

state to Florida divided by the sum of the exempt and nonexempt tonnage hauled or exported from Florida to another state. A ratio greater than 1.0 inferred more carriage by volume was being shipped into Florida, thereby implying an increased potential for obtaining a backhaul into Florida. The hypothesized effect on BCU was positive (Figure A1, curve C).

Interstate highway corridors serving Florida FF&V truckers were included. Two prominent highway arteries serving Florida were the interstate systems of I-95 connecting the Florida east coast with the Northeast and I-75 connecting Florida with the Midwest and the upper Midwest (via I-65 as a feeder artery). The relative importance of each corridor has been shown earlier in terms of outbound shipments and citrus inspections (Table 1), but the hypothesized effect was unknown. The hypothesized model was summarized as follows:

$$BCU = f(FHM, OWN, PAV, I-95) \quad (A1)$$

where: BCU = backhaul capacity utilization,
 FHM = fronthaul mileage,
 PAV = product availability for a backhaul,
 $I-95$ = an interstate corridor used by Florida truckers,
 OWN = owner-operator, truck ownership.

Model Estimation

The model specification incorporated a functional form that was similar to Figure A1. It was assumed that the error term of the model was heteroskedastic and must be corrected. The following model was specified:

$$CUR_i = \beta_0 + \beta_1 FHM_i + \beta_2 PAV_i + \beta_3 I-95 + \beta_4 OWN_i + e_i \quad (A2)$$

where: $CUR_i = \ln((100/BCU_i) - 1)^1$,
 \ln = natural logarithm,
 100 = 100 percent, the upper limit of BCU ,
 $BCU_i = (1 - (\text{empty backhaul mileage/one-way fronthaul mileage})) \times 100$, or the percent of BCU for truck i ,
 FHM_i = fronthaul mileage from Sanford, Florida to the interstate destination of truck i ,
 PAV_i = the exempt truckloads plus the nonexempt truckloads capable of being hauled in refrigerated vans (Ramirez, p. 58-60) from an interstate destination to Florida, divided by the exempt truckloads plus the nonexempt truckloads capable of being hauled in a refrigerated van from Florida to the interstate destination of truck i ,

1. When $BCU_i = 0$, CUR_i is undefined. Thus, when $BCU_i = 0$, the data entered for $BCU_i = .001$.