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Global Trade in Milkfat

Butter

Anhydrous Milkfat

Milkfat Blends

Meeting / Presentation Name

Global Butterfat Production

During 2009 world production of cow's milk was approximately 583 million metric tons.

The butterfat portion of the milk was about 20.4 million metric tons (based on 3.5% milkfat).

Source: OECD-FAO Agricultural Outlook 2009 & USDEC staff estimates.

Global Butterfat Utilization 2009

- Drinking milk 11%
- Yogurt 2%
- Cream 8%
- Cheese 18%
- WMP 11%
- Butter 17%
- Ghee, AMF, Butteroil 22%
- Other uses (blends) 11%

Source: PM Food and Dairy Consulting 2010

Global Butterfat Utilization 2009

- Drinking Milk 2,250,000 MT
- Yogurt 450,000 MT
- Cream 1,500,000 MT
- Cheese 3,700,000 MT
- WMP 2,280,000 MT
- Butter 3,500,000 MT
- Ghee, AMF, Butteroil 4,500,000 MT
- Other uses (Blends) 2,120,000
- Total 20,400,000 MT

Source: PM Food and Dairy Consulting 2010, OECD-FAO and USDEC staff estimates

Major Butterfat Product Producing Countries 2010 Estimate

• EU 27	1,886,000 MT
• Other Europe	67,000 MT
• CIS	554,000 MT
• North America	946,000 MT
• South America	242,000 MT
• MENA	475,000 MT
• Sub Sahara Africa	91,000 MT
• ASIA	4,194,000 MT
• Oceania	552,000 MT
• World	9,007,000 MT

Source: PM Food and Dairy Consulting 2010



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Butter Consumption 2009 – Selected Countries

- EU-27 1,920,000 MT
- USA 800,000 MT
- Russia 420,000 MT
- India 115,000 MT
- Turkey 114,000 MT
- Australia 93,000 MT
- Japan 91,000 MT
- Canada 88,000 MT

Major Global Exporters of Butter and AMF 2009

• New Zealand	454,000 MT
• EU-27	160,000 MT
• Australia	70,000 MT
• Belarus	60,000 MT
• USA	25,000 MT
• Ukraine	8, 000 MT
• Other Countries	50,000 MT
• Total	827,000 MT

AMF/Butteroil Exports

- Just a few countries are major players in the global trade of AMF and butteroil.
- Yet 25% of global trade of butterfat is AMF and butteroil.
- New Zealand exports about 75% of internationally traded AMF and butteroil.
- The EU and Australia together export about 20% of the international supply.

Source: PM Food and Dairy Consulting 2010

World Butter Exports (2009)

- Total exports approximately 500,000 MT
- Top four exporters:
 - New Zealand 274,188 MT (54% share)
 - EU 112,211 MT
 - Australia 49,654 MT
 - U.S. 22,826 MT

U.S. Butter Production

- 2009 U.S. butter production was 675,860 MT (1.49 billion pounds)*
- ***Milkfat Market 2009*** predicts that U.S. production of butter could increase by 225,000 to 320,000 MT (500-700 million pounds) by 2014 to a total of 900,000-996,000 MT.

Source: Milkfat Market 2009

Markets for U.S. Butter

- Huge domestic market (average export over past several years is less than 10%)
- Some major open markets for U.S. butter are:
 - Russia
 - Mexico
 - North Africa
 - Middle East
 - Iran

U.S. Butter Exports (2009)

- Largest export markets:
 - ME/NA: over 15,000 MT – Saudi Arabia and Egypt were the largest buyers
 - Asia: over 1,120 MT – South Korea was largest buyer
 - Mexico: over 1,120 MT
 - FSU: over 800 MT

Source: Global Trade Atlas

CODEX Definitions (partial)

- **Anhydrous Milkfat (AMF)** – contains minimum 99.8% milkfat
- **Butteroil** contains minimum 99.6% milkfat

Both products can be manufactured directly from milk or from products obtained from milk

Global Trade of AMF/Butteroil (2009)

- Top exporters*
 - New Zealand 174,249 MT
 - Australia 30,241 MT
 - EU-27 27,537 MT

*May include products that are not specifically AMF or butteroil

U.S. AMF/Butteroil

- Total U. S. capacity is limited (estimated 17,000 MT)
- Much of the capacity is in facilities that are old and, in some cases, are not in the best location based on milk supply.
- Some capacity increase is expected during 2010.

Source: USDEC from Industry Sources 2010

Top Global Markets for AMF/Butteroil (2009)

- S.E. Asia 51,200 MT
- Mexico 49,000 MT
- ME/NA 31,000 MT
- India 15,000 MT
- U.S. 14,800 MT
- China 11,000 MT

NOTE: Does not include food preparations into U.S.

From Milkfat Market 2009

“The AMF/butteroil market appears to be more dynamic and growing than the global butter market.”

“AMF/butteroil trade appears to be limited by production capacity, with the exception of New Zealand where capacity has increased over the years and excess capacity is maintained.”

Source: Milkfat Market 2009

Milkfat Based Blends

- “Tariff-smart products have been designed to minimize production costs, offer functional advantages, and minimize duties.”
- “In a number of markets blends represent 3 to 4 times the volume of straight AMF and/or butteroil imports.”

Source: Milkfat Market 2009 and USDEC from Industry Sources 2010

U.S. Food Preparation Imports (2009)

- New Zealand 31,714 MT
- Mexico 16,838 MT*
- Australia 755 MT

*Mexico doesn't manufacture AMF or butteroil, but it does enjoy NAFTA advantages with the U. S. regarding the import of dairy products that meet NAFTA Rules of Origin

U.S. AMF/Butteroil Plus Blend Imports (2009)

- AMF/Butteroil 14,836 MT
- Food Preparations 49,307 MT
- **Total 64,143 MT**

U.S. Butterfat Trade Balance (2009)

- U.S. Production: 675,860 MT
- Imports:
 - AMF/Butteroil 14,836 MT
 - Butter 9,233 MT
 - Blends 49,307 MT
 - **Total 73,376 MT**

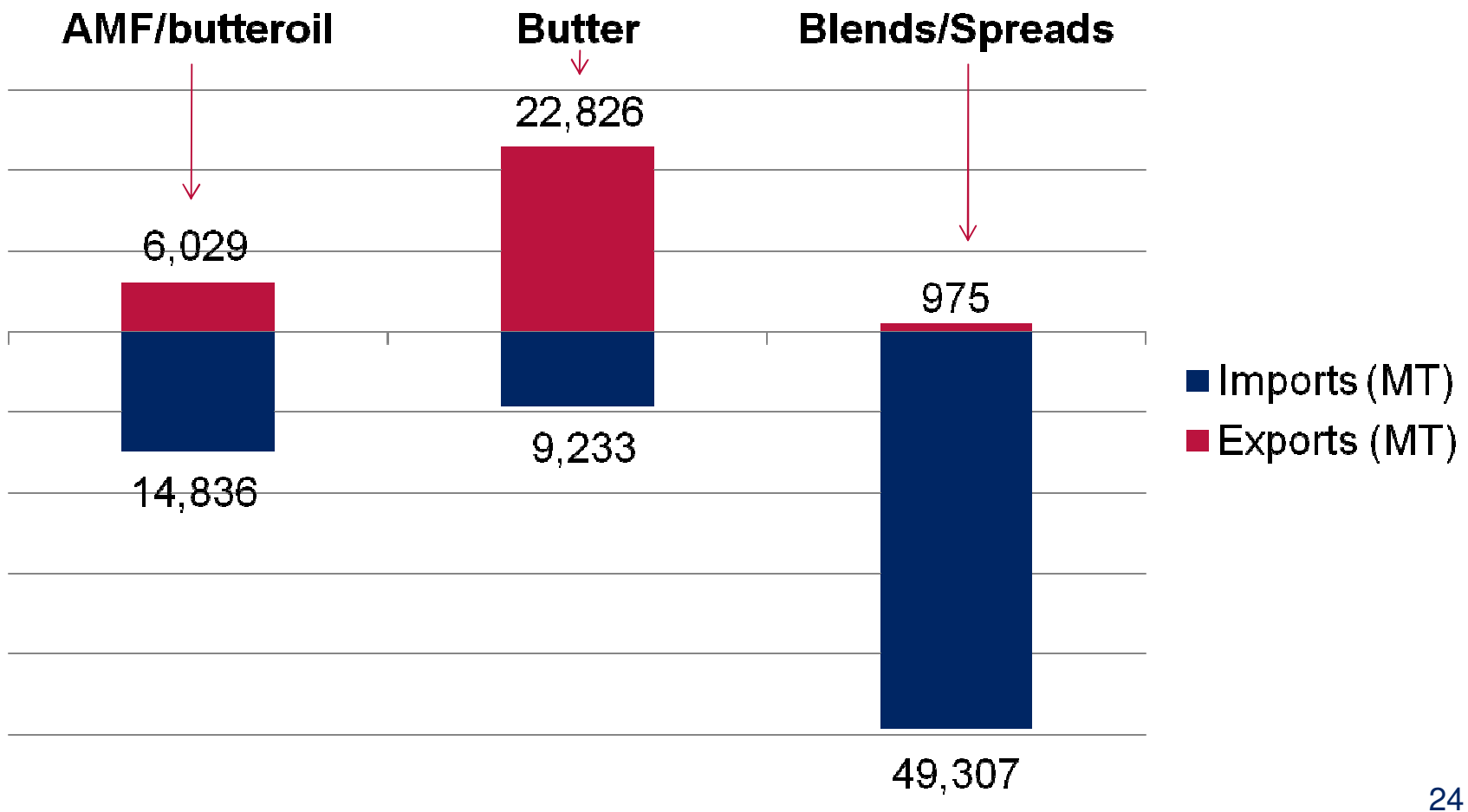


U.S. Butterfat Trade Balance (2009)

- U.S. Production: 675,860 MT
- Exports:
 - AMF/Butteroil 6,029 MT
 - Butter 22,826 MT
 - Spreads 975 MT
 - **Total 29,830 MT**



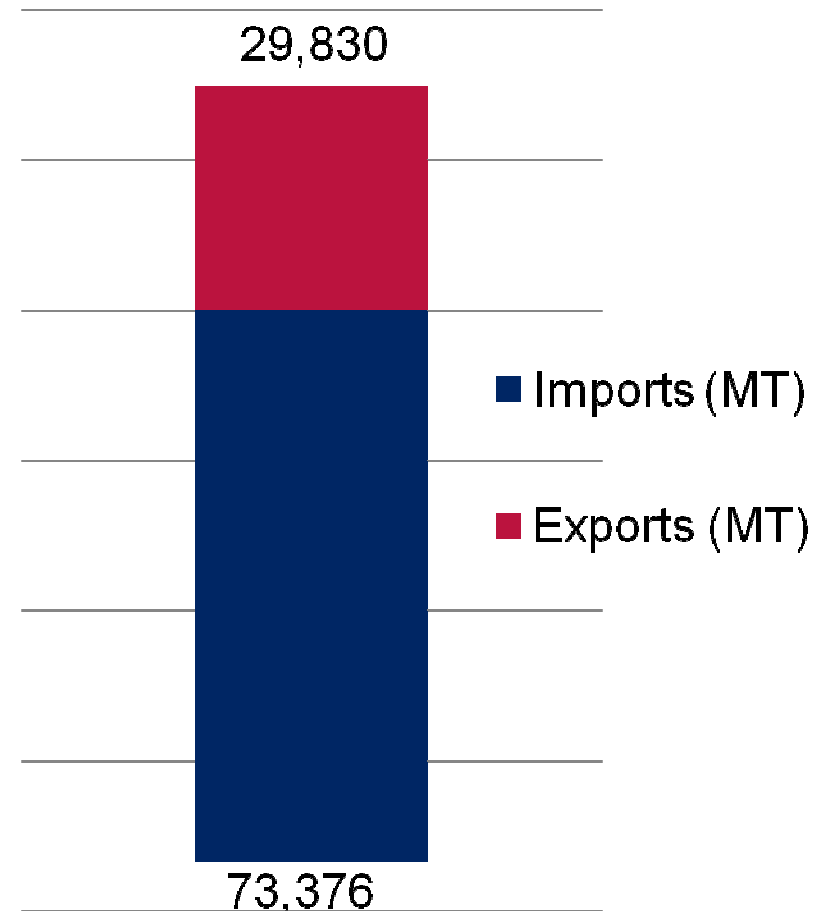
U.S. Butterfat Trade Balance (2009)





U. S. Butterfat Trade Balance (2009)

- Imports 73,376 MT
- Exports 29,830 MT
- **Shortage 43,546 MT**





The Surge of 2008

- Oil price dependent economies have high oil revenue (Russia, Middle East, Mexico).
- Asian economies are relatively strong (especially China).
- Dairy production from New Zealand and Australia were down due to weather issues.
- Melamine disaster in China (4th quarter).

2009 Market Surplus

- Oil drops from U.S. \$140 to U.S. \$45 per barrel - serious issue for Russia and Mexico, less of an issue for the Middle East.
- Some currencies crash:
 - Russian Ruble goes from R25 to R49 (per USD).
 - Pushed Russians to buy from FSU or domestically.

Source: Moscow Times

2009 Market Surplus

- Turmoil in financial markets causes credit crisis
 - In Russia and Mexico, many companies lost their credit line and access to foreign exchange (i.e. no USD or Euros).
- New Zealand dairy production rebounded and there was less decline than anticipated in Australia.
- U.S. dairy production starts out very strong.
- Global demand drops (along with prices).

Moving from Butterfat Deficit to Surplus?

- One conclusion of the *Butterfat Market 2009* study was that U.S. butter production may increase by as much as 320,000 MT in the next 5 years
- A second conclusion is that the AMF/butteroil market appears to be more dynamic and growing than the butter market

Source: Milkfat Market 2009

Moving from Butterfat Deficit to Surplus?

- If milk production in the U.S. continues to grow, and if **cheese production growth rate lags behind milk production growth rate** – then the U.S. will move from a butterfat deficit to a butterfat surplus.
- Large growth in WMP production/sales could reduce “cheese effect”.
- Need to look at product mix in the context of having a significant structural surplus of butterfat.

ISSUES

- Some major butter exporters (most notably New Zealand) produce CODEX butter from AMF in a continuous process from cream.
- The process is flexible – so either butter or AMF can be produced on the same line from cream.
- Stored AMF can be converted to butter on the same equipment as needed – allowing greater flexibility for product mix.
- US regulations do not allow for butter to produced from AMF.
- Source: USDEC from industry sources 2010, USCFR

Issues

- Ultimately – New Zealand will sell their butterfat.
 - New Zealand has no support price or export restitution program.
 - New Zealand does not like to store butterfat.
 - The “tariff buster” AMF blend business in the U.S. is good business for NZ (compared to dumping in NA).

Source: USDEC, from industry sources 2010

Issues

- Russia – world’s largest butterfat market – has made it more difficult to import U.S products.
- Russia has cooled on joining the WTO.
 - Gives more latitude in increasing tariffs, establishing quotas and otherwise controlling imports.
- Russia has established a requirement for U.S. plants to be inspected and approved before product can be exported to Russia.

Source: Moscow Times, USDEC from Industry Sources



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Final Points

The Major players on the world market for butter are New Zealand, EU and Australia which accounted for more than 80% of the country to country trade.

New Zealand is becoming more dominating with a world market share during 2009 of more than 50%.

The U.S. exported a record high of 105,000 MT during 2008, compared to 40,000 MT for 2007 and dropping to 25,000 MT in 2009.

SOURCE: PM Food and Dairy Consulting 2010, USDEC from Industry Sources



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Final Points

- The export of AMF is handled by a very small group of exporting countries but is a significant portion of overall country to country trade in butterfat.
- The major world importers of butter are Russia, EU and Mexico – followed by Iran and Egypt.
- Russia has been the biggest importer of butter for decades with a peak of over 400,000 MT in some years (from EU intervention stocks and New Zealand during the 1980's).

Source: Milkfat Market 2009

Final Points

- A new middle class of 2 billion consumers is expected to appear in the “emerging economies” in the next decade, especially in Asia and South America.
- The penetration of large retailers into Asia and South America will accelerate development of the “cold chain” and facilitate market development of butter and other refrigerated products.
- Butter and butteroil imports to Asia will be driven primarily by ice cream and bakery demand, but with use in recombining still a major volume.

Source: PM Consulting 2010, USDEC from Industry Sources 2010

Final Points

- Domestic Sales
- Domestic Displacement of Imports
- Exports
- U.S. pricing in the International Market.
- AMF and AMF Blends.
- Whole Milk Powder.



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David Stiefer

dstiefer@usdec.org