

**Testimony of Dr. Ronald D. Knutson
On behalf of
Edaleen Dairy, Malories Dairy, Sarah Farms, and Smith Brothers Dairy**

My name is Dr. Ronald D. Knutson. I am a Professor Emeritus at Texas A&M University and reside at 1011 Rose Circle in College Station, Texas. At Texas A&M, I served for 28 years as Professor and for 13 years as Director of the Agricultural and Food Policy Center, whose primary task involves completing studies of the impacts of proposed policy changes for the U.S. Congress. Prior to accepting the Texas A&M position, I was the Chief Economist in USDA's Agricultural Marketing Service and Administrator of its Farmer Cooperative Service. Throughout my 40 years as a professional agricultural economist, my primary research area has been dairy marketing and policy. In this capacity, I have served as the Chairman of two USDA Milk Pricing Advisory Committees; one evaluated the Minnesota-Wisconsin manufacturing milk pricing series, and the other evaluated pricing and classification options for Federal Milk Marketing Order Reform. I have attached my professional résumé related to my work as a dairy economist. Upon request I will supply my complete résumé.

I have been engaged by producer-handlers (P-Hs) who would be directly and adversely impacted by the proposed 3 million pound per month Class I route disposition limit to be exempt from the Class I pricing and pooling provisions of the Pacific Northwest and the Arizona-Las Vegas milk marketing orders. I have concluded that the proposed action represents a stopgap regulatory measure that will curb competition within the milk industry, deny consumers and wholesale buyers an efficient direct-from-producer source of milk supply, and effectively discriminate against small businesses; which our government is mandated to protect.

In drawing my conclusions, I have interviewed and compiled information on regulated P-Hs in Seattle and Phoenix Federal Order (FO) markets, studied economic conditions in these markets, studied past USDA decisions on the P-H issue, and studied past USDA reports on the objectives of FMMOs. Utilizing these analyses, I will testify to: (1) the evolving economic and technical environment in which P-Hs compete; (2) the meaning of "orderliness" as applied to Federal Milk Marketing Orders (hereinafter FMMOs); (3) the true origins of the regulatory issue that has led to the stopgap regulatory proposal; (4) the serious analytical errors made by Mr. Herbein, Dr. Cryan, and Mr. Hollon who have testified in support of this stopgap measure; and I will (5) identify a series of misleading or unsubstantiated statements and generalizations, made by Mr. Herbein, Dr. Cryan, and Mr. Hollon, that are not based on facts and sound analyses.

If the proposed 3 million pound limit is put into effect, it will be but another example of one regulatory mistake designed to deal with another regulatory mistake. However, in this case, it would be to the material disadvantage of the progressive small business operators that our government is supposed to protect and, in fact, could put several of them out of business.

Existing and evolving dairy industry environment

My comments on the existing and evolving economic environment are designed to tie together and point out those dairy industry conditions that have particular relevance to the proposal to limit the Class I and pooling exemption to P-Hs processing 3 million pounds or less per month.

Large multi-plant processors, large national retailers, and large cooperatives dominate the dairy industry. While this has been the case in the industry for many years, it is more true today after the amalgamations of many formerly independent processors into Dean Foods and National Dairy Holdings; the consolidation of many local and regional grocery chains into national chains, such as Kroger and Safeway; and the merger of many cooperatives into DFA and Land O' Lakes. While often characterized as either a case of monopsony, meaning a single buyer, or monopoly, meaning a single seller, this structure is more correctly labeled trilateral oligopoly, meaning high levels of concentration on all three sides to the market.¹ Less attention is given to the competitive fringe of smaller, independent processors that has largely disappeared due to many factors including their lack of ability to realize economies of size, their inability to serve the needs of large retailers, their inability to compete with large processors, their inability to adapt to the rapidly changing market for milk, and the fact that there were family members who desired to get their equity out of a business, which they often saw decreasing in value.² A similar statement of fact can also be made with regard to the disappearance of the fringe of smaller grocery retailers although, in this case, the market power of the traditional large grocery chains has been offset by the rise of membership stores such as Sam's Club and Costco and of the growth of Wal-Mart.

Entry into the market place for fluid milk and its products is limited by large processors, large retailers, and by dominant cooperatives that have full supply contracts for most of the raw milk in and entering FO markets. In this environment, a captive milk supply or a captive outlet for milk often is the only way to get into the milk processing business. That is, one simply does not see new independent processors in a competitive size range that buy milk directly from producers entering the market. The Class I pricing and pooling exemption has provided a long-standing market niche opportunity for dairy entrepreneurs, having expertise in both production and processing, to compete in the dairy industry. Modern P-H operations provide an opportunity for a resurgence of an efficient competitive fringe adapted to today's industry marketing conditions. While the challenges of being able to operate both a dairy farm and a milk processing plant are great, the development of this fringe represents a societal benefit in terms of maintaining competitive markets for milk at all market levels.

¹ "Senate Hearing Looks at Power of Monopsony Buyers in the Dairy Industry," *Cheese Reporter*, Vol. 128, No. 17. Madison, Wisconsin. October 31, 2003; Knutson, Ronald D. "Buyer Strategy in Bilateral Oligopoly," *American Journal of Agricultural Economics*, Vol. 50, No. 5, December 1968, pp. 1507-1511.

² H. M. Harris, Jr., Ronald D. Knutson, and C. E. French. "An Economic Analysis of Policies Protecting Small Business in the Milk Industry," *Southern Journal of Agricultural Economics*, Vol. 5, No. 2, December 1973, pp. 23-29.

Streamlined, vertically coordinated firms are thriving and setting the pace for competition in an increasing share of today's agriculture. Such new structures are controversial to traditional processors, producers, and their organizations. This is the case in the same sense as Wal-Mart and Sam's Club have been controversial challenges to traditional milk processors and grocery chains. It would be a serious mistake to nip such fledgling operations in the bud by government regulation. Likewise, it would be a mistake to curtail the growth of P-Hs to an efficient and competitive scale of operation.

The modern milk industry is also characterized by consumers who have different wants, desires, and needs for milk and milk products. Today's consumers are highly diverse ranging from poor migrant laborers who must shop for the lowest cost sources of milk to an increasingly affluent segment that will pay to have milk and its products delivered to their homes. These vastly different market segments create opportunities for firms, such as P-Hs, to serve niche markets such as home delivery, direct-to-consumer sales, products perceived to have superior quality, and products having particular characteristics desired by consumers. If the dairy industry is to resume a pattern of growth, it must be sufficiently flexible to efficiently serve these diverse needs. In addition to producing for such market niches, P-Hs overcome some of the disadvantages of smaller size by processing limited product or container lines with high levels of efficiency. In an era of increasingly intense competition with carbonated beverages and soy products, the dairy industry cannot afford to be hamstrung by a pattern of stopgap regulations having the effects of stifling change and innovation.

The producer segment of the industry is undergoing a rapid and progressive technological revolution. This is more than just an issue of the growth and development of the 380 large dairy farms having over 2,000 cows that in January 2002 produced 15 percent of the milk on which this proposal will cast further regulations.³ An additional or alternative growth strategy for these dairies involves P-H innovations in marketing to serve the wants and desires of a diverse consumer market for milk and its products.

The Cornell University analysis of cost of fluid milk plants relied upon by Mr. Herbein, Dr. Cryan, and Mr. Hollon demonstrates that economies of size in milk processing require a minimum size of dairy to implement the innovations that the proposed limits on size are designed to regulate and stifle.⁴ It is important to note that the minimum size plant studied by the Cornell scientists was nearly four times the 3 million pound threshold proposed to be subjected to Class I pricing and pooling regulation in FO 124 and FO 131. The minimum size of plant studied by Cornell was approximately the size of the largest P-H plant on whose behalf my study and this testimony was developed.

The P-H operations at issue are diverse in their mix of customers, products, and containers. Although some do their business through distributors, some run their own

³ National Agriculture Statistics Service, *Milk Production*. USDA. February 14, 2002. p. 22.

⁴ Eric M. Erba, Richard D. Aplin, and Mark W. Stephenson. *An Analysis of Processing and Distribution Productivity and Costs in 35 Fluid Milk Plants*. R.B. 97-03, Cornell Program on Dairy Markets and Policy, February 1997.

routes for some portion (or all) of their business. While emphasis is generally placed on a line of fluid products with a limited number of containers, some produce a surprisingly large product line and container mix. Their customers tend to be a mix of convenience stores, smaller independent supermarkets, schools, coffee shops, restaurants, institutions, and home delivery sales. Their surplus milk, which generally accounts for a small proportion of their production/sales, is sold to a wide array of outlets, sometimes at a price discount.

Customer feedback indicates that consumers buy P-H milk because of its perceived higher quality, freshness, taste, because they know where it comes from, and, in some cases, because it does not contain rBST. Customers view P-Hs as offering better service, being more responsive, and being more flexible. Although several offer milk produced without the aid of rBST, their output per cow is highly competitive and generally what one would expect for a cutting-edge dairy farm.

This is the first of a series of regulatory challenges resulting from rapid technological change in the industry. Others include the use of reverse osmosis and ultrafiltration to modify the nonfat solids content of milk, to create new beverage uses for milk, and to expand the utilization of milk components. While the industry, with the help of the government, can curb the use of such new technologies and strategies by regulation, as it has in the past and proposes to do in this hearing, a more progressive strategy would be to use FMMOs to facilitate change and serve the many market niches that exist in the milk business.

In the current and evolving dairy industry environment, there is a need for competition offered by independent and innovative firms that have historically been a source of progress in the American economy. Studies demonstrate that small businesses are very important agents of change and of technological innovation in the American economy.⁵ Another landmark study of innovation found that small firms have 2.5 times as many innovations relative to the number of people employed as large firms and that small firms bring their innovations to market faster than large firms.⁶

The government and its regulators have a special obligation to foster and protect these innovative small businesses. In 1980, Congress enacted the Regulatory Flexibility Act to require Federal agencies to analyze the impact of federal laws on small business and consider meaningful alternatives that would achieve the agency's goals without unduly harming small business. The current policy is consistent with this policy while the proposed policy would be inconsistent because it will stifle P-Hs' innovations in fluid milk production, processing, and distribution.

It is ironic to me that Mr. Hollon, on behalf of DFA, would testify against the interests of the 380 dairy farms who are the largest and most efficient small business operations in the dairy industry. It is even more surprising that this growing segment would be referred

⁵ David B. Audretsch. *Innovation and Industrial Evolution*. Cambridge, MA: The MIT Press. 1995.

⁶ Gellman Research Associates, Inc. *The Relationship between Industrial Concentration, Firm Size, and Technological Innovation*. Jenkintown, PA. May 11, 1982.

to as “statistical outliers” when they account for 15 percent of the milk production. In the future, these dairies will account for the majority of DFA’s volume, or it will not exist as a cooperative.

Meaning of Orderliness

The concepts of orderly marketing, public interest, and adequate supply permeate the statutory authorization for FMMOs. This proposal to regulate the pricing and pooling of Class I milk produced and processed by P-Hs would equate the meaning of orderliness to the pricing of all producer milk in the market, regardless of whether it is bought or sold. In other words, the emphasis is on the mechanics.

Orderliness, as defined by the experts who defined the term, places emphasis on results. The Milk Pricing Advisory Committee to then Assistant Secretary Lyng addressed the orderliness definition as follows:⁷

Orderliness, in a market context, is the opposite of chaos. It has several different dimensions...it implies prices which achieve a reasonable balance between production and consumption. Orderliness implies short-term protection of a market from unwarranted movement of supplies. At the same time, it implies adjustment of supply to the least cost sources as well as to regional changes in production costs. Orderliness implies a proper relation between fluid and surplus prices as well as between blend and manufacturing prices. It implies the establishment of relations between producers and handlers which facilitate fair, but not disruptive, competition among producers and handlers while encouraging the establishment of reliable channels of trade. At the same time, it implies protecting the rights of producers to choose their market outlet, free of coercion and unreasonable barriers to market entry.⁸

The Milk Pricing Advisory Committee developed this definition by building on the earlier objectives for FMMOs from the much-quoted Nourse Committee.⁹ The important point is that both Advisory Committees to USDA placed emphasis upon results. This means finding evidence of market disruption and chaos. Likewise, both placed emphasis on fostering competition and adjustment to ever-changing economic conditions within the dairy industry. The concepts of equitable treatment (not equal treatment), rights of producers to choose, and freedom of trade are mentioned by both Advisory Committees.

The relevance of the orderliness definition to this hearing lies in the question of whether there exists evidence in the two FO markets that the P-H exemption has led to disorderly

⁷ Milk Pricing Advisory Committee. *Milk Pricing Policy and Procedures: Part I. The Milk Pricing Problem*, USDA, March 1972.

⁸ Milk Pricing Advisory Committee. *Milk Pricing Policy and Procedures: Part I. The Milk Pricing Problem*, USDA, March 1972, pp. 4-5.

⁹ Edwin G. Nourse et al., *Report to the Secretary of Agriculture by the Federal Order Study Committee*, USDA, December 1962.

marketing conditions. In a word, have the Class I pricing and pooling exempt P-Hs created chaos? My study indicates no evidence of disorderliness as a result of the P-H exemption in any of the terms identified in either the Milk Pricing Advisory Committee or the Nourse Committee. Specifically, while there may be excess production, it cannot be argued to be due to the activities of P-Hs, but rather would be the result of excessive Class I prices. There have not been unwarranted movements of milk supplies. P-Hs can be argued to have facilitated adjustment of milk supplies to least cost sources. There is no evidence of disruptive competition. My analysis indicates that Seattle processors have enjoyed some of the highest gross margins in the United States. The Phoenix market's gross margin lies close to the median of major US FO markets. Channels of trade remain reliable in that P-Hs have found a reasonably stable niche in the markets that they serve. P-Hs are subject to the loss of accounts like any other processors, as indicated by the experience of Edaleen Dairy with the Starbucks' account in Seattle. Was that account transfer evidence of disorderly marketing? As I understand, Safeway captured the Starbucks' account. Should Federal Order regulations be changed to prevent such transfers? If P-Hs have an advantage, how can this transfer of accounts be explained?

Based on these generally accepted definitions of disorderly marketing, it is evident the conditions in the Arizona-Las Vegas Order and the Pacific Northwest Order are not conducive to disorderly marketing. Furthermore, the testimony of Mr. Hollon and the other witnesses who testified in Phoenix does not point to activity that would warrant a change in regulation or policy. At best, these witnesses have expressed a fear that future growth of market share by P-Hs could disrupt the market. However, the economic considerations that foster growth and the regulatory environment that would permit such growth have existed for at least a decade, and these fears have not materialized. Contrary to the proponents' assertions, the sky is not falling, and important decisions like the one before the Secretary should not be made on speculation about events that history has shown are unlikely to occur.

Origins of this regulatory issue

FMMOs have been used to accomplish price enhancement objectives for which they were never designed.¹⁰ FMMOs were designed to compensate producers for the cost of serving the Class I market. Setting Class I prices at a level that more than compensates producers for the cost of serving the Class I market unduly increases the prices paid by processors for milk used for fluid purposes. FMMO price enhancement is augmented by over-order premiums tacked onto the Class I price by cooperatives, which has complicated the pricing problem for Federal Order regulators. The Class I price was further enhanced by the FMMO reform decision to set the Class I price at the higher of

¹⁰ Milk Pricing Advisory Committee. *Milk Pricing Policy and Procedures: Part I. The Milk Pricing Problem*, USDA, March 1972. Milk Pricing Advisory Committee, *Milk Pricing Policy and Procedures: Part II. Alternative Pricing Procedures*, USDA, March 1973.

the Class III or Class IV price. Dairy farmers respond to the higher Class I price by increasing production, which drives down the fluid utilization and the blend price. Thus Class I utilization has fallen from 62 percent in 1975 for the Central Arizona FO to 32 percent for the Arizona-Las Vegas FO in 2001. Similarly, Class I utilization has fallen from 41 percent in 1975 for the Puget Sound Federal Order to 30 percent for the Pacific Northwest in 2001. The increases in the Class I price have pushed down the blend price and increased the margin between the Class I price and the blend price. The size of the alleged “loophole” that Mr. Hollon refers to has been determined by the lobbying activities of DFA and NMPF, who now proposes to close the “loophole” it created by its excesses.

For the Puget Sound and successor Pacific Northwest FO, the Class I differential was increased in December 1989 from \$1.85 per cwt to \$1.90 per cwt. The cooperative premium tacked on an additional simple average of \$0.67 per cwt to the \$1.90 per cwt Class I differential with a range of from \$0.30 per cwt to \$2.13 per cwt. For the Arizona and successor FO, the Class I differential was reduced from \$2.52 per cwt to \$2.35 per cwt in 2000. The cooperative premium did not exist until December 1999 when it was set at \$0.60 per cwt. In August 2000, the cooperative premium was reduced to \$0.15 per cwt. The biggest recent contributing factor to the higher Class I price was the “higher of” provision of the FMMO reform, which added an average \$1.05 per cwt to the Class I price compared with the weighted average of the Class III and Class IV price. High Class I prices, including cooperative premiums, have been a contributing factor to increased milk production, reduced fluid milk consumption, and resulted in CCC stock accumulation, lowered the producer blend price, and provided incentive for expansion of P-H operations.

The proposal to limit the P-H exemption from Class I pricing and pooling to 3 million pounds per month is a consequence of a Class I price that is too high. Excessive Class I prices have been fostered by political pressure from producer organizations and by the market power of dairy cooperatives that do not acknowledge their consequences. Lowering the FMMO Class I price and/or the over-order premium could reduce incentives for P-H expansion. Such a strategy, of course, would require an admission to a strategic error in judgment by cooperative leaders acting through the National Milk Producers Federation (NMPF). Instead, the political strategy of inflicting pain on P-Hs was selected.

Mr. Hollon indirectly recognizes the contribution of excessive Class I pricing as a contributing factor to disorderliness in milk markets stating that its consequence is to expand the so-called P-H “loophole” in Federal Order regulation that will “completely undermine the Federal Order system.” The true culprit in expanding the alleged “loophole” that would prevent processors who are not P-Hs from competing is not the P-H Class I pricing and pooling exemption. It is the excessive Class I differentials and over-order premiums that have simulated excess milk production, which forces producers’ blend price down and leads to manufactured dairy products flowing into the hands of the Commodity Credit Corporation (CCC). Assuming the type of growth alleged by the proponents, it is not surprising that Sarah Farm’s growth accelerated

following Federal Order Reform and the adoption of “higher of” pricing. By advocating “higher of” pricing, DFA and NMPF widened Mr. Hollon’s “loophole” and now seek to regulate P-Hs out of existence.

The proposed strategy reflects a prevailing industry philosophy that there exists a regulatory solution to every problem. The consequent requirement is for a series of stopgap measures designed to plug holes resulting from the unforeseen consequences of regulatory decisions. In the process, there is the inherent danger that industry progressiveness and competition are stifled.

Errors in analyses by testifying economists

A number of serious errors were made by the economists testifying for the proponents of the proposed 3 million pound per month limit on P-Hs to be exempt from the Class I pricing and pooling provisions of the Pacific Northwest and Arizona Las Vegas Federal Orders.

There was a failure on the part of each of the economists to recognize the problem as being the level of the Class I price. This is a serious error in that it reflects the pervasive problem of looking at individual issues in isolation and embracing a stopgap regulatory measure as opposed to reflecting on why the problem exists and suggesting action to deal with it.

Dr. Cryan’s explanation of the principles that underlie the PD Class I pricing and pooling exemption was distorted and misleading. He attributes the exemption to resistance by P-Hs to file reports with the FO Market Administrators and their refusal to make payments into the pool. According to Dr. Cryan, “*That is, producer handlers were exempted from regulation as a matter of administrative expediency.*” This statement, in addition to being degrading of the ability of FO market administrators to perform their responsibilities, ignores the history of the exemption contained in the 1989 Pure Milk decisions and the 1993 Heartland decision. In the Pure Milk decision, the USDA rejected a proposal to limit the Class I pricing and pooling exemption to P-Hs who limit their distribution to home delivery and to processor-owned store sales. It also rejected a proposal to differentiate among P-Hs on the basis of size. In so deciding, the USDA indicated that,

In fact, the policy has been to exempt such types of operations. Such policy has been based, generally, on findings in regulatory proceedings that producer-handlers have no significant advantage in the market in their capacity as either handlers or producers as long as they are solely responsible for their production and processing facilities and assume essentially the entire burden of balancing their production with their fluid milk requirements.¹¹

The Pure Milk decision goes on to indicate that while the USDA says that it has authority to regulate producer-handlers,

¹¹ 54 FR 27179 at 27182

However, on the basis of overall history of the treatment of producer-handlers, a size consideration, in and of itself, is not particularly relevant to the issue. Even large operations in relation to the markets they serve have continued to be exempt from full regulation. Consequently, any decision to fully regulate a producer-handler type operation *must be supported by substantial evidence of the existence of disorderly marketing that is the direct result of producer-handler activity.*¹² (emphasis added)

The Heartland decision¹³ dealt largely with the issues of buying needed Class I milk at the FO minimum regulated price and of sharing the cost of handling of surplus and installed a means for P-Hs to bear their share of the cost for maintaining their reserve supply of milk. In so doing, it rejected a proposal by the NMPF to limit the size of a P-H.

In the case of both the Pure Milk and Heartland decisions, the role of FMMOs was one of assuring that P-Hs were treated equitably in the markets in which they deal, not to restrict the size of their operations. In other words, the emphasis is on results. Dr. Cryan failed to consider and recognize this USDA FMMO policy regarding the treatment of P-Hs.

There was a failure to utilize sound statistical methods. For example, Mr. Herbein's sample size of 20 fluid milk plants was far too small to be of any use in establishing predictive values. From a statistical perspective, drawing conclusions from a sample size of less than 30 leads to highly tenuous results. Only two of the plants were P-Hs, both being substantially smaller than the P-Hs impacted by this proposal. Yet, Mr. Herbein generalized as if all of the plants were P-Hs. Mr. Herbein's sample plants were located outside of the Arizona-Las Vegas and almost entirely outside of Pacific Northwest Orders with substantially no demonstrated comparability of product mix, processing, or distribution conditions. Even at that, there was no indication that they were randomly selected. In fact, there was adverse selection in that these plants were not only not representative of the P-H niche; they were also small firms that have for years had problems surviving. In other words, Mr. Herbein's data represents an unrepresentative worse case scenario that is completely useless in this hearing. Then an error was made in making regional cost adjusted by using the CPI rather than the PPI (Producer Price Index). It can readily be concluded that Mr. Herbein's testimony is of no value in either drawing the conclusions he reached or as a basis for decision regarding the proposal to fully regulate P-Hs.

Dr. Cryan's analysis likewise fails to use sound statistical methods. He makes the fatal mistake of basing his analysis on the obviously faulty analysis of Mr. Herbein. Then Dr. Cryan implies in Table 1B that the cost curve fitted to Mr. Herbein's data is nearly a perfect fit, allegedly explaining 98 percent of the cost variation. This obviously is not the case since the R² coefficient should have been calculated using individual cost observations of plant costs of 20 plants, not the average costs for different size plants.

¹² 54 FR 27179 at 27182

¹³ 60 FR 214

The R² using individual observation would have been substantially lower. Data are not provided to determine how much lower the R² would be, had it been correctly calculated.

It is also extremely important to recognize that size is only one of the factors influencing plant efficiency and competitiveness. The proposal limiting the exemption to 3 million pounds per month as well as the expert testimony of Dr. Cryan and Mr. Herbein imply that size is the sole, or at least the major, factor influencing efficiency and competitiveness. This is highly misleading. The Cornell study found that there were at least 17 different factors influencing efficiency and competitiveness including: (1) whether the plant is a captive of a supermarket chain, (2) whether it is a cooperative plant, (3) the wage level in the area, (4) whether the plant is unionized, (5) the percent utilization of capacity, (6) the number of stock keeping units processed, (7) size of plant, (8) the percent of products handled on pallets, (9) the degree of automation or technology in processing, (10) the degree of automation and technology in the cooler and load out, (11) the population density, (12) the number of miles traveled per month in delivery, (13) the percent of plant capacity utilized, (14) the size and mix of customers, (15) the delivery method, (16) the type of delivery vehicles utilized, and (17) the percentage of milk delivered to the customers' docks. The point is that picking one of these factors and utilizing it as a basis for regulation has anecdotal characteristics that are not useful in drawing conclusions that must be based on science-based facts—meaning they can be replicated and verified.

Mr. Hollon likewise falls into the trap of using statistics and statistical methods that are not sound, including:

1. The reliance on the unrepresentative plant cost data presented by Mr. Herbein. This makes his whole analysis of the advantages accruing to producer handlers from the Class I pricing exemption faulty and unreliable. Then Mr. Hollon states that P-Hs “would easily be able to gain market share at will” without being able to demonstrate that this has happened.
2. The statement that P-H numbers and/or volume are “growing rapidly” was not substantiated. In fact, utilizing his own estimates combined with historical USDA data would appear to suggest the contrary. Specifically, from 1980 to 1998, the last year for which USDA reported P-H data, the volume of milk sold in the United States by P-Hs declined from 1.47 billion pounds (1.14 percent of production) to 1.16 billion pounds (0.73 percent of production).¹⁴ Mr. Hollon's estimates indicate that in 2003 the volume remained at 1.16 billion pounds. These data do not confirm the rapidly growing P-H segment that Mr. Hollon indicates.
3. Data on current producer handler numbers and volume were set forth where USDA indicates that no such reliable data exist.

¹⁴ NASS/USDA. *Agricultural Statistics*. Washington, D.C. 1981 and 1999.

4. Estimates were made by Mr. Hollon of the number of stores served by P-Hs based on incomplete, and therefore unreliable, data. They are by design the smaller stores that are disappearing just as are small milk producers and processors.

Conclusions drawn by Mr. Herbein contain a number of generalizations that are not substantiated by his analysis: These include:

1. Without realizing or considering the implications of his flawed statistical analysis, Mr. Herbein draws the unsubstantiated conclusion that, "At the 2,000,000 pound per month size a producer handler can be fully competitive with regulated plants on a cost of processing and packaging basis." There is no way that he could reliably make this statement when his sample did not include any producer handlers that fall in this size category.
2. The implication of Mr. Herbein's testimony that P-Hs are not regulated is not true. They are regulated by FMMOs. They are not required to pay the Class I price because they buy no Class I milk from producers.
3. The implication that large P-Hs only serve large wholesale customers is not true. There are all types of customers served by large P-Hs. While, as noted previously, there are P-Hs that serve large customers in competition with large processors; there also is an emphasis by P-Hs to serve markets that may not otherwise be served, such as with rBST free milk or home delivered milk. The best way to characterize the P-H strategy is one of concentrating their operations on serving niche markets.
4. The implication by Mr. Herbein is that since vertically integrated P-Hs are competitive, they have an unfair advantage. P-Hs have built a better mousetrap to serve specific market niches with their set of skills. In doing so, they have taken on the increased risks of both production and processing. This is a characteristic of many integrated businesses. As a general rule, the U.S. government is not allowed to turn around and penalize firms that find ways to be competitive.
5. The overt statement is made by Mr. Herbein that large P-Hs have an unfair advantage over small P-Hs. How could this possibly be, since they both operate by the same rules? Greater efficiency, vertical integration, and more effective marketing have never been interpreted as an unfair advantage in the American economy. In fact, when considering the increased risk of performing both the production and processing functions, I am convinced that P-Hs have no discernable competitive advantage.

Conclusions drawn by Dr. Cryan likewise contain a number of generalizations that are erroneous and/or not substantiated by his analysis. These include:

1. Dr. Cryan implies that the only basis for the P-H Class I and pooling exemption was and is that USDA simply gave up on getting P-Hs to comply or that their

records are so bad that they could not be audited. While that may have been part of the history, as noted previously, the policy of USDA has been one of supporting the P-H Class I pricing and pooling exemption. However, it is not clear to me that USDA has the authority to price P-H milk as Class I since the milk is never purchased by a P-H. The legal authority would appear to apply only to milk purchased by a P-H. There is no transaction or sale of milk between the P-Hs farm and its processing plant. The P-H is a single business entity. This interpretation is consistent with the Pure Milk and Heartland decisions. Moreover, any government imposed penalty on P-Hs would be the equivalent of a tax on their operations.

2. The implication by Dr. Cryan that P-Hs are not regulated is not true. They are not required to pay the Class I price because they buy no Class I milk.
3. The statement by Dr. Cryan that P-Hs enter the bottling market “purely to exploit this regulatory basis” has no supporting foundation. A producer can grow by adding more cows or by adding value to what is produced. Exploitation has nothing to do with either avenue.
4. The Class I pricing exemption does not “rob the pool” as stated by Dr. Cryan. Since P-Hs draw nothing from the pool and do not participate in the pool, how could they rob the pool? By law, the only firms that have an obligation to pay into the pool are those that buy milk.
5. The Class I pricing exemption has nothing to do with the economic concept of a “deadweight loss” as stated by Dr. Cryan. The economic concept of deadweight loss implies a loss to society due to reduced production, reduced sales, and increased prices.¹⁵ Price discrimination, as practiced in FMMOs, imposes a deadweight loss. There is no deadweight loss to society in the P-H Class I pricing exemption. There would be a deadweight loss due to reduced consumption from the higher price if the exemption did not exist.
6. Dr. Cryan contends that the Class I pricing and pooling exemption is a threat to orderly marketing. He begins this line of argument by implying that large farms having over 3 million pounds of production are a threat to orderly marketing because they might all decide to become P-Hs. If this were the case, there would be many more P-Hs throughout the country than is currently the case. The only threat of large producers to other producers is that they have been more innovative and have become more efficient.¹⁶ Dr. Cryan also argues that P-Hs are able to sell packaged milk at a lower price and implies that this is a threat to orderly marketing. As a dairy economist, I have problems with the notion that a

¹⁵ Robert S. Pindyck and Daniel L. Rubinfeld. *Macroeconomics*. 4th ed. Upper Saddle River, NJ: Prentice-Hall, Inc., 1998.

¹⁶ Phillips, Michael J., et al. *Technology, Public Policy and the Changing Structure of Agriculture*, Office of Technology Assessment, Congress of the United States, Washington, D.C., March 1986.

lower price that results in more sales represents disorderly marketing. Moreover, he presents no evidence that P-Hs do sell milk at a lower price. I analyzed the retail price structure in both the Seattle and Phoenix markets from 1994 to October 2002 and reviewed the prices that are in the record of this hearing. Aside from the difference in the time period studied, my research used the actual price paid by handlers from the cooperative for Class I milk rather than the FMMO minimum price.¹⁷ In both studies the Seattle market was found to have one of the highest, if not the highest, gross processor-retailer margins in the United States. If Dr. Cryan were right that P-Hs drive down milk product prices, the Seattle market would benefit from more P-H competition. The gross margin for the Phoenix market appears in the middle of the markets studied. In neither case is there any evidence of disorderliness. Dr. Cryan's balancing argument is stated in sufficiently unclear terms that it is not decipherable. If the argument is that P-Hs do not pay the cost of balancing, this is factually unsupported. Moreover, the proposed remedy being pursued is unrelated to the cost of balancing. Somehow, Dr. Cryan relates the balancing issue to payments into the pool. Since P-Hs do not buy milk, they neither make payments into the pool nor draw from the pool. They are obligated to do their own balancing, but it is not at the expense of either other producers or handlers. If this were the case, there would be evidence in the retail prices.

7. Dr. Cryan stated that justification provided for the 3 million pounds per month was that 3 million pounds is the limit for exemption from payment of the fluid milk promotion assessment. It is ridiculous to suggest that the limits set under another program provide justification for applying the same limit to P-Hs. Then there is an indication that the breakpoint ought to be set low in case it is readjusted so that "uneconomic investments" are not lost. This may be interpreted as setting the limit sufficiently low that no one will survive as a P-H. In other words, NMPF desires to get rid of P-Hs as a competitive force within the dairy industry, even though it purports to represent U.S. milk producers.

Mr. Hollon's testimony also contains a number of generalizations and assumptions that are erroneous and/or are not substantiated, including:

1. No data are presented on the prices P-Hs receive for either Class I milk that is purchased or surplus milk that is sold. Instead Mr. Hollon assumed that the Federal Order prices prevailed. My interviews with P-Hs indicate that cooperatives pay substantially less than the FO minimum price for surplus milk purchased from P-H.
2. He assumed that increased competition results in disorderly marketing. In the process he ignored retail price evidence indicating that there was no disorder

¹⁷ Ronald D. Knutson, Oral Capps, and Robert B. Schwart. "An Assessment of the Experience with and Future of Interstate Dairy Compacts." *Looking Ahead...or Looking Behind? Dairy Policy Studies Mandated by the Farm Bill*. Ithaca NY: Cornell Program on Dairy Markets and Policy, April 2003. <http://dairy.cornell.edu/epdmp/pages/workshops/memphis03>.

created in the structure of prices. New competition and account switching is normal milk market behavior and certainly not evidence of chaos.

3. He assumed that it is the role of FMMOs to enforce over-order premiums. Orders only set minimum prices for milk that is sold.

Conclusions

Based on the above analysis it is my conclusion that it would be a serious mistake to adopt any limit at which P-Hs' would be required to account to the pool at the minimum Class I price for the following reasons:

1. Producer-handlers make no purchases of raw milk and should not be taxed for being efficient and innovatively marketing the milk they produce and is preferred by certain market segments.
2. There is no appropriate and objectively determined volume cap that can be placed on the regulation of prices paid by producer-handlers.
3. The proposed actions represent stopgap regulatory measures that will curb competition within the milk industry. Curbing competition is itself disorderly in that it would be a destructive barrier to entry of new firms into milk processing and distribution.
4. The proposal will deny consumers and wholesale buyers an efficient, direct-from-producer source of milk supply.
5. The proposal will effectively discriminate against small businesses, which our government is mandated to protect.
6. Economists testifying have not proven the existence of disorderliness in either of the Federal Order markets. Moreover, they failed to present any analysis to prove that disorderly marketing conditions in the dairy industry have developed in recent years.
7. The true cause of any advantages accruing to P-Hs, which is higher Class I prices, has not been taken account of in the proponents' testimony.
8. Serious analytical errors were made by experts who have testified in support of the proposal.
9. A series of misleading or unsubstantiated statements and generalizations, which were not based on facts and sound analyses, were made by experts.