



ANALYSIS AND COMMENTS

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Major Factors Affecting the Mexican Beef and Cattle Industry: What to Expect in the Coming Years[§]

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Introduction

These comments are based on an ongoing research project including the author's recent sabbatical work in Mexico during 2001. The project has the general objective to increase understanding of the Mexican beef and cattle industry and to study the implications of increased economic integration of the Mexican industry with expanding global cattle and beef trade. The principal component of this research is a computer-based economic model of the Mexican cattle and beef industry. The model uses mathematical optimization to analyze the impacts of changes in various factors that affect the industry. The following comments on important factors affecting the Mexican cattle and beef industry include indications based on preliminary results of this research.

Changing Beef Demand

The Mexican cattle and beef industry is developing and changing rapidly, primarily because of changes in consumer demand for beef. In turn, Mexican consumer beef demand is changing rapidly as a result of continued population growth and because of generally increasing levels of income. This economic growth is causing an increase in

the per capita consumption of beef and, more importantly, a change in the types of beef demanded, wherein higher quality grain-fed beef is being substituted for lower quality grass-fed beef and beef from cull animals.

It appears that the role of cull beef, in particular, is changing rapidly. Historically, cull beef was often not differentiated from traditional, grass-fed beef. Moreover, cull beef represented a significant portion of total beef consumption. Today, many consumers, especially in urban markets, prefer meat from younger animals and, increasingly, animals that are finished in feedlots or other semi-intensive production systems. The result is that cull beef is increasingly differentiated and relegated to more traditional, often rural, markets. Although Mexico is still deficit in cull beef production at this time and continues to import cull cows from the U.S. for slaughter, it is likely in the coming years that Mexico will have excess cull beef and could be a potential exporter of that product.

More Intensive Production Systems

Decreased demand for cull beef and other lower quality beef is being filled by higher quality meat from younger animals. This tendency, combined with increased total

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consumption, is stretching the Mexican cattle industry to its limits at this time. This will continue the shift toward more semi-intensive stocker and feedlot production systems in Mexico. This shift has large implications for the entire Mexican cattle industry. There will be a tendency for reduced use of forage for extensive stocker production and cattle finishing, which means that forage resources can be utilized for increased (or improved) cow-calf production.

Increased Competition with Other Livestock Industries

The disadvantage for the beef industry of the tendencies described above is the requirement for more high quality non-forage feed resources for semi-intensive production. Mexico is approximately fifty percent self-sufficient in production of feedgrains and perhaps only 10 percent self-sufficient in production of protein feeds. Thus, there is a significant reliance on imported feed for Mexican livestock production. The majority of these feeds are used by the poultry (for meat and eggs), pork and dairy industries.

Since cattle are less efficient in the conversion of grain into meat than poultry or pork, it is usually not economical to rely extensively on imported grain for beef production. For example, in the U.S., cattle are fed near grain production areas, while grain is often hauled long distances for poultry, pork and dairy production. Therefore, as the Mexican beef industry uses more semi-intensive production systems, it will simultaneously face increased competitive pressure from other livestock industries for the use of more expensive feed resources. The Mexican cattle and beef industry faces a delicate balance between providing higher quality meat to compete, in terms of consumption, with poultry and pork, and the competition with other livestock industries for high-quality feed resources.

Regional Advantages and Disadvantages

The issues described above also have significant implications for regional production and flows of animals and products within Mexico. The diverse geoclimatic zones in

Mexico have tremendous implications for crop and animal production in different regions of the country. In general terms, the old system of forage-based beef production meant that animals remained on pasture until finished, then were transported to urban centers to be slaughtered. For example, cattle produced in Veracruz remained on pasture until ready for slaughter, then were transported directly from Veracruz to Mexico City.

The emerging semi-intensive system favors cow-calf and stocker production in forage dominant areas, followed by cattle movement to feedlots in feed grain production areas. With the availability of modern meat processing infrastructure, cattle are slaughtered near the feedlots and the meat is transported to urban demand centers. For example, in this system cattle that are born and stockered in Veracruz, might then be shipped to Tampico (or Monterrey or Guadalajara) to finish in a feedlot, with the meat shipped to Mexico City.

This suggests that future regional production patterns will be heavily influenced by the availability and relative price of feedgrains in different locations in Mexico. Additionally, because of the beef industry's ability to utilize a wide variety of medium quality feeds, such as by-product and residual feed ingredients, regional location of cattle feeding may be influenced by the location of other livestock industries, food and beverage production and grain importing facilities. Other factors that will influence cattle and meat flows between regions include availability and quality of the transportation and meat-processing infrastructure. Development of more complex animal and product flows suggests the need for improved market information systems to facilitate efficient production and marketing in an increasingly integrated and interrelated industry.

International Competition and Global Markets

With increasingly open and rapidly developing international markets, it is essential that the Mexican cattle and beef industry develop with an awareness of the

global economic environment. Global markets bring both opportunities and threats. The threats include not only the economic competition of other countries, but also the challenges of assuring animal and human health and food safety. At the same time, global markets provide the opportunity for each country to exploit their comparative advantages and pursue enhanced economic benefits.

It is important to remember that, although the beef industry starts with the production of a single product in the form of an animal, the end result is a large set of final consumer products. This creates a very complex set of marketing issues in the beef industry. Because of this situation, beef trade issues are complicated by a mixed set of motivations for trade in different products. Beef trade may occur for the relatively simple issue of price competition but is often motivated by the need to improve the product mix or provide specific products lacking in the domestic market. Because consumer preferences for beef are very different in the U.S. and Mexico, there is considerable opportunity for complementary beef trade between the two countries.

The Mexican cattle and beef industry is inevitably influenced greatly by the large U.S. market next door. Much of the rapid growth in beef demand in Mexico recently has been met with imported beef from the U.S. This has occurred for a variety of reasons. In part, it is a matter of insufficient domestic production in Mexico. Beef production potential in Mexico has been severely disrupted by drought reduced cattle inventories and by the financial aftershocks of the 1994 Peso devaluation. Another factor appears to be the inability to meet the rapidly changing consumer demand for higher quality beef. The Mexican cattle and beef industry has not yet adjusted to the long run tendency for more intensive production systems. Also, there is the question of overall price competitiveness. Beef products in the U.S. tend to be differentiated in value to a much greater degree than is common in the Mexican market. The result is that some U.S. products are very price competitive in the

Mexican market at this time. The relatively higher demand for end meats in Mexico is very complementary to the relatively low demand for these products in the U.S.

Although Mexico does not currently export beef to the U.S., this could change in the future. As noted earlier, Mexico has the potential to become an exporter of cull beef in the coming years. The large Hispanic population in the U.S. provides the potential for exports of ethnically specific products in the U.S., including value-added processed products.

Finally, there are the impacts of dynamic short-run market conditions. The U.S. cattle and beef market is very cyclical. At the present time, high cattle prices in the U.S. are causing near record levels of Mexican cattle exports to the U.S. These high cattle prices are likely to persist for the next two to three years. However, rapid beef demand growth in Mexico is resulting in an increasingly strong market to retain more animals in Mexico for the domestic market. At the same time, decreasing beef production and generally strong beef demand in the U.S. is increasing the price level for U.S. beef and will affect the relative competitiveness of U.S. meat in the Mexican market. These factors will simultaneously affect traditional animal and meat flows, as well as emerging markets and potential new markets in the coming years.

Summary

Mexico is virtually certain to have a significant cattle industry in the future. The Mexican beef market is very dynamic and offers tremendous potential in the coming years. However, changing consumer preferences and rapidly evolving global economic environment imply that the Mexican industry faces dramatic change in the coming years. The Mexican cattle and beef industry of the future is very likely to look much different than that of the past.