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December 18 2020

Econometrics

View(FarmingData\_excel\_)

library(AER)

library(MASS)

library(ggplot2)

colnames = c(FarmingData\_excel\_)

FarmingData\_excel\_$AcreInsurePerOps = FarmingData\_excel\_$AcresInsured/FarmingData\_excel\_$OpsInsured

m1= lm(FarmingData\_excel\_$NetCashPerOp ~ FarmingData\_excel\_$CropLandPctOp + FarmingData\_excel\_$MachRentPctOpXp

+ FarmingData\_excel\_$MachRentPctOpXp + FarmingData\_excel\_$IntNonRealPctOpXp + FarmingData\_excel\_$IntRealPctOpXp

)

summary(m1)

m2= lm(FarmingData\_excel\_$NetCashProducerPerOp ~ FarmingData\_excel\_$IntNonRealPctOpXp + FarmingData\_excel\_$IntRealPctOpXp )

#Type of Debt

summary(m2)

m3= lm(FarmingData\_excel\_$NetCashProducerPerOp ~ FarmingData\_excel\_$NetCashPerOp)

summary(m3)

m4 = lm(FarmingData\_excel\_$NetCashProducerPerOp ~

FarmingData\_excel\_$MachRentPctOpXp + FarmingData\_excel\_$UtilityPctOpXP +

FarmingData\_excel\_$FertPctOpXP + FarmingData\_excel\_$ChemPctOpXP +

FarmingData\_excel\_$FuelPctOpXp + FarmingData\_excel\_$RentLandPctOpXp

+ FarmingData\_excel\_$PlantsPctOpXp + FarmingData\_excel\_$SuppliesPctOpXp

+ FarmingData\_excel\_$AcreInsurePerOps)

#Capital Expenses

summary(m4)

m5 = lm(FarmingData\_excel\_$NetCashPerOp ~ FarmingData\_excel\_$CustomWorkPctOpXP

+ FarmingData\_excel\_$ContractPctOpXP + FarmingData\_excel\_$HirePctOpXp)

#Labor Expenses

summary(m5)

m6 = lm(FarmingData\_excel\_$NetCashPerOp ~ FarmingData\_excel\_$CropLandPctOp +

FarmingData\_excel\_$VetPctOpXp + FarmingData\_excel\_$AnimalsNoBreedPctOpXP +

FarmingData\_excel\_$BreedPctOpXP + FarmingData\_excel\_$FeedPctOpXP +

FarmingData\_excel\_$PlantsPctOpXp)

#Crops Versus Animals

summary(m6)

g1 =ggplot(FarmingData\_excel\_,

aes(x=FarmingData\_excel\_$FeedPctOpXP,

y=FarmingData\_excel\_$NetCashPerOp)) + geom\_point()

g1 + labs(title = "Animal Feed as % of Expenses Vs. Profit Per Operation",

subtitle="By State",

y="Profit Per Operation",

x="Animal Feed as Percentage of Expenses")

g1 =ggplot(FarmingData\_excel\_,

aes(x=FarmingData\_excel\_$FeedPctOpXP,

y=FarmingData\_excel\_$NetCashPerOp)) + geom\_point()

g2 =ggplot(FarmingData\_excel\_,

aes(x=FarmingData\_excel\_$PlantsPctOpXp,

y=FarmingData\_excel\_$NetCashPerOp)) + geom\_point()

g2 + labs(title = "Seeds & Plants as % of Expenses Vs. Profit Per Operation",

subtitle="By State",

y="Profit Per Operation",

x="Seeds & Plants as % of Expenses")

g3 =ggplot(FarmingData\_excel\_,

aes(x=FarmingData\_excel\_$RentLandPctOpXp,

y=FarmingData\_excel\_$NetCashProducerPerOp)) + geom\_point()

g3 + labs(title = "Land Rent as % of Expenses Vs. Profit Per Operation",

subtitle="By State",

y="Profit to Producer Per Operation",

x="Land Rent as % of Expenses")

g4 =ggplot(FarmingData\_excel\_,

aes(x=FarmingData\_excel\_$HirePctOpXp,

y=FarmingData\_excel\_$NetCashProducerPerOp)) + geom\_point()

g4 + labs(title = "Hired Workers % of Expenses Vs. Profit Per Operation",

subtitle="By State",

y="Profit to Producer Per Operation",

x="Hired Workers as % of Expenses")

g5 =ggplot(FarmingData\_excel\_,

aes(x=FarmingData\_excel\_$IntNonRealPctOpXp,

y=FarmingData\_excel\_$NetCashProducerPerOp)) + geom\_point()

g5 + labs(title = "Interest for Non-Real Estate % of Expenses Vs. Profit Per Operation",

subtitle="By State",

y="Profit to Producer Per Operation",

x="Interest Rate For Non-Real Estate as % of Expenses")

g6 =ggplot(FarmingData\_excel\_,

aes(x=FarmingData\_excel\_$IntRealPctOpXp,

y=FarmingData\_excel\_$NetCashProducerPerOp)) + geom\_point()

g6 + labs(title = "Interest for Real Estate % of Expenses Vs. Profit Per Operation",

subtitle="By State",

y="Profit to Producer Per Operation",

x="Interest Rate For Real Estate as % of Expenses")