**STA 312F2007 Solutions to Quiz 10**
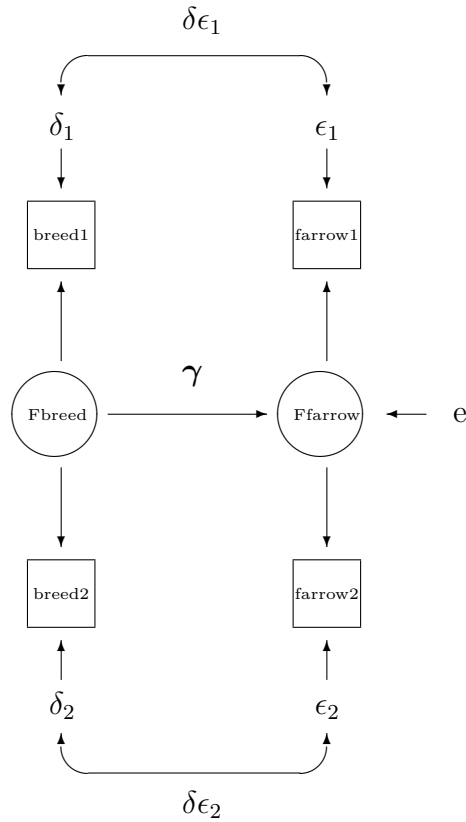
1. The path diagram



2. This model is identified because when data are collected according to the double measurement design, model identification is guaranteed.

3. Test statistic, $X^2 = 4.4834$
   degrees of freedom $= 1$
   p-value $= 0.0342$

   Reject $H_0$ since p-value $< 0.05$, we conclude that the model is not appropriate.