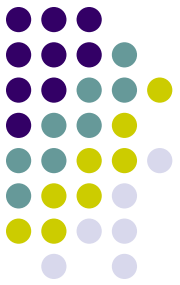


Dairy Trade Issues Including Milk Protein Concentrates

Ken Bailey
Penn State University

Southern Dairy Conference, Atlanta, Georgia





My Talk Today

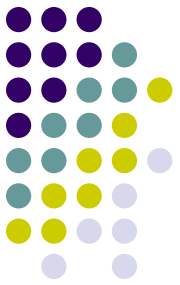
- How to look at trade
- Analysis of year-to-date
- What about MPC's?
- Summary of International Trade Commission hearing on milk protein imports

USDA's Assessment of Dairy Trade



- Milk equivalent measures of milk
- Dollar values
- Select imports (Chapter 4)

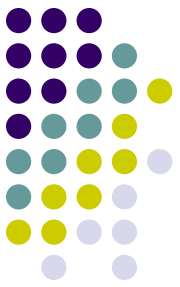
- Problems:
 - “Milk equivalent” measures are distorting
 - Not measuring all trade
 - No common basis



My Alternative

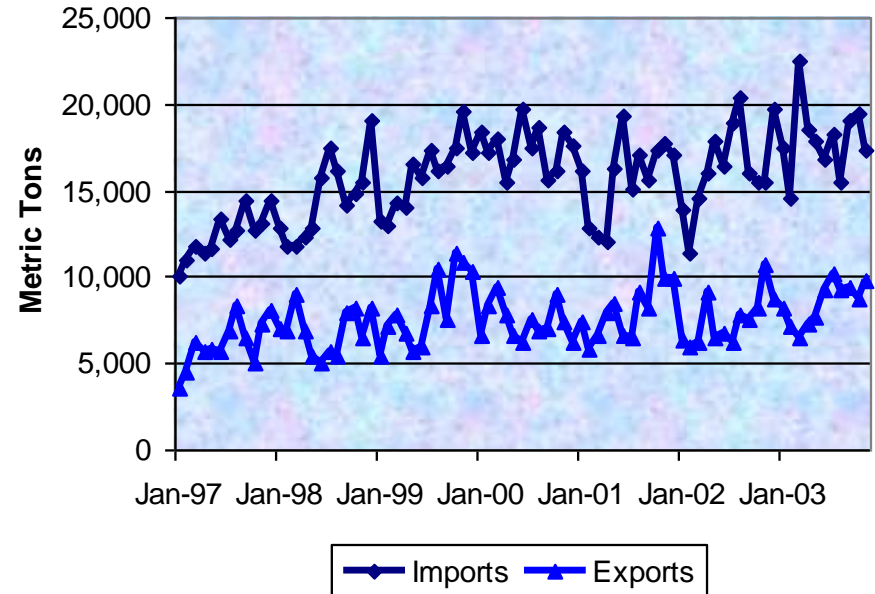
- Common measure for trade:
 - Butterfat
 - Protein
 - Other dairy solids
- Inclusive groupings of trade:
 - Butter equivalent
 - Skim milk powder
 - MPC/casein equivalent

Protein in Imports Ahead of Exports



- More imports, less exports
- Jan-Nov 2003 imports are up 11.8%
- Jan-Nov 2003 exports are up 14.4%
- Jan-Nov 2003 NET imports up 9.5%

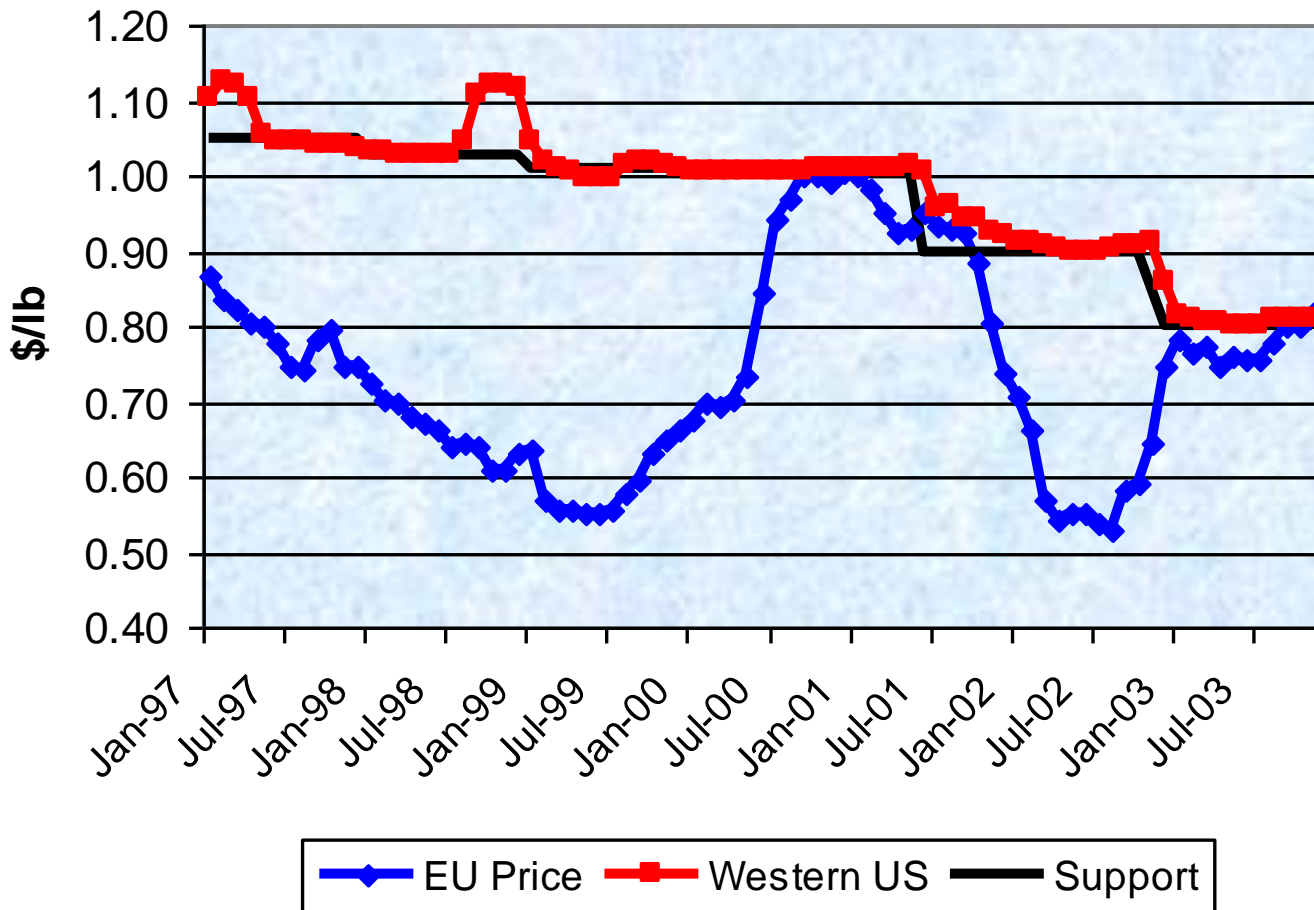
Protein Content of U.S. Dairy Trade



World Trends in Protein Prices



World Skim Milk Prices

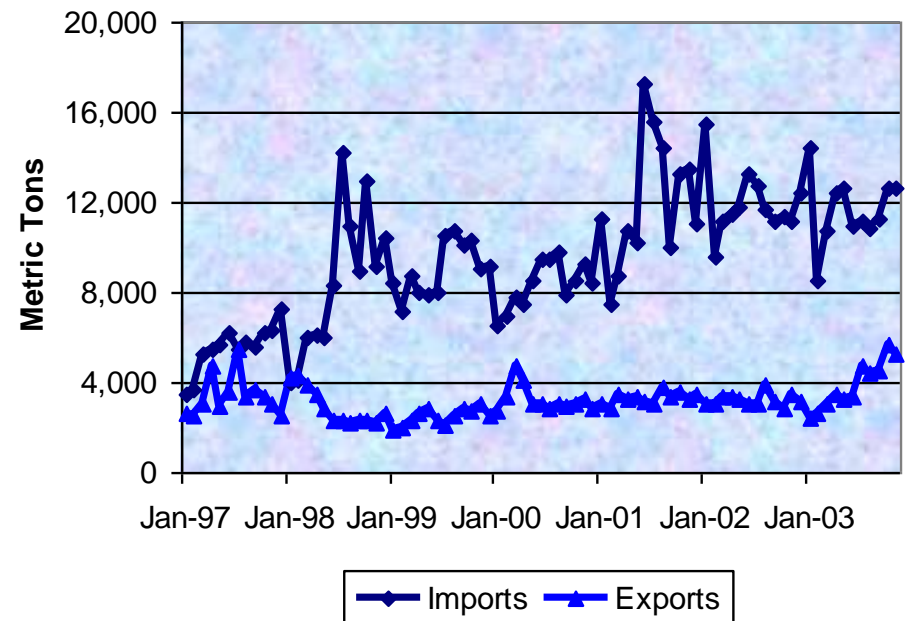


Butterfat Imports Ahead of Exports Also . . .

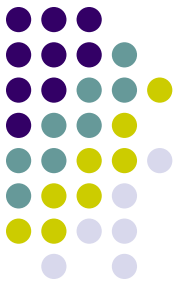


- More imports, exports are flat
- Jan-Nov 2003 imports are *down* 2.0%
- Jan-Nov 2003 exports are **UP** 20.4%
- Jan-Nov 2003 NET imports *down* 10.4%

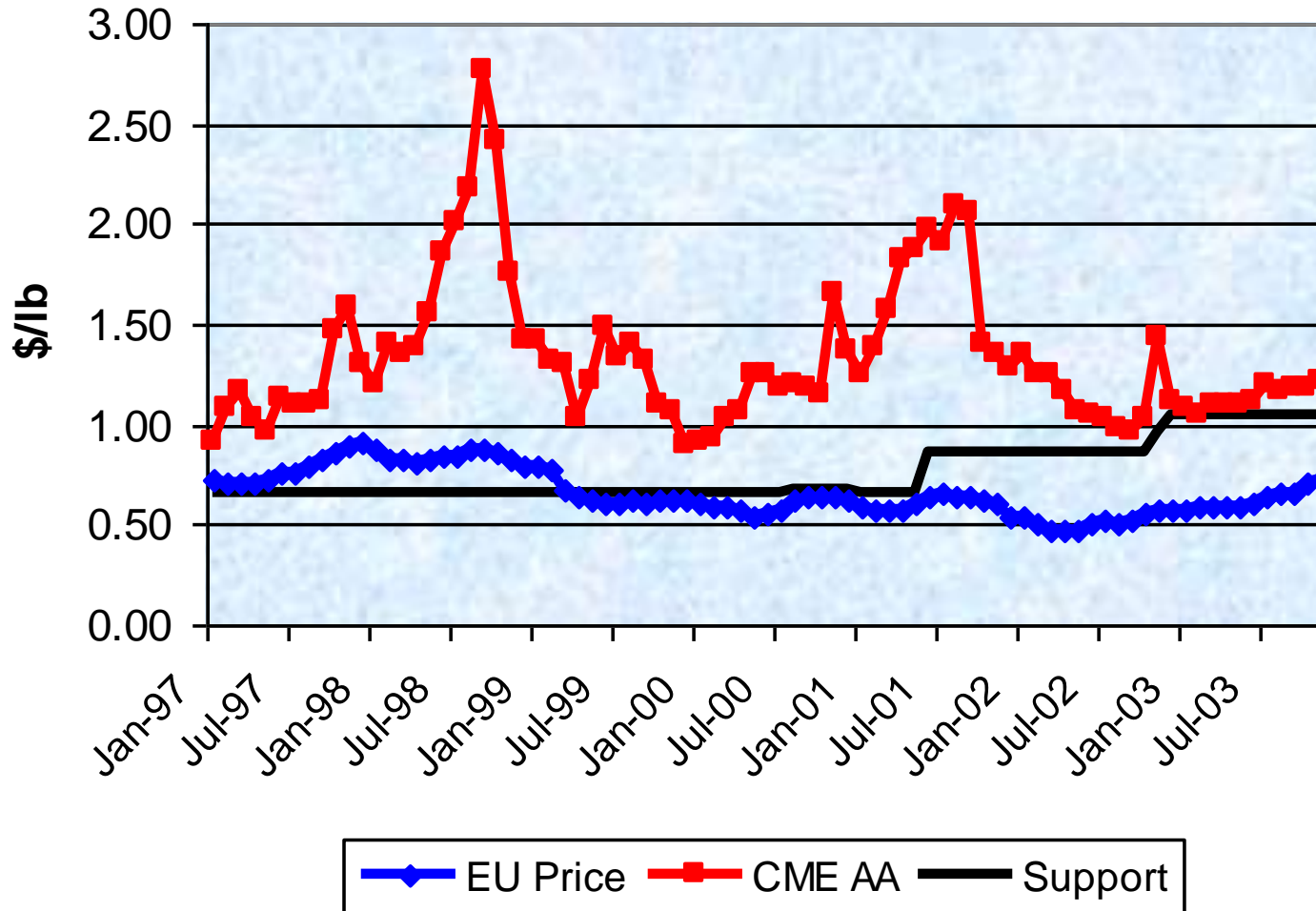
Butterfat Content of U.S. Dairy Trade



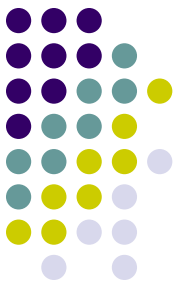
World Trends in Butterfat Prices



World Butter Prices



Net Import Summary for Dairy, Jan-Nov

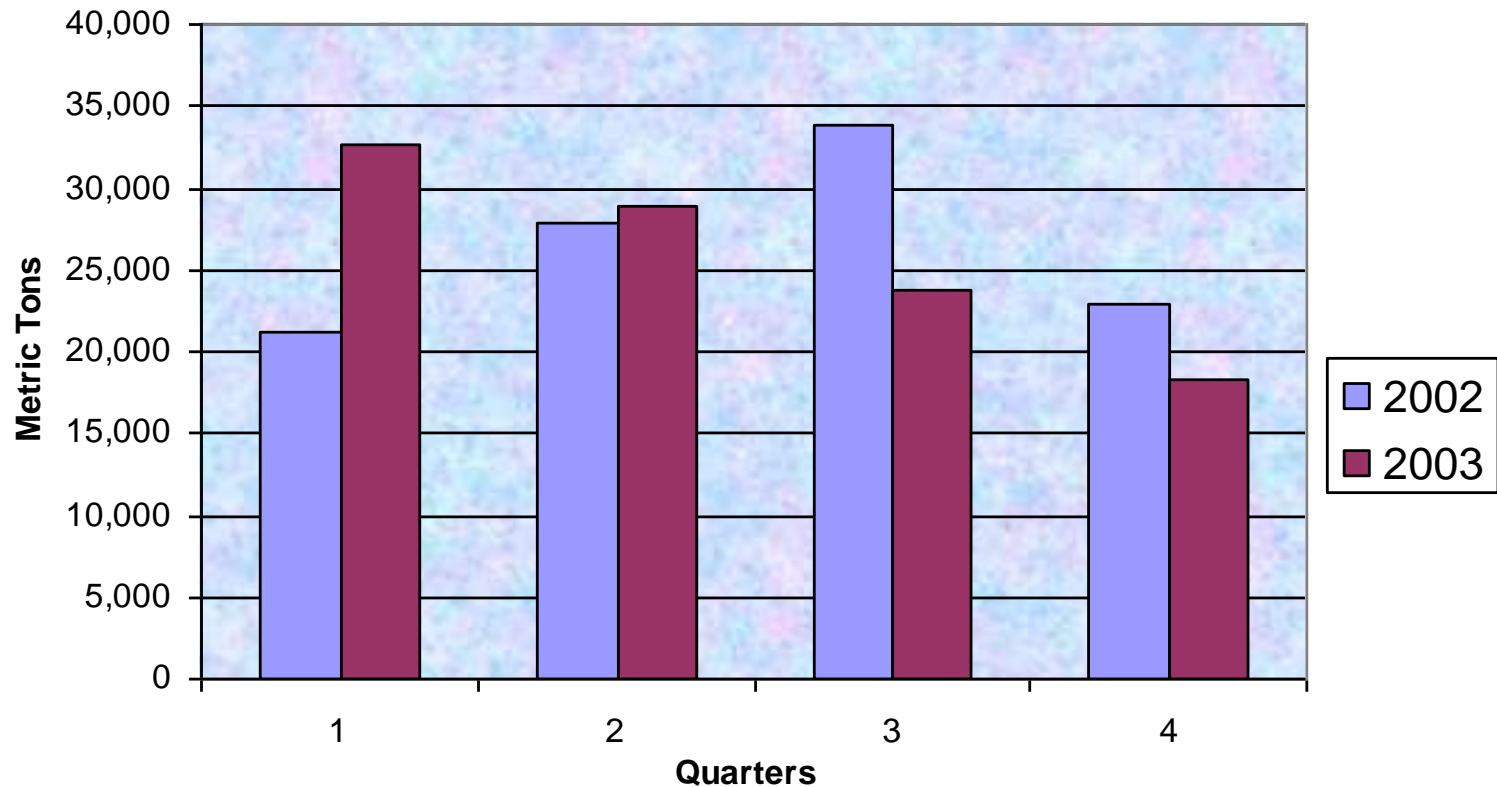


Trade Grouping	Net I/E	2002	2003	% chng
Packaged/Bulk Milk	E	-9,897	-17,029	72.1
Ice Cream	E	-30,597	-16,575	-45.8
Butter equivalent	I	50,978	37,159	-27.1
Cheese	I	146,417	147,371	0.7
Nonfat	E	-79,408	-118,856	49.7
Whole Milk	E	-6,476	-3,225	-50.2
Lactose	E	-103,194	-125,609	21.7
MPC/Casein Equiv.	I	113,898	130,949	15.0
Whey Equiv.	E	-144,134	-125,193	-13.1

Protein YTD Imports Down Slightly

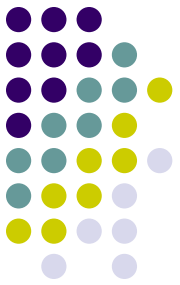


Protein Net Imports, Jan-Nov, 2002-2003

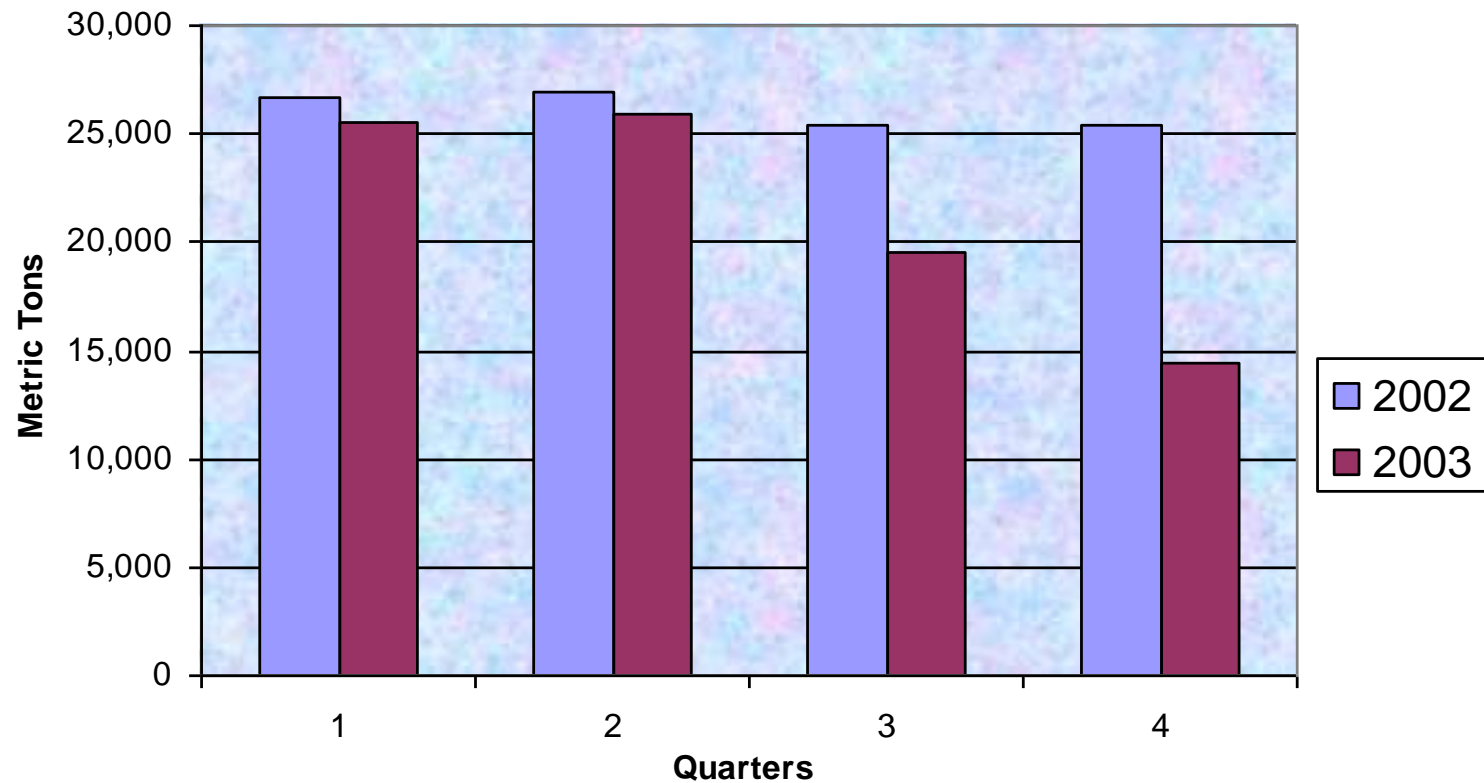


Year-to-date net imports down 1.8 percent.

Butterfat Net Imports Way Down



Butterfat Net Imports, Jan-Nov, 2002-2003

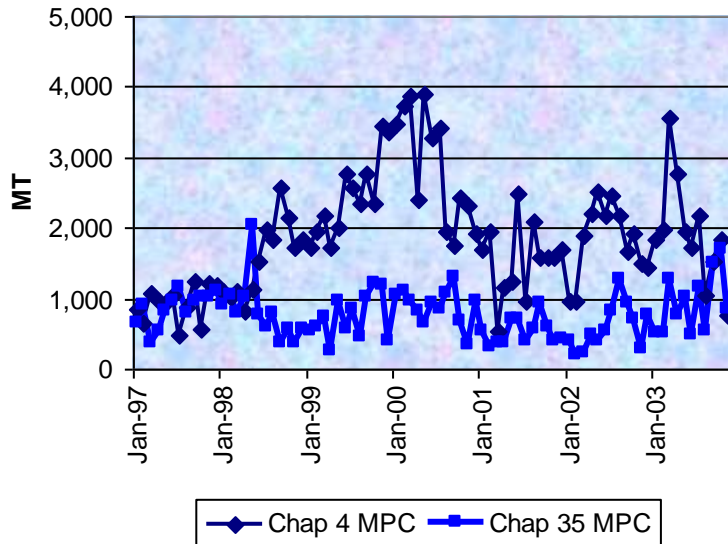


Year-to-date net imports down 18.3 percent.

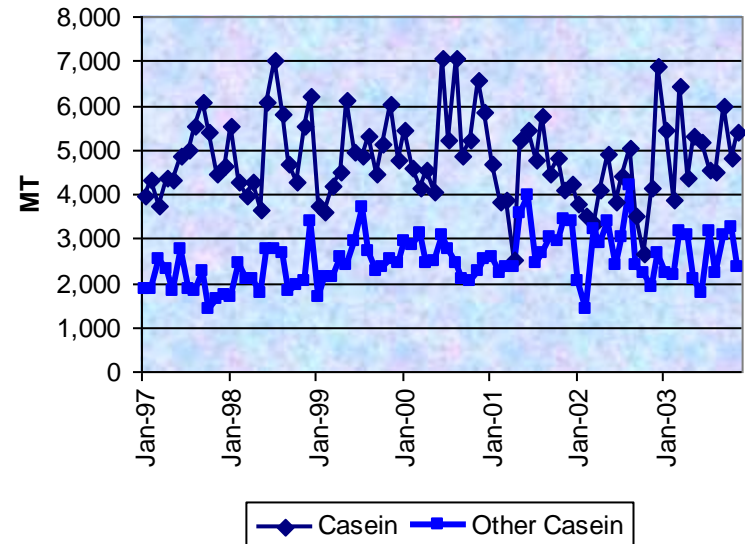
Casein and MPC Import Trends



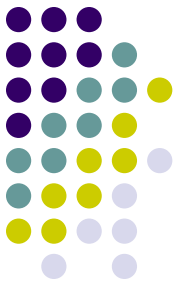
MPC Imports, Protein Content



Casein Imports, Protein Content

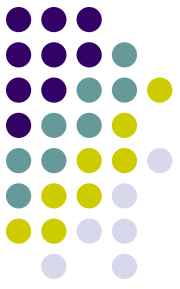


Substitutability?

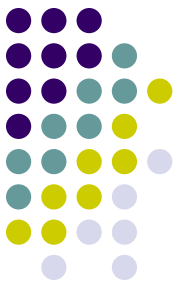


- MPC:
 - 40-88% protein
 - Varying levels of lactose and minerals, depending on protein
 - Total Milk Protein:
 - 90% protein
 - 1% milkfat
 - 5% minerals
 - 0.2% lactose
- Nonfat Dry Milk:
 - 34-36% protein
 - 1% milkfat
 - 8% minerals
 - 48-50% lactose

Technical Issues of Substitutability



- Solubility
- Water absorption & binding properties
- Viscosity
- Gelation
- Cohesion
- Adhesion
- Elasticity
- Emulsification
- Fat absorption
- Flavor binding
- Foaming



How these Proteins are Used

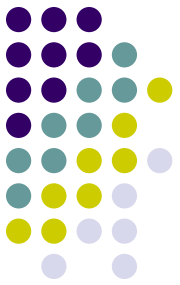
- MPC
 - Nutrition: infant, medical, geriatric, sport
 - Dairy: processed cheese, frozen desserts, yoghurt, ice cream
 - Non-dairy: imitation cheese, coffee creamers
 - Other: bakery, confectionery, soups, meats, gravies, cookies
- Casein(ates)
 - Nutrition: infant, medical, geriatric, nut. bars, sport
 - Dairy: proc. cheese, frozen desserts, yogurt, ice cream, non-std cheese
 - Non-dairy: whipped toppings, imit. cheese, coffee creamers
 - Other: bakery, confectionery, soups, gravies, meats, high tech

Source: Dairy Australia, Dec 1, 2003, Appendix F.

International Trade Commission Hearing on Milk Proteins



- Processors
 - There is no MPC loophole (Congress)
 - NFDM no substitute
 - MPC functionally superior to NFDM
 - MPC imports did not affect U.S. farm price
 - MPC imports did not contribute to CCC purchases
- NMPF
 - MPC imports are a WTO loophole
 - Imports have grown rapidly due to loophole
 - Imports driven by subsidies and unfair advantages
 - Imports have “economically displaced” domestic NFDM
 - This has lead to greater CCC purchases



Two Views of the World

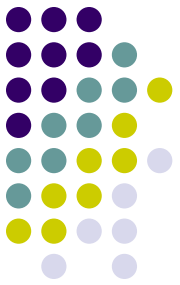
- One view:
 - Technology has changed
 - MPC functional and improves the product
 - Consumer happier
- Another:
 - NFDM should be just fine
 - Close loopholes, restrict trade to WTO



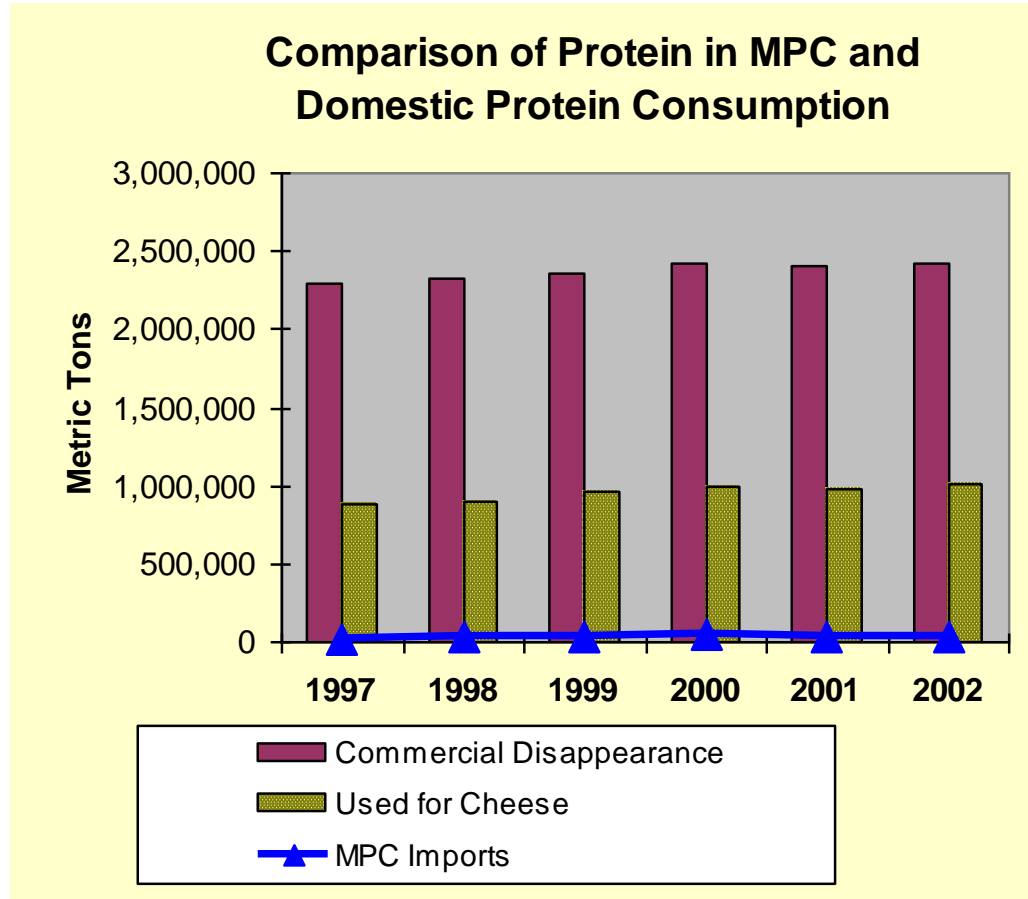
Protein Import Facts for 1997-2002

- MPC:
 - 14-22% of protein in all imports
 - 1-2% of U.S. consumption

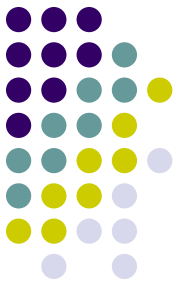
- MPC, Casein & Albumins:
 - 64-74% of all protein imports
 - 5-6% of U.S. consumption



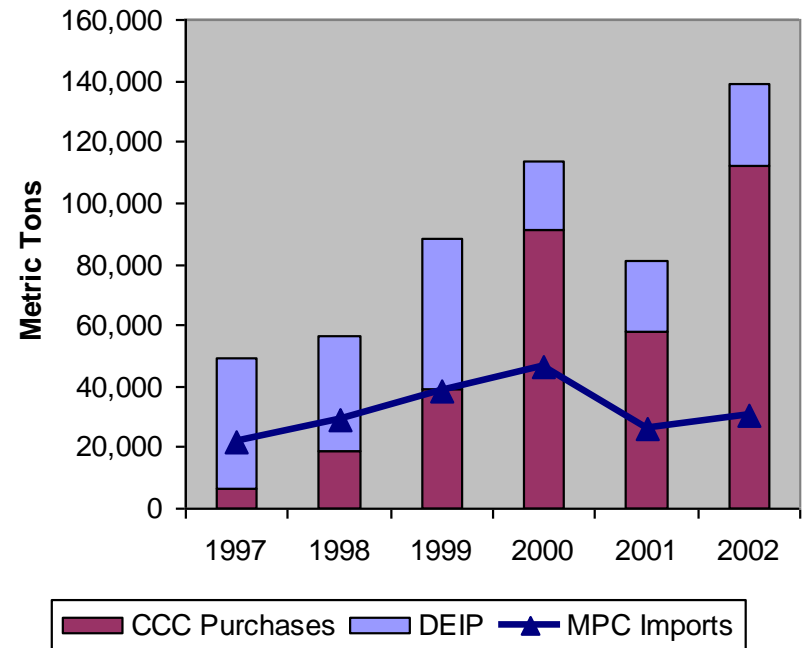
MPC Imports vs Protein Use



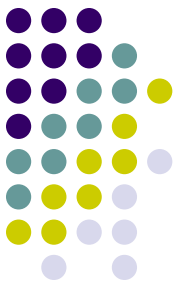
MPC Imports and the Dairy Price Support Program (mt of protein)



- Growth in MPC imports
1997-2002: 8,938 mt
- Growth in USDA CCC purchases + DEIP sales of nonfat dry milk
1997-2003: 89,893 mt

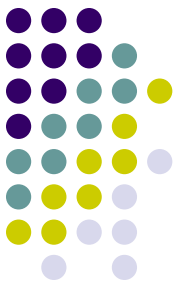


Reflects protein only!



Summary of Findings

- USDA's trade accounting methodology is not adequate
- Aggregate imports have increased relative to aggregate exports
- MPC imports have grown
- MPC imports not related to volatility in U.S. milk prices during 1997-2002
- MPC had little to do with growing CCC purchases of NFDM
- Price support program too inflexible for the future



Conclusions

- Dairy imports have been going up
- The real issue behind MPC is:
 - Questions the future of the price support program
 - Why are we giving up a small but growing market for high tech proteins?
 - Is the price support program a subsidy for the West?
- The best thing long term for family farmers is to sell more product!!!!