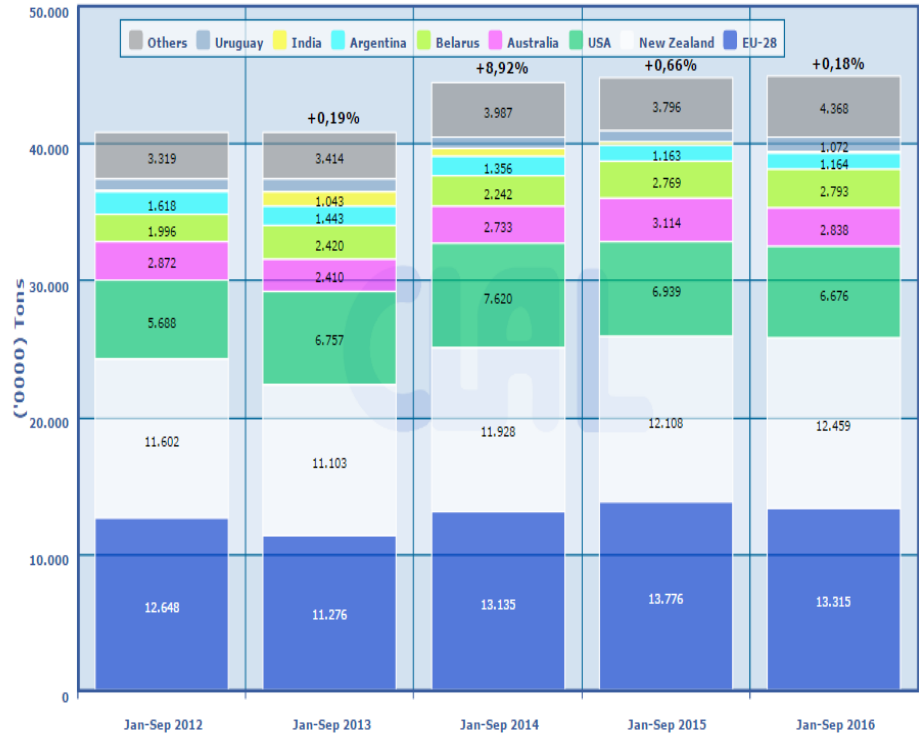
Visit the page: [Imports by Geographical Area](#)

WORLD: Breakdown of Dairy Product Exports in Milk Equivalent

WORLD Dairy Export in Milk Equivalent
(Products considered: Liquid milk, SMP, WMP, Condensed milk, Yogurt, Cheese)
(Exporters considered: see note below the graph)
Data processed by CLAL based on GTIS source



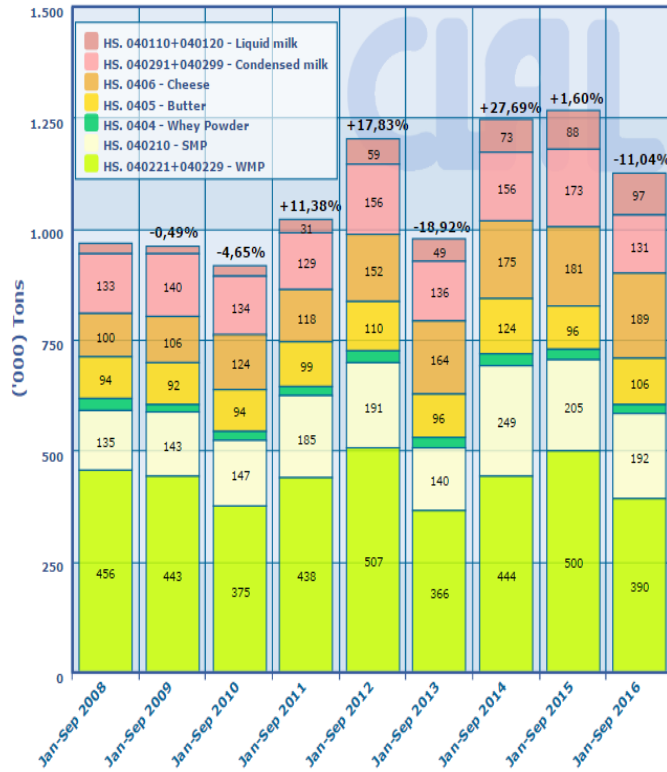
WORLD Dairy Export in Milk Equivalent
(Products considered: Liquid milk, SMP, WMP, Condensed milk, Yogurt, Cheese)
(Exporters considered: see note below the graph)
Data processed by CLAL based on GTIS source



INFORMATION NOTE

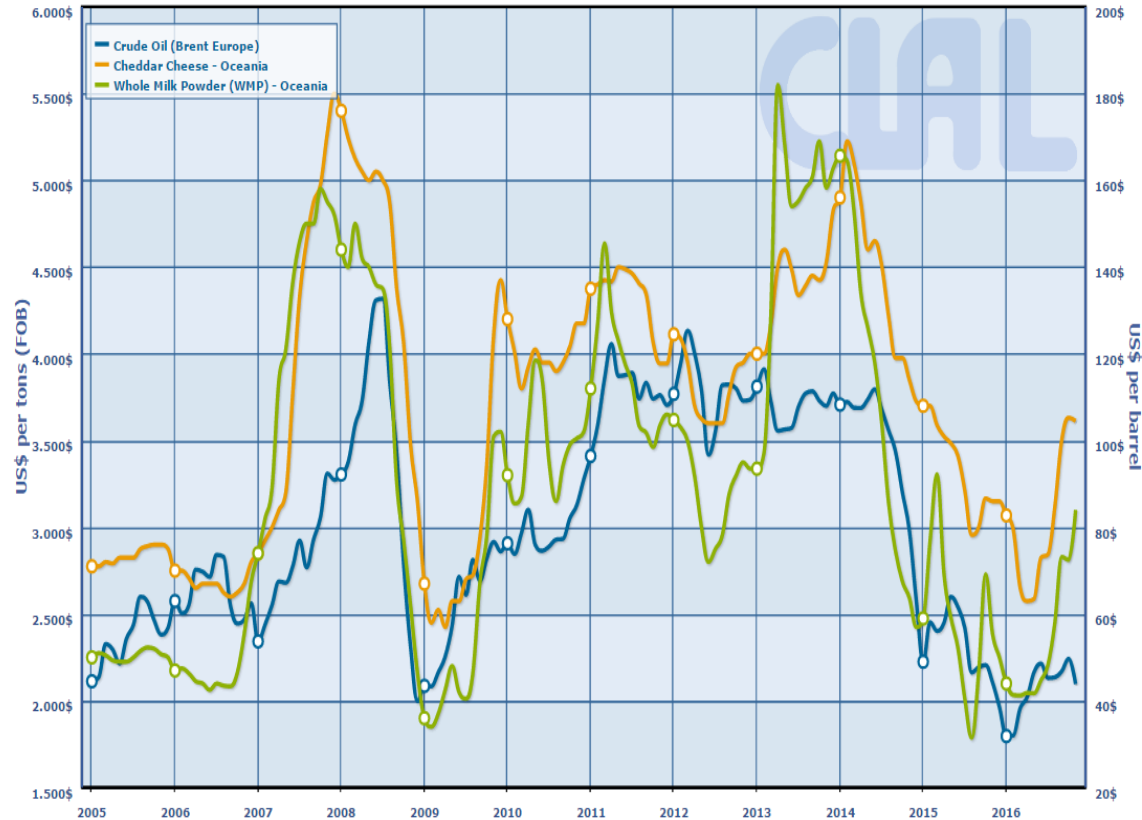
Crude Oil Price

Volumes exported to OPEC members
(Exporters considered: see note below the graph)
Data processed by Clal



Comparative historical overview for Crude Oil, WMP and CHEESE price

Processed by Clal

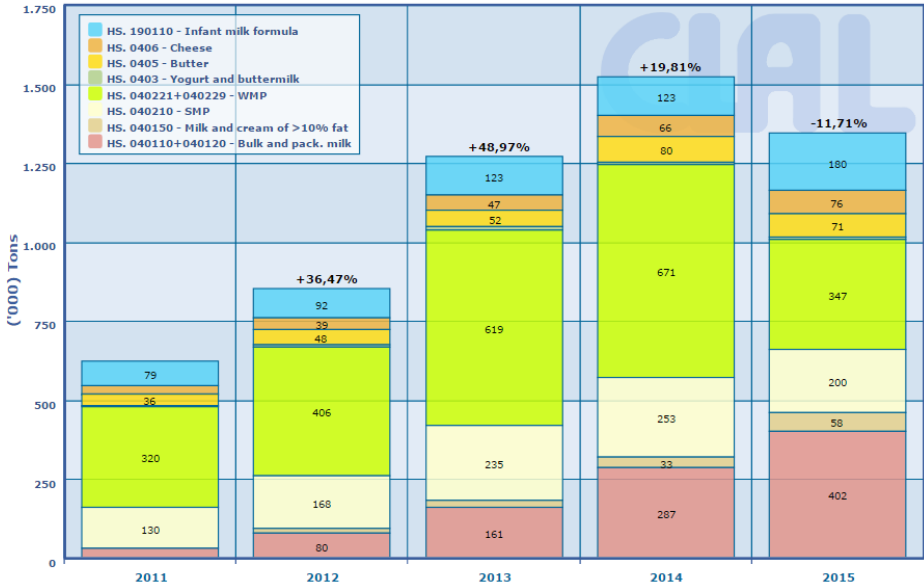


Visit the page [Oil](#)

CHINA: Dairy Import

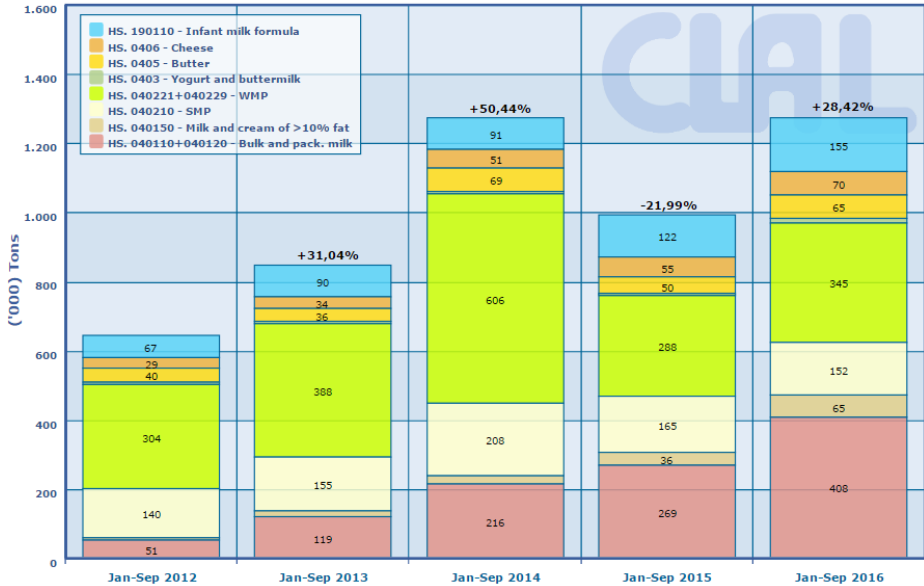
China DAIRY PRODUCT - Total Import
Milk, Cream, Yogurt, SMP, WMP, Butter, Cheese
(Yearly)

Data processed by Clal based on GTIS source



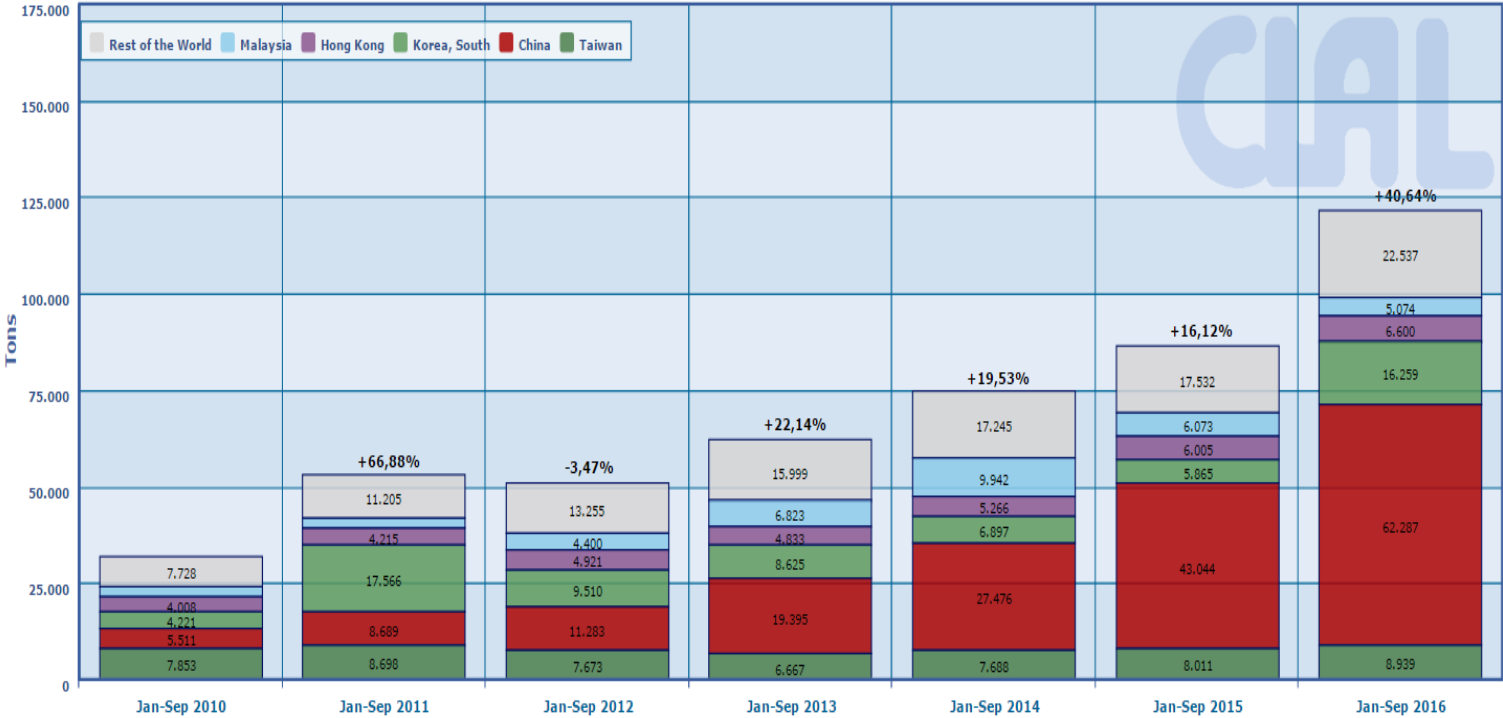
China DAIRY PRODUCT - Total Import
Milk, Cream, Yogurt, SMP, WMP, Butter, Cheese
(Monthly Cumulative)

Data processed by Clal based on GTIS source



CREAM: Main purchasing countries of Asia South East

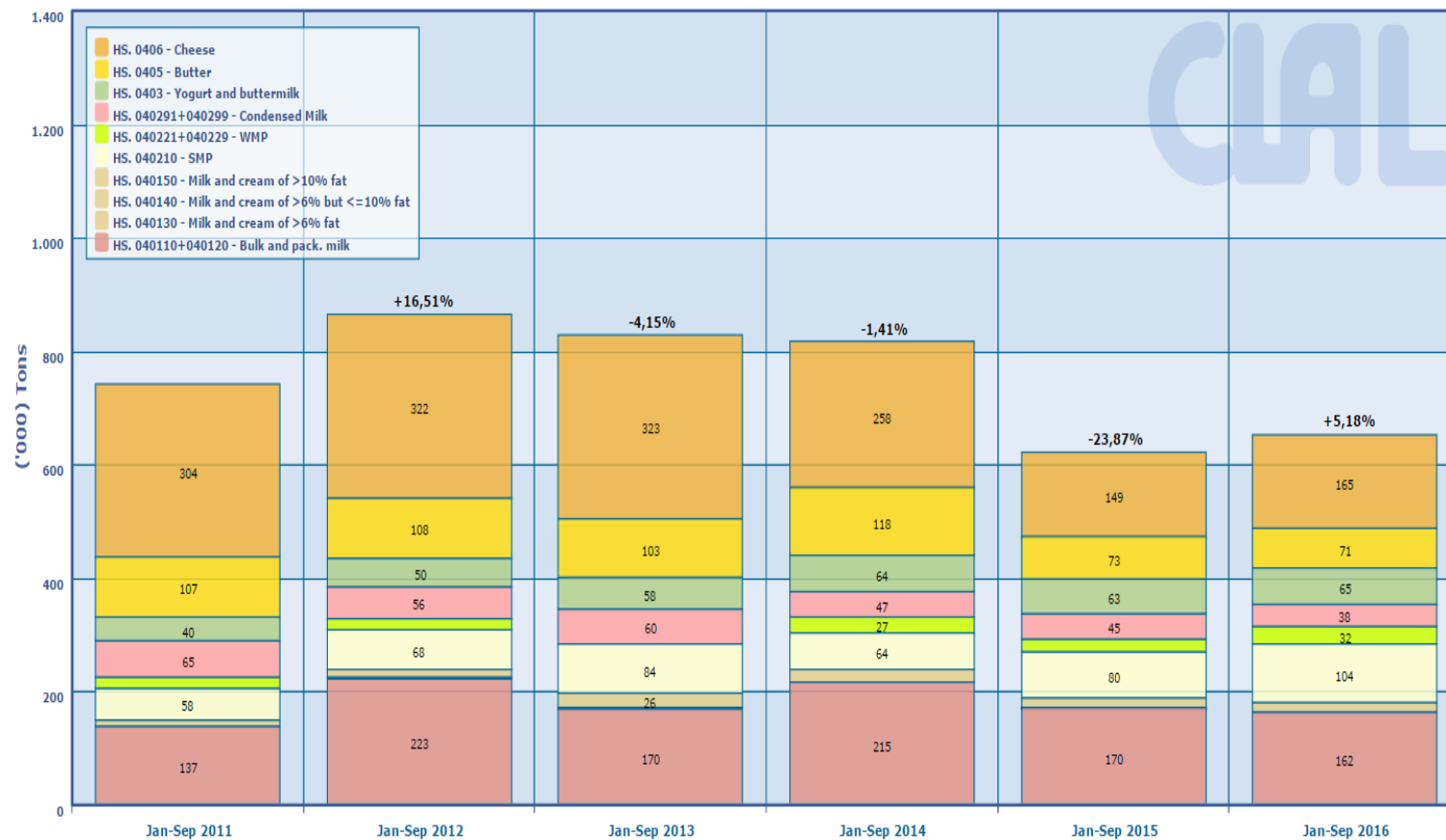
Cream - main purchasing countries of Asia - South East
(Exporters: UE-28, AR, AU, BY, CA, CN, EG, IN, ID, IR, JP, KR, MY, MX, MA, NZ, RU, SG, CH, TH, UA, US, UY, RS)
Processed by CLAL on IHS data



RUSSIA: Yearly Dairy Import 2/2

Russia DAIRY PRODUCT - Total Import (incl. Belarus) SMP, WMP, Butter, Cheese, Milk and cream, Yogurt, Condensed milk

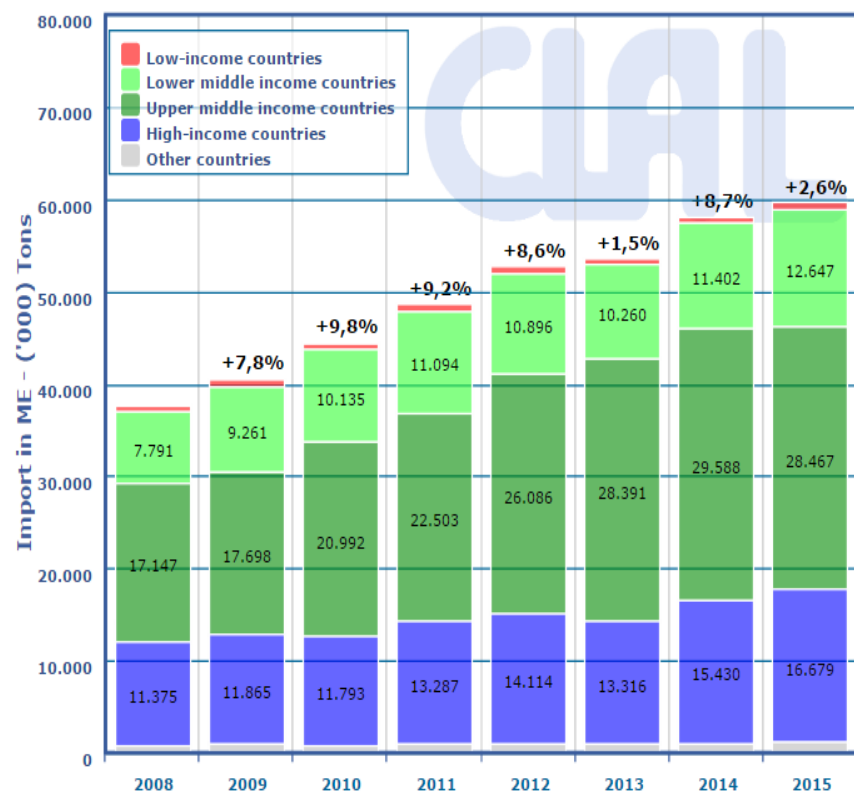
Data processed by Clal based on GTIS source



Import in ME of all Countries aggregated by income

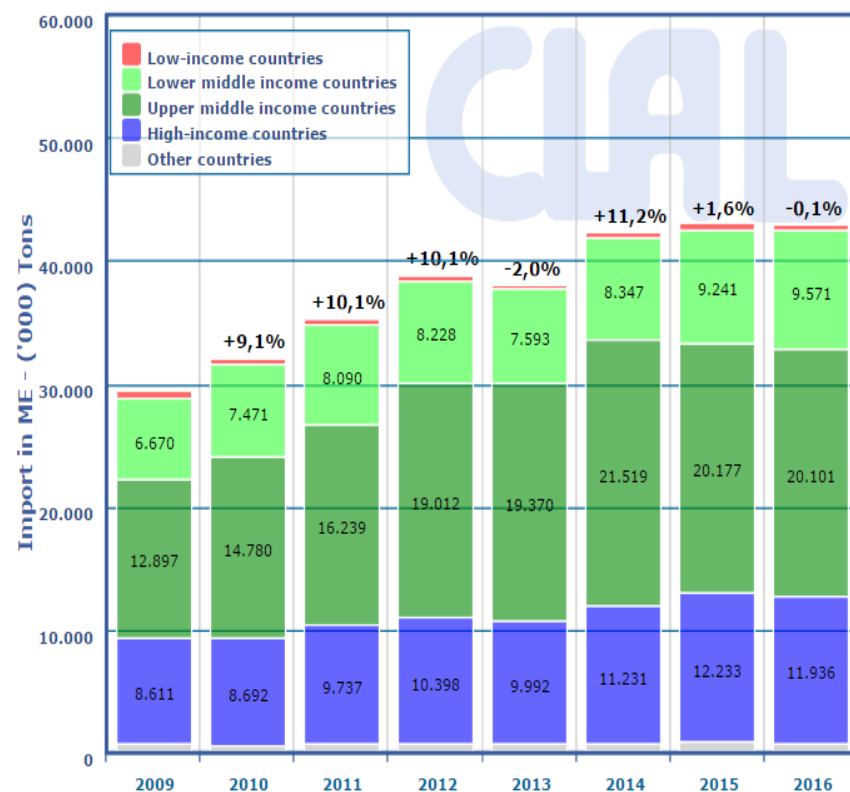
Import in milk equivalent of all Countries
aggregated by income
yearly

Data processed by Clal



Import in milk equivalent of all Countries
aggregated by income
year-to-date (January-September)

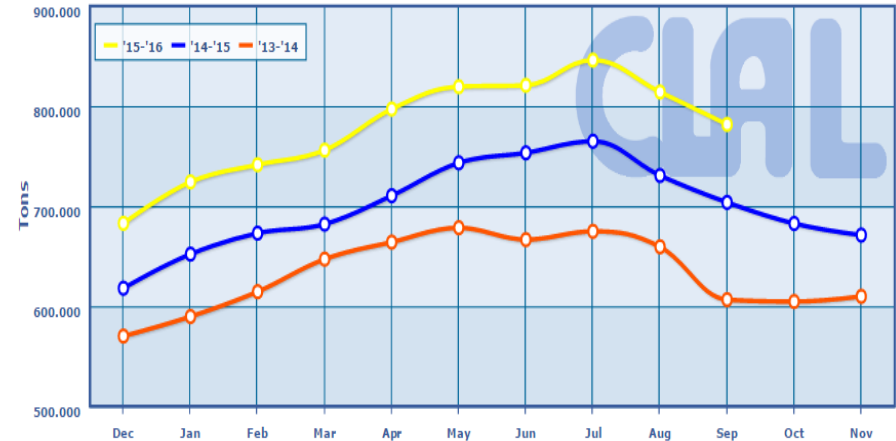
Data processed by Clal



USA, NZ, EU: Stocks trend

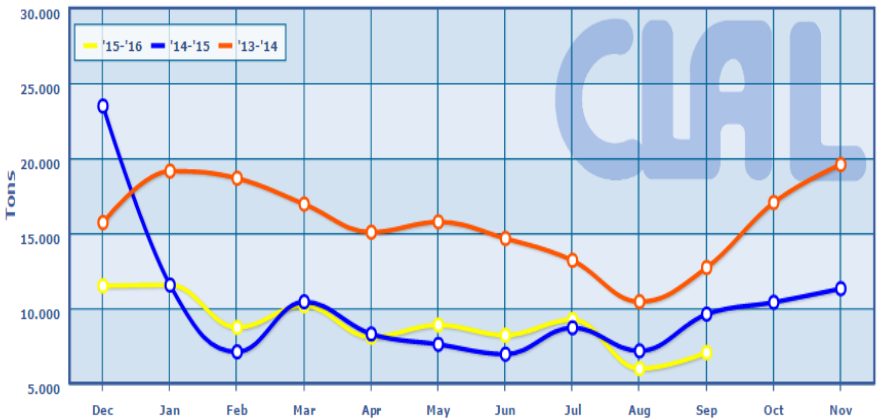
Monthly U.S. combined Butter, Cheese and SMP Stocks

Processed by CLAL on USDA data



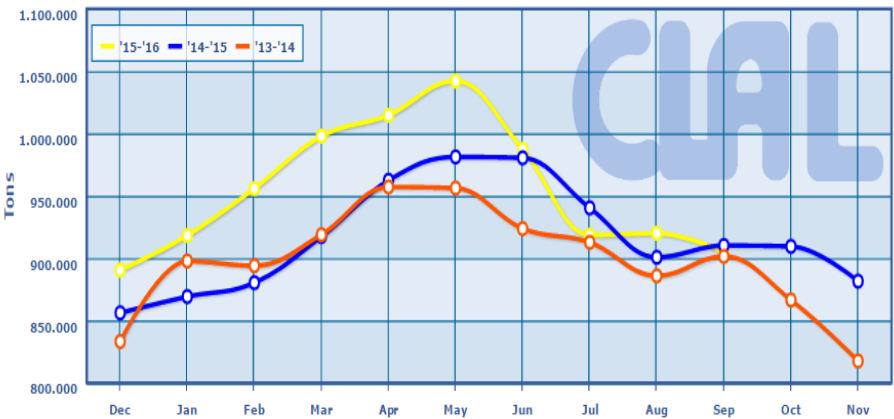
Monthly New Zealand combined Butter, Cheese, SMP and WMP domestic use including stock change

(Production + Import - Export) adjusted for months of 30 days
Processed by CLAL



Monthly EU combined Butter, Cheese and SMP domestic use including stock changes

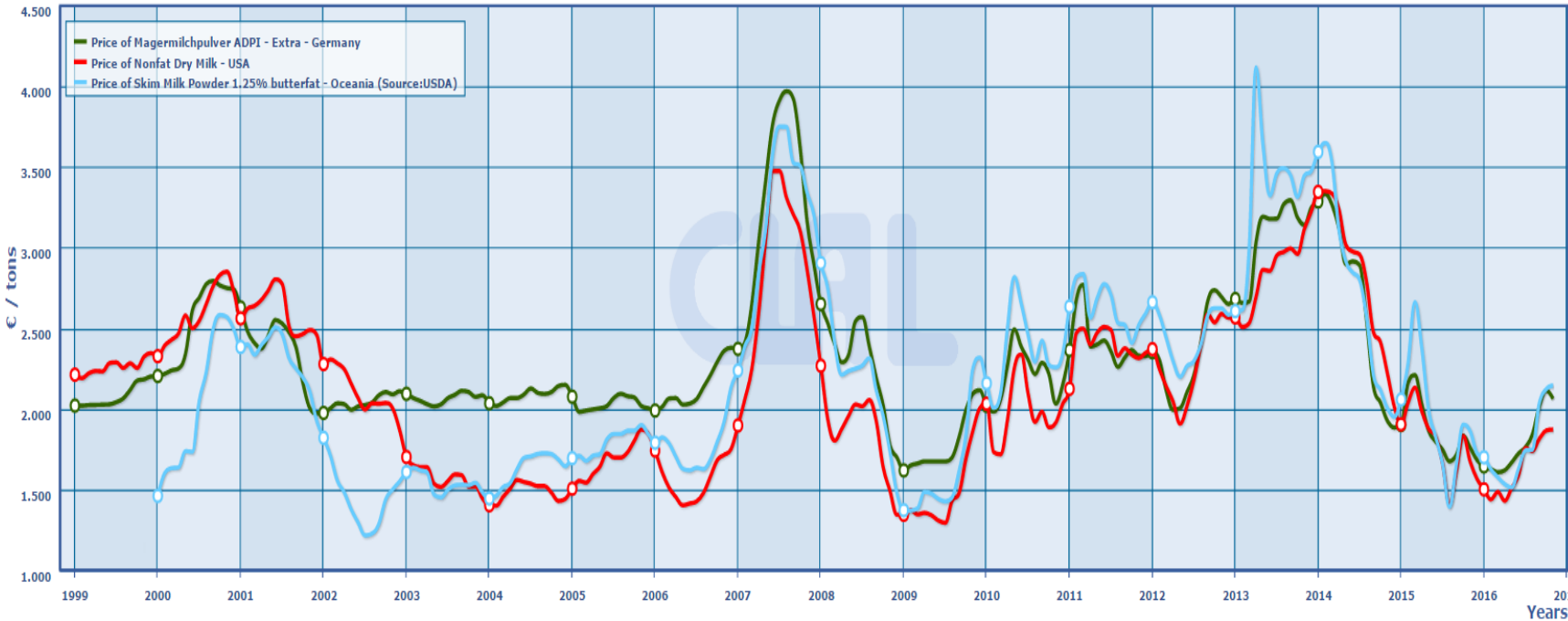
(Production + Import - Export) adjusted for months of 30 days
Processed by CLAL



WORLD: Prices of Skimmed Milk Powders (SMP)

World - Comparative historical overview of Skim Milk Powder (SMP) prices

Processed by CLAL

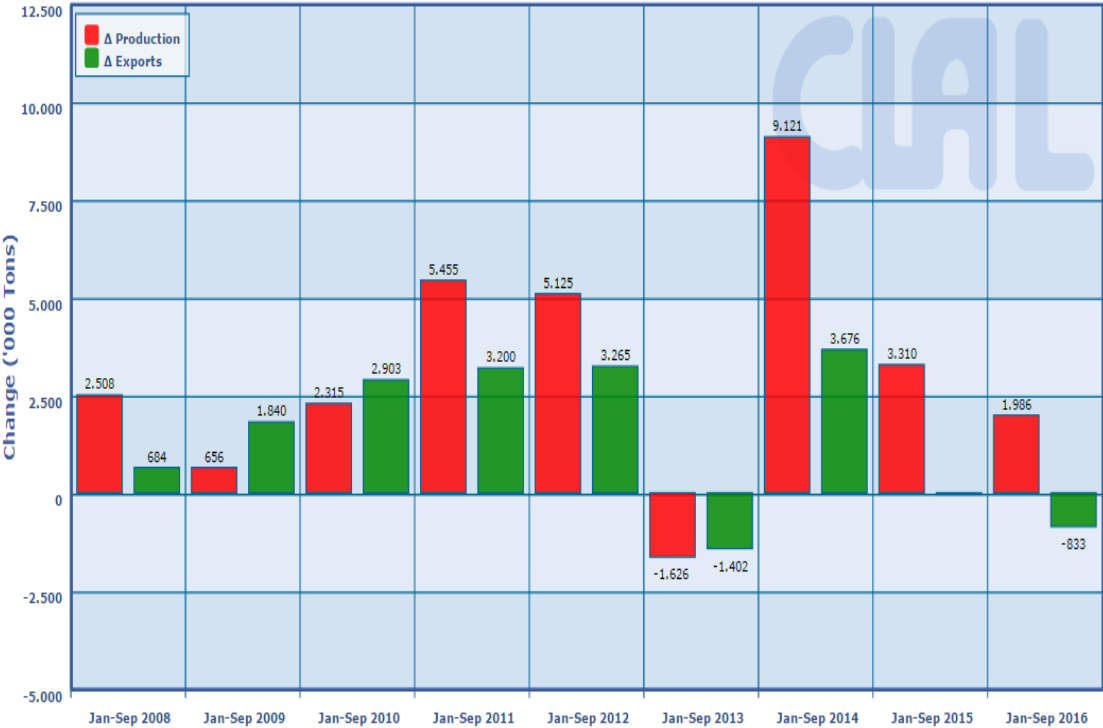


€:	Germany 16/11/20162.050 €/ton	USA 18/11/20161.903 €/ton	Oceania 11/11/20162.145 €/ton	GDT 15/11/20162.332 €/ton
US\$:	Germany 16/11/20162.207 US\$/ton	USA 18/11/20162.039 US\$/ton	Oceania 11/11/20162.338 US\$/ton	GDT 15/11/20162.513 US\$/ton

WORLD: Δ Milk production and Δ Export in Milk Equivalent (ME) Monthly Cumulative

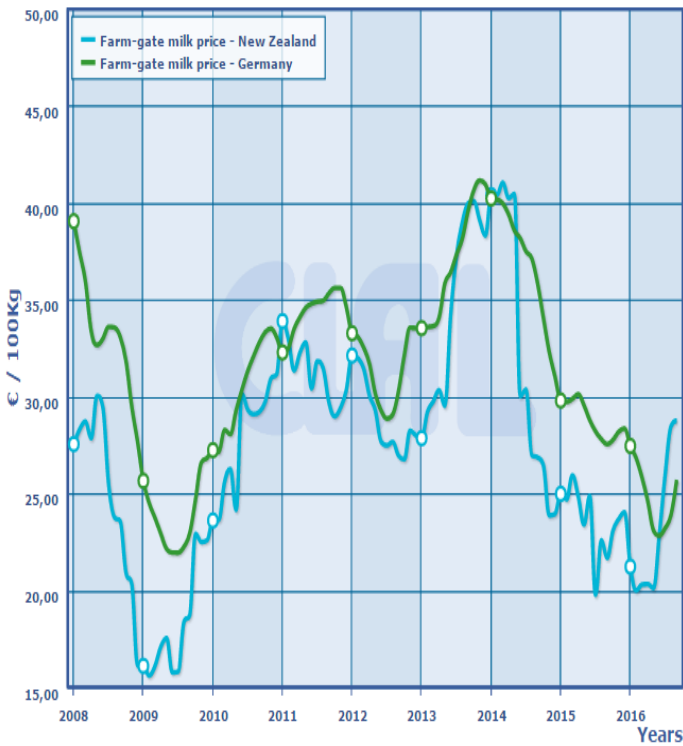
WORLD: Δ Milk Production and Δ Exports in milk equivalent
(Monthly Cumulative)

Producers: EU-28, USA, New Zealand, Australia, Argentina
Exporters: EU-28, United States, New Zealand, Australia, Argentina
Exports products considered: SMP, WMP, cheese, butter, condensed milk, liquid milk, yogurt
Processed by Clal



Historical comparative overview between Farm-gate milk prices
in Germany and in New Zealand

Processed by CLAL



EU-28

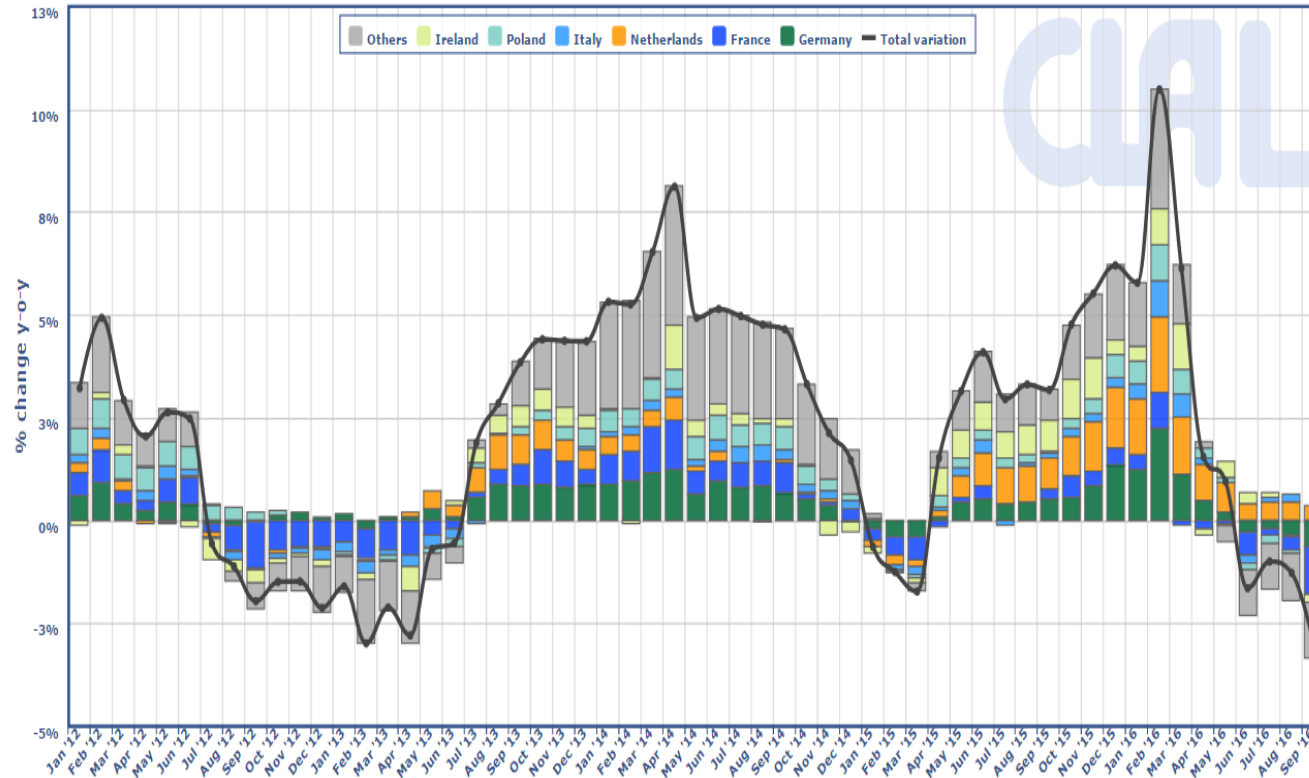


EU-28: Milk Deliveries Evolution

EU-28 - Milk Deliveries in the key producer countries

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

Sources: Eurostat, AGEA and CLAL estimations - Processed by CLAL



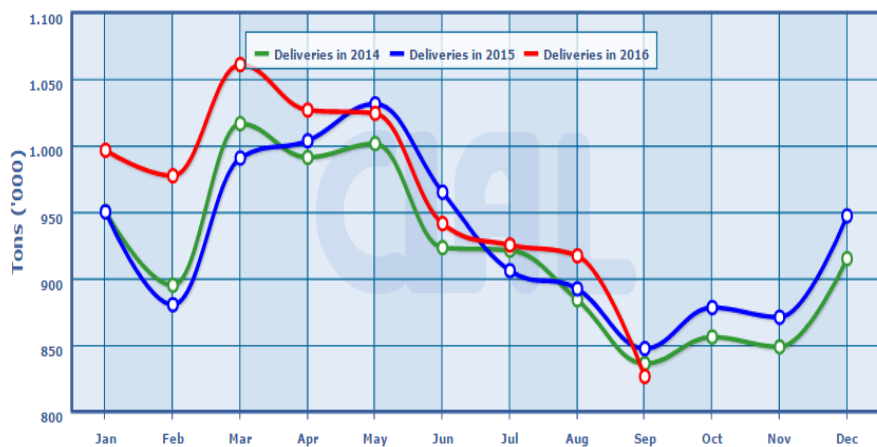
CHANGE % MILK DELIVERIES y-o-y			
COUNTRY	2015	2016	Last Month
FRANCE	+0,3%	-1,0%	-7,3%
		(Jan - Sep)	(Sep '16)
GERMANY	+1,6%	+1,9%	-3,0%
		(Jan - Sep)	(Sep '16)
IRELAND	+13,3%	+6,1%	-3,7%
		(Jan - Sep)	(Sep '16)
NETHERLANDS	+6,8%	+9,9%	+4,0%
		(Jan - Sep)	(Sep '16)
POLAND	+2,7%	+2,8%	-0,1%
		(Jan - Sep)	(Sep '16)
HUNGARY	+3,6%	+1,7%	+3,0%
		(Jan - Sep)	(Sep '16)
EU-28	+2,6%	+1,8%	-3,0%
		(Jan - Sep)	(Sep '16)

Visit the page [EU-28: Deliveries of Cow Milk](#)

EU: Milk Deliveries of the main European Producing Player

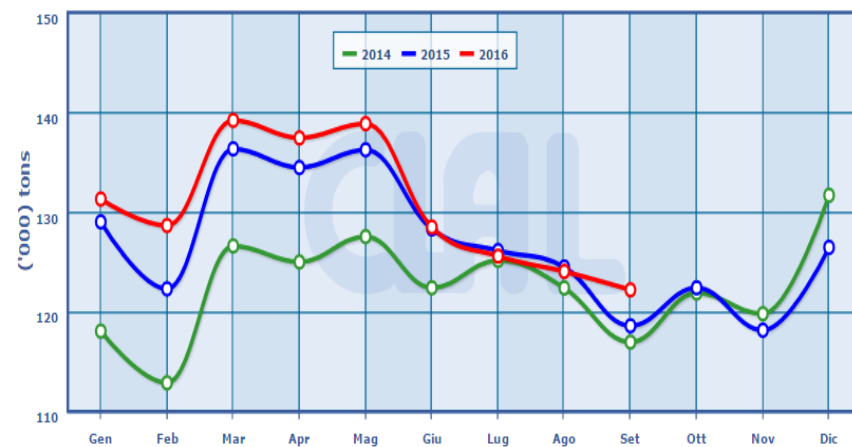
Italy - Triennial overview of monthly milk deliveries

Source: AGEA



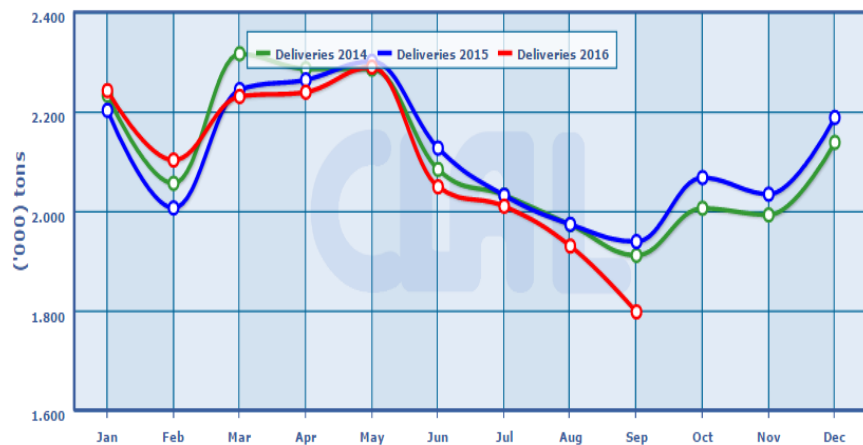
Hungary - Triennial overview of Milk deliveries

Source: Eurostat



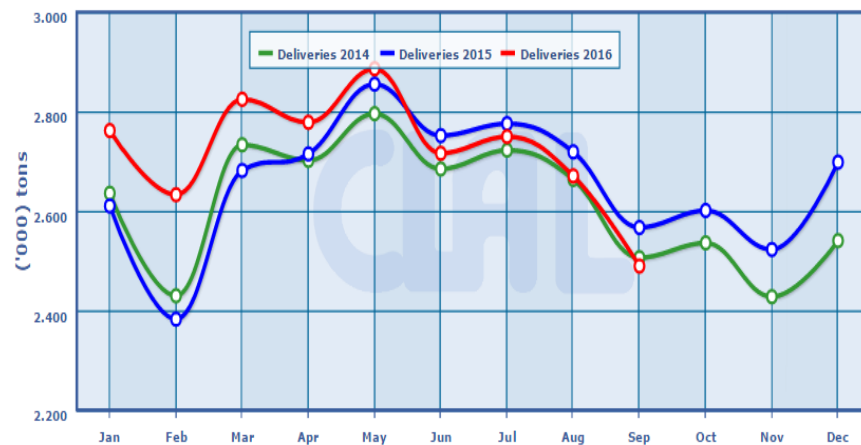
France - Triennial overview of milk deliveries

Source: Eurostat



Germany - Triennial overview of Milk deliveries

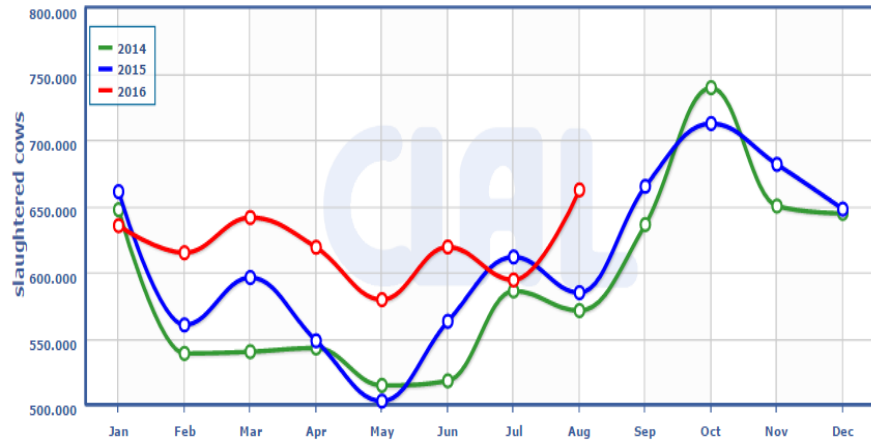
Source: Eurostat



EU-28: Triennial overview of slaughtered cows

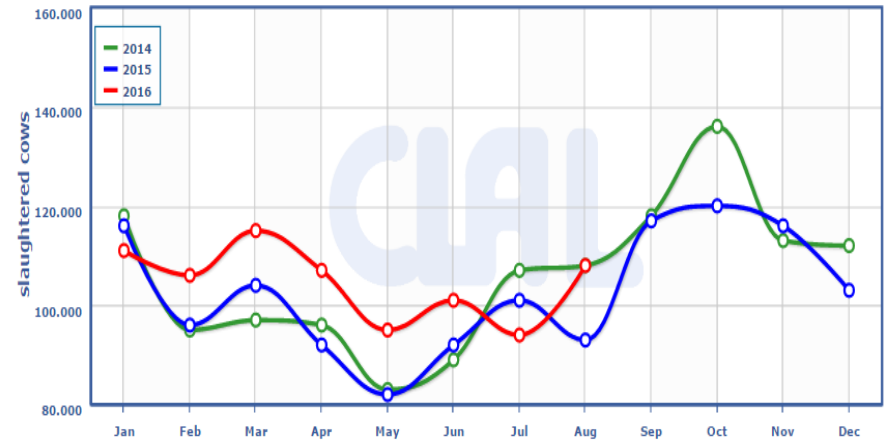
EU-28 - Triennial overview of number of slaughtered cows

Processed by CLAL on Eurostat data



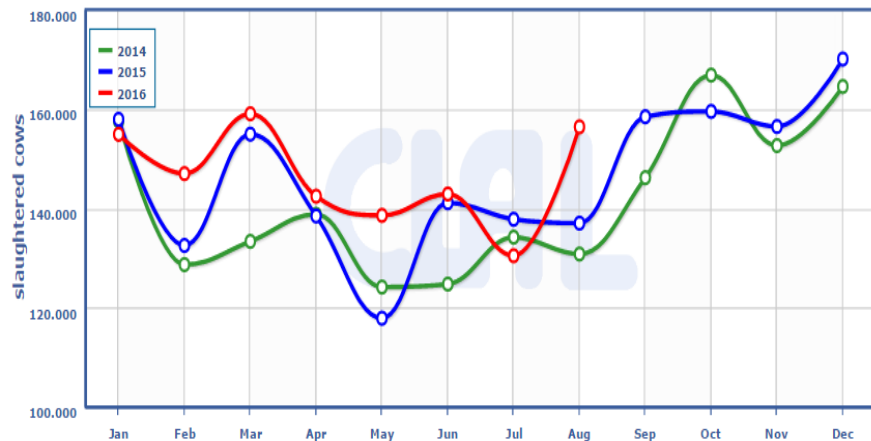
Germany - Triennial overview of number of slaughtered cows

Processed by CLAL on Eurostat data



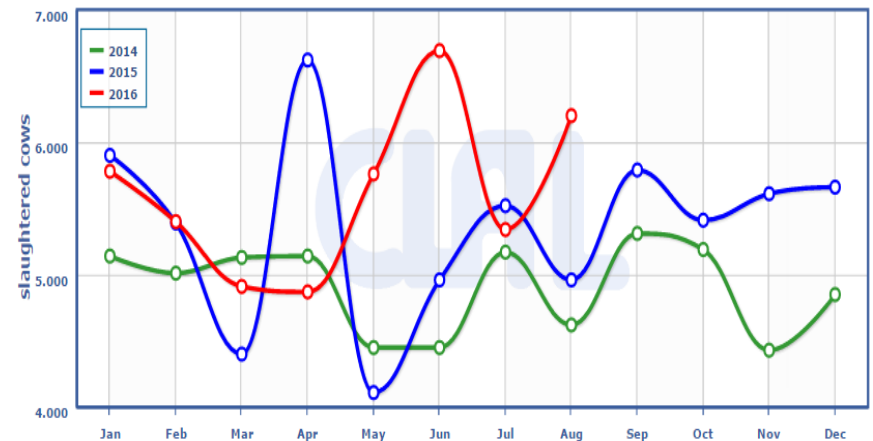
France - Triennial overview of number of slaughtered cows

Processed by CLAL on Eurostat data



Hungary - Triennial overview of number of slaughtered cows

Processed by CLAL on Eurostat data

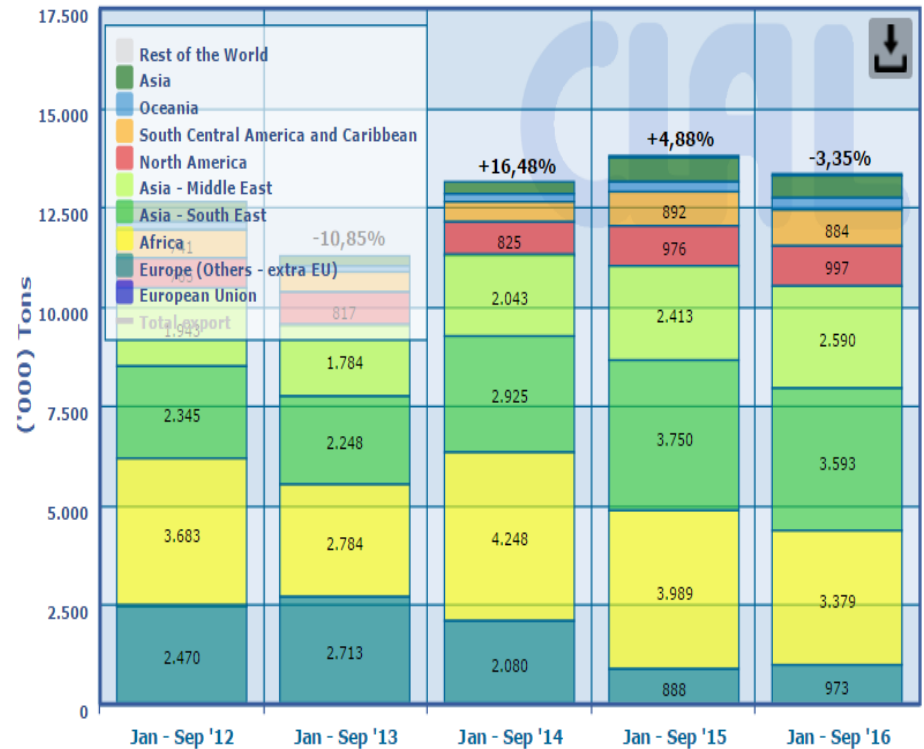


EU-28: Export in Milk Equivalent (ME) by region of destination

EU-28: Total Export in Milk Equivalent (ME)
by region of destination (year-to-date)

(Products: Bulk and pack. milk, SMP, WMP, Condensed Milk, Yogurt, Cheese)

Data processed by Clal based on GTIS source - latest update November, 23 2016

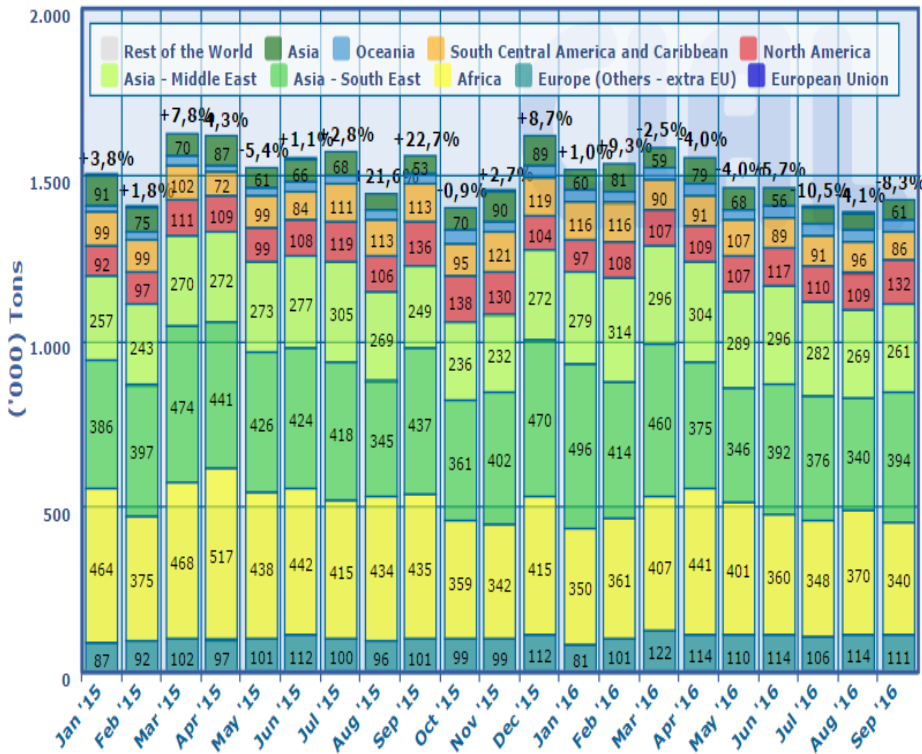


EU-28: Monthly Export in Milk Equivalent (ME)
by region of destination

(Products considered: Bulk and pack. milk, SMP, WMP, Condensed Milk, Yogurt, Cheese)

(Change from the same period of previous year)

Data processed by Clal based on GTIS source

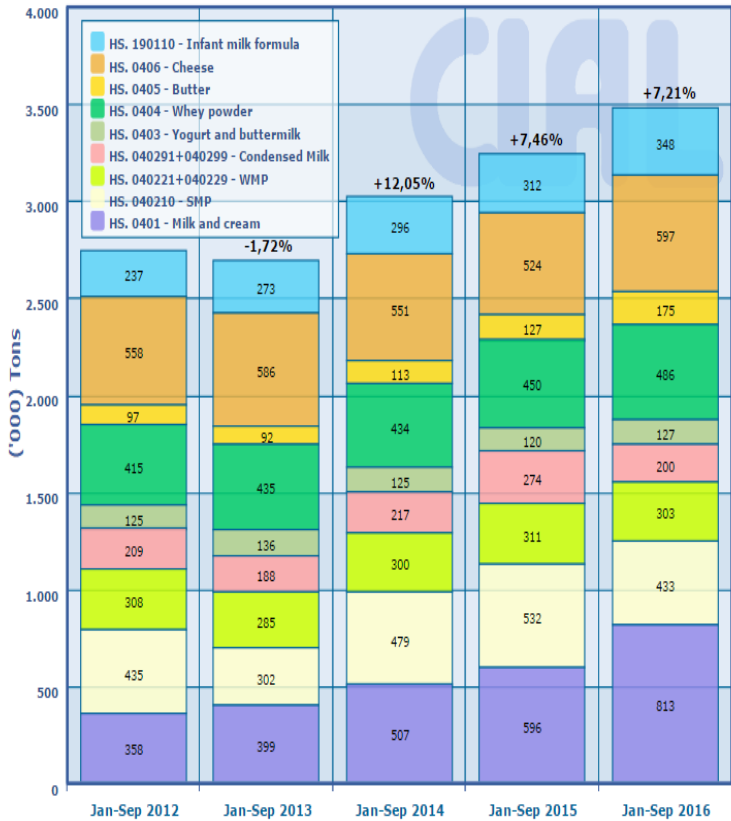


EU-28: Monthly Dairy Export

EU-28 DAIRY PRODUCT - Total Export

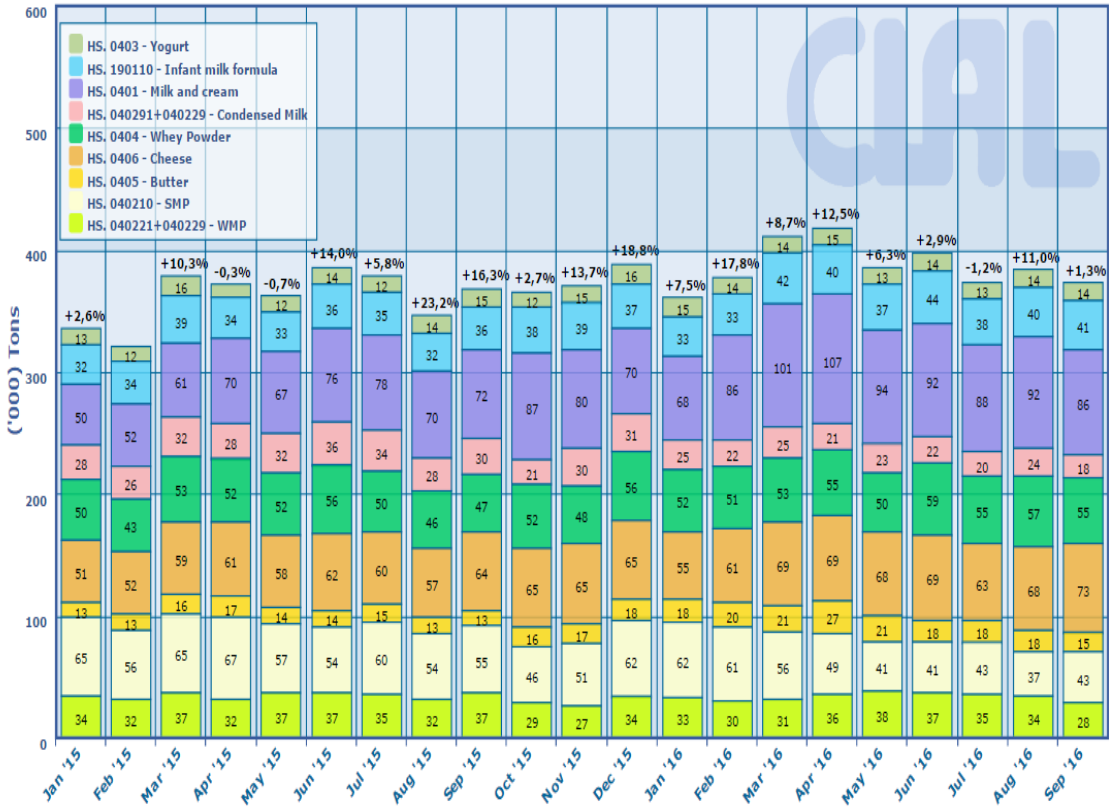
(Monthly Cumulative)

Data processed by Clal based on GTIS source



EU-28: Monthly Dairy Product Export over the last 2 years

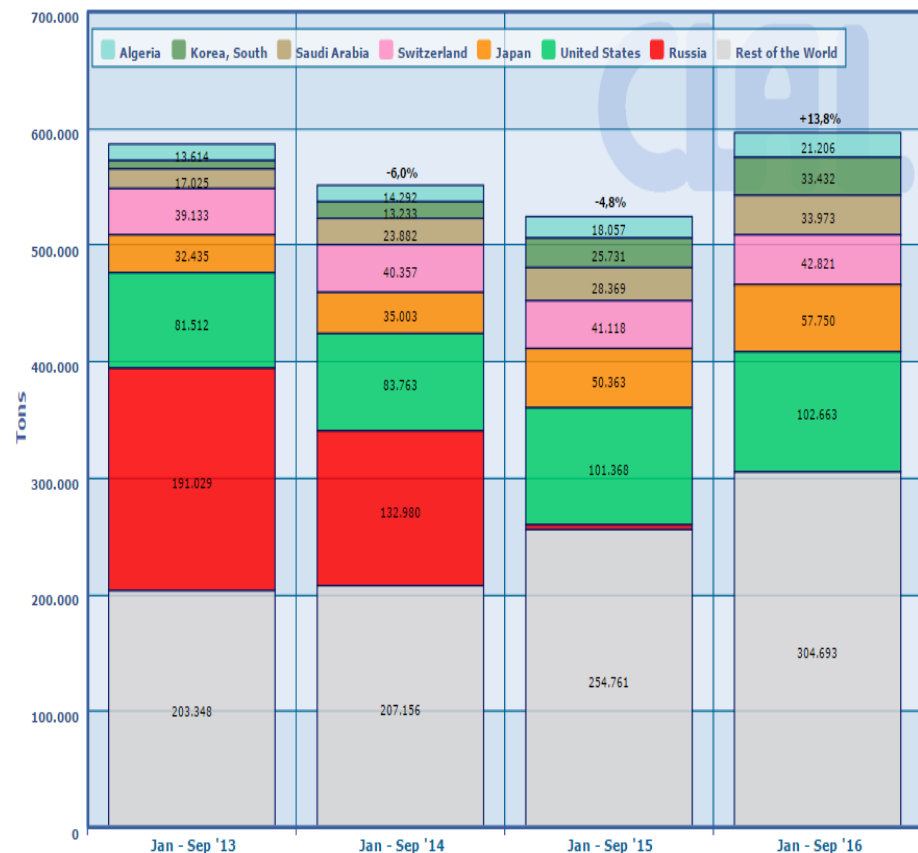
Processed by CLAL on GTIS data



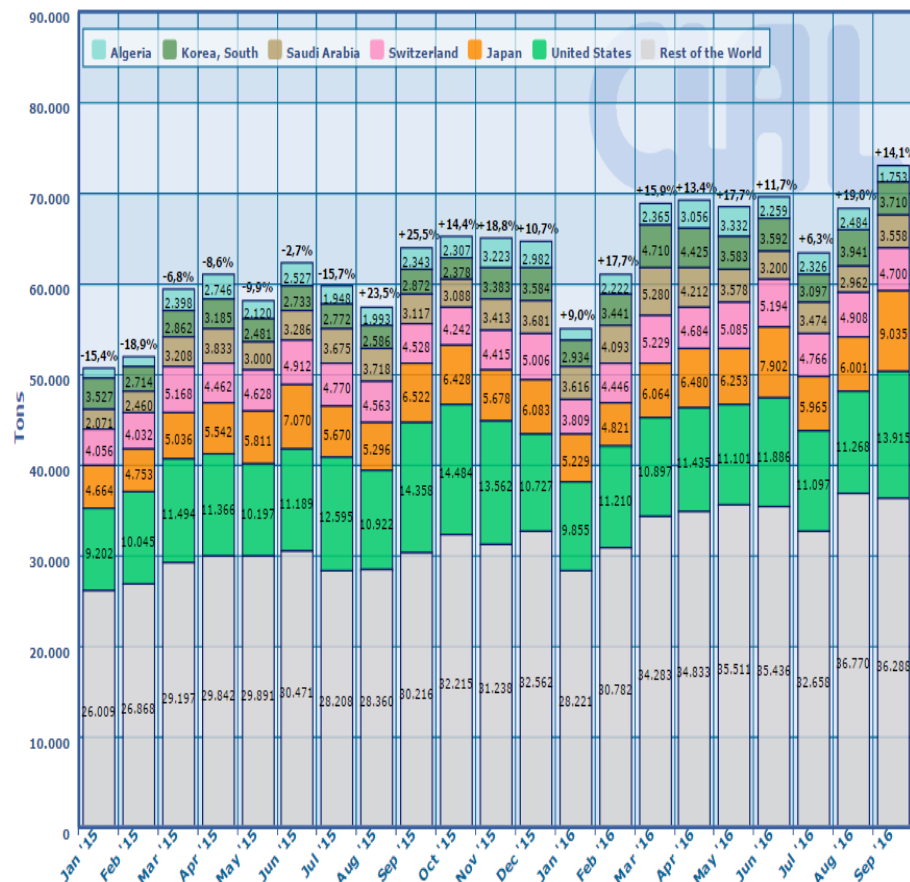
Visit the page [Export EU-28](#)

UE-28: Focus on Exports of Cheese towards Extra-EU Countries

EU-28 : Exports of CHEESE
(Monthly Cumulative)
Processed by CLAL



EU-28 : Monthly Exports of CHEESE
(+/- % on the same period of previous year)
Processed by CLAL

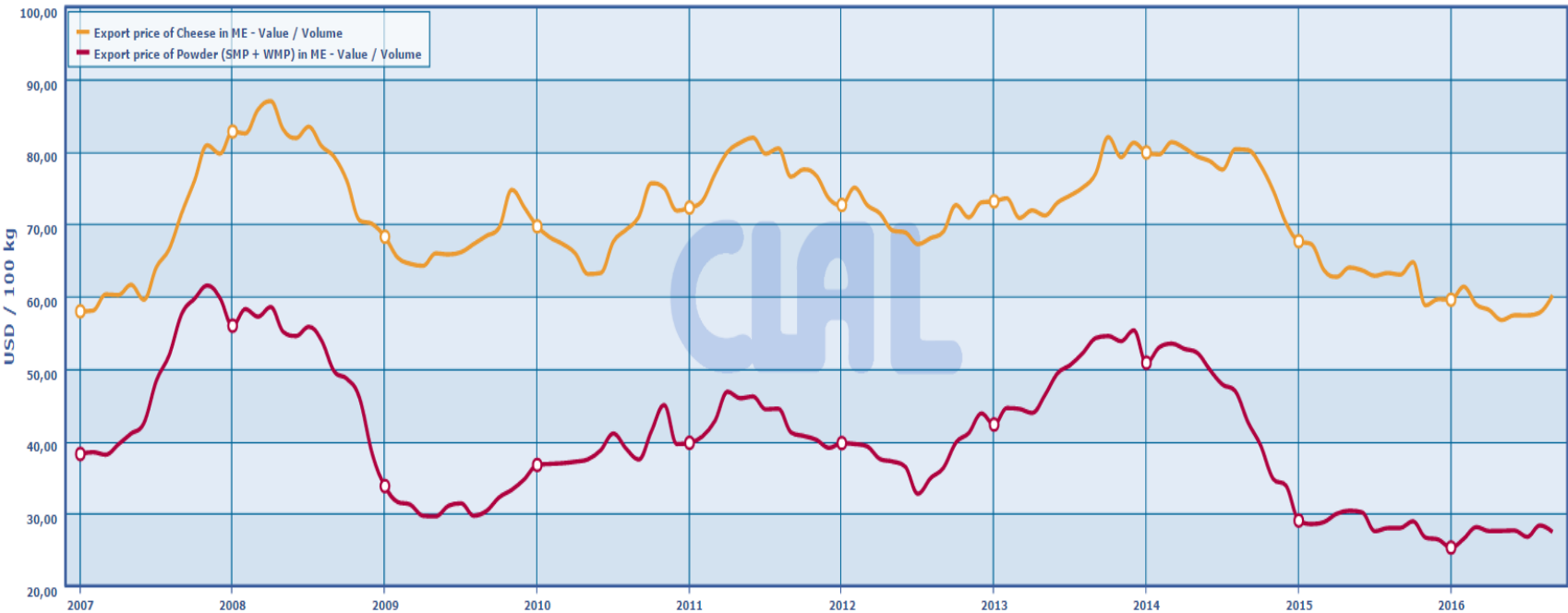


Visit the page [Export UE-28 - Annual and Monthly Profile \(Table C\)](#)

EU-28: monthly Export of CHEESE and POWDER in ME (Values/Volumes)

EU-28: monthly price of products exported in ME (USD / 100 Kg)

Price= Values / Volumes
Products considered: cheese and powder (SMP + WMP) in milk equivalent
Processed by CLAL on GTIS source

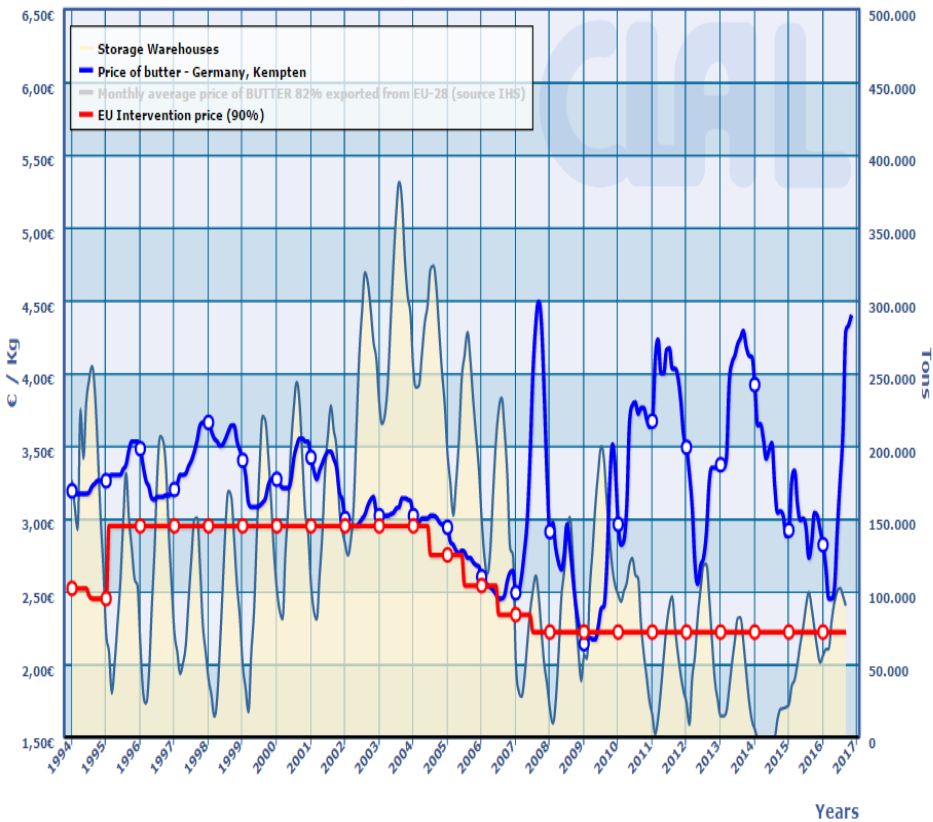


Month	Sep '10	Sep '11	Sep '12	Sep '13	Sep '14	Sep '15	Sep '16
Cheese (USD/100 Kg)	70,98	76,52	68,93	76,95	80,20	62,99	60,15
Cheese (EUR/100 Kg)	54,32	55,57	53,62	57,65	62,16	56,13	53,65
Powder (USD/100 Kg)	37,47	41,22	36,31	54,24	42,63	28,02	27,47
Powder (EUR/100 Kg)	28,68	29,93	28,24	40,64	33,04	24,97	24,50

EU-28: Public and Private storage of Butter and SMP

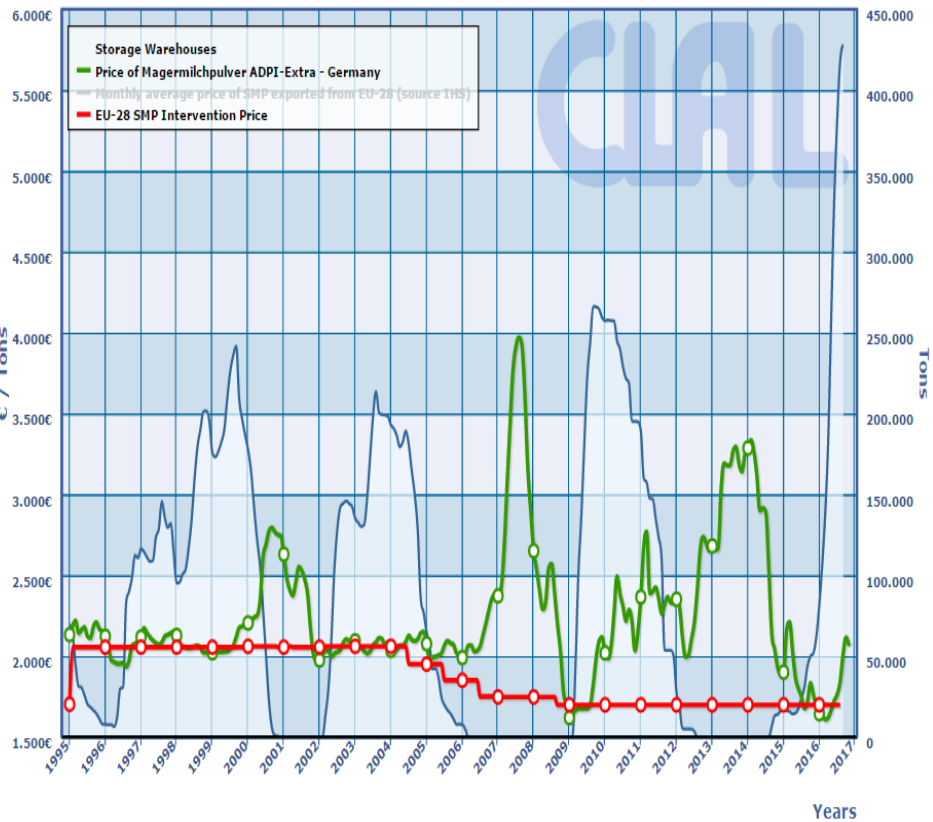
EU-28 comparative overview for BUTTER stocks (Public and Private), BUTTER market price in Germany and BUTTER intervention price (2.218 €/Ton to Sep 2016)

Processed by CLAL



EU-28 comparative overview for SMP stocks (Public and Private), SMP market price in Germany and SMP intervention price (1.698 €/Ton to Aug 2016)

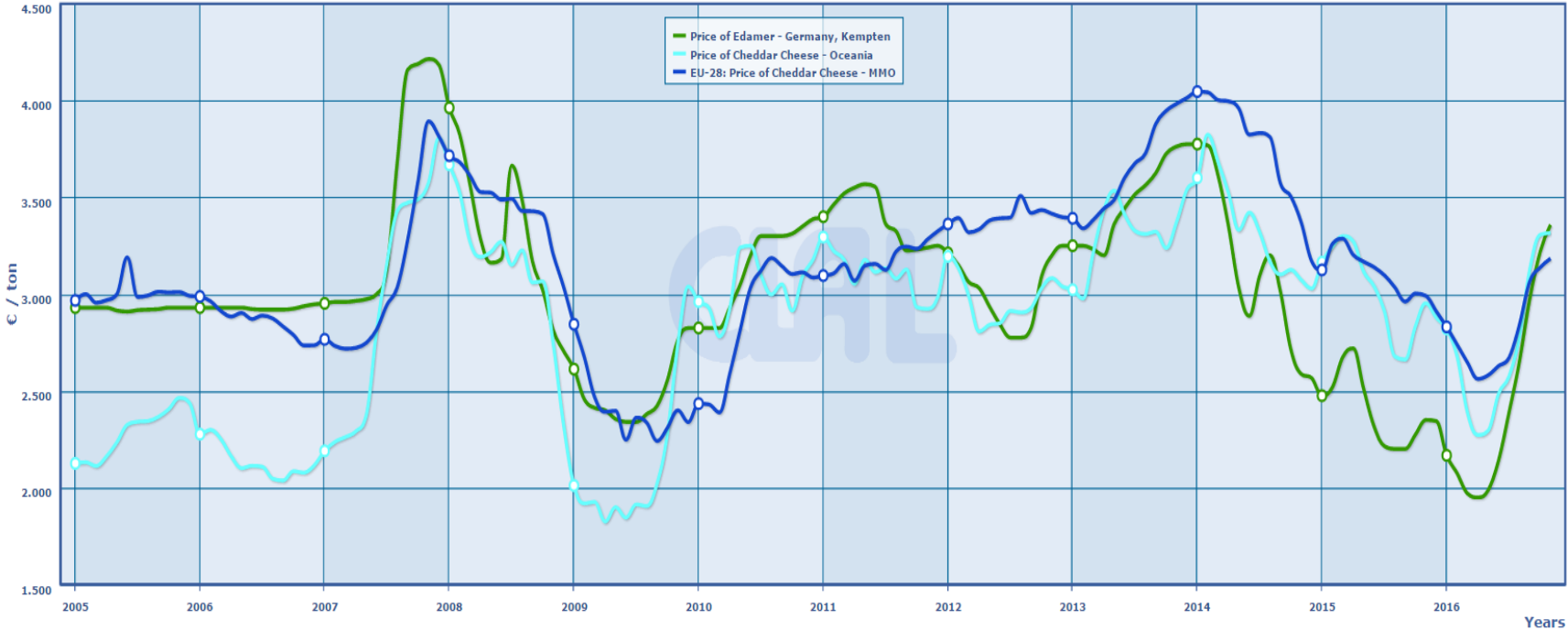
Processed by CLAL



EU-28 - WORLD: Cheese prices - comparison

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

Source: ZMP; since 6 May 2009; Süddeutsche Butter- und Käseborse eV, Kempten



Germany 16/11/2016

3.400 €/ton

Oceania 11/11/2016

3.316 €/ton

EU-28, MMO 13/11/2016

3.203 €/ton

Last update: 16-11-2016

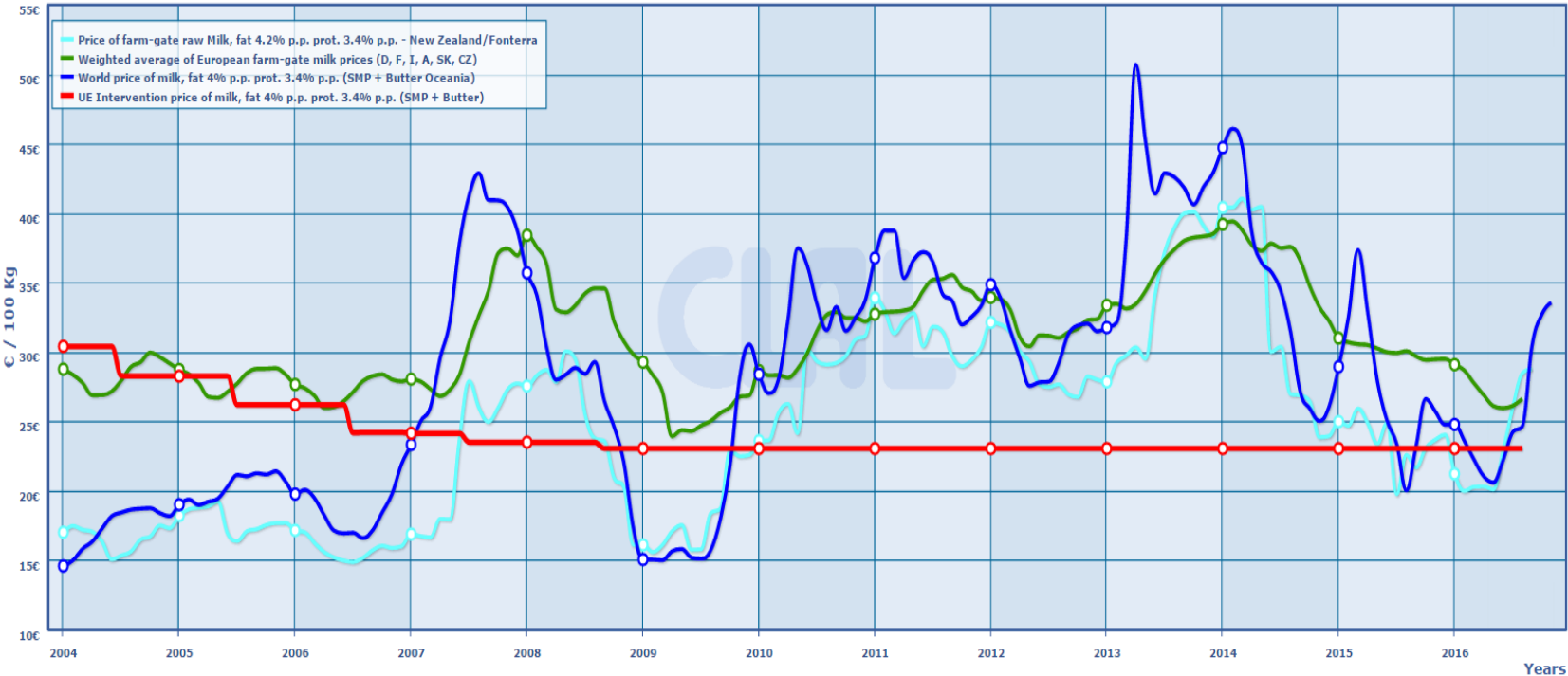
Visit the pages: [Edamer, Germany](#), [Cheddar Cheese, Oceania](#), and [Cheddar Cheese, United Kingdom](#)

CLAL

WORLD: Farm-gate milk price competitiveness

World: Farm-gate milk price competitiveness

Source: Processed by CLAL



Europe (D, F, I, Ö, SK, CZ) Ago 2016 26,62 €/100Kg

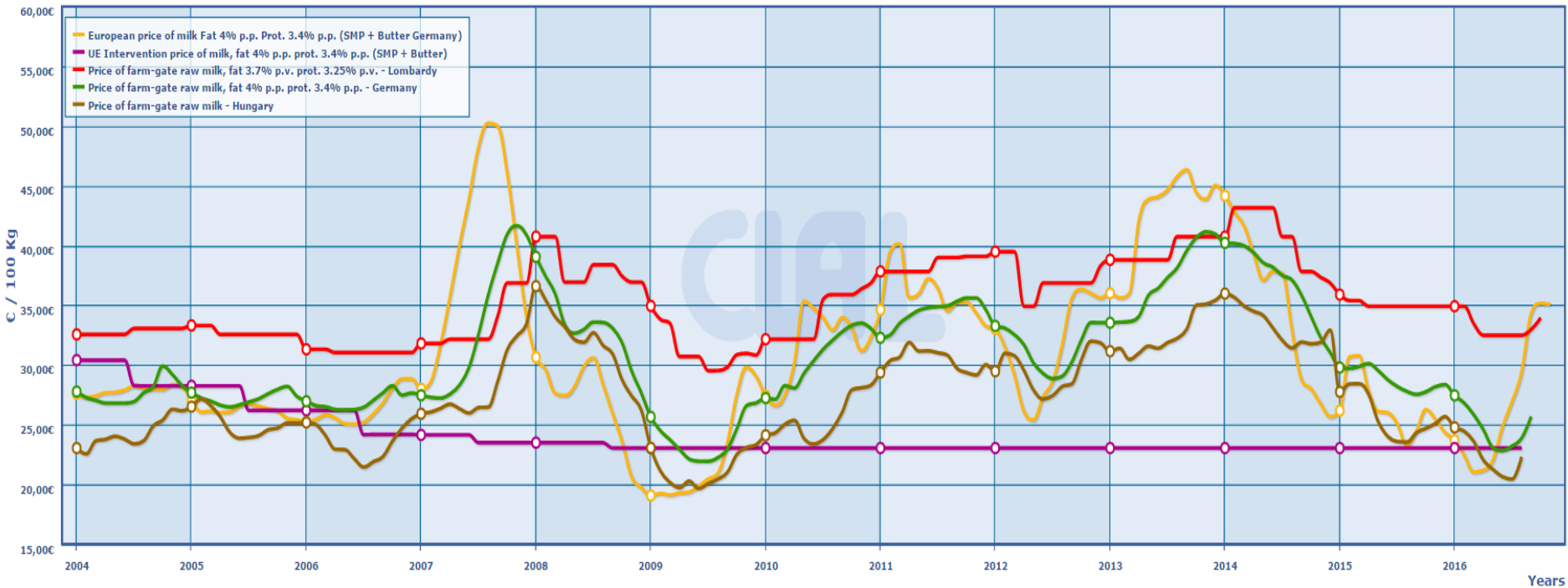
SMP+Butter Oceania 11/11/2016 33,56 €/100Kg

New Zealand 30/09/2016 28,76 €/100Kg

EU-28: Farm-gate milk price competitiveness

Historical comparative overview of farm-gate milk
in Lombardy (I), in Germany and prices
obtained from the quotations of SMP and BUTTER(Germany)

Source: Processed by CLAL



Germany

Sep 2016

25,70 €/100Kg

SMP+Butter Germany

16/11/2016

35,08 €/100Kg

Italy, Lombardy

Oct 2016

33,95(e) €/100Kg

CLAL

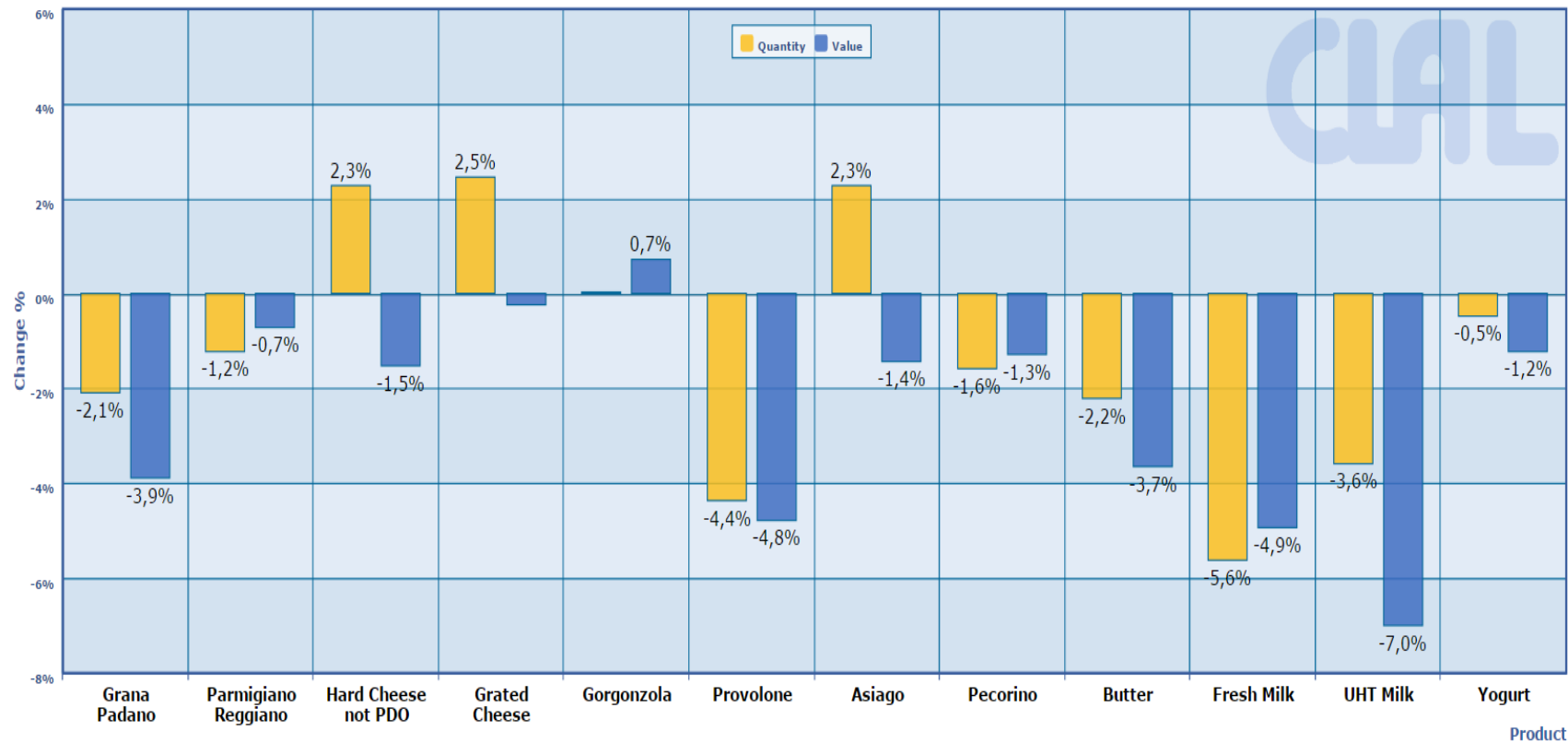
ITALY



ITALY: Domestic consumption

Italy - Domestic consumption change % (Jan-Sep '16 on Jan-Sep '15)

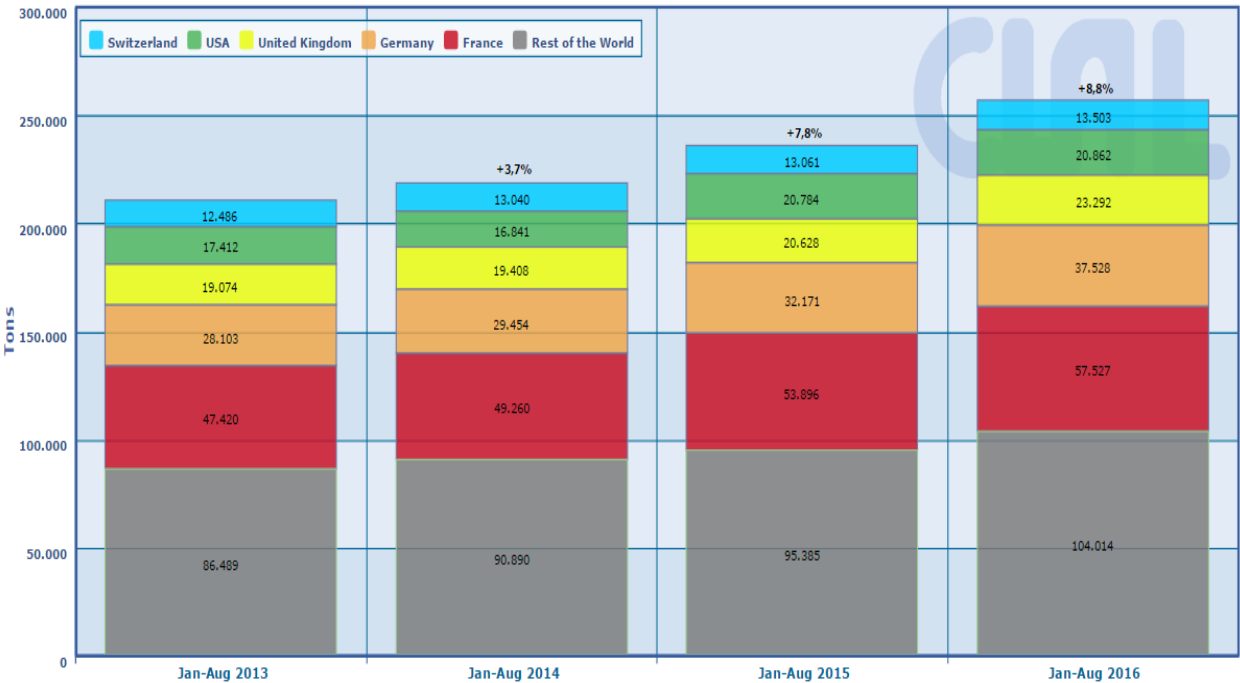
Processed by CLAL



ITALY: Monthly Exports of Cheese

ITALY: Export of CHEESE AND CURD (HS. 0406)
(Monthly Cumulative)

Processed by CLAL



Italia: Export Formaggi e Latticini (HS. 0406)		
Period	Tons	± % y-o-y
Last 12 months		
Sep '15 - Aug '16	378.499	+9,3%
Last 6 months		
Mar '16 - Aug '16	203.176	+8,7%
Last 2 months		
Jul '16 - Aug '16	68.950	+6,8%
Year-to-date		
Jan - Aug '16	256.727	+8,8%

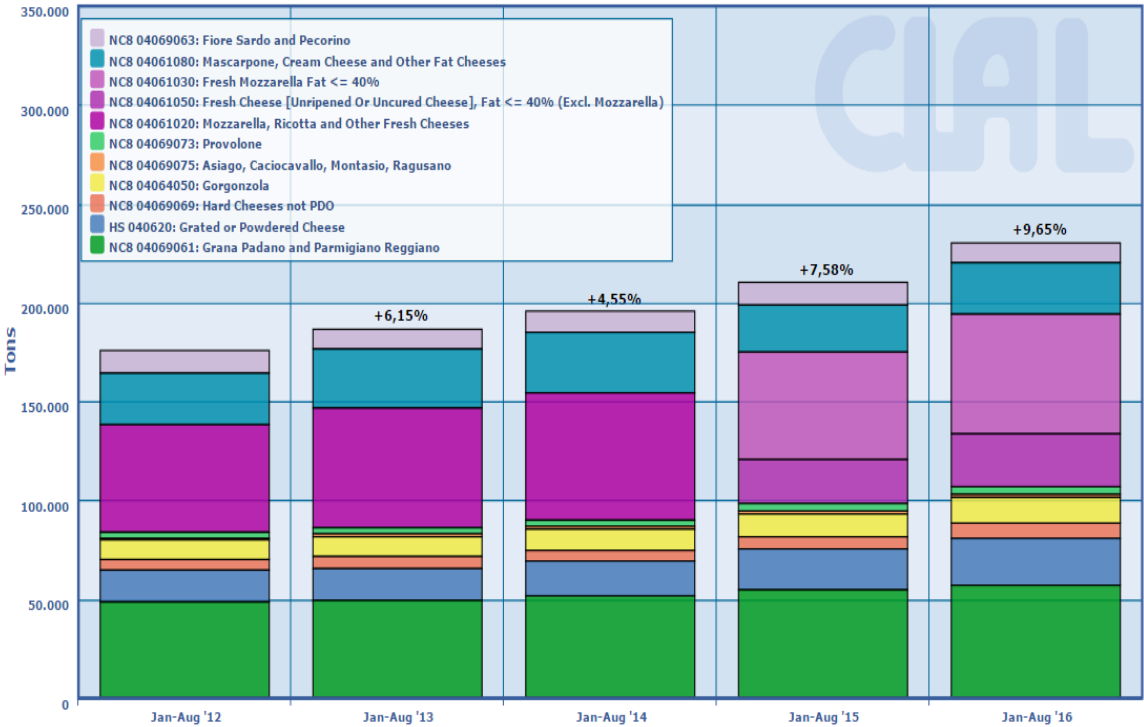
Visit the page [Export Italy - Annual and Monthly Profile](#)



ITALY: Main Cheese Exports (VOLUMES)

Italy - Cumulative monthly data
of Main Cheeses Exports
(VOLUMES)

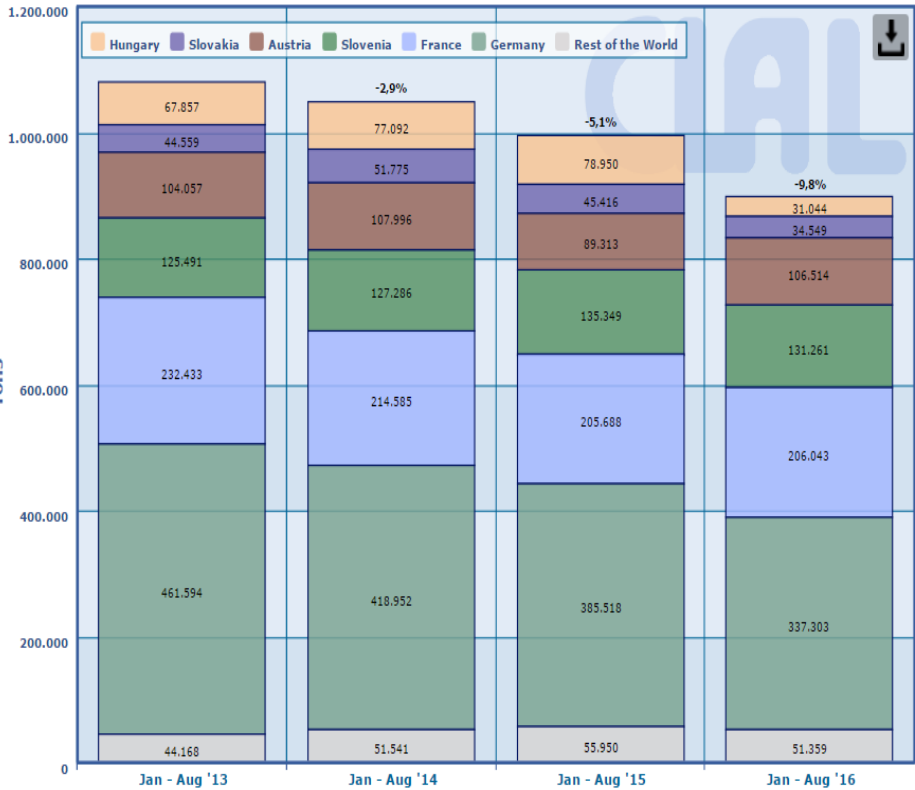
Source: ISTAT



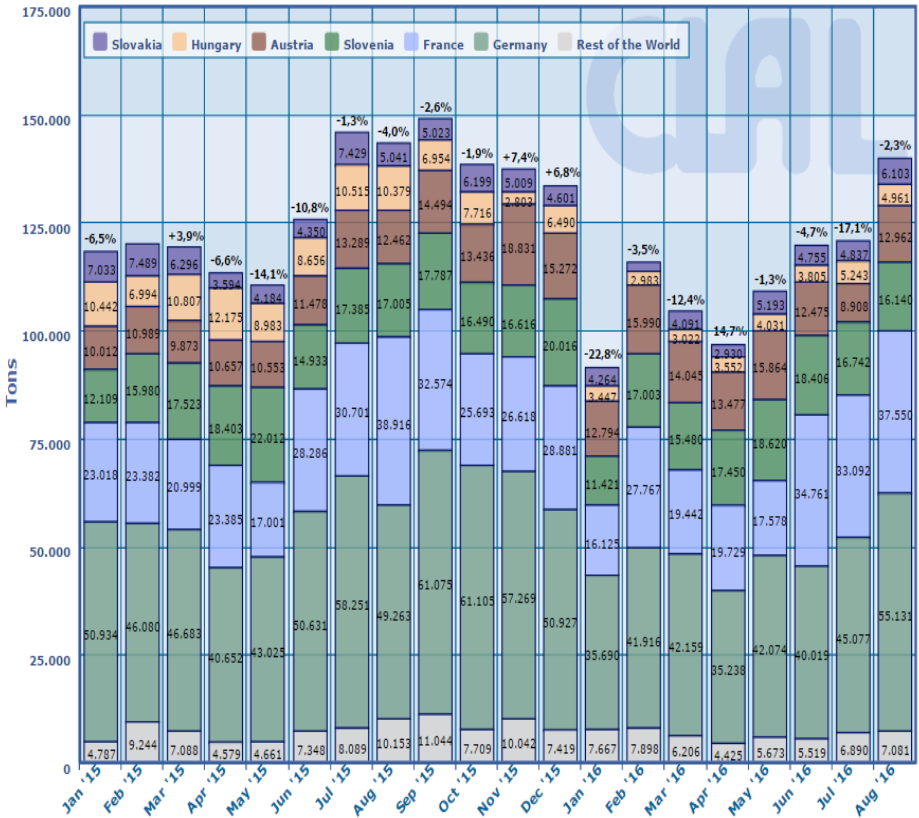
Fresh Cheese [Unripened Or Uncured Cheese], Fat <= 40% (Excl. Mozzarella)	+18%
Fresh Mozzarella Fat <= 40%	+12%
Fiore Sardo and Pecorino	-11%
Mascarpones, Cream Cheese and Other Fat Cheeses	+12%
Provolone	+4,3%
Asiago, Caciocavallo, Montasio, Ragusano	+10%
Gorgonzola	+9,7%
Hard Cheeses not PDO	+30%
Grated or Powdered Cheese	+16%
Grana Padano and Parmigiano Reggiano	+3,9%

ITALY: Import of milk in packings > 2L

ITALY : Imports of MILK IN PACKINGS > 2L (intra and extra EU)
(Monthly Cumulative)
Processed by CLAL

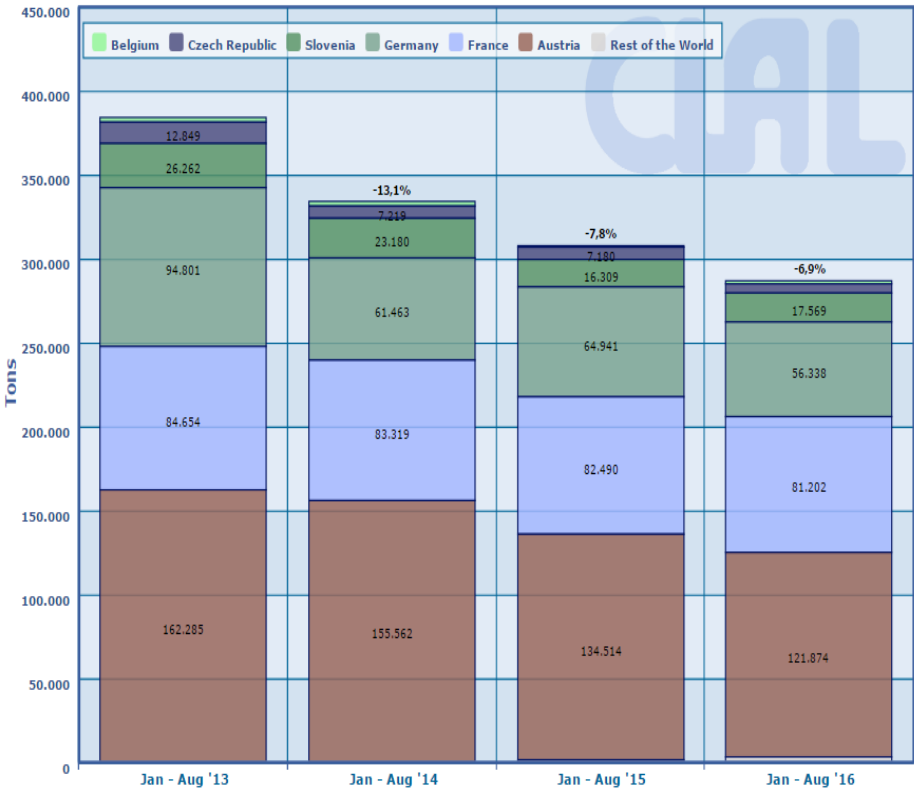


ITALY : Monthly Imports of MILK IN PACKINGS > 2L (intra and extra EU)
(+/- % on the same period of previous year)
Processed by CLAL

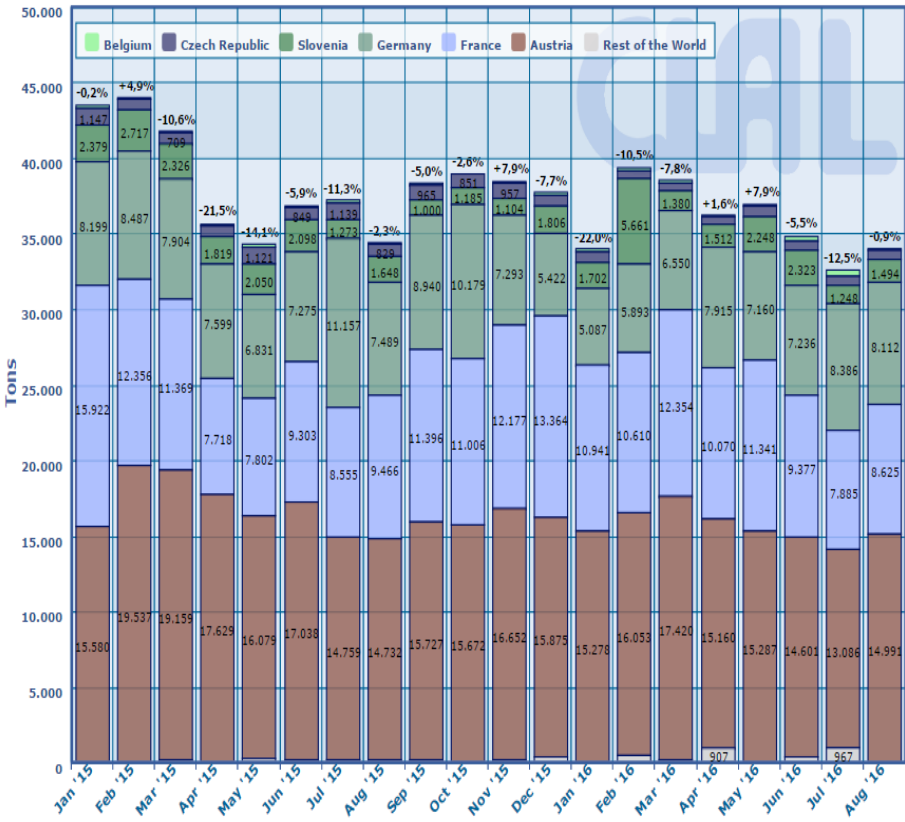


ITALY: Import of milk in packings <= 2L

ITALY : Imports of MILK IN PACKINGS <= 2L (intra and extra EU)
(Monthly Cumulative)
Processed by CLAL



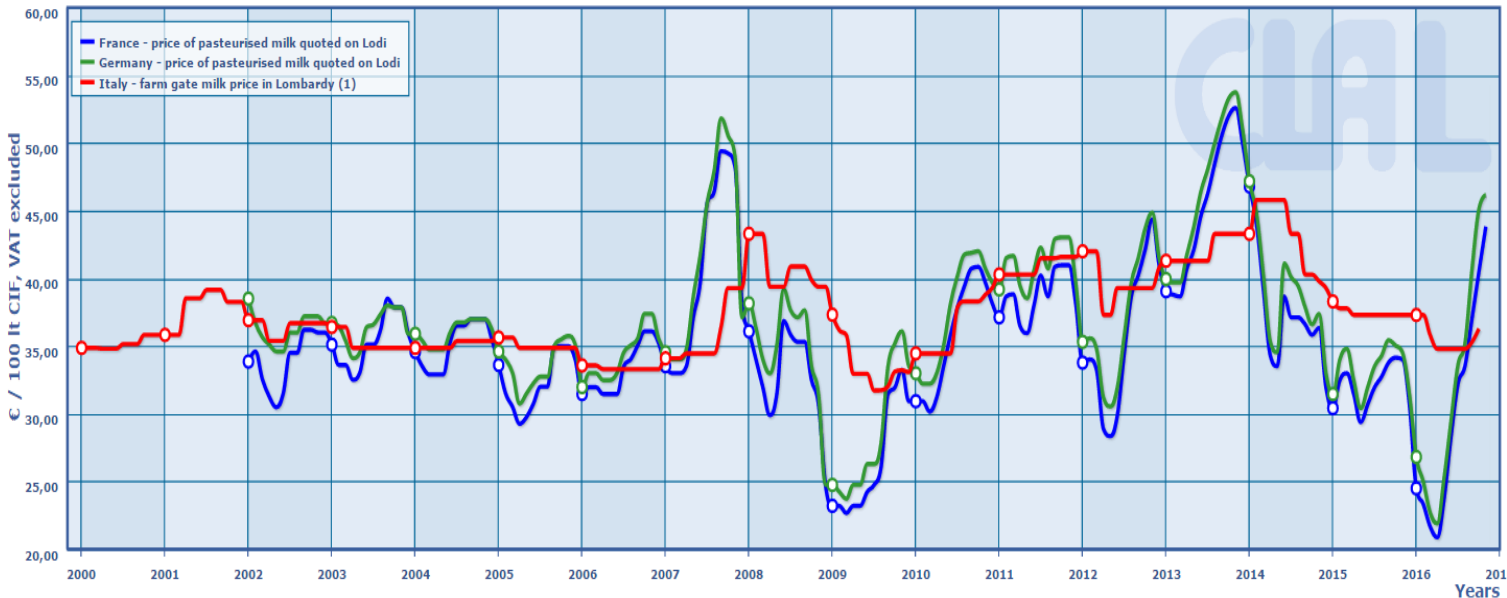
ITALY : Monthly Imports of MILK IN PACKINGS <= 2L (intra and extra EU)
(+/- % on the same period of previous year)
Processed by CLAL



ITALY: Comparison among Italian and Foreign Milk Prices

Comparison between farm gate milk price (Italy-Lombardy) and price of whole pasteurised spot milk from France and Germany
(1) Included indicative milk collection costs (1,2911 € / 100lt)

Processed by Clal



Average price €/100 l	Oct 2012	Oct 2016
Lombardy	39.29	36.29
Spot from France	42.14	40.47
Spot from Germany	43.69	45.11

HUNGARY

Year summary 2015	Tons
Milk Deliveries * (D)	1.522.710
Import** in Milk Equivalent (I)	627.898
Export** in Milk Equivalent (E)	610.337
% Self-sufficiency Milk = $C/(C+I-E)$	98,86%

Sources: Eurostat (D), IHS (I,E)

* Cow's milk deliveries

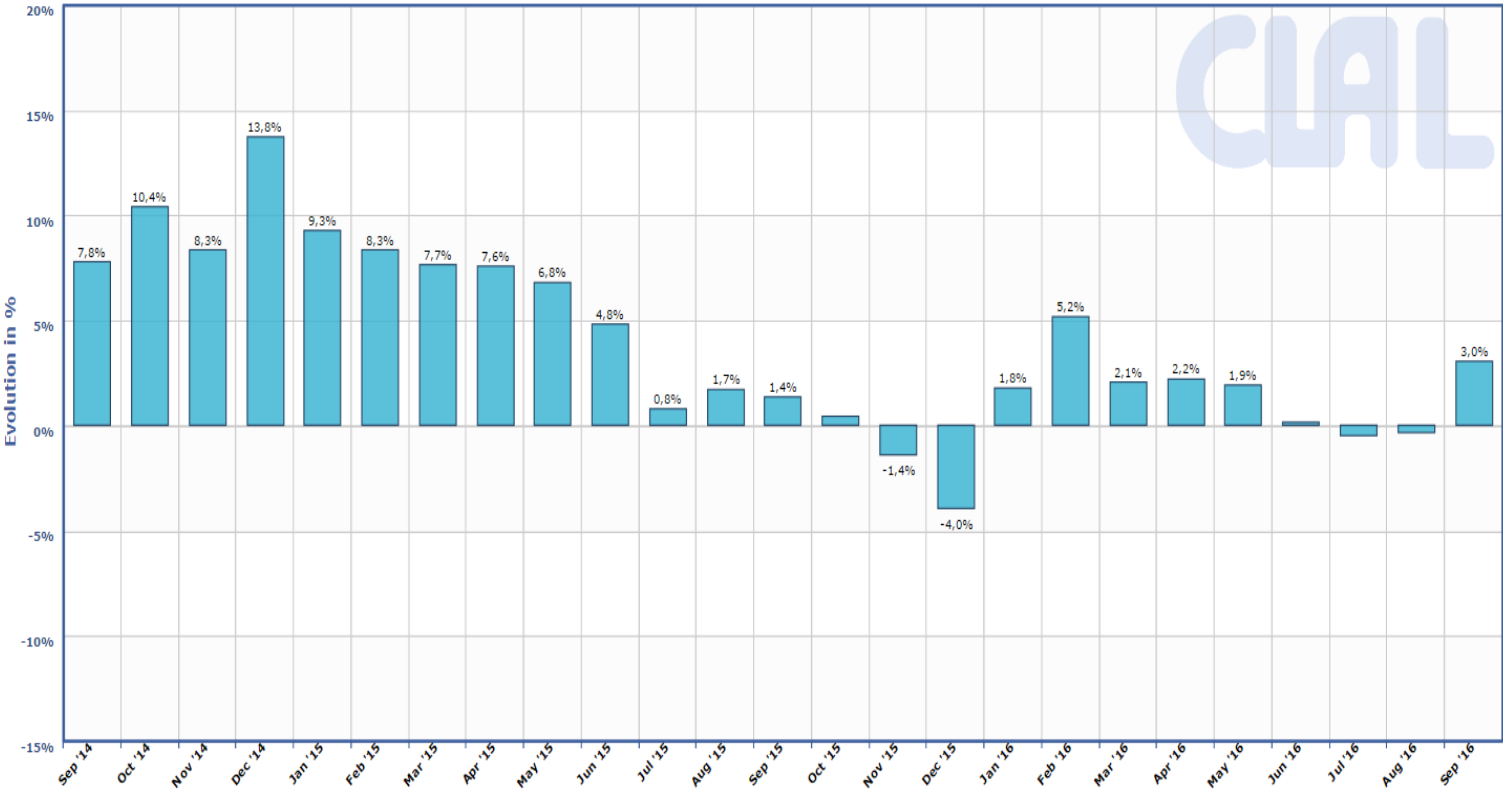
** Import/Export in **milk equivalent (ME)** of liquid milk, yogurt, condensed milk, Cheese, SMP, WMP.



HUNGARY: Milk Deliveries

HUNGARY - Milk deliveries:
(+/- % on the same period of previous year)

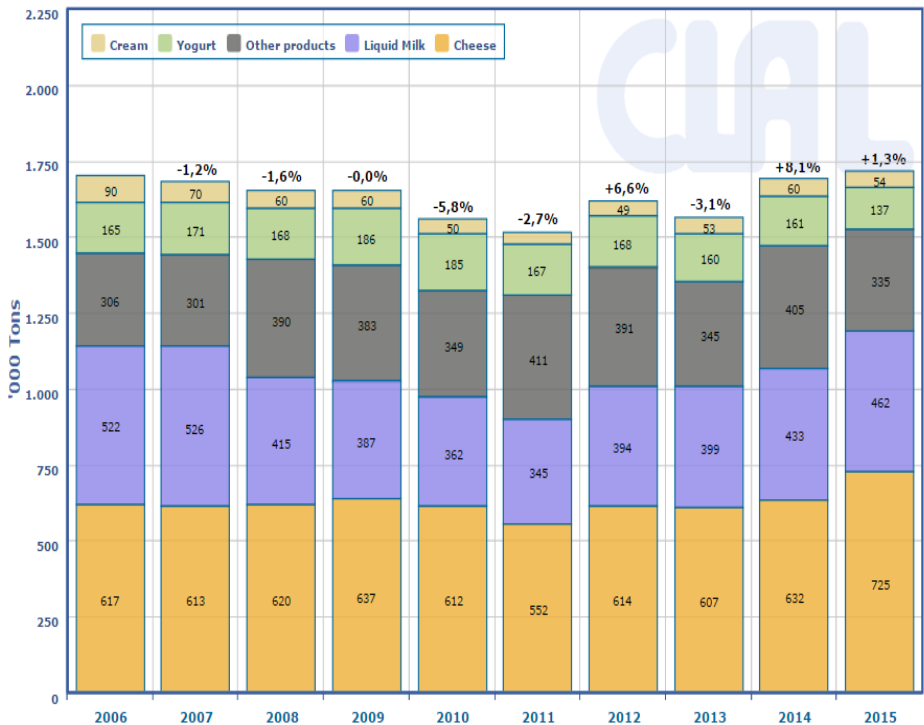
Source: Eurostat



HUNGARY: Production in Milk Equivalent (ME)

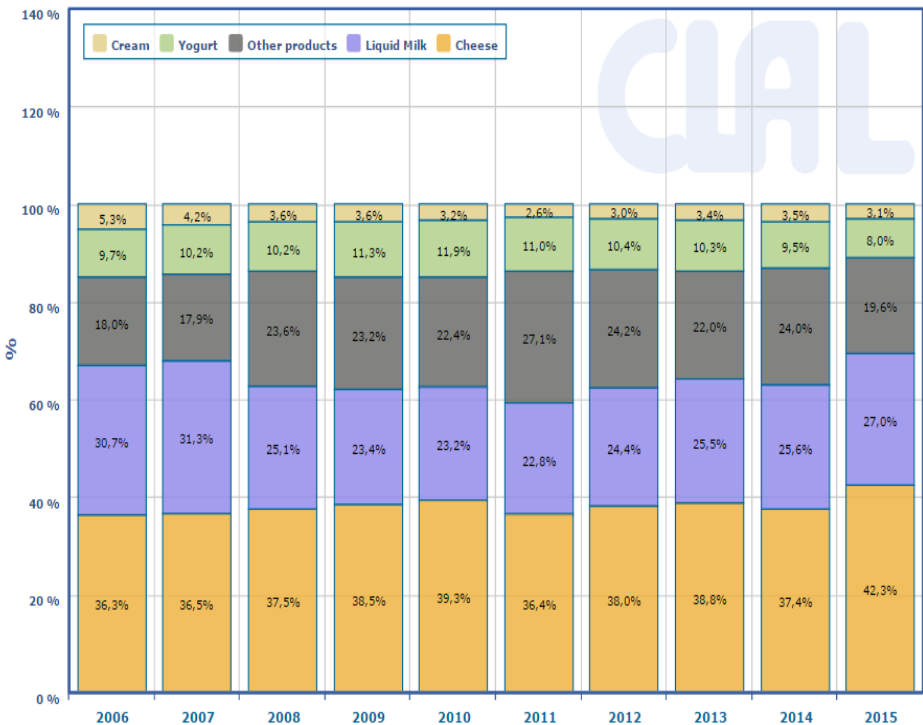
HUNGARY: milk destination (based on production data)
(^{000 Tons})

Processed by CLAL based on Eurostat data



HUNGARY: milk destination (based on production data)
Percentage (%)

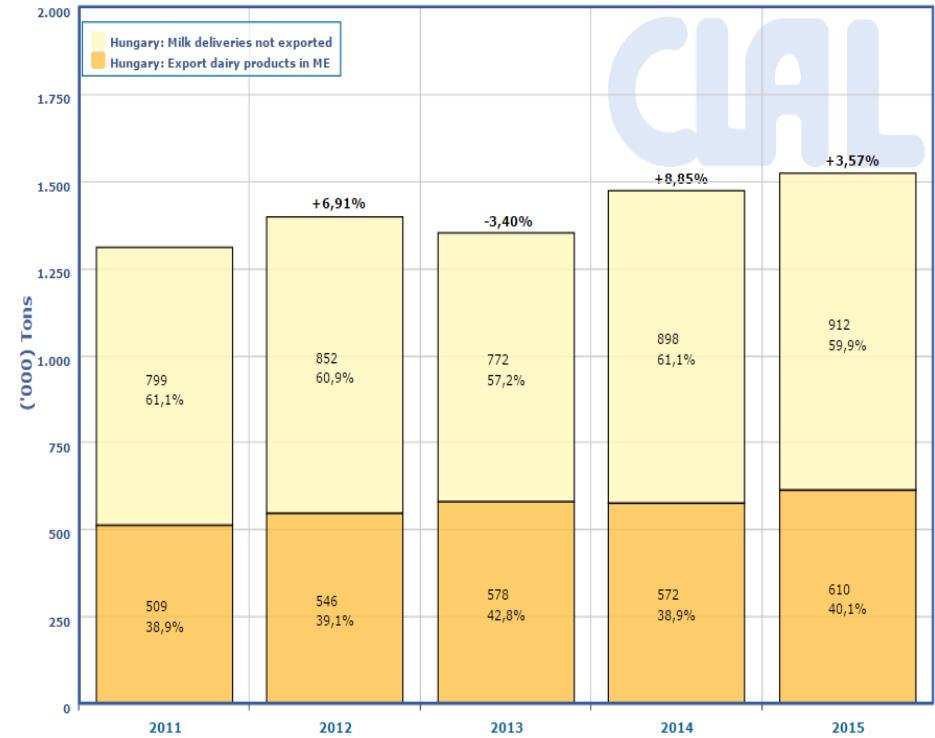
Processed by CLAL based on Eurostat data



Hungary: Milk deliveries and dairy export in milk equivalent

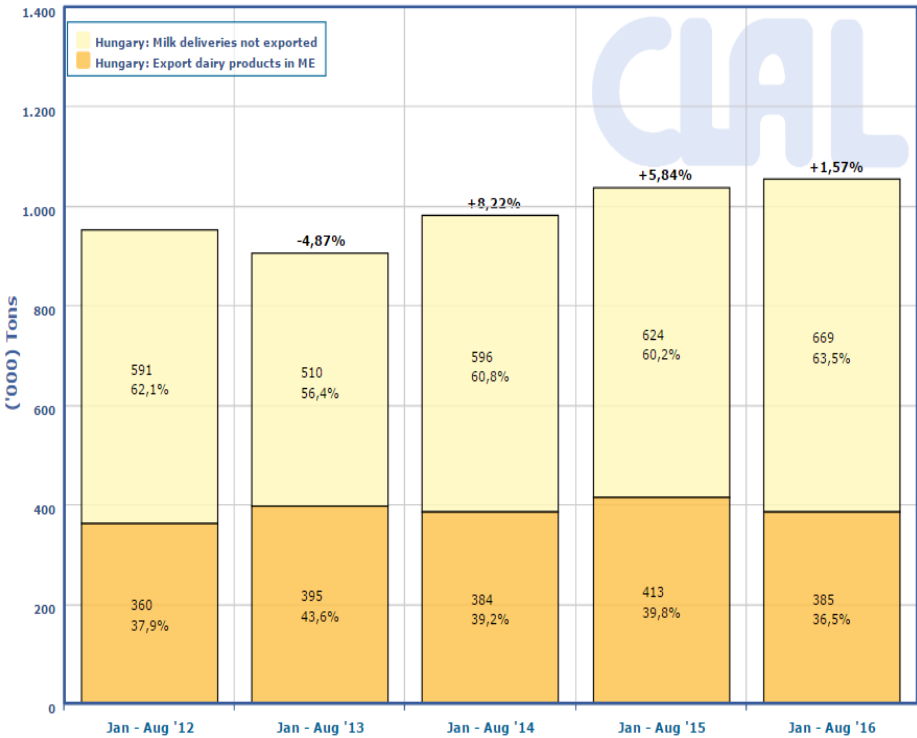
Hungary - Milk deliveries and dairy exports in ME (SMP, WMP, Cheese, Condensed Milk, Milk, yogurt)

Processed by Clal



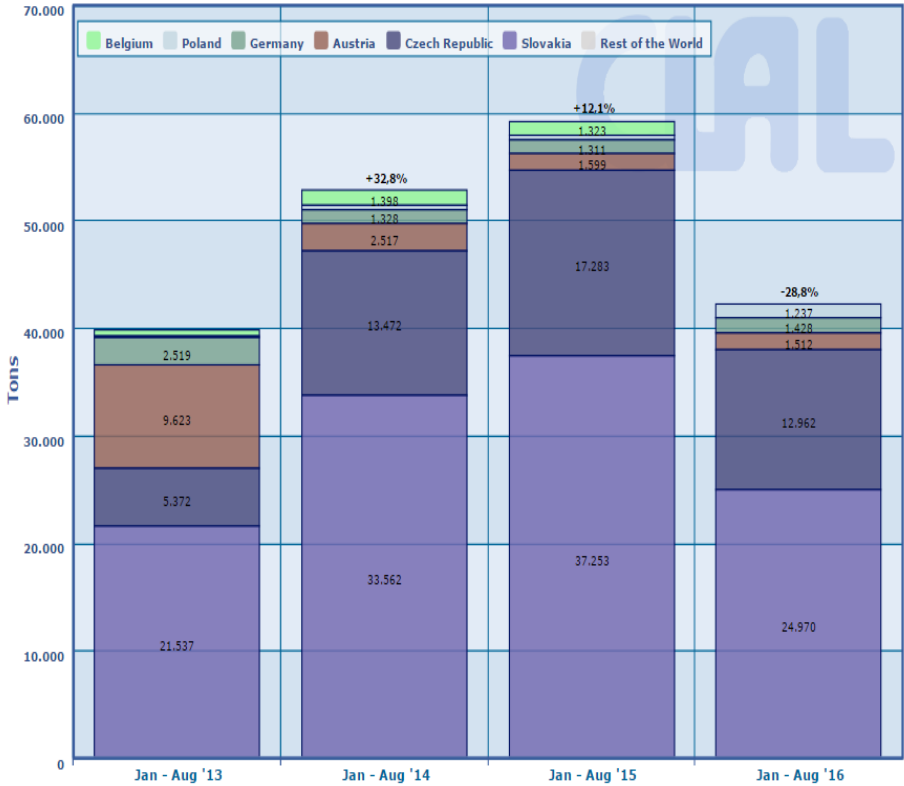
Hungary - Milk deliveries and dairy exports in ME (SMP, WMP, Cheese, Condensed Milk, Milk, yogurt) (Monthly Cumulative)

Processed by Clal

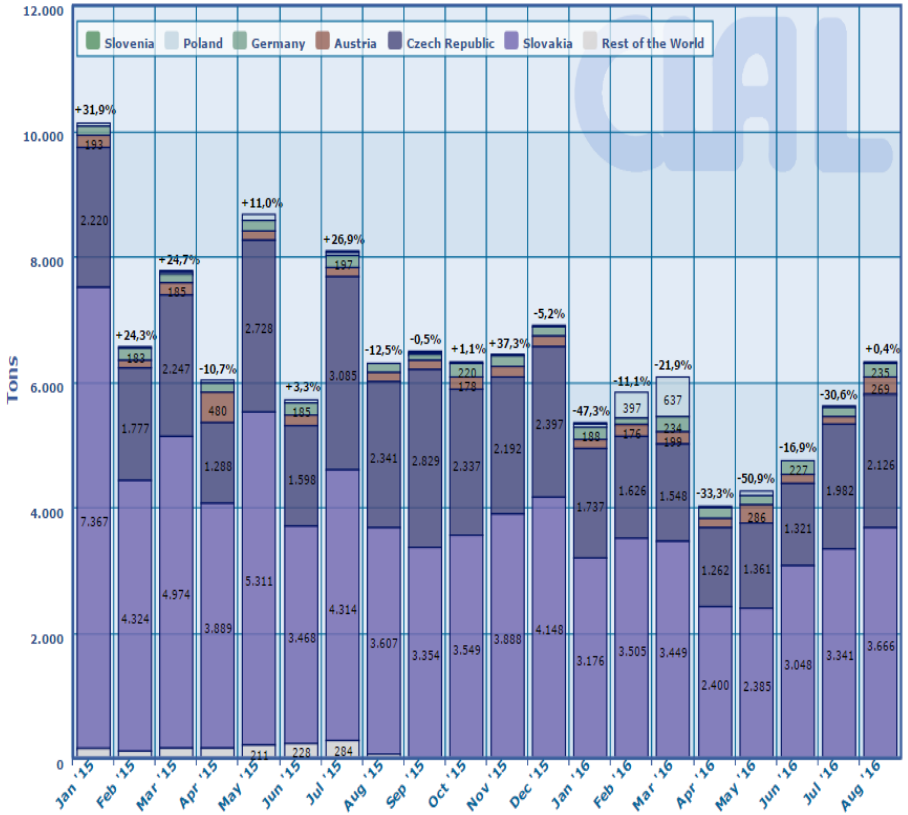


HUNGARY: Import of milk in packings <= 2L

HUNGARY : Imports of MILK IN PACKINGS <= 2L
(Monthly Cumulative)
Processed by CLAL

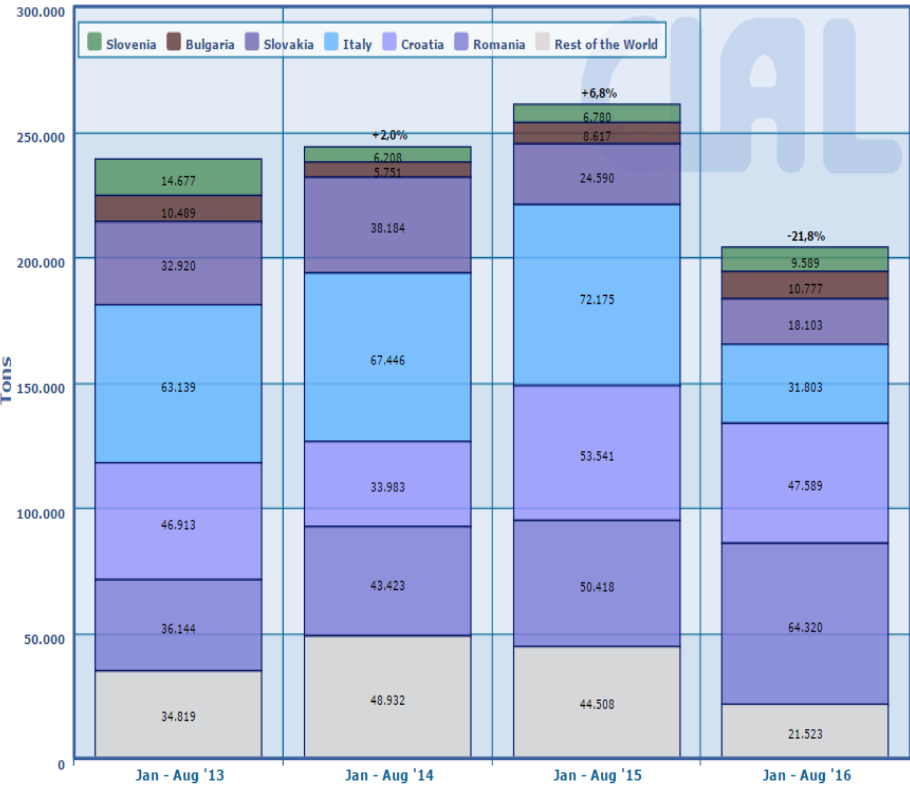


HUNGARY : Monthly Imports of MILK IN PACKINGS <= 2L
(+/- % on the same period of previous year)
Processed by CLAL

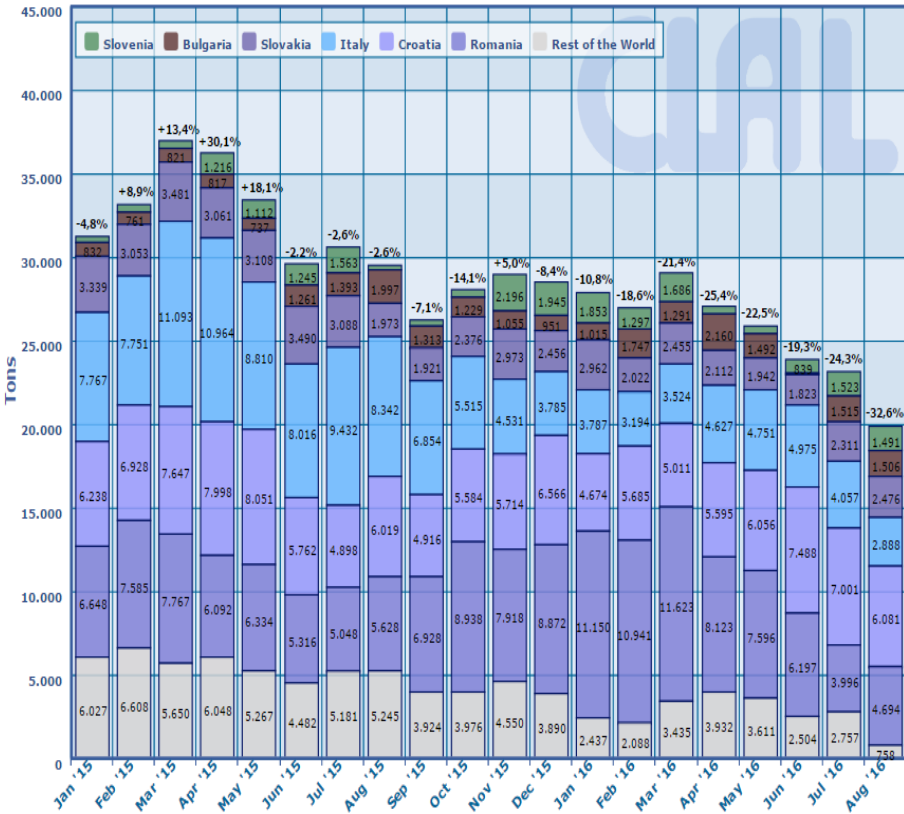


HUNGARY: Export of milk in packings >= 2L

HUNGARY : Exports of MILK IN PACKINGS >= 2L
(Monthly Cumulative)
Processed by CLAL

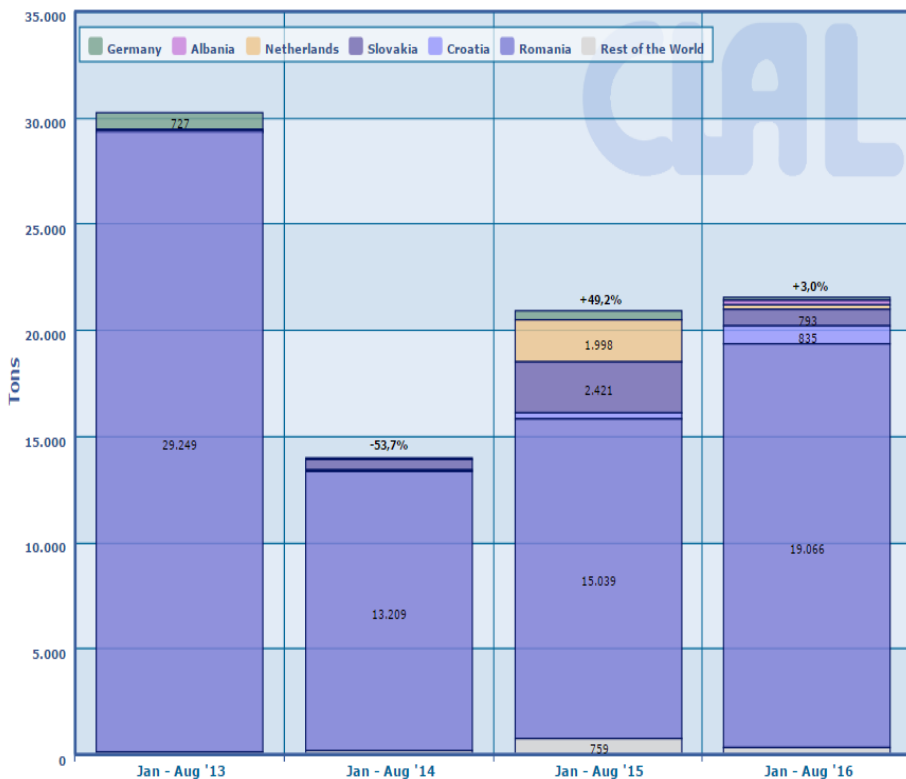


HUNGARY : Monthly Exports of MILK IN PACKINGS >= 2L
(+/- % on the same period of previous year)
Processed by CLAL

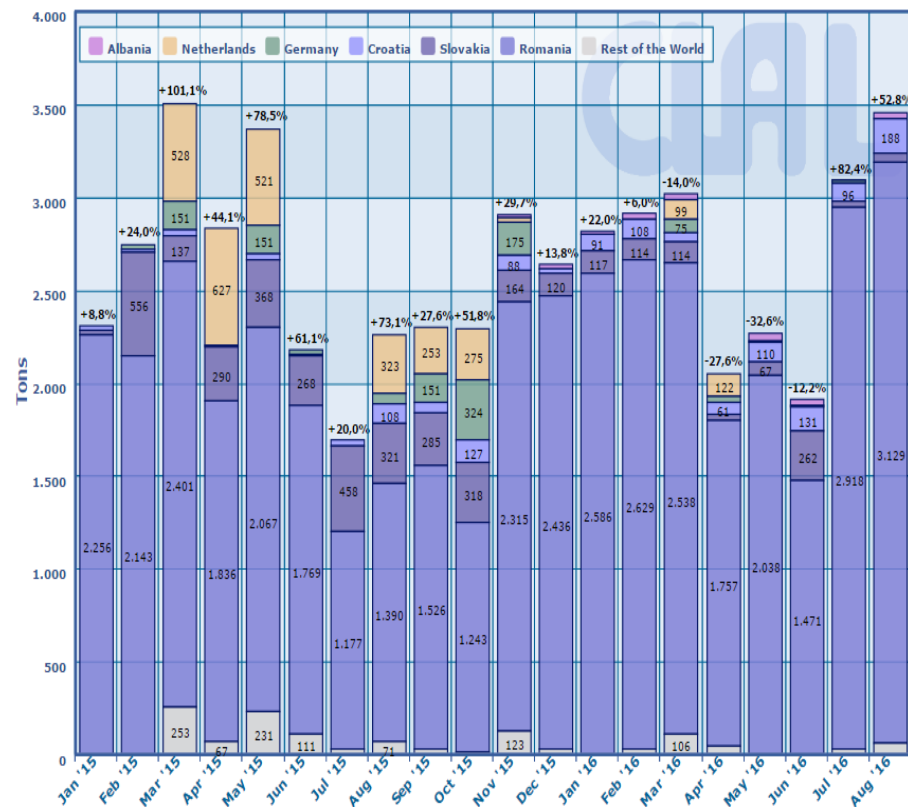


HUNGARY: Export of milk in packings <= 2L

HUNGARY : Exports of MILK IN PACKINGS <= 2L
(Monthly Cumulative)
Processed by CLAL



HUNGARY : Monthly Exports of MILK IN PACKINGS <= 2L
(+/- % on the same period of previous year)
Processed by CLAL



EU-28 vs Hungary: Main purchasers of Packed milk

Hungary: Main Purchasers of Milk in packings of <= 2 L (HS. 04011010+04012011+04012091) [Jan-Aug 2016]		
Purchaser	Tons	€/Kg
TOTAL	21.514	0,37
Romania	19.066	0,37
Croatia	835	0,42
Slovakia	793	0,37
Netherlands	221	0,14
Albania	179	0,41

Hungary: Main Purchasers of Milk in packings of <= 2 L (HS. 04011010+04012011+04012091) [Aug 2016]		
Purchaser	Tons	€/Kg
TOTAL	3.458	0,34
Romania	3.129	0,33
Croatia	188	0,42
Kosovo	53	0,41
Slovakia	49	0,52
Albania	33	0,39

EU-28: Main Purchasers of Milk in packings of <= 2 L (HS. 04011010+04012011+04012091) [Jan-Aug 2016]		
Purchaser	Tons	€/Kg
TOTAL	512.007	0,58
China	257.683	0,59
Libya	47.616	0,56
Mauritania	22.047	0,64
Angola	16.566	0,58
Melilla	12.342	0,54

EU-28: Main Purchasers of Milk in packings of <= 2 L (HS. 04011010+04012011+04012091) [Aug 2016]		
Purchaser	Tons	€/Kg
TOTAL	63.606	0,57
China	24.364	0,58
Libya	9.531	0,57
Angola	3.369	0,57
Hong Kong	3.309	0,51
Mauritania	2.560	0,56

EU-28 vs Hungary: Main purchasers of Cream

Hungary: Main Purchasers of Cream (HS. 040130+040140+040150) [Jan-Aug 2016]		
Purchaser	Tons	€/Kg
TOTAL	6.671	1,30
Bosnia & Herzegovina	1.879	1,44
Slovakia	1.247	1,20
Poland	1.244	1,12
Germany	498	1,16
Netherlands	430	1,22

EU-28: Main Purchasers of Cream (HS. 040130+040140+040150) [Jan-Aug 2016]		
Purchaser	Tons	€/Kg
TOTAL	100.825	2,13
China	27.602	2,22
Korea, South	11.811	2,07
Saudi Arabia	10.455	2,39
Taiwan	5.792	2,13
United Arab Emirates	4.693	2,16

Hungary: Main Purchasers of Cream (HS. 040130+040140+040150) [Aug 2016]		
Purchaser	Tons	€/Kg
TOTAL	586	1,75
Bosnia & Herzegovina	242	1,84
Italy	123	1,74
Slovakia	118	1,59
Netherlands	51	1,66
Poland	26	1,73

EU-28: Main Purchasers of Cream (HS. 040130+040140+040150) [Aug 2016]		
Purchaser	Tons	€/Kg
TOTAL	13.419	2,05
China	2.413	2,11
Korea, South	2.234	2,11
Saudi Arabia	1.137	2,29
Angola	912	0,68
Taiwan	661	2,21

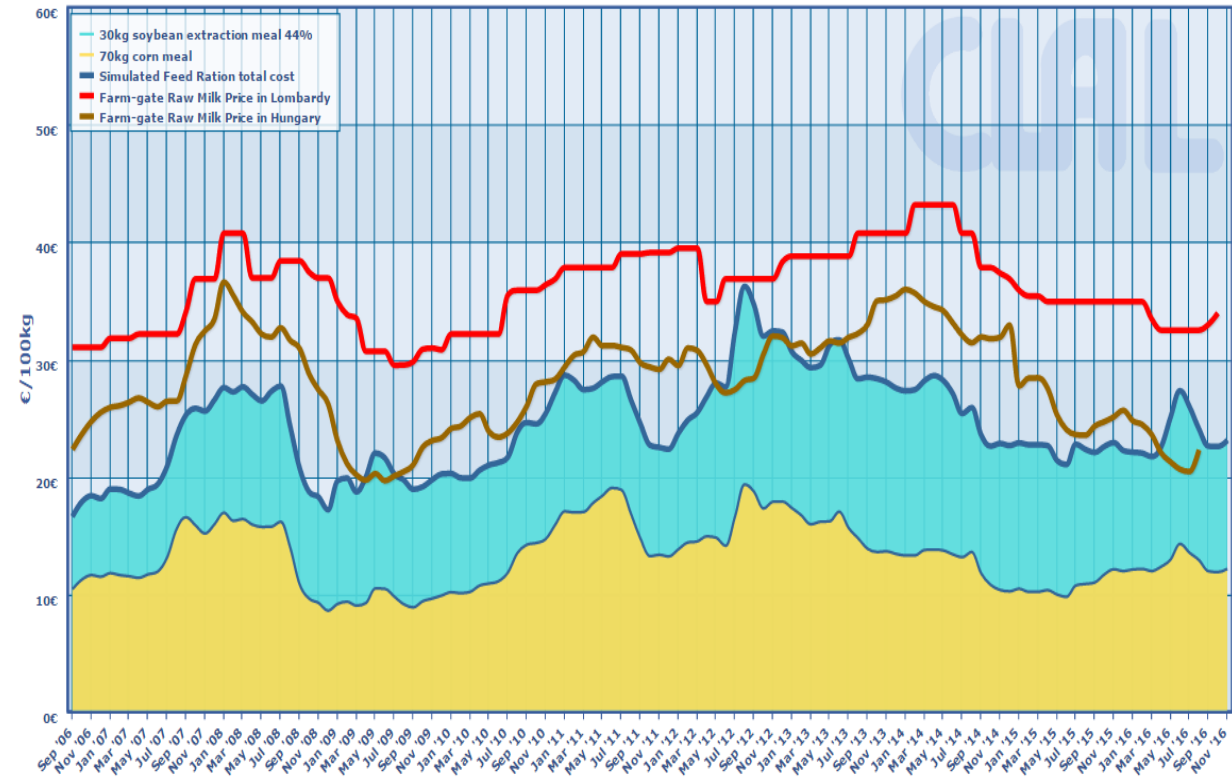
Italy, Cream 21/11/2016 2,44 €/Kg

HUNGARY: Simulated Feed Ration and Farmgate Milk Price

Simulated Feed Ration Cost and Farm-gate Milk Price in Hungary and Lombardy: value of 100kg

70kg of domestic corn meal + 30kg of soybean extraction meal 44% protein

Quotations of the Milan Chamber of Commerce - Processed by CLAL



Visit the page [Feed composition analysis](#)

Simulated Feed Ration Nov 2016 **23,12 €/100Kg**

Italy, Lombardy Oct 2016 **33,95 (e) €/100Kg**

Hungary Aug 2016 **22,31 €/100Kg**

Total Feed Ration Cost/ Milk Price	
August 2016	74,1%
August 2015	64,0%
August 2014	63,6%
August 2013	69,6%
August 2012	98,3%
August 2011	68,1%

PRUDENTE FIDUCIA:
CAUTIOUSLY CONFIDENT:



- nella possibile ed equilibrata ripresa dei mercati.
on the likely and balanced recovery of the market.
- nella possibilità di dialogo fra i soggetti della filiera.
on the possibility of dialogue between supply-chain stakeholders.
- nella possibilità di accordi che salvaguardino un equilibrio di mercato.
on the possibility of reaching agreements that safeguard market equilibrium.