



MARKET IN AGRIBUSINESS,  
PROF. DR. BERNHARD BRÜMMER

# The World Dairy Markets

Dies ist eine Leseprobe. Es werden nicht alle enthaltenen Inhalte angezeigt.



Bundesministerium  
für Bildung  
und Forschung



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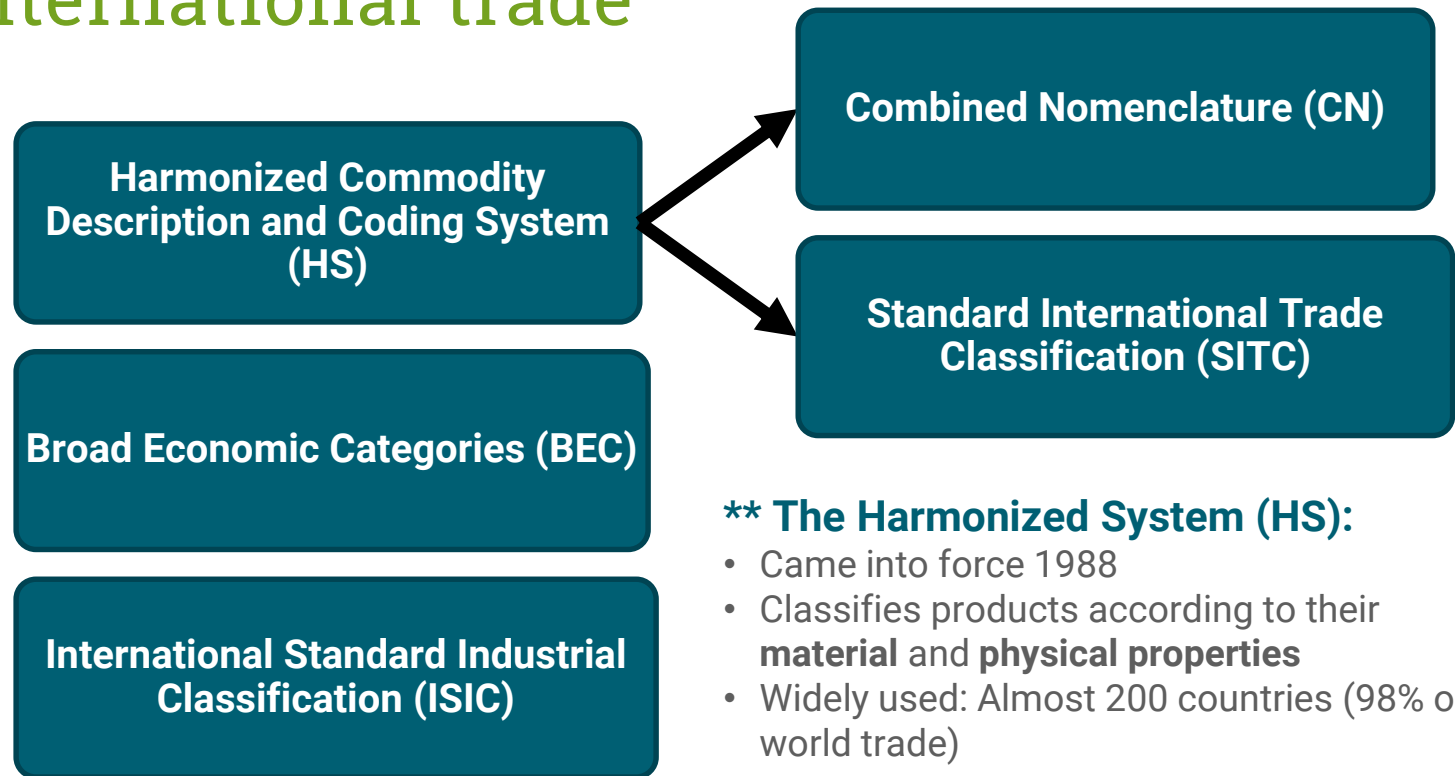
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# The World Dairy Markets

## 1. Product Classifications Systems

# Product classification systems in international trade



## \*\* The Harmonized System (HS):

- Came into force 1988
- Classifies products according to their **material** and **physical properties**
- Widely used: Almost 200 countries (98% of world trade)

# Product classification systems in international trade

**Harmonized  
Commodity  
Description and  
Coding System (HS)**

**Combined  
Nomenclature (CN)**

**Standard  
International Trade  
Classification  
(SITC)**

**Broad Economic  
Categories (BEC)**

**International  
Standard Industrial  
Classification (ISIC)**

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# Product classification systems in international trade

## Harmonized Commodity Description and Coding System (HS)

- Developed by World Customs Organization (WCO)
- Classifies according to material and physical properties (6-digit code)

## Combined Nomenclature (CN)

- Classification system of the European Communities
- Adds two digits to the HS code

## Standard International Trade Classification (SITC)

- Developed by United Nations
- In addition to HS: Classifies according to stage of processing and economic function

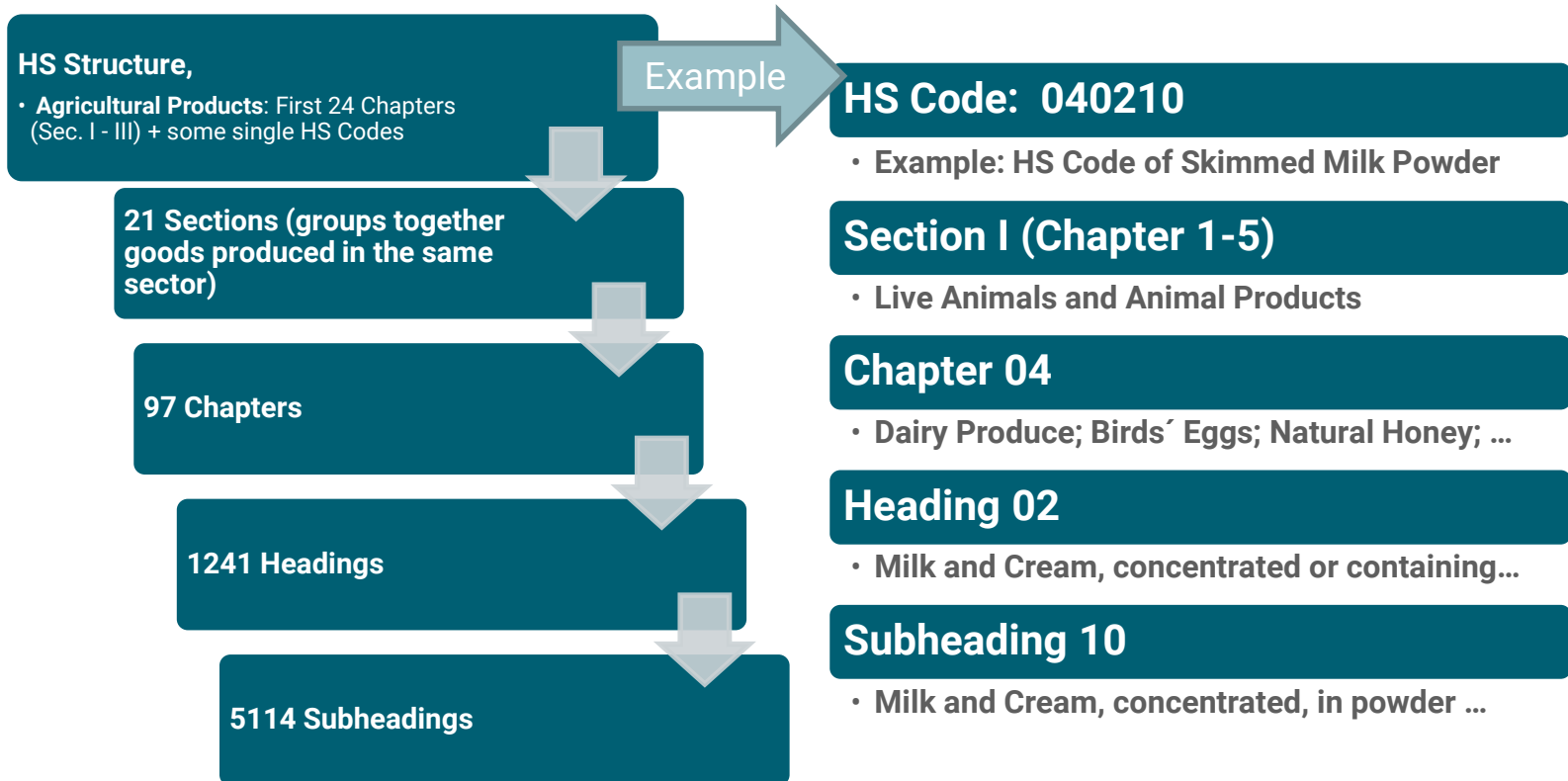
## Broad Economic Categories (BEC)

- Developed by United Nations
- Classifies into 19 categories (3-digit code)

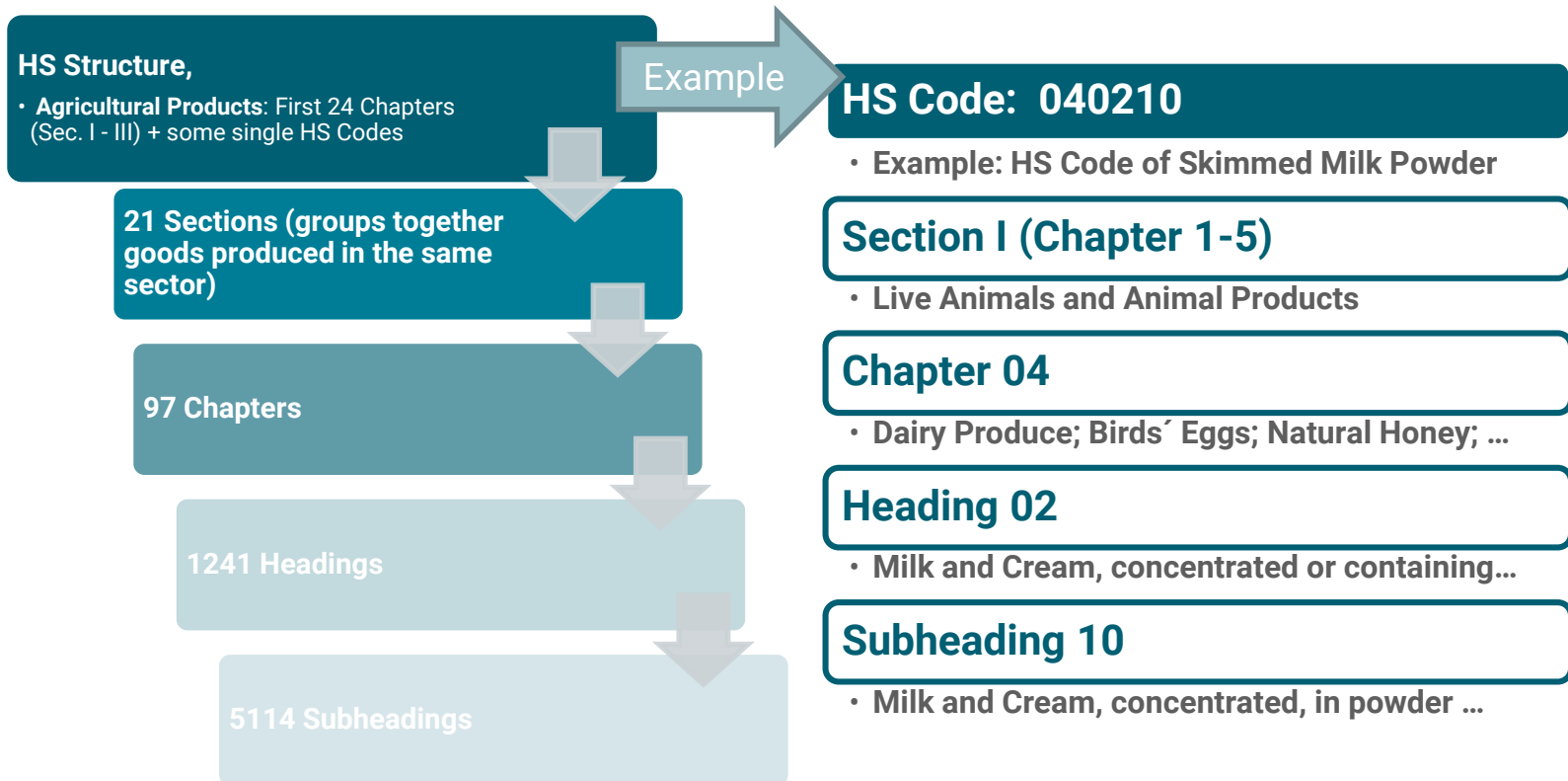
## International Standard Industrial Classification (ISIC)

- Developed by the OECD
- Does not classify products, but the principal economic activity of the producer

# The Harmonized System (HS)



# The Harmonized System (HS)





# Where can trade data (for EU) be found?

The screenshot shows the Eurostat website interface. The main navigation bar includes 'News', 'Data', 'Publications', 'About Eurostat', and 'Help'. The 'Data' section is active, and the 'INTERNATIONAL TRADE' category is selected. Under 'INTERNATIONAL TRADE', the 'DATABASE' sub-section is chosen. The 'International trade' tree structure is displayed, with 'International trade detailed data (detail)' highlighted. A red box encloses the list of data series under this category, including 'EU trade since 1988 by CN8 (DS-016890)', 'EU trade since 1988 by HS6 (DS-016893)', 'EU trade since 1988 by HS2-HS4 (DS-016894)', 'EU trade since 1988 by HS2,4,6 and CN8 (DS-645593)', 'EU trade since 1988 by HS2,4,6 and CN8 (DS-575274)', 'EU trade since 1988 by SITC (DS-018995)', 'EU trade since 1988 by BEC (DS-057555)', 'EXTRA EU trade since 1999 by mode of transport (NSTR) (DS-022469)', 'EXTRA EU trade since 2000 by mode of transport (HS6) (DS-043328)', 'EXTRA EU trade since 2000 by mode of transport (HS2-HS4) (DS-043327)', 'Adjusted EU-EXTRA imports by tariff regime, by CN8 (DS-041691)', 'Adjusted EU-EXTRA imports by tariff regime, by HS6 (DS-041718)', 'Adjusted EU-EXTRA imports by tariff regime, by HS2-HS4 (DS-041719)', 'EFTA trade since 1995 by SITC (DS-043227)', and 'Traditional international trade database access (ComExt) (comext)'. A blue callout box with an arrow points to the 'EU trade since 1988 by HS6 (DS-016893)' entry, containing the text: '1. In this website, we select the HS6 category'.

Source: Eurostat <http://ec.europa.eu/eurostat/web/international-trade/data/database>

# Where can trade data (for EU) be found?

2. We will enter in the next web page which shows the trade data of all EU countries.

The dataset here can be adjusted by clicking on the (+) sign beside the

- Period
- Product
- Reporters
- Flow
- Geopolitical partners
- Indicators

By click on the (+), the adjustment box will appear

The screenshot shows the Eurostat Data Explorer interface. The main title is "EU trade since 1988 by HS6" with a reference code [DS-016893]. The last update is 15-04-2016. The interface includes a search bar and several filter sections: "PERIOD" (set to 1988-2016), "PRODUCTS" (set to TOTAL), "REPORTER" (set to EU28\_EXTRA), "FLOW" (set to IMPORT), and "INDICATORS" (set to VALUE\_IN\_EUROS). A table of trade data is displayed, showing values for various EU countries and regions from January 2014 to April 2014. The table includes columns for "PERIOD", "REPORTER", and "VALUE\_IN\_EUROS". The data is organized into a grid with rows for different countries and regions, and columns for different time periods.

REPORTER	Jan. 2014	Feb. 2014	Mar. 2014	Apr. 2014
EU28 (AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SI, SK, UK)	145,199,175,560	131,705,610,251	139,385,006,381	138,380,289,937
EURO AREA 19 (AT, BE, CY, D, DE, DK, EE, ES, FI, FR, GR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SI, SK, UK)	109,260,685,043	99,847,587,676	105,060,384,849	103,523,349,887
AUSTRIA	2,876,456,817	2,776,346,901	2,556,477,725	2,692,684,534
BELGIUM (and LUXBG -> 1998)	10,370,305,075	9,300,516,166	10,202,344,008	10,180,901,631
BULGARIA	829,704,550	679,262,911	734,990,196	854,055,023
CYPRUS	129,584,787	89,535,409	102,830,428	101,922,794
CZECH REPUBLIC (CS -> 1992)	2,122,186,278	2,128,936,963	2,038,420,001	2,117,394,809
GERMANY (incl DD from 1991)	26,969,110,459	25,400,436,707	26,270,189,198	25,072,598,992
DENMARK	1,879,035,944	2,016,224,964	1,703,106,879	1,903,314,499
ESTONIA	187,441,822	188,178,955	218,339,306	216,624,782
SPAIN	9,891,751,569	9,401,006,750	9,761,642,791	9,368,003,127
FINLAND	1,616,940,446	1,358,053,982	1,491,997,869	1,829,410,517
FRANCE	14,876,949,440	12,395,338,560	13,604,757,338	14,060,771,452
UNITED KINGDOM	20,502,757,624	17,421,053,785	19,085,896,353	19,312,339,275
GREECE	2,042,261,281	2,274,011,754	2,130,674,852	1,717,782,819
HUNGARY	1,589,849,790	1,424,621,484	1,683,677,620	1,613,228,883
IRELAND	1,680,413,300	1,469,272,334	1,634,696,351	1,636,466,615
ITALY	13,725,503,411	12,690,408,623	12,583,375,073	12,786,276,573
LITHUANIA	677,567,799	654,136,330	706,206,370	774,238,393
LUXEMBOURG	282,468,626	321,819,002	242,634,958	261,531,758
LATVIA	233,581,674	212,716,177	220,165,707	217,660,104
MALTA	81,277,018	111,051,695	99,521,482	115,840,276
NETHERLANDS	20,237,605,155	18,234,875,680	20,311,857,305	19,517,914,926
POLAND	4,353,539,609	3,892,929,766	4,188,692,324	4,255,538,250
PORTUGAL	1,437,404,474	1,119,488,116	980,769,464	967,667,471
ROMANIA	1,032,904,912	1,212,214,251	1,171,469,943	1,207,521,496
SWEDEN	3,249,470,291	2,829,032,818	3,420,814,161	3,171,892,057
SLOVENIA	622,756,929	605,353,415	641,226,326	672,834,817
SLOVAKIA	1,301,304,961	1,185,040,720	1,280,674,068	1,312,216,306
CROATIA	379,041,519	253,745,633	297,554,095	421,655,758

Source: <http://appsso.eurostat.ec.europa.eu/nui/show.do>

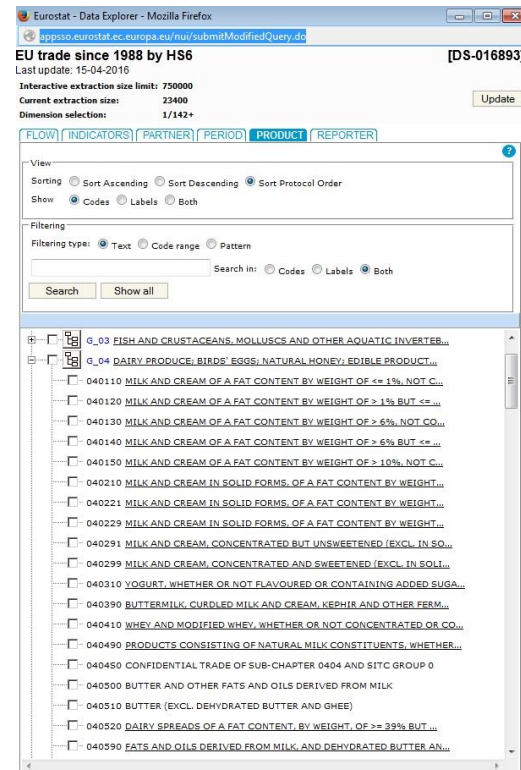
# Where can trade data (for EU) be found?

3. after clicking on the (+) sign we will enter in to the adjustment box (on the right).

Here we will select the requested category of commodity based on the HS code (Yogurt: 040310)

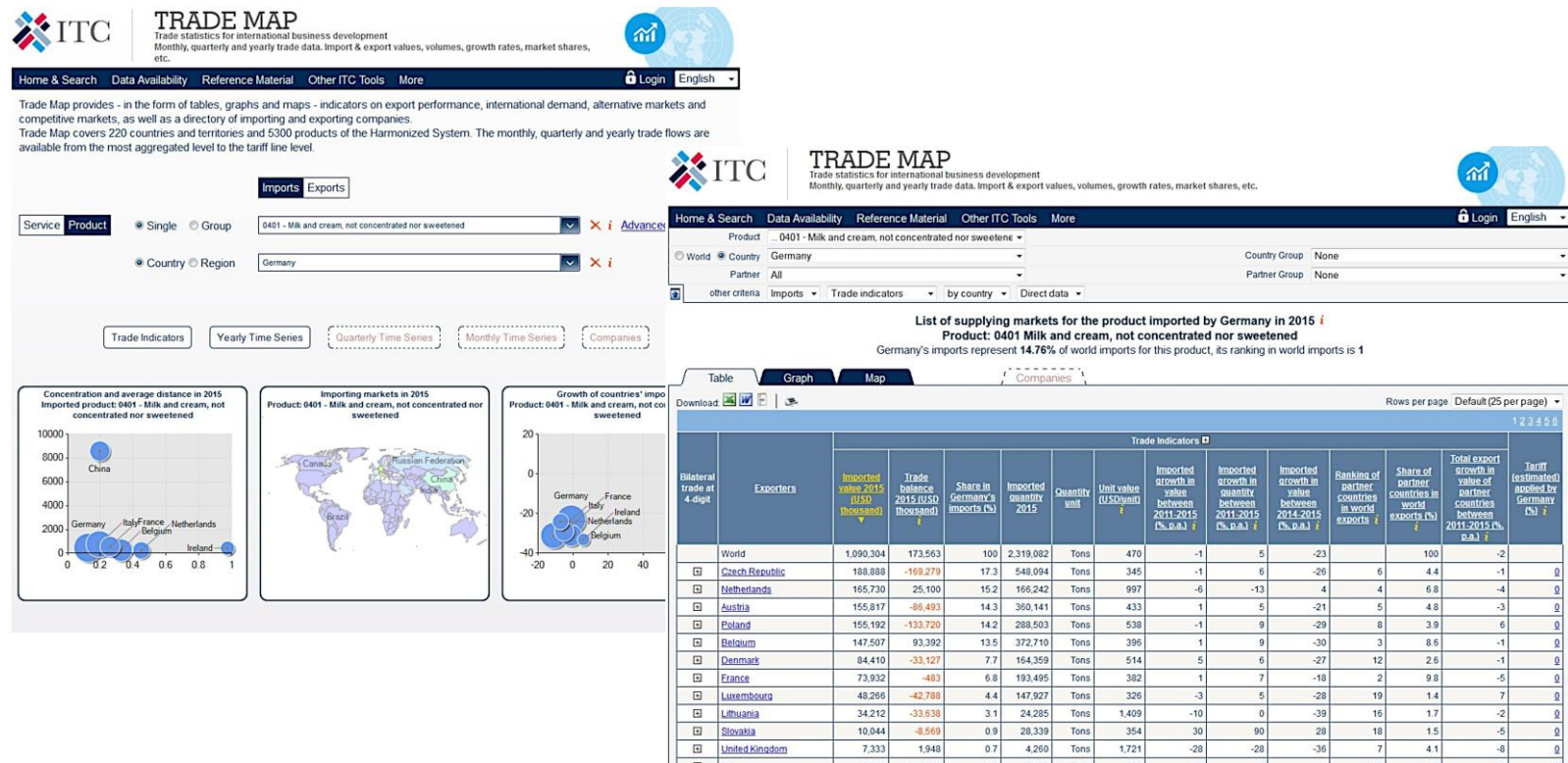
- We can also adjust the time period and other variables

Finally we click the “Update” bottom on top right and we see the requested data for EU on former webpage (see previous slide).



Source: <http://appsso.eurostat.ec.europa.eu/nui/setupModifyTableLayout.do>

# Trade Map for international data



## Classification of dairy products

Generell category	Specific products	Share of German dairy product. exported (EU intra-extra 2011)	HS Code
Fluid milk	Fresh whole milk	15.1%	0401
	UHT milk		
Fresh milk products	Yogurt	11.9%	040310
	Cultured milk		040390
	Ice cream		210500
Milk powders	Skimmed milk powder (SMP)	8.4%	040210
	Whole milk powder (WMP)	2.2%	040221,040229
	Butter milk powder (BMP)	-	040390
Butter fats	Cream	3.8%	040130
	Butter	5.4%	040510,040520
	Butter Oil		040590
Nonfat components	Milk protein concentrates (MPC)	0.7%	040490
	Whey proteins	5.5%	040410
	Lactose	2.2%	170211, 170219
	Casein	2.5%	3501
Cheese	Fresh cheese	41.8%	0406
	Processed cheese		
	Natural aged cheese		

Source: own presentation

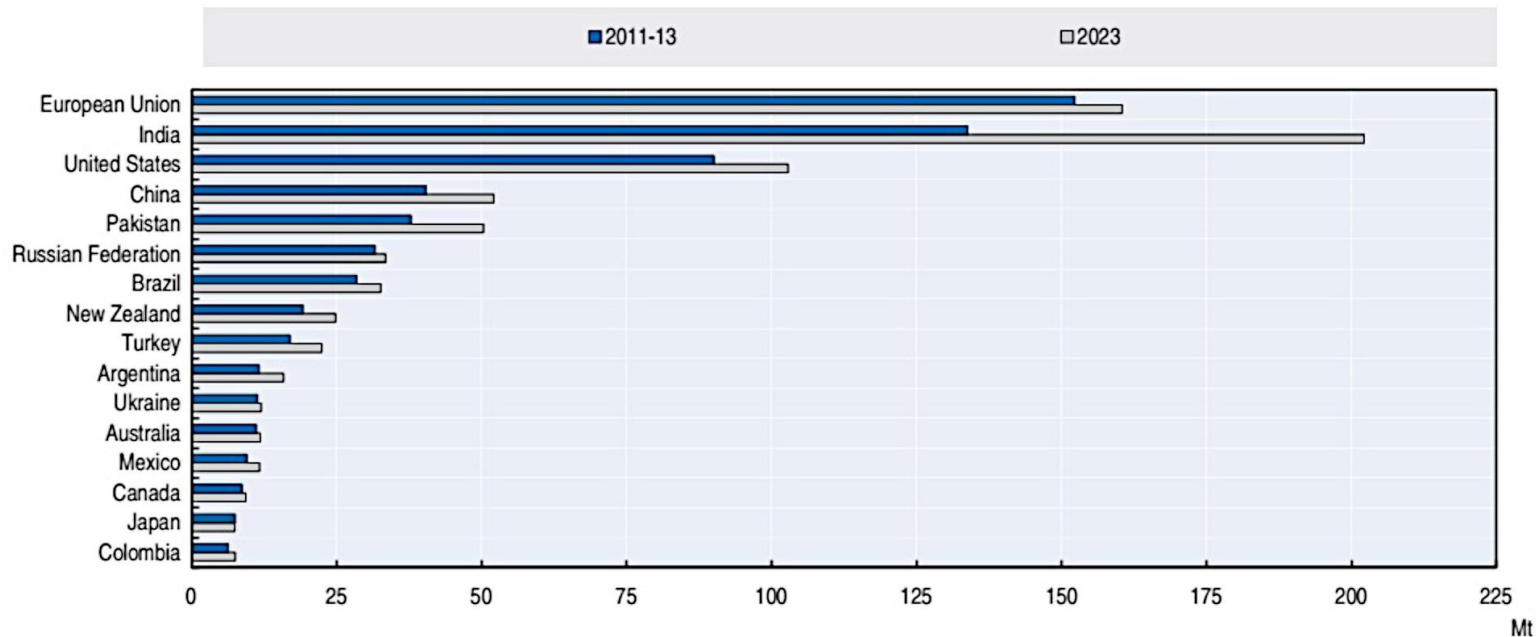
# The World Dairy Markets

## 2. International Trade in Dairy Products

## AGRICULTURAL OUTLOOK 2014-2023

# Outlook for milk production until 2023

Figure 9.3. Outlook for milk production

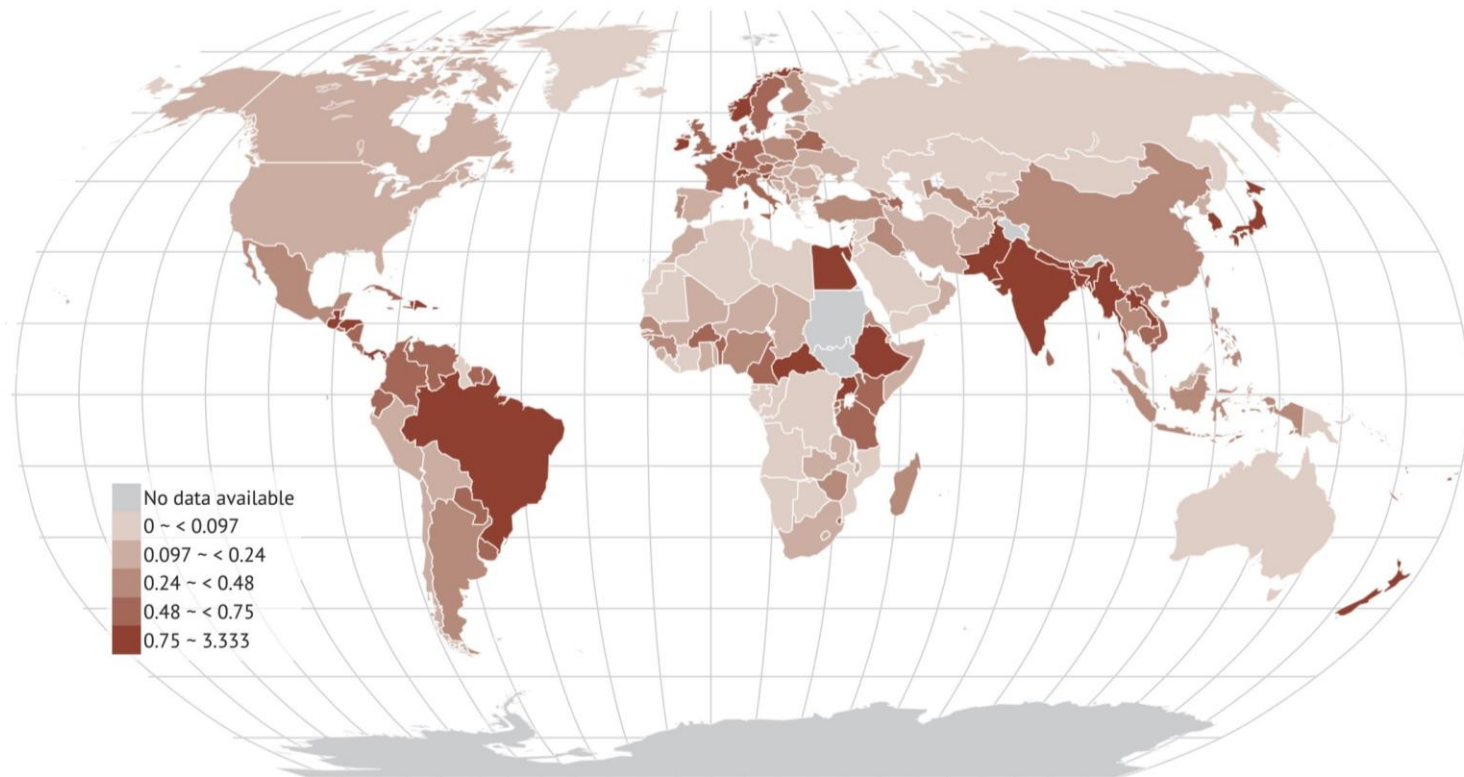


Source: OECD-FAO, <http://dx.doi.org/10.1787/888933100758>



HEADS PER HA (2012)

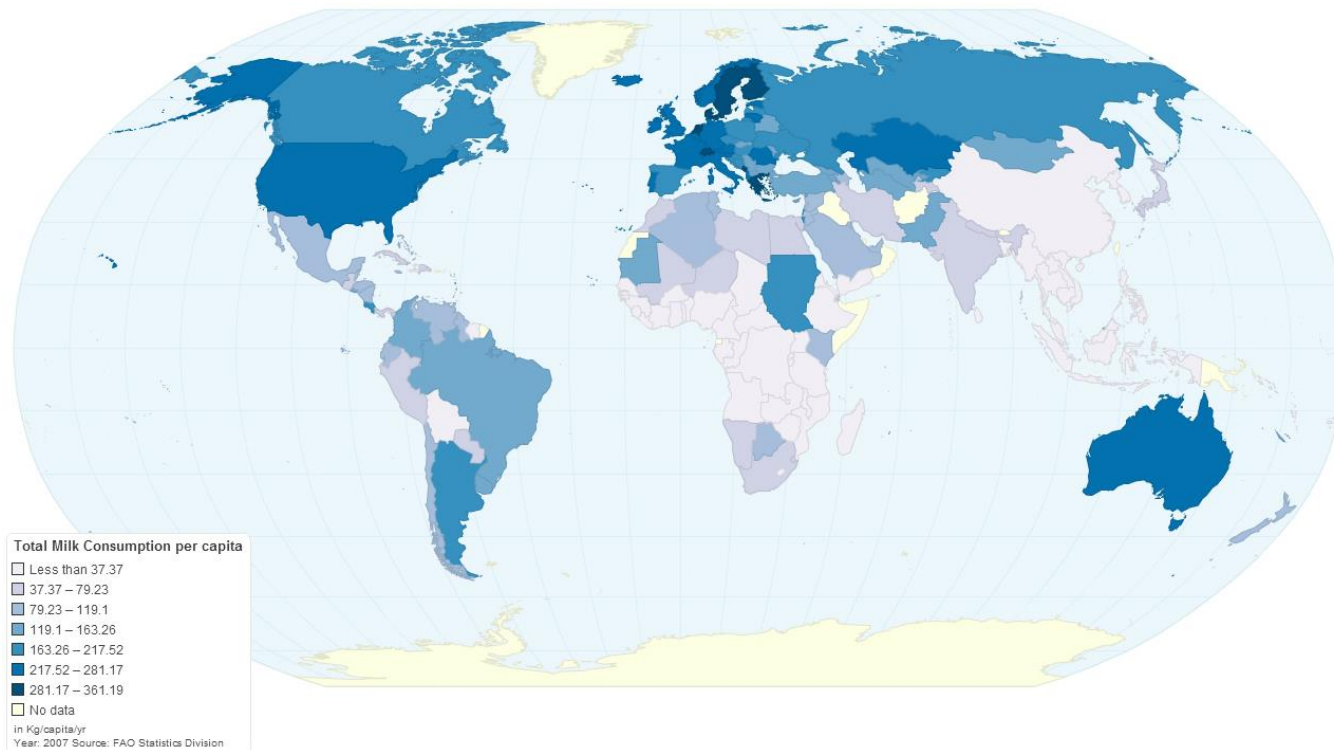
## Cattle and buffaloes per ha of agricultural area



Source: FAO Statistical Pocketbook 2015, p.31



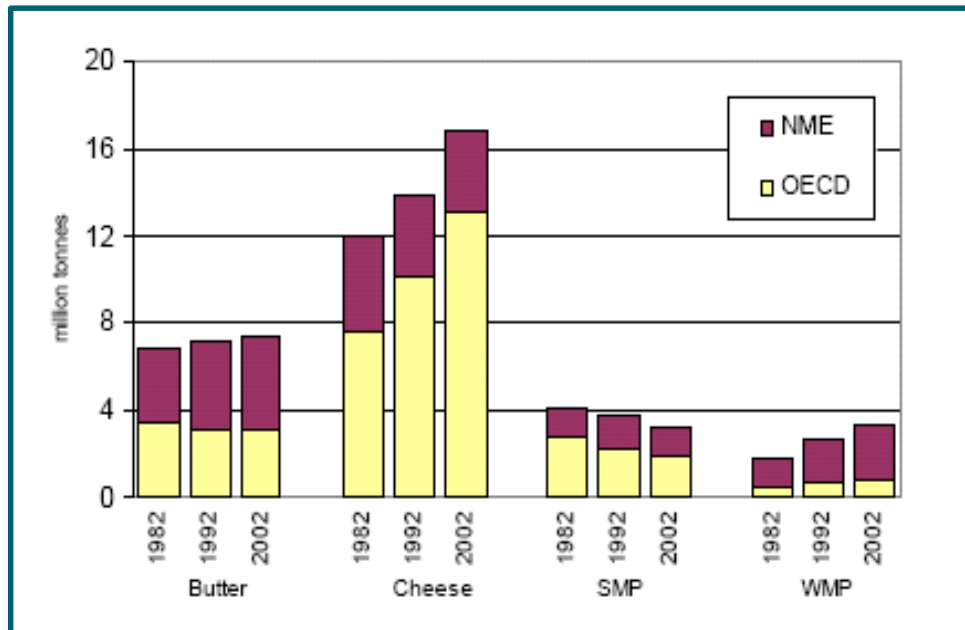
## Milk consumption: litre per capita (2007)



Source: FAO Statistics Division 2011 <http://chartsbin.com/view/1491>, <http://www.fao.org/faostat/en/#data/CL>

CONSUMPTION TRENDS OF DAIRY PRODUCTS IN OECD AND NON-MEMBER ECONOMIES (NME)

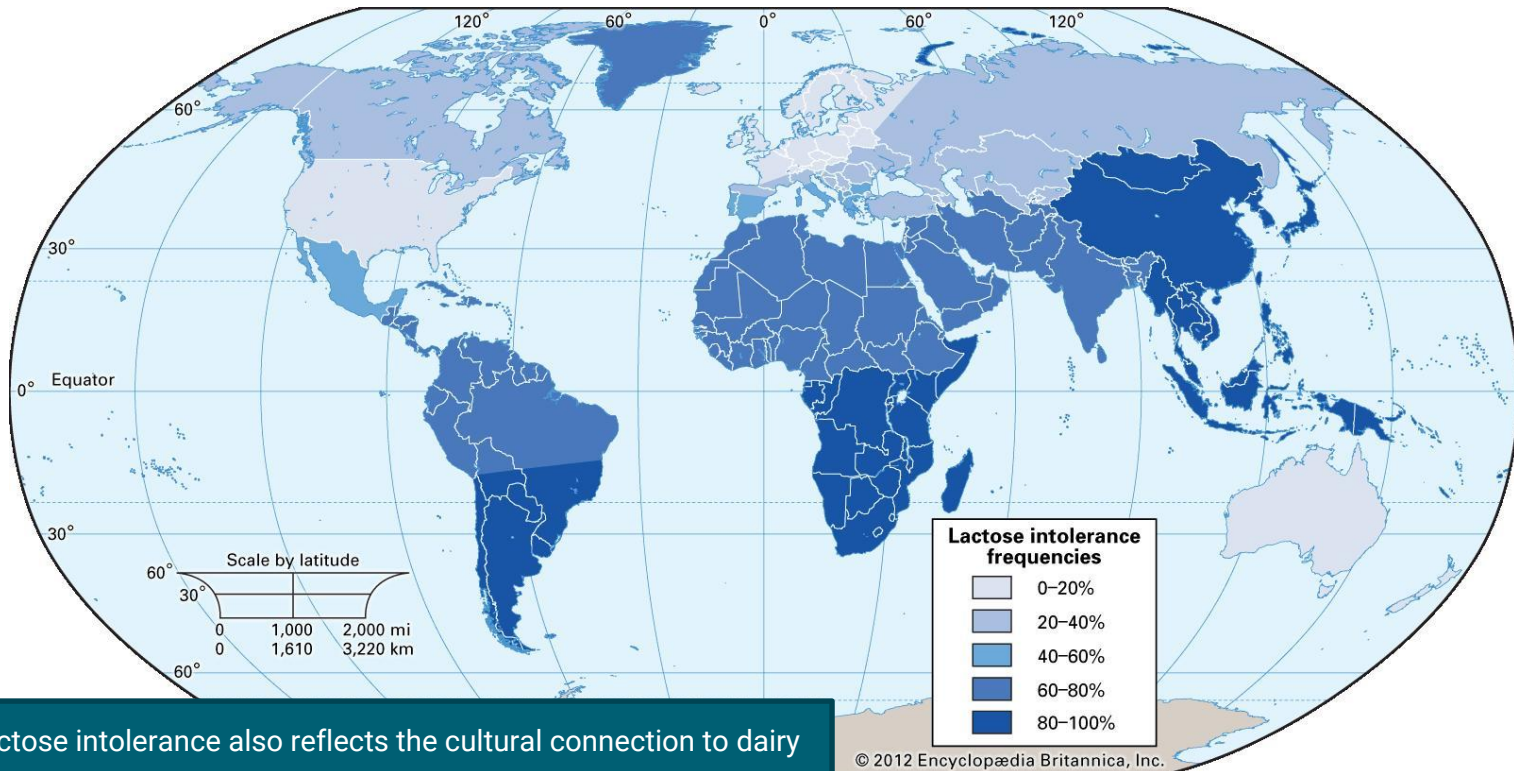
## Where are dairy products consumed?



- In developed countries (OECD countries) just the consumption of **cheese** is increasing
- In developing countries the consumption of **WMP** and **butter** is increasing.

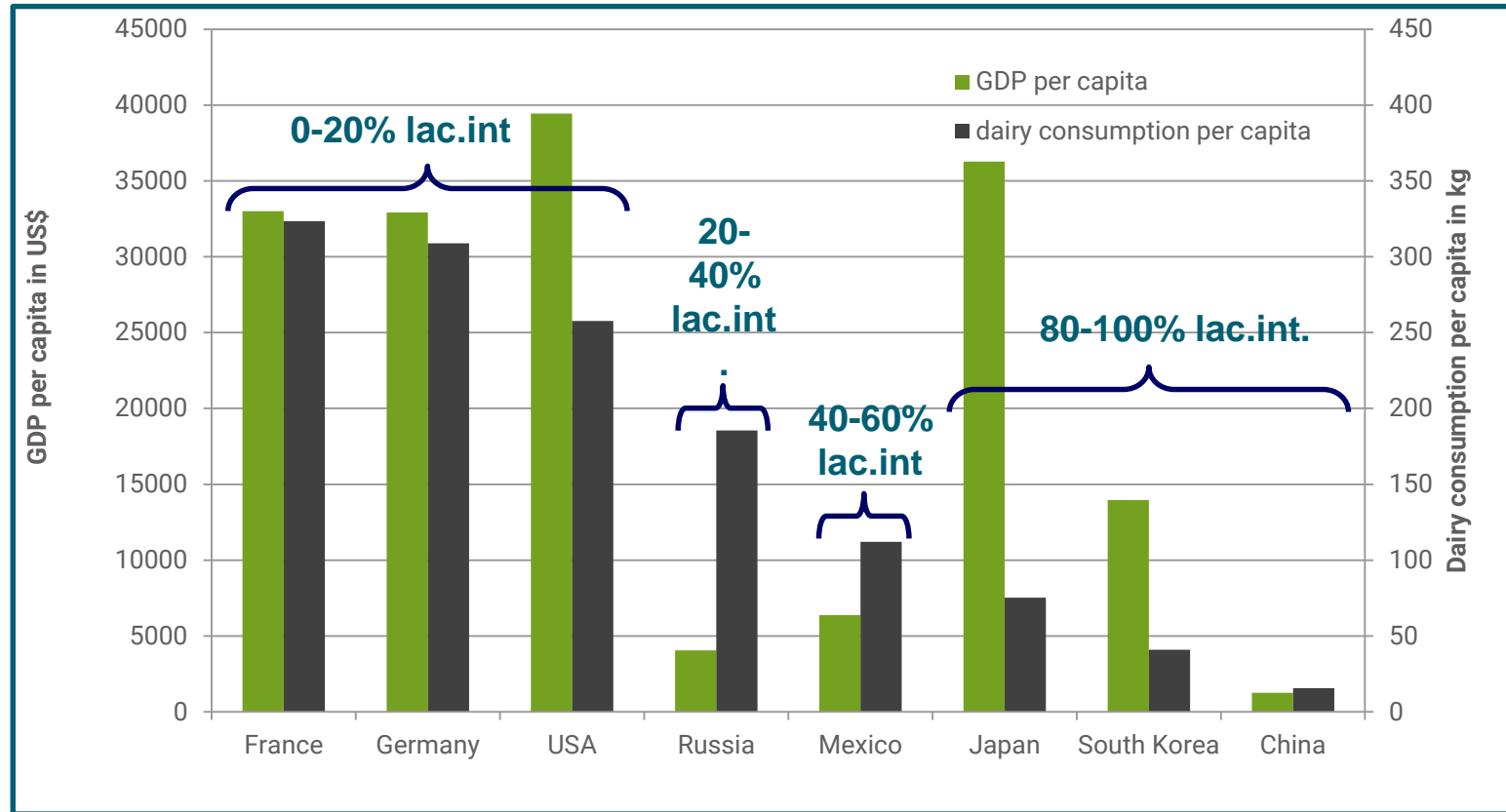
OECD (2005). An analysis of dairy policy reform and trade liberalisation

## Lactose intolerance by countries and ethnicity



Source: Encyclopedia Britannica

# Dairy consumption and lactose intolerance



Source: Own calculations

## Dairy trade items: Definitions

### Whole Milk Powder (WMP)

- contains all the constituents of fresh milk

### Skim Milk Powder (SMP)

- is the Codex term for milk powder with the fat removed. It is also called nonfat dry milk by U.S. Code of Federal Regulations (CFR)

### Whey protein

- is commonly obtained from two major sources, either as a coproduct of cheese production (sweet whey), or during the production of acidified products, such as cottage cheese, some yogurt, or casein (acid whey)
- Whey Protein Concentrates (WPC)
- Whey Protein Isolates (WPI)

### Milk Protein Concentrates (MPC)

- MPC and MPI are ingredients obtained by the partial removal of non-protein constituents (lactose and minerals) from skim milk such that the finished dry product contains 40% or more protein by weight (MPC) or 90% or more protein by weight (MPI).

### Casein

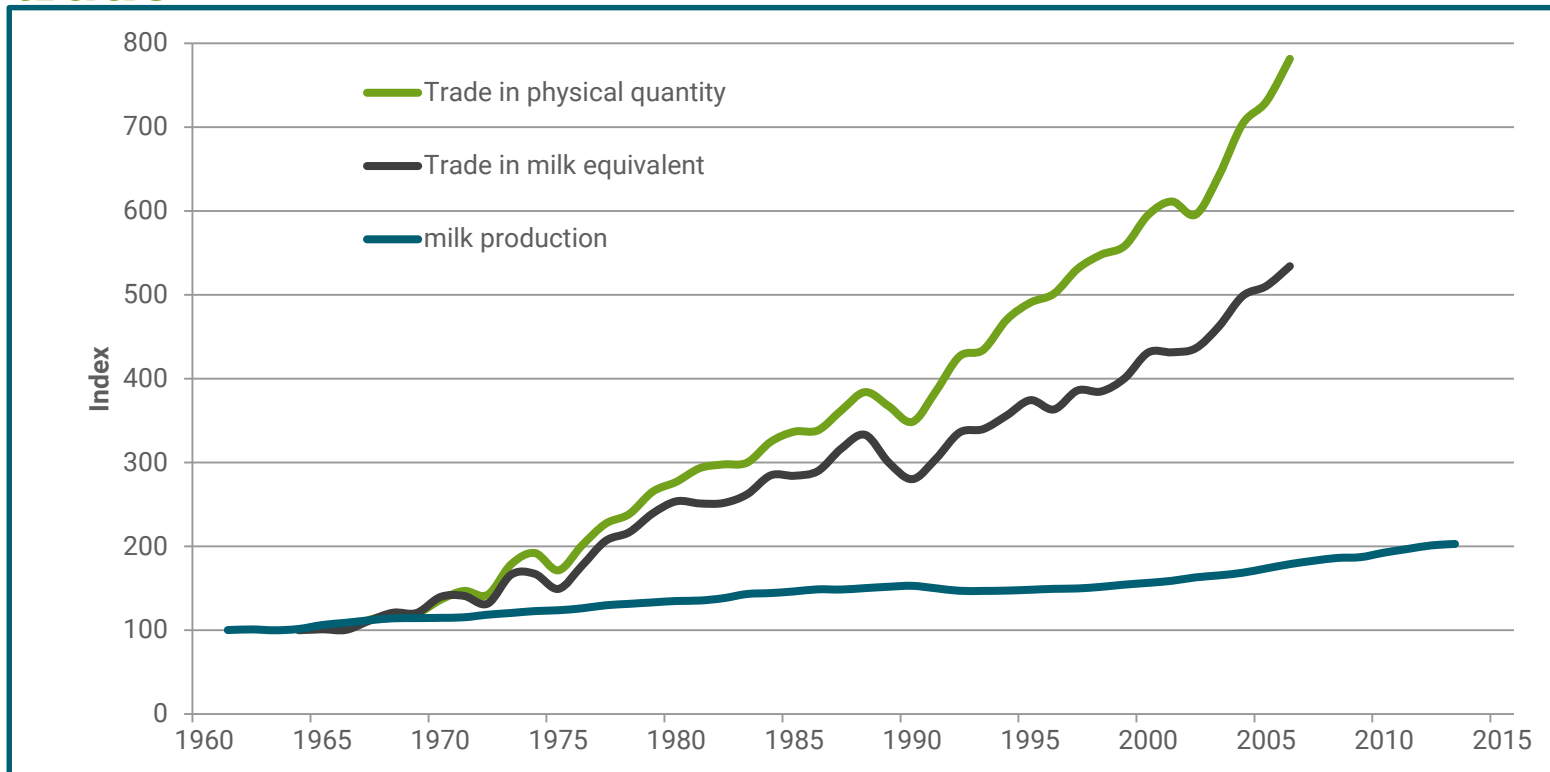
- can be broadly defined as the ingredient derived from “separating, washing and drying the coagulum of skim milk and/or other products derived from milk” (Codex Stan 290–1995b)

### Children Milk

- Infant formula, follow on formula (FOF), growing up milk (GUM) or toddler milk

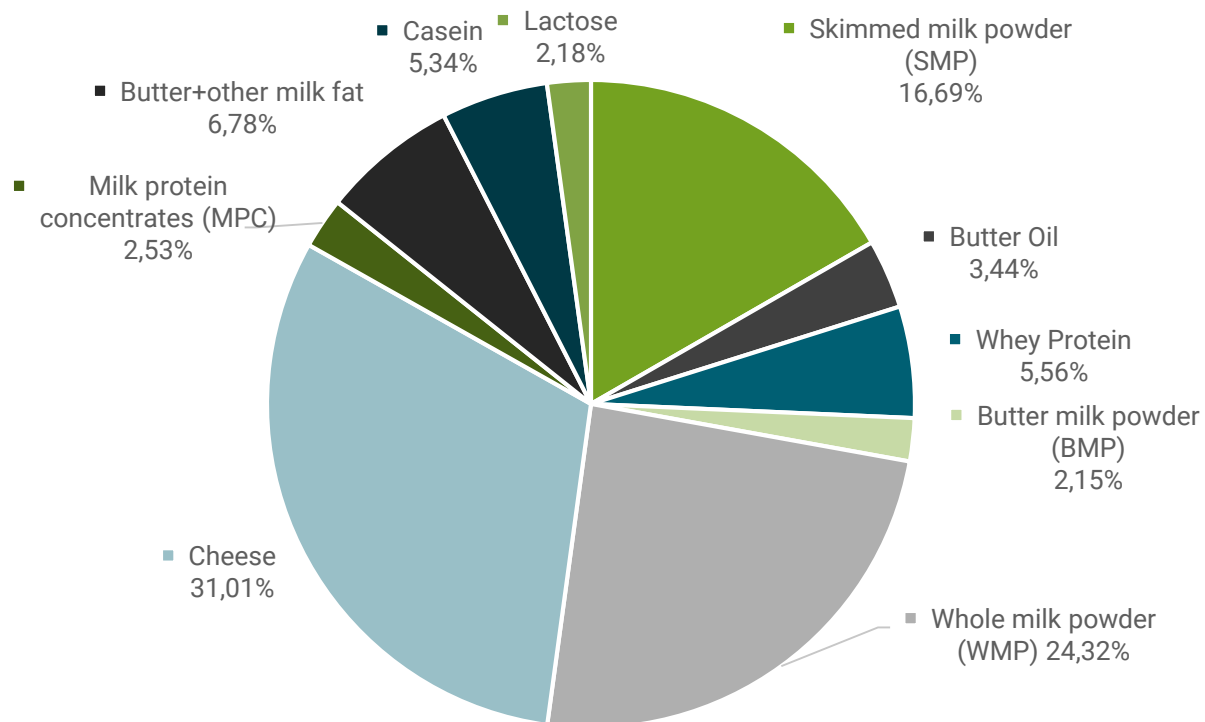
Source: Lagrange et al. (2015)

## Development of world wide milk production and trade



Source: Production, FAO

## The importance of specific dairy products for trade (export based on adjusted dollar value)

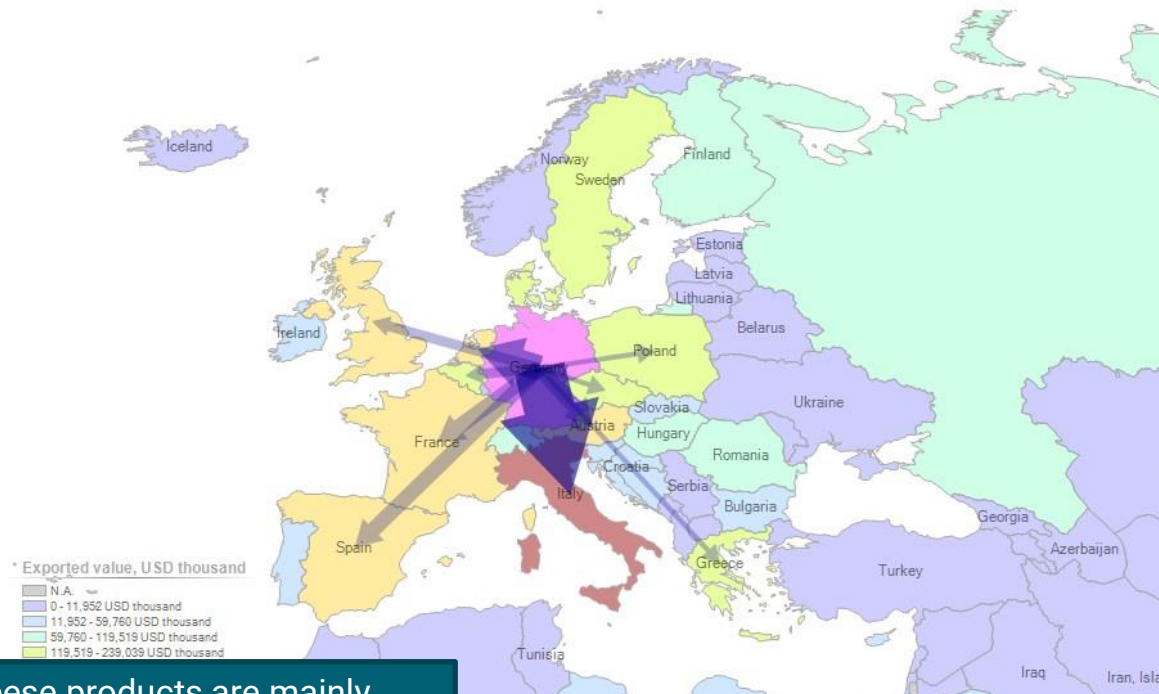


Data source: Trade Map, <http://www.trademap.org/Index.aspx>

# Germany's major cheese export destinations in 2014

List of importing markets for a product exported by Germany in 2014

Product : 0406 Cheese and curd



German cheese products are mainly exported to European countries

Source: TradeMap