

# Putting it all together:

Dairy Risk Management –  
from an European exchange  
perspective

Sascha Siegel, Chicago, July 18<sup>th</sup> 2011



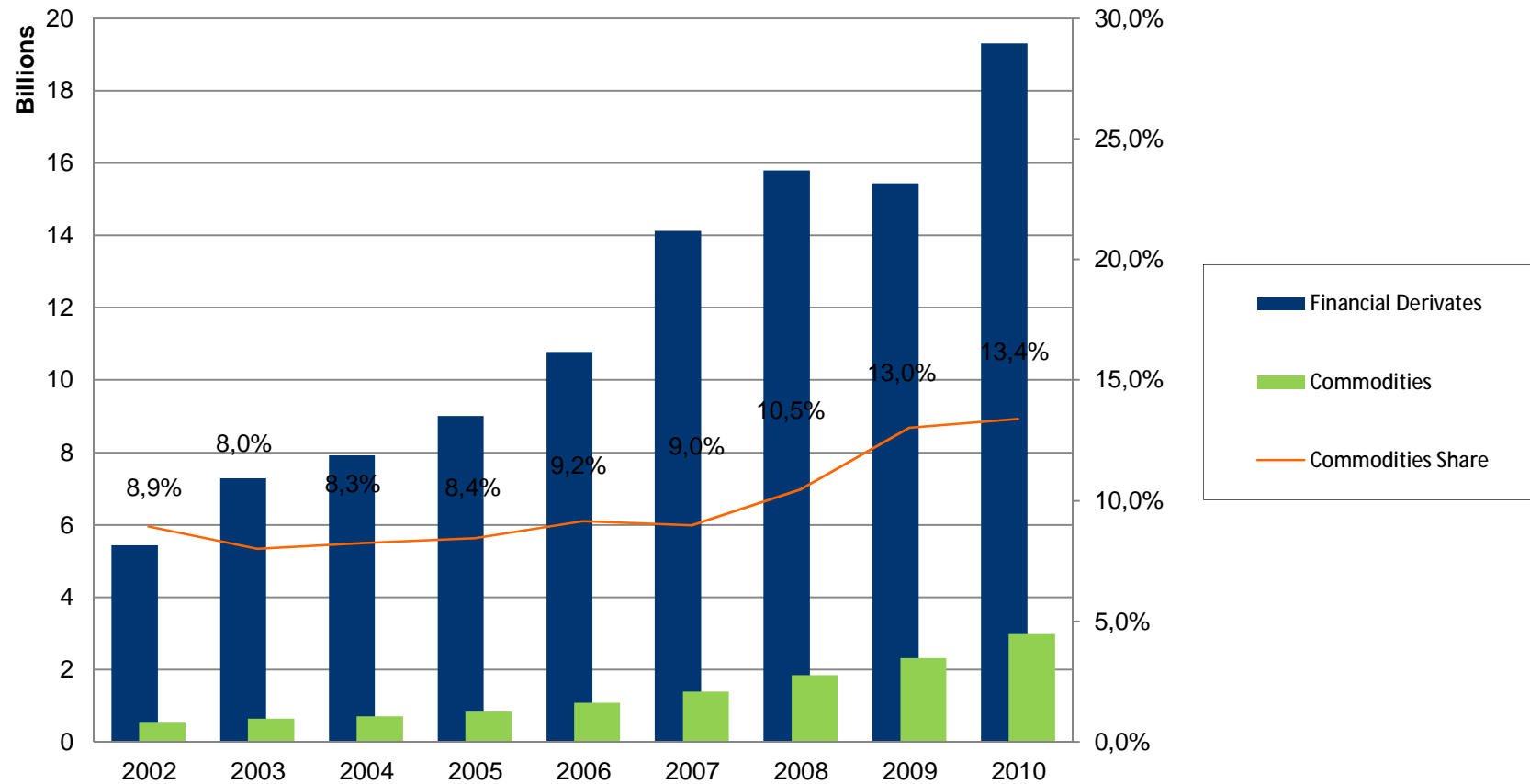
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# Agenda

- Commodity fundamentals
- Dairy in Europe
- Eurex Dairy Futures - Our offering

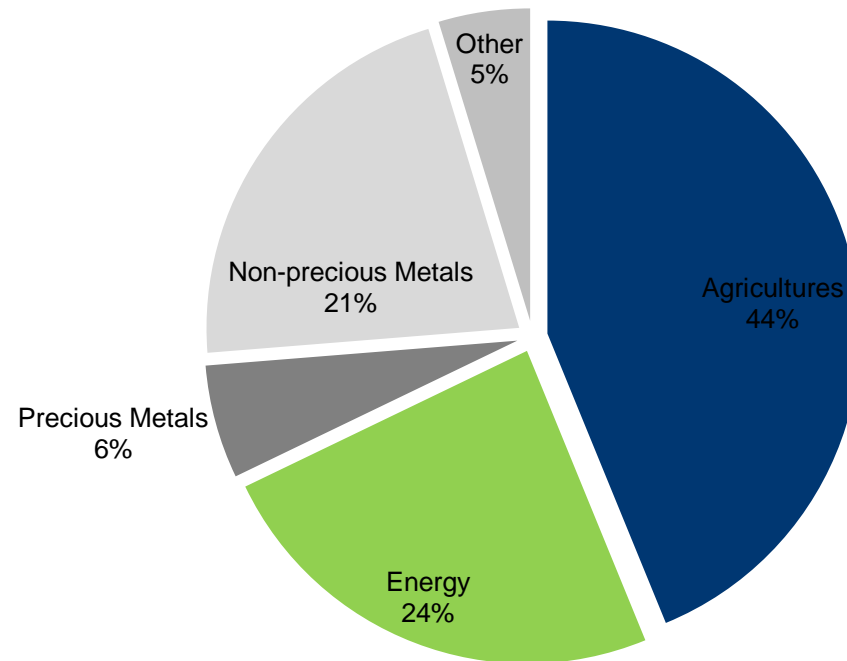
# Traded commodities “on-exchange” – development (1)

Growth pattern: financial and commodity derivatives



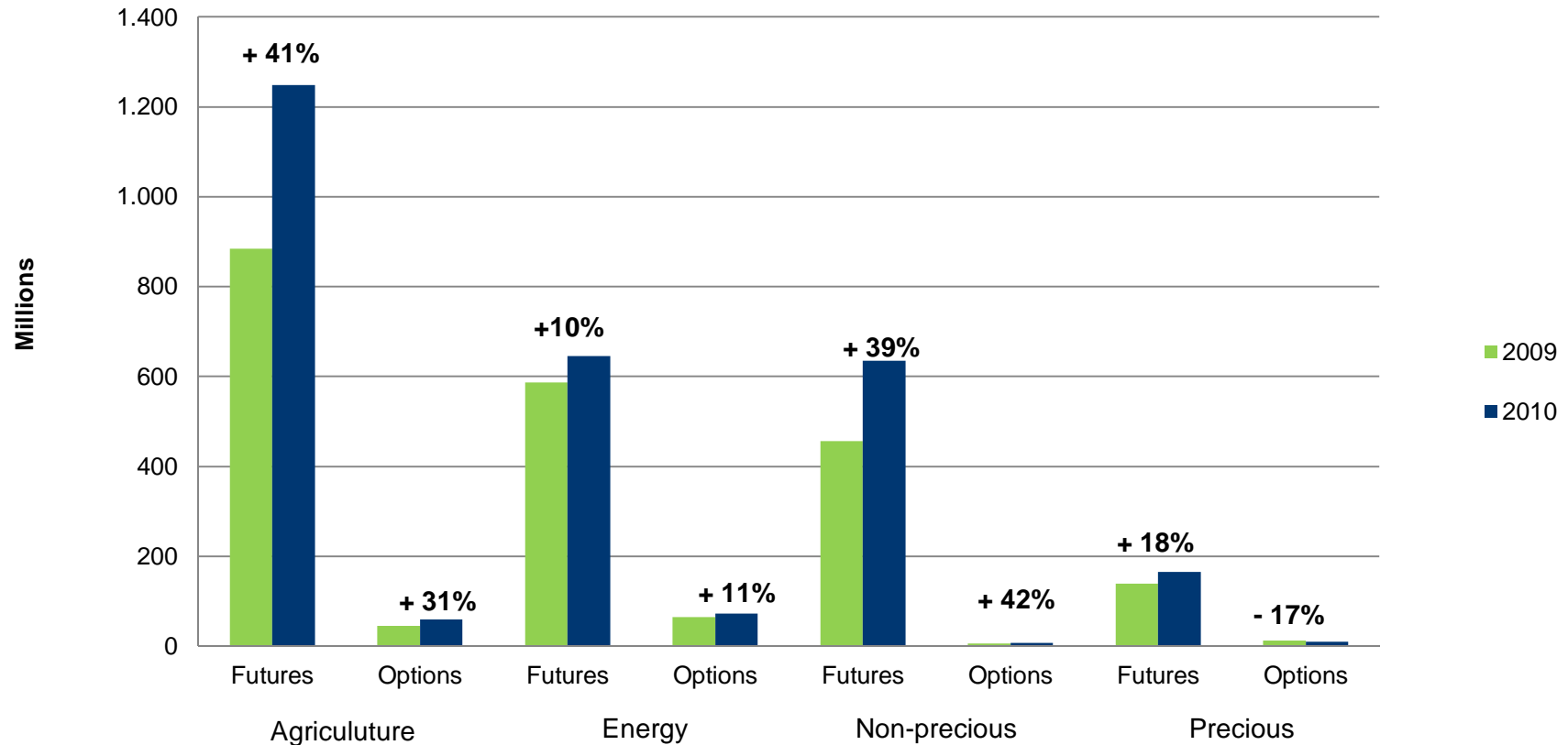
# Traded commodities “on-exchange” – development (2)

## Market share of commodity sub asset classes



# Traded commodities “on-exchange” – development (3)

## Growth rates within commodity asset classes



## Derivatives on agricultural products – drivers

So far dominated by Asia and the USA, changes in Europe offer new opportunities

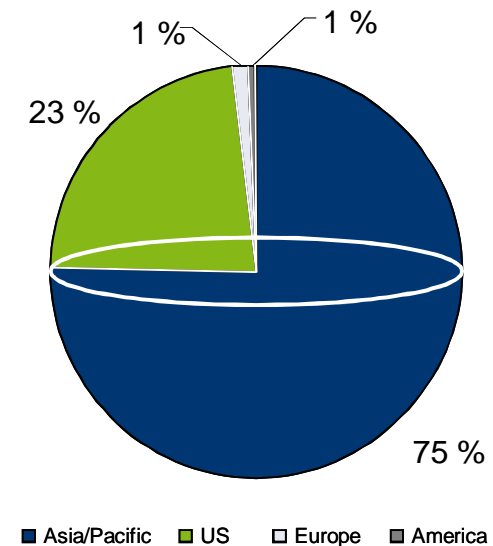
The past:

- Intervention price system stabilized agricultural commodity prices.
- Intervention system decoupled the EU from the world market.
- EU agricultural policy ensured incomes of small agricultural enterprises, collectors and trading houses.
- Diversification of production reduced business risks.

The present & future:

- Market liberalization of the European agricultural market leads to significant reduction in the intervention price level.
- Significant reduction of agricultural commodity stocks is a result of strong increasing consumption (foodstuff, feed, bio energy).
- High price elasticity of supply leads to increasing commodity price volatilities.
- Specialization and company growth leads to an increasing sensitivity against price fluctuations.
- Hedging is becoming an essential instrument for commodity traders.

Share (in %) of world-wide on-exchange trading in agriculture products in HY1 2010



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# Dairy products consumption (kg per capita)

## USA



Milk: 81.9 kg



Butter: 2.3 kg



Cheese: 14.8 kg



Population: 307.2 mln.

## India



Milk: 38.6 kg



Butter: 3.3 kg



Cheese: -



Population: 1 170 mln.

## European Union



Milk: 64.5 kg



Butter: 3.5 kg



Cheese: 16.6 kg



Population: 499.7 mln.

## China



Milk: 11.2 kg



Butter: 0.1 kg



Cheese: -



Population: 1 335 mln.

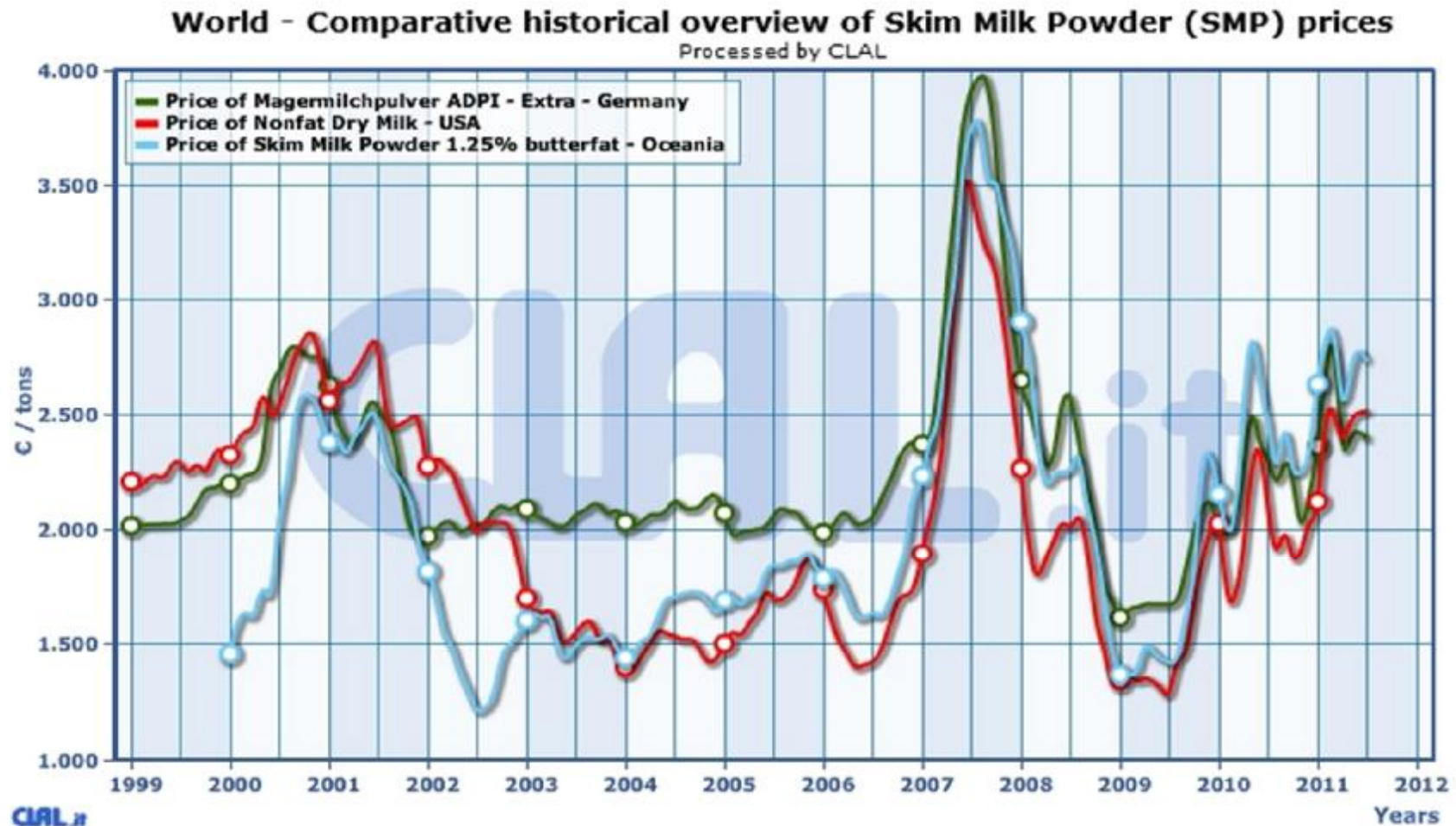
Source: International Dairy Federation 2010

## Global market players

Die 20 größten Molkereien der Welt					
Rang	Unternehmen	Land	Milch-Umsatz 2010 in Mrd. USD	Milch-Umsatz 2010 in Mrd. EUR	Rang Vorjahr
1	Nestlé	Schweiz	28,0	21,2	1
2	Danone	Frankreich	16,4	12,3	2
3	Fonterra	Neuseeland	12,1	9,1	5
4	Lactalis	Frankreich	12,0	9,1	3
5	FrieslandCampina	Niederlande	11,7	8,8	4
6	Dean Foods	USA	10,9	8,2	6
7	Dairy Farmers of America	USA	9,8	7,4	8
8	Arla Foods	Dänemark/Schweden	9,1	6,9	7
9	Kraft Foods	USA	7,0	5,3	9
10	Unilever	Niederlande/Vereinig. Königreich	6,7 <sup>1)</sup>	5,1	10
11	Saputo	Kanada	5,7	4,3	12
12	Meiji Dairies	Japan	5,5	4,1	11
13	DMK	Deutschland	5,3 <sup>1)</sup>	4,0	-
14	Sodiaal	Frankreich	5,3 <sup>1)</sup>	4,0	-
15	Parmalat	Italien	5,2	3,9	13
16	Morinaga Milk Industry	Japan	5,1	3,8	14
17	Bongrain	Frankreich	4,7	3,6	15
18	Mengniu	China	4,5	3,4	16
19	Yili	China	4,3	3,3	17
20	Schreiber Foods	USA	4,0 <sup>1)</sup>	3,0	-

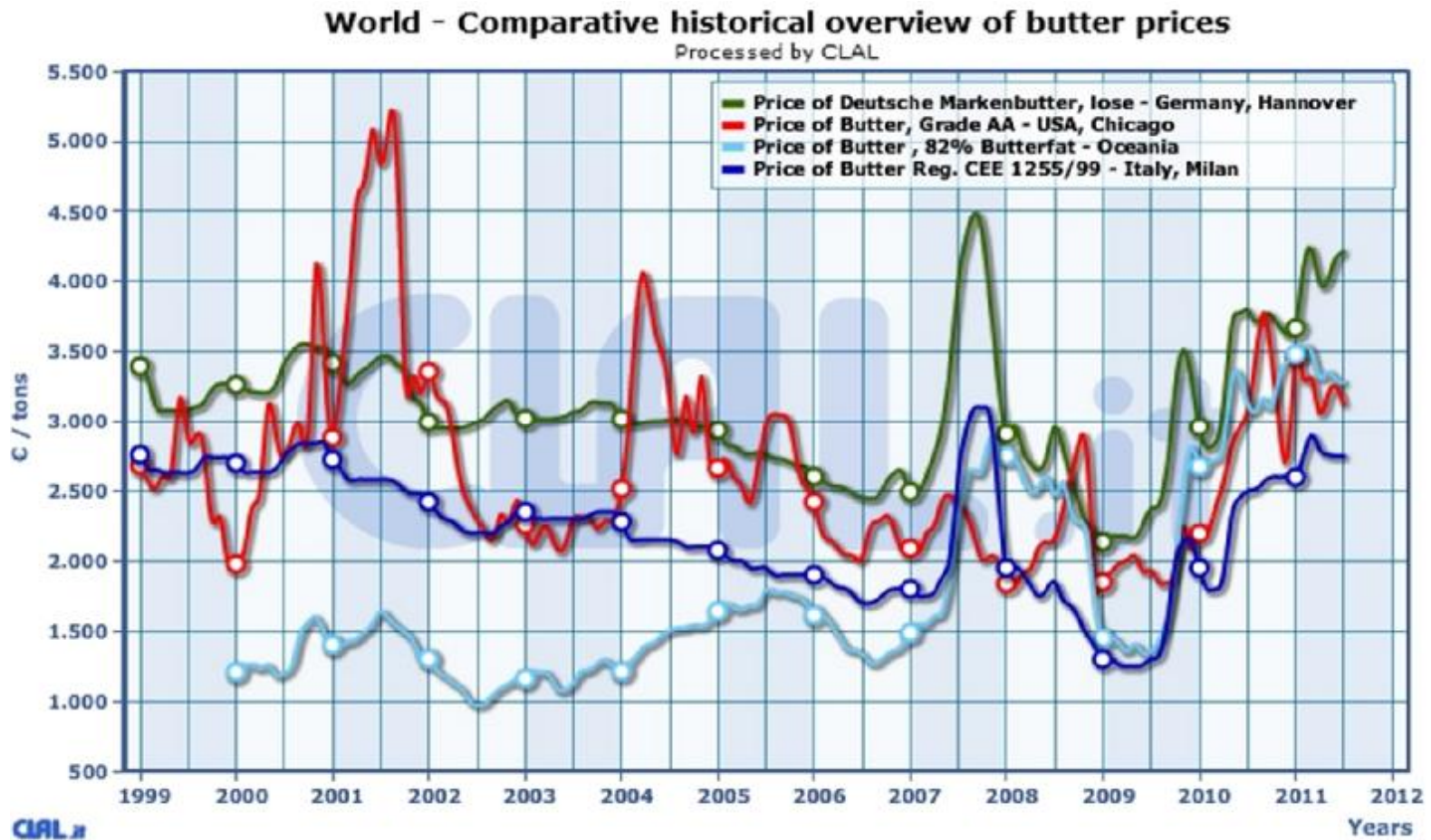
Quelle: Rabobank International <sup>1)</sup> geschätzt © ZMB

# Global price development for Skimmed Milk Powder



Source: EU, CLAL

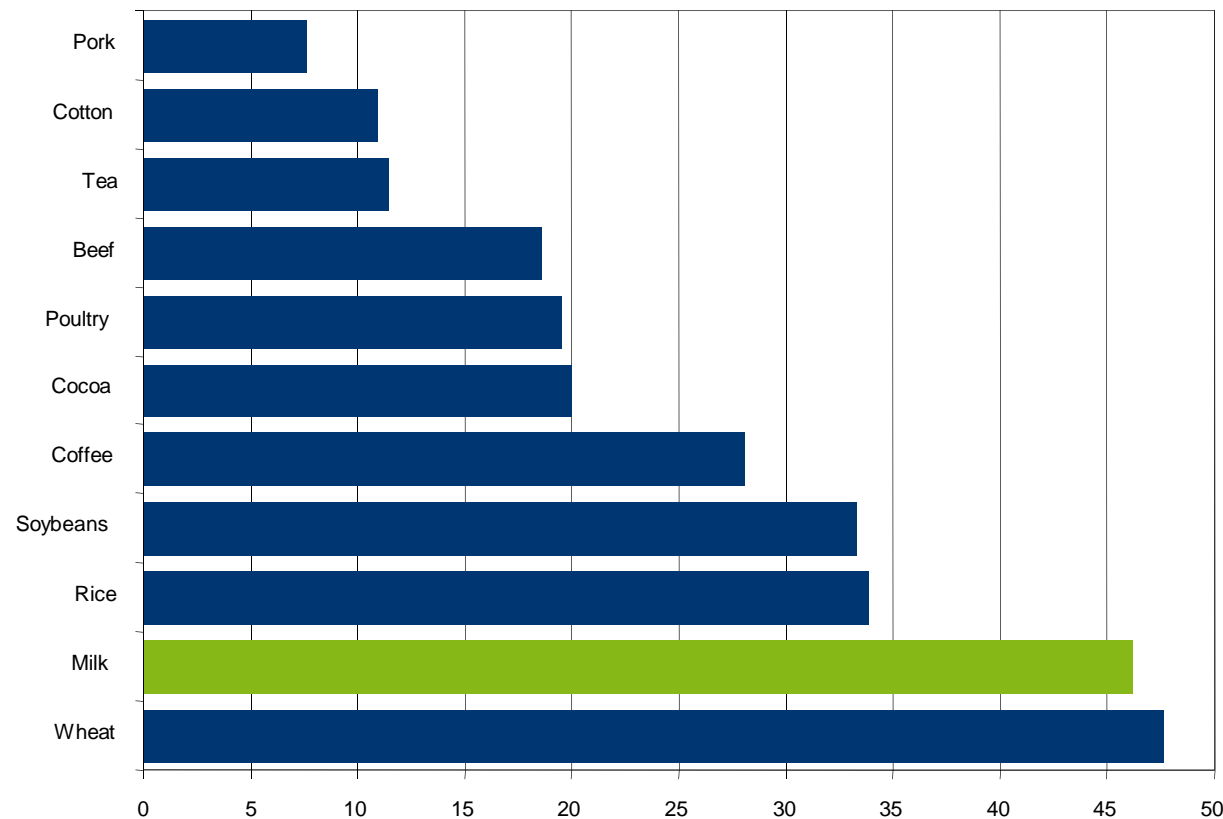
# Global price development for Butter



# Price volatility in the agricultural sector

## Overview

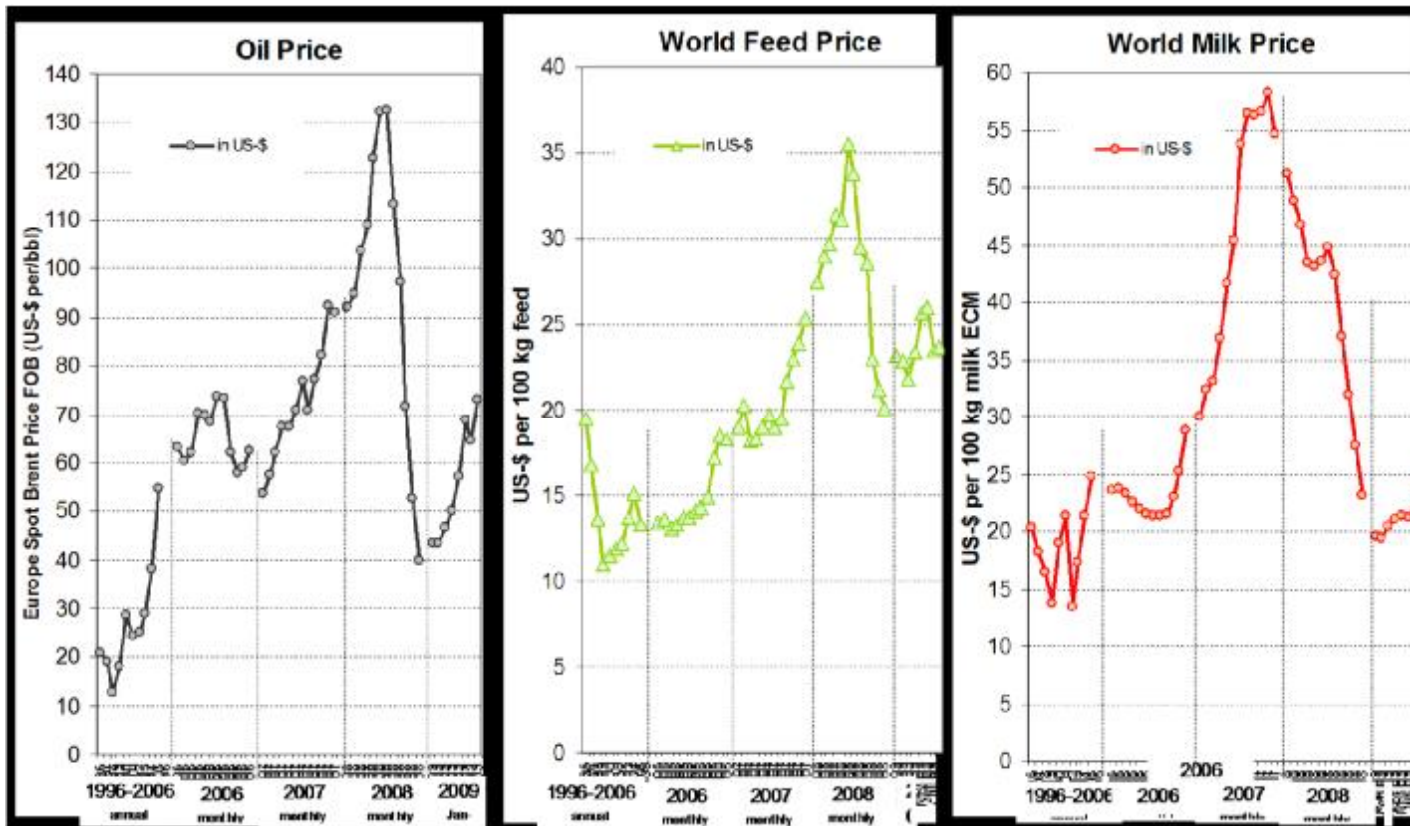
Coefficient of variation in %



- Reduced stocks and a continuously growing demand results in increasing price sensitivity and volatility.
- Globalization of the markets lead to increasing supply and demand fluctuations. As a result, price volatility is rising.
- The planned reduction of political influence and the increasing relevance of global supply and demand developments will lead to an increasing volatility.

# Price Volatility

Oil, feed and milk prices, 1996 – June 2009



Source: International Dairy Federation, 2009

# Official regulatory procedures in Europe

## History and Presence & Future

### History

- ▶ Strongly regulated and organized market
- ▶ Limited milk production (quota limitation)
- ▶ Public warehousing for butter and skimmed milk powder
- ▶ Stabilized milk prices and as a result stable dairy product prices
- ▶ Isolated EU market as a result of import restrictions

### Presence & Future

- ▶ Reduction of political influence on the agricultural markets
- ▶ Annual reduction of quota limitation until 2013, planned abolition in 2015
- ▶ Market regulation by supply and demand

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# Eurex commodity derivatives

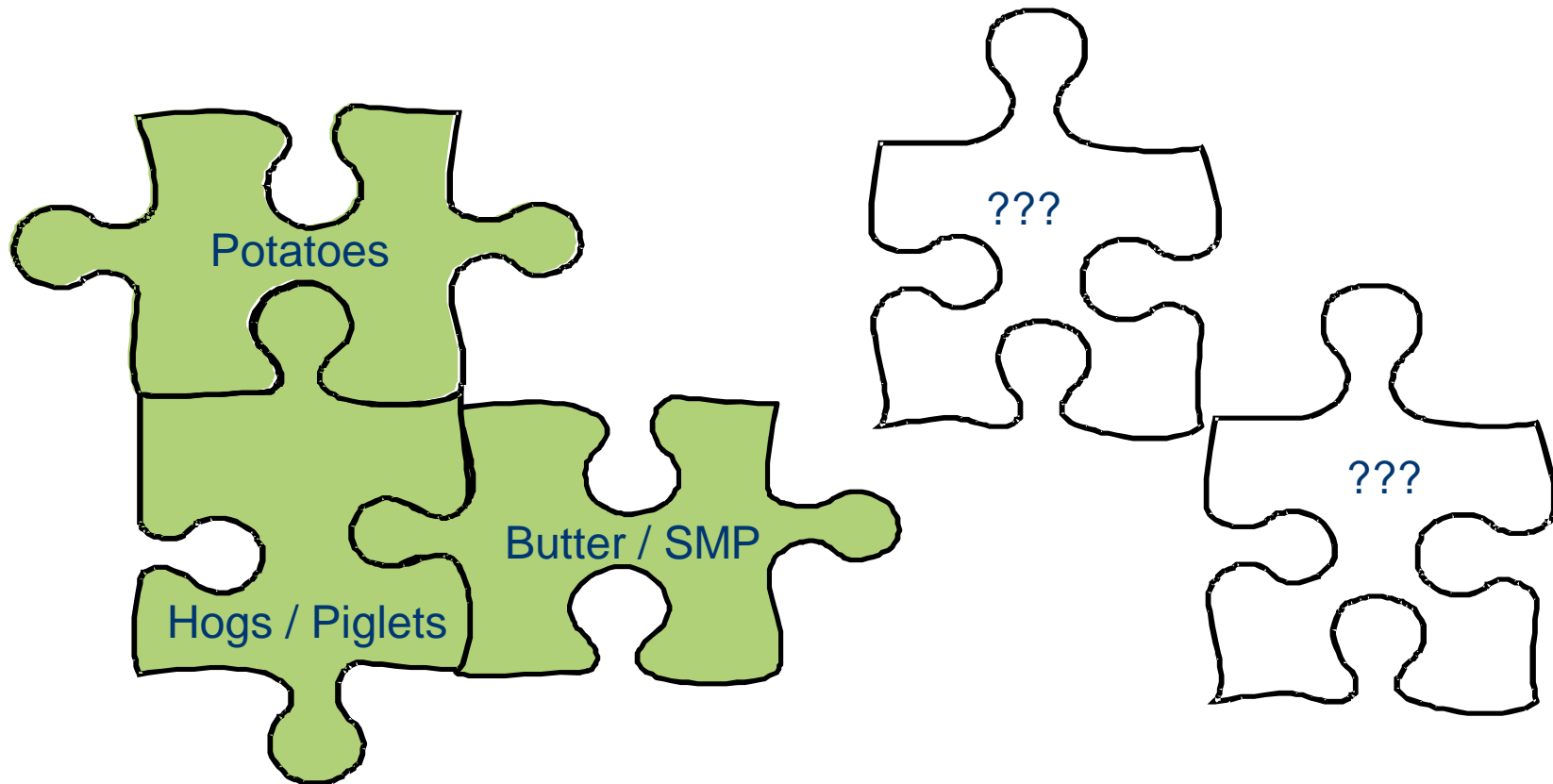
Commodity Derivatives					
CO2 Derivatives*	Dow Jones-UBS		Precious Metal	Power Derivatives	Agricultural Derivatives *
EUA (European Union Allowance) Futures	Dow Jones-UBS Commodity Futures	Dow Jones-UBS Industrial Metals Futures	Gold Futures & Options*	Phelix Base® Futures	European Processing Potato Futures
CER (Certified Emission Reductions) Futures	Dow Jones-UBS Agriculture Futures	Dow Jones-UBS Livestock Futures	Xetra-Gold® Futures and Options	Phelix Peak® Futures	London Potato Futures
	Dow Jones-UBS Energy Futures	Dow Jones-UBS Petroleum Futures	Silver Futures & Options*	Phelix Off-Peak® Futures	Piglet Futures
	Dow Jones-UBS Ex Energy Futures	Dow Jones-UBS Precious Metals Futures		Options on Phelix Base® Futures	Hog Futures
	Dow Jones-UBS Grains Futures	Dow Jones-UBS Softs Futures			Skimmed Milk Powder Futures
					Butter Futures

\* Available for trading in the U.S.



## The beginning.....

After the first steps into European Agricultural Derivatives in July 2009 Eurex added futures on Butter and Skimmed Milk Powder on 31.05.2010 – further products addressing regional and international industry needs are to follow ...



# Future trading on Dairy Products

## Opportunities

- Instrument for price risk management
- Possibility of early price fixing
- Opportunity of decoupling price determination from the physical sale of goods
- Mediation of counterparty risk
- Price information mechanism

## Product specifications – Eurex Dairy futures

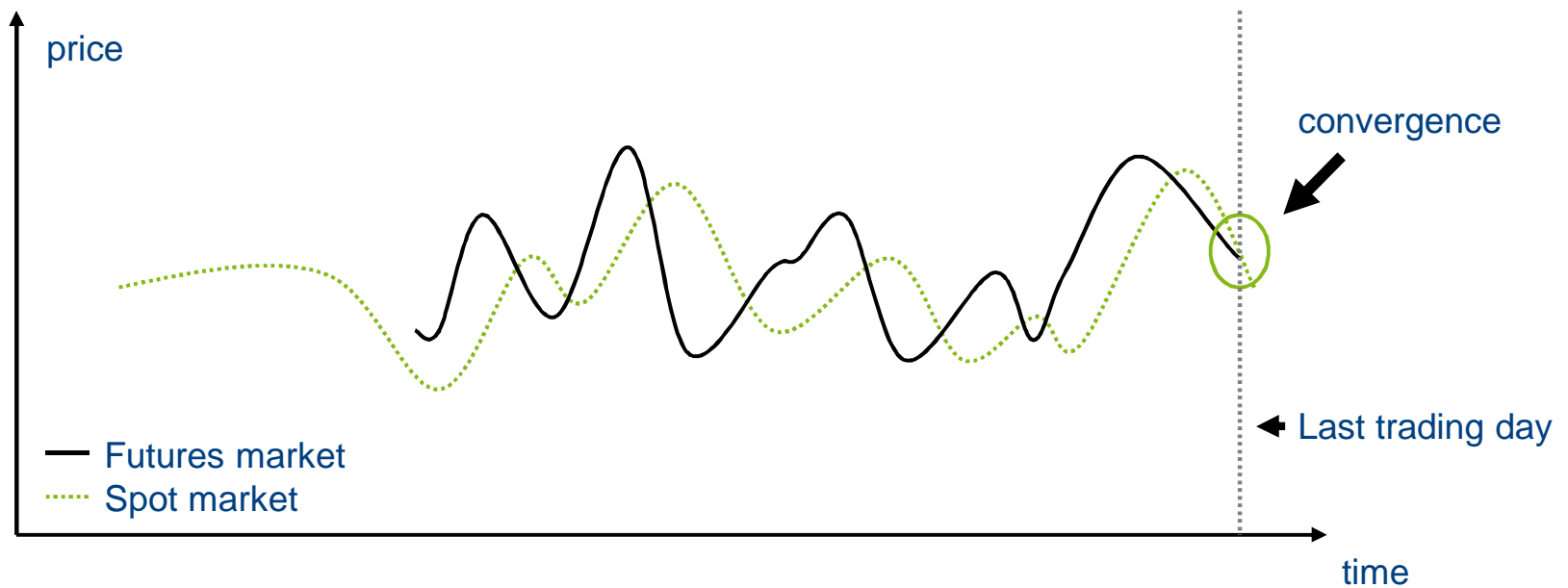
	Skimmed Milk Powder Futures	Butter Futures
Product ID	FSMP	FBUT
Product ISIN	DE000A1DKGX8	DE000A1DKGY6
Underlying	Eurex Skimmed Milk Powder Index	Eurex Butter Index
Contract Size	5 metric tons (5,000 kg)	
Currency	EUR	
Notation	In EUR per metric ton	
Price Quotation and Minimum Price Change	In points. The minimum price change is 1 point, equivalent to a value of EUR 5.	
Contract Months	Up to 18 months: The six nearest successive maturity months of the January, April, July and October cycle.	
Settlement	Cash settlement, difference between the final settlement price and the settlement price of the previous exchange trading day.	
Last Trading Day	The last trading day is the final settlement day.	
Final Settlement Day	The last Wednesday of the respective maturity month, if this is an exchange day; otherwise the exchange day immediately preceding that day.	
Final Settlement Price	Established by Eurex, based on the value of the relevant index on the final settlement day at 19:00 CET.	
Trading Hours	09:50-18:30 CET, on last trading day until 12:00 CET.	
Trading Fees	EUR 1.50	

# Future trading on Dairy Products

## Convergence principle

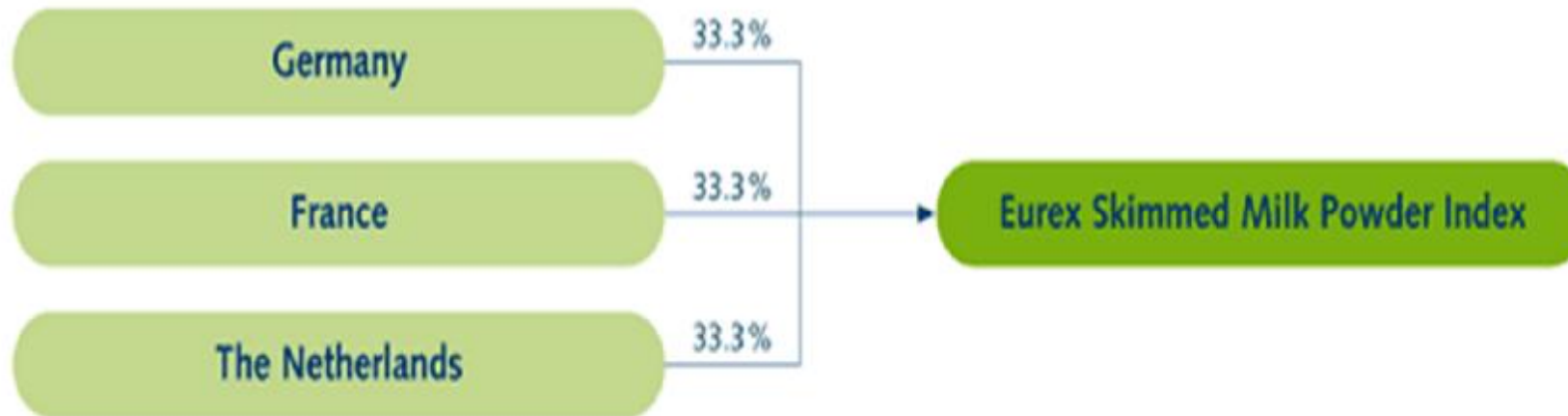
At the last trading day of every maturity contracts will be closed on the Eurex Butter- / Eurex Skimmed Milk Powder Index

schematic diagram



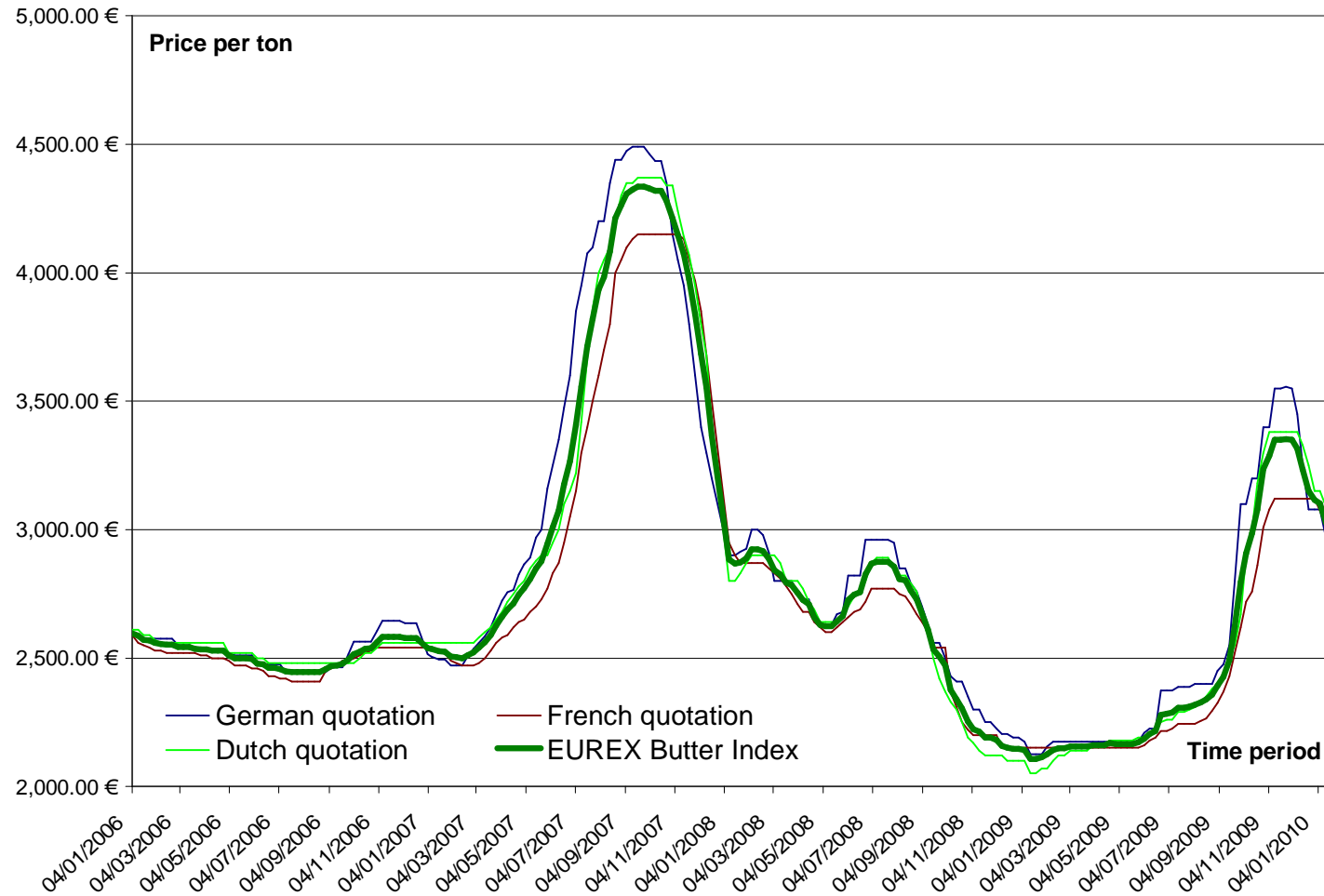
# Eurex Skimmed Milk Powder Index

The index is composed as follows:



- The Eurex Skimmed Milk Powder Futures are based on the Eurex Skimmed Milk Powder Index, which in turn reflects the market risk for skimmed milk powder used for food production in the European Economic Area.
- The index calculation process is built on the basis of established price-determination mechanisms in the respective countries; the index components are reflecting the spot market situation in the respective countries for skimmed milk powder (food quality) based on the Code Alimentarius ex works, loose exclusive value added tax (VAT) or other dues/ charges.

# Product characteristics, Eurex Butter Index

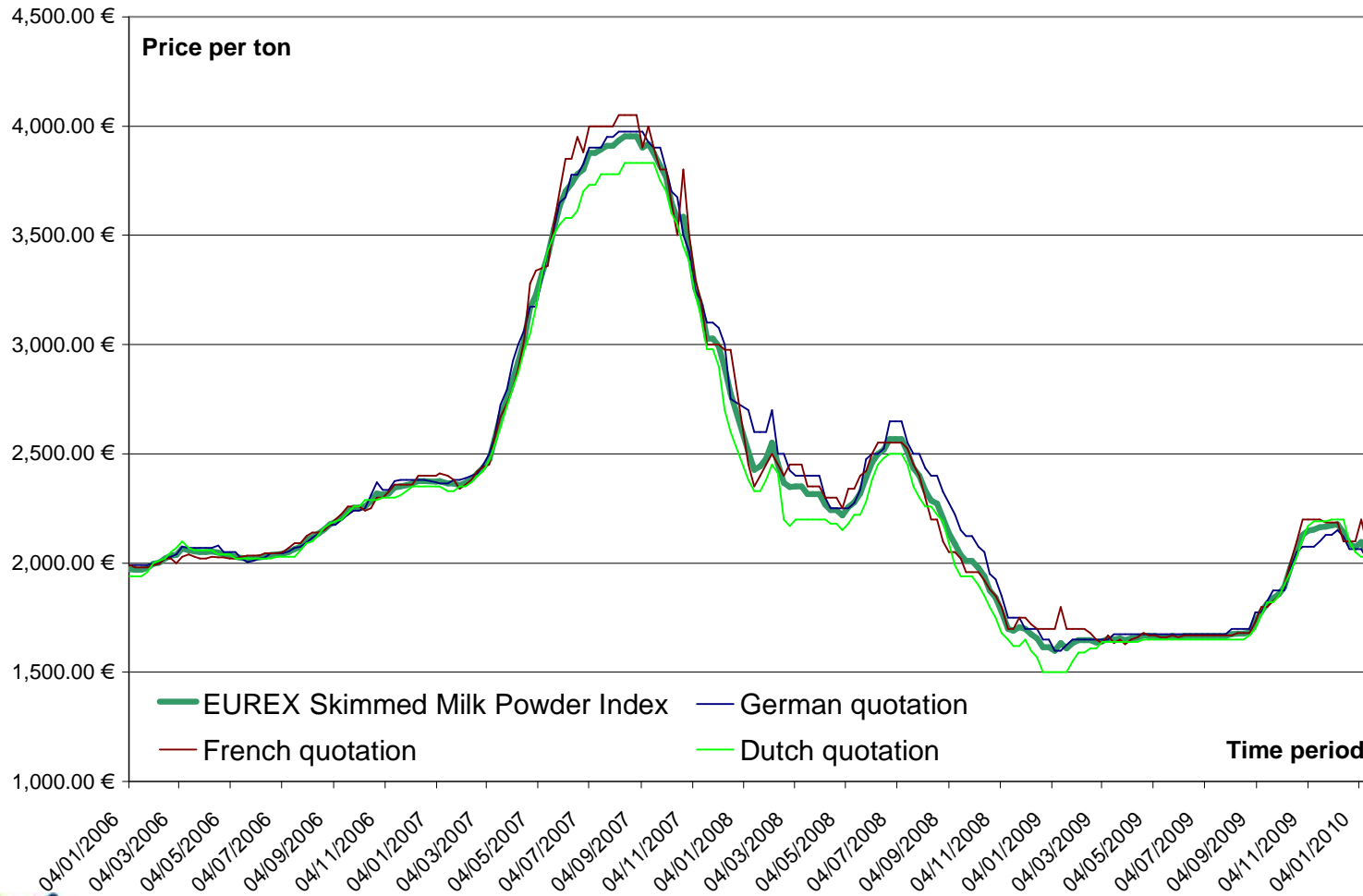


## Eurex Butter Index



- The index calculation process is built on the basis of established price-determination mechanisms in the respective countries; the index components are reflecting the spot market situation in the respective countries for block butter (food quality) ex works, loose exclusive value added tax (VAT) or other dues/ charges. The Eurex Butter Index is equivalent to the mean value of these price determinations.

# Product characteristics, Eurex Skimmed Milk Powder Index



## The way forward for the Eurex Dairy futures ...

-  **Education in Europe (Farmers, Cooperatives, Dairys etc.)**
-  **Bring in participants from the European value chain that have experience in hedging via futures markets (traders, producers)**
-  **Attract participants from the US and Oceania**

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**Thank you very much for your attention**

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