We now know the outcome of the vote in the House of Representatives in Spring of 1996. As I prepared these remarks for today's discussion, the outcome was far less certain. U.S. dairy policy was at a crossroads. One course continued the industry on a path similar to the recent past—gradual deregulation with movement towards a more market-oriented industry allowing the U.S. dairy industry to be truly competitive in world markets. The other course led the industry on a very different path—creating a class of export products designed to remove "surplus" product from domestic markets and regulate higher domestic prices. A complicated set of mandatory pooling mechanisms would be established to make this course work, including a series of rules and procedures (like compensatory payments and upcharges) preventing lower priced "export" product from leaking back into the domestic market.

These different options suggest fundamentally different directions for the U.S. dairy industry. I would like to share with you some of the questions and hypothesis that we faced over the prior 18 months regarding the impact of these alternate policies.

My specific objectives today are two-fold. First, to summarize some of the structural, efficiency and trade effects of alternate U.S. dairy policies, and second, to identify analytical and research areas to guide future work.

The "export class" course (House Compromise) described briefly above would have increased regulation of the dairy markets, while the Soloman-Dooley amendment and Freedom to Milk each represented a decrease in regulation of dairy markets. The Soloman-Dooley amendment passed by the House this Spring represents gradual deregulation of the kind we have seen in recent years. On an ordinal scale of more to less regulation, the figure below illustrates the ranking of the various alternatives vis-à-vis the status quo.
If a policy such as the “export class” concept were adopted a number of significant changes in structure and efficiency would have occurred. Below we highlight some of the most potentially troublesome changes induced by policies designed to increase domestic dairy prices.

Higher fluid milk prices (Class I) would certainly have generated increased manufacturing milk supplies. From a manufacturing perspective, this raises a number of questions. Where will these supplies be generated, what is the production technology most likely to be adopted and at what cost, and where might plants need to be located in the future to deal with the new spatial equilibrium? Since the increased supply of manufacturing milk must be converted to storable product, will it be converted into butter/powder for export or cheese for domestic markets and at what prices? How should purchasing practices change to adapt to the new temporal equilibrium? These were some of the crucial structural and efficiency questions that we wrestled with earlier this year.

A significant increase in regulation contemplated by the “export class” concept was mandatory pooling for all milk. For the “export class” concept to work, all milk would have to be pooled. Presently, pooling is voluntary—manufacturers participate in milk pooling when and where there is an economic incentive to do so. Manufacturers can opt out of the pool or choose alternate locations where they do not have to participate. These options are eliminated with the mandatory pooling. Moreover, mandatory pooling further disadvantages proprietary manufacturing firms because cooperatives are exempt from pooling restrictions.

The adoption of mandatory pooling would force proprietary firms to examine alternate forms of milk sourcing and plant ownership to maintain a competitive position with cooperatives. One way to avoid the penalties of mandatory pooling would be vertical integration combining ownership of milk production and manufacturing facilities. Another alternative would be to completely eliminate plant ownership and manufacturing. In either alternative, the proprietary firm has avoided the increased minimum milk price provisions imposed by mandatory pooling. Again, the implications for milk production, dairy industry structure and global competitiveness are significant.

The trade effects of the adoption of an “export class” policy by the United States are enormous. Instead of gradually reducing export subsidies and rescuing world dairy markets from an historically low-price dumping ground, this policy exacerbates this situation. The creation of an “export class” to clear U.S. markets, keeps subsidized NFDM & butter flowing to world markets at low prices. Instead of continuing the transition of the U.S. dairy
industry toward market reform and competitiveness, the United States would need to operate a 2-tier price system—a high domestic milk price and a low export price.

As discussion and legislation in the United States moved closer to an "export class" policy, Europe began exploring similar concepts (similar to the EU sugar program with pooling, albeit significantly more complicated to establish and administer). If both the United States and EU adopted such schemes, most of the progress achieved in the GATT/WTO regarding dairy markets would be eliminated.

With respect to Canada/U.S. trade, the United States would export less to Canada under an "export class" regime than under the legislation actually passed by the House this week. There remain significant barriers to dairy trade between the United States and Canada today. As these barriers are lowered, the US is naturally positioned to export to Canada. However, if the United States established an "export class" and a 2-tier price regime, with only NFDM and butter competitive in world markets, the US would have stifled commercial exports to Canada.

Fortunately, the course actually set for U.S. dairy policy differs sharply from the "export class"-mandatory pooling proposal discussed above. The reduction and ultimate elimination of support prices and reform of federal orders, continues the gradual deregulation trend experienced over the last few years.

While gradual, the policy change implemented in the 1995/96 Farm Bill will have a significant impact on structure, efficiency and trade. The elimination of support prices will raise many questions about the location and price of manufacturing milk production and alter the pace of trends in utilization of technology to accommodate spatial allocation. One technology that has existed for many years but has never been utilized commercially is ultrafiltration (UF) on the farm. High support prices and the accompanying milk price regulations render on-farm UF cost-ineffective at present. However, as regulation decreases, we could well see the trend to on-farm UF accelerate greatly.

Other questions arise under a deregulation scenario with respect to the seasonal pattern of milk production. Today, regulation, and specifically pooling, has a major impact on the seasonal pattern of milk production. As the industry continues along the trend towards market forces, the seasonal pattern of production may change. A change in the temporal equilibrium for milk production and pricing would have a significant impact on manufacturing location and efficiency and purchasing practice.

Another major impact of the elimination of pooling regulation would involve changes in the component quality of milk for manufacturing and fluid milk production. Manufacturers are interested in solids, protein and fat (as raw materials in manufacturing, the more per unit the better.) Fluid bottlers are more interested in volume and are less concerned about the solids level in milk. At present, milk shifts back and forth from manufacturing to fluid bottling, but is priced by regulation on the same basis (primarily volume and fat.) With the elimination of pooling arrangements, the fluid milk and manufacturing milk industries would be more like other sectors of the food economy with separate (but related) fresh and industrial milk markets. Moreover, milk production and
pricing would specialize to cater specifically to what manufacturers and fluid bottlers each want. Allocative efficiency should certainly increase with the elimination of the artificial and arbitrary pooling regulations that exist today.

From the trade perspective, a gradual deregulation scenario in the United States has a very different impact on world prices and trade flows than "export class" policies. Rather than perpetuating a "surplus clearing" world price scenario, gradual deregulation in the United States reduces export subsidies and should allow world prices to rise. Rising world prices make the United States more competitive, stimulate milk production in traditional exporting nations like Australia and New Zealand, and increase trade pressure on Canada.

This summary of some of the structure, efficiency and trade effects of new directions in U.S. dairy policy, suggests some areas for further academic work useful for assessing existing programs and developing policy for the U.S. dairy industry:

- develop a better understanding of the equilibrium price surface for manufacturing and fluid milk without pooling, or other regulatory inefficiencies,

- develop an understanding of the true value of the components of milk (protein, fat and other solids) for various uses of milk (for instance, manufacturing or fluid bottling),

- and, substantial work to develop an understanding of just what supply, demand and prices would be in world dairy markets outside of the narrow experience provided by the past century of market regulation.

Clearly, the U.S. dairy industry would look quite a bit different without the regulations that have shaped dairy industry structure historically and govern behaviour today! We have a way to go to understanding the future of the dairy industry, but it should be interesting.