## Introduction

Vertical coordination of the broiler, turkey, and egg industries changed significantly decades ago. In the broiler industry, production contracts between feed companies/contractors and growers accounted for over 85 percent of production in 1955, as fewer growers operated independently. These contracts later evolved, giving more control to the contractors. In the 1960s, relationships between the production and processing stages also changed, as feed companies became more directly involved in both broiler production and processing. In the 1970s, many feed companies exited the broiler business, leaving processors as the major contractors with growers. Since the 1950s, the prevalence of production contracts in the broiler industry has been stable.

In the turkey and egg industries, contracting developed at a slower rate than in the broiler industry, but vertical integration was more common. In vertically integrated operations, a single firm conducts production and processing. Initially, feed dealers entered production contracts with egg and turkey producers. In 1955, 21 percent of turkeys were produced under production contracts, and 4 percent were produced in vertically integrated operations. By 1977, production contracts accounted for 52 percent of production, and vertical integration had increased to 28 percent of production. In 1955, only 2 percent of table eggs were produced under production contracts or vertically integrated operations. By 1977, production contracts and vertically integrated operations accounted for 44 and 37 percent of table egg production, respectively. Over this period, production contracts in the egg and turkey industries evolved to transfer more price and production risk from growers to contractors, and processors assumed the role of contractor. Today, production contracts, together with vertical integration, account for over 90 percent of production in each of the three industries.

Coordinating arrangements in the turkey and egg industries have received less scrutiny than arrangements in the broiler industry, perhaps due to the smaller size and level of growth of the turkey and egg industries. In 1999, broilers represented 68 percent of the estimated farm value of U.S. poultry and egg sales, compared with 19 percent for eggs and 13 percent for turkeys (USDA[c]). However, despite these differences, a comparison of the structural changes in each of the three industries may provide useful insights into other agricultural industries that are undergoing changes in vertical coordination.

More recently, the U.S. pork industry also has undergone significant changes in vertical coordination, as contracting has surged. From 1993 to 2001, hogs sold through contractual arrangements increased in share of total hogs sold from 10 to 72 percent. Consequently, sales and purchases through the traditional spot, or open, markets have dwindled to 28 percent.

This report examines possible motives for changes in vertical coordination of the poultry, egg, and pork industries. In the broiler industry, production contracts and vertical integration facilitated rapid growth of the industry through gains in production efficiency and response to consumer preferences for convenient, nutritious products (Martinez, 1999). To what extent is the broiler industry unique in its motives for contracting and vertical integration? What are the common characteristics of the poultry, egg, and pork industries that explain such a large degree of contracting and vertical integration? Why are there differences in the use of contracting and vertical integration in the otherwise similar poultry and egg industries? What insights do such comparisons bring to industries that are currently undergoing dramatic structural changes, such as the pork industry? This report attempts to answer these questions by extending concepts from transaction cost economics.