

**COMMENTS ON THE ROLE OF COMPETITION
IN SHAPING THE AGRICULTURAL MARKETING
SYSTEM--POST RAIL DEREGULATION**

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Comments on
The Role of Competition in Shaping the Agricultural Marketing System--
Post Rail Deregulation¹
by L. Orlo Sorenson²

Introduction: Agricultural transportation almost defies concise discussion. The agricultural marketing system is characterized as much (perhaps more) by diversity as by uniformity. There is little common ground in the transport requirements for the marketing of Washington apples, Georgia cotton, Kansas wheat, and Texas beef.

For my discussion, I will narrow the product focus to grain and emphasize the role of rail transportation. Grain transportation enters discussions of rail transport policy perhaps more frequently than other agricultural commodities. However, rail transportation of grain provides only a subset of agricultural transportation issues, albeit an important subset. It is also true that a good deal of diversity exists within the transportation, storage, and handling systems for grains.

But, before we narrow the focus, let me say something about agricultural and rural transportation generally. There is a persistent myth that rural communities are not viable markets for transportation services and that dependable quality services are not self-supporting in rural areas. A pre-Staggers statement of this position is as follows: "It has been claimed and widely accepted that ... rural freight rates are artificially

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depressed; that passenger services to rural communities require and receive subsidies; and that much existing transportation provided by privately owned carriers would be discontinued if those carriers were not forced by public regulation to provide service" (Bruton, pp. 195, 196). This is not true, as acknowledged by Bruton. Agricultural transportation is not only viable but is a vital source of traffic for many carriers. Interstate Commerce Commission (ICC) railroad burden studies of past years have indicated that wheat alone in several years contributed more annual revenue above variable costs to railroads than any other single commodity. Since Staggers, rail freight rates for grain have decreased in an environment of pricing freedom, which would not have happened if rates had been depressed artificially through regulation. Likewise, rural communities have not seen wholesale abandonment of truck or passenger service since deregulation. Price and service responses to deregulation by carriers serving agriculture have helped to dispell this myth.

Now let us focus more directly on the market (or transactions) environment in rail transportation of grain. I will address issues in the following sequence. First, what has been happening in transportation markets for grain since the legislative base for current rules was established in October, 1980? Second, how have the events of the 1980's been affected by competitive relations and what can we expect in the future as competitive relationships work themselves out and, third, are the current rules superior to any other rules or does experience to date point to a need for modification of regulatory rules?

Current Markets: I identify several significant forces in transportation markets in the 1980's that either indicate or affect performance in agricultural transportation markets and that are probably significant in market system development.

First and foremost is the decline in rail transportation rates for grain since 1980. The recent USDA evaluation of the effects of the Staggers Rail Act on grain marketing indicated reductions in export rates and also reported that "some single-car rates charged to processors declined as railroads attempted to stay competitive with trucks" (Office of Transportation, p.i.).

Rate reductions reflect intermodal competition in some areas. I also perceive interrail competition to have been important to rate reductions in the Central Plains. In the first two and a half years after Staggers, tariff rates for wheat from 14 locations across Kansas to Gulf export destinations were reduced an average of 35 percent. When rates were deflated by the index of prices paid by farmers for all production inputs, the decrease was 43 percent. This is probably a larger decrease than in other areas because (1) rates before deregulation were high relative to rail variable costs and (2) several railroads compete for movement of Kansas grain to the Gulf. Specific reductions designed to compete with truck movements were also evident in Kansas. Price discounts on grain delivered by truck at Kansas inland terminals have gone down in the 1980's, suggesting a better competitive opportunity for trucks on short hauls.

Rate reductions also reflect a market condition for railroads in which freight cars were in surplus and demand for grain transport service was reduced. The important aspect of this is that railroad rates have responded to market conditions. I perceive that this rate response would have been much slower, if it would have occurred at all, in the pre-Staggers pricing environment.

Since Staggers, relatively stable rate patterns and rate relationships of the past no longer characterize grain rates. Contract rates and other selective, short-notice rate changes have introduced an instability in transport rates, with which grain merchants were not faced in the pre-Staggers marketing of grain. It is argued that short-notice rate variation and absence of information concerning competitors' rates have reduced pricing efficiency in grain markets.

The use of shipper/carrier contracts has expanded rapidly. The ICC reports a doubling of numbers of rail freight contracts from July 1983 to July, 1984. This probably means that number of contracts for carriage of agricultural products also has doubled. In the past, agricultural contracts have been a stable 13 to 14 percent of all contracts when reported by type of commodity.

The use of contracts means that rate and service conditions available to an individual shipper are determined by negotiation. Concern has been expressed frequently over the relative ability of smaller, independent grain shippers to negotiate favorable contract terms with carriers. Availability of resources to develop negotiating skills, the development of relevant information for negotiation, and the existence of competitive alternatives all contribute to successful negotiations. These conditions all would appear to favor larger shippers.

Conversely, successful negotiations on the part of one shipper may contribute to disaster for a competitor. Many examples exist of serious profit problems for local elevators in Kansas, resulting from apparently highly favorable contract rates for another firm, which raise the farm bid for grain relative to terminal bids and dry up opportunities for price margins consistent with operating costs for firms not parties to rail contracts.

Selective rate changes through special tariff conditions (e.g. minimum annual volume rates) and through shipper/carrier contracts also have changed competitive relationships among grain firms with disregard for some conditions that in the past have been considered unlawful discrimination and, in the case of contracts, without sufficient information readily available to competitors of contracting shippers to decide if legal action to determine unlawful discrimination is warranted.

After Staggers, railroads found themselves in a new competitive environment, with the ability to respond to competition. Struggles among railroads for market shares have been occurring and providing a dominant force in developments in the Central Plains since the Staggers Act. As a result of the new pricing environment following Staggers, competitive activity by railroads has increased and cooperative activity has declined--which appears to be the intent of the Act. As a further result, routing options and market access have been reduced for some (perhaps many) shippers. Restrictions have been enforced through gateway closings, modifying or cancelling of joint rates, selective changes in traffic interchange charges, and changes in transit and other enroute service opportunities. In short, it appears to me that inter-railroad competition has become a major force in structuring the pattern of rates and services available to grain shippers. This is rapidly becoming competition among a small number of firms, however.

Railroad rates historically have accounted for competition from other modes, although the relative sluggishness of pricing responses to changed market conditions prior to deregulation provided opportunities for profitable adjustment to competition from other modes following Staggers. Geographic or market competition is also significant in long-distance grain movement. Various origin areas served by different railroads compete for delivery

of feed grains to poultry producers in the Southeast; in movement of feed grains, soybeans, and wheat to Gulf ports for export; and in movements of feed grains and wheat to the West Coast for export.

Anticipated Developments: With existing rules, it would appear that railroads are in a position for substantial exercise of rate and service strategies designed to maximize revenues for individual rail systems. These strategies may be (1) a fine tuning of rates to approach as closely as possible the reservation price of individual shippers, (2) structuring of rates to fit long-term development plans for railroads, (3) consolidation of rail systems and rail/barge and rail/truck systems to increase pricing and service options of the railroads, and (4) inter-railroad joint planning to maximize rail movement over long hauls. In so doing, the railroads become agents of change in a system that has been identified by stability both in logistic and transportation characteristics and in industry structure.

As a result, I hypothesize significant forthcoming changes in the grain marketing system, especially at the local level. We probably will see significantly fewer long distance shippers of grain as shipper/carrier contracts and trainload shipments further concentrate shipping points in grain surplus areas. This doesn't necessarily mean wholesale abandonment of local elevators but it does mean substantial adjustment in the character of the business operation of those firms that are not major long-distance shippers.

A second likely development is integration of local shipping points into larger firms. Contracting ability will continue to provide large grain shippers with a significant advantage over smaller firms. Independent local elevators will find it increasingly difficult to compete in transporta-

tion markets. It is also likely that freight movement on rail line segments not serving trainload shipping points will be further reduced, leading to more branchline abandonment, at least in the Great Plains.

Continued consolidation of transportation systems also is likely, if permitted. With a small number of rail systems and limited interchange of freight, increasing market share appears related to the number of origins and destinations served directly. Large grain shippers also will benefit if the railroad serving the shippers originating facilities also serves a large number of potential market destinations. Hence, both carriers and shippers are likely to support further consolidation of transportation networks.

Evaluation of Current Rules: In evaluating a regulatory program, one first must establish the criteria. I assume most of us have done that either implicitly or explicitly. For economists, resource costs and efficiency of given operations are always important. Progressiveness of system development is a second criterion. Distribution of income or changes in distribution resulting from system changes is a third. Fairness to participants is an additional criterion that has loomed large in the evaluation of need for economic regulation of railroads.

Hard data for evaluation of performance based on these criteria are extremely scarce. Therefore, evaluations at this point depend upon anecdotal information and subjective judgement--which casts evaluations more in the role of hypotheses than in the role of conclusions.

Resource efficiency in rail transport of grain probably has increased since the Staggers Act. This is a hypothesis that needs to be tested. Judgements concerning benefits of reduced circuitous movement, reduced

yard time, increased trainload movement, and reduced loading and unloading time support this hypothesis but I am not aware of empirical studies that either support or cast doubt on it.

A contravening rational hypothesis may say that the merchandising, handling, and storage system for grain has become less efficient because of increased pricing uncertainties, unstable transport rates, restricted access to market, and restricted routing and enroute services. If this is true, price spread between geographic points over which marketing services are performed would be expected to increase when considered independently of transport rates. At Kansas State, we have assembled weekly data on price spreads between to-arrive prices of wheat at the Gulf and the local elevator farm bids at 14 Kansas points. These data cover the period since January, 1977. These data do not indicate consistent margin increases after 1980, but given the nature of the adjustments to new transport conditions in the past four years, this is far from conclusive evidence. However, market margin is a key variable in evaluating the performance of a highly competitive grain marketing system. At least this evidence does not support a hypothesis of a less efficient, higher cost market system following deregulation.

Kansas State studies indicate that the grain marketing system is very effective in reflecting changed transportation rates in changed inter-market price spread both in times of rate increase and in times of rate decrease. Therefore, benefits of reduced transport rates are distributed broadly, dividing between consumers and producers on a basis of market determination. Less evidence exists concerning distribution of benefits or productivity gains for railroads. Although evidence of excess profits among railroads has not appeared, significant increase in railroad earnings from grain traffic may have occurred or may be in prospect.

The fairness issue is extremely difficult to appraise. Unquestionably, logistics patterns have changed and some grain facilities have lost capital value or have become obsolete. In some cases, these facilities are sudden victims of accumulated technological and economic change to which markets had not adjusted in the pre-Staggers environment. In other cases, shippers may be disadvantaged simply because of marketing and pricing strategy of a railroad directed toward a competing railroad or for other market strategy reasons.

In transport of non-agricultural commodities, exercise of market power in cases where investments have circumscribed shipper options has been cited as potential undue use of power by carriers. Charges of arbitrary behavior by carriers causing "unfair" economic injury to shippers have appeared more frequently in coal traffic than with grain. This does not mean that they don't occur in grain transport. Injured grain shippers may not have the resources necessary to institute legal action in the present environment for control and enforcement.

Exercise of market or competitive strategy by railroads can result in discrimination, which can be very injurious to the disadvantaged shipper. Rail cost structures allow a broad range of rational prices, which may be used to achieve market objectives. This leaves shippers, especially smaller shippers, in vulnerable positions. A re-definition of what constitutes undue and unlawful discrimination is badly needed, along with more readily available means of determining the existence of discrimination and of seeking redress.

Summary: Significant benefits to grain industries and consumers from the change in regulation seem to be accruing. Railroad productivity appears to have increased. Freight rates for grain have

gone down, probably in part because of innovations and in part as a result of increased inter-railroad and intermode competition.

Substantial change is occurring in the grain distribution system and more is likely. Many features of the emerging distribution system work to the disadvantage of local elevators; are likely to result in fewer elevators functioning as long-distance shippers; and will result in greater ownership and market concentrations in grain industries. For grain merchants, routing restrictions and resulting limits on market access appear to be serious concerns. Undoubtedly, routing restrictions foreclose market opportunities on occasions. The extent of market inefficiencies introduced by these restrictions is not known.

Maintaining rail alternatives and competitively determined rates for as many shippers as possible is important to grain markets. In the area with which I am most familiar, the Central Plains, a reasonably workable level of inter-railroad competition exists. This is important because there is still some distance between rail cost of hauling grain in that area and costs generated by competing modes. Evidence on this issue has been provided by research studies (for example, Fuller and Shanmugham). A public policy goal of increasing and expanding competition among rail carriers is an important objective. This means, among other things, closer surveillance of railroad consolidation.

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