

# Re: Ratio as a response variable

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- *From:* Philip A. Viton <[viton.1@xxxxxxx](mailto:viton.1@xxxxxxx)>
  - *Date:* Mon, 13 Aug 2007 11:19:17 -0400
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In article <1186679781.417116.288320@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx>, heath@xxxxxxxxxxxxxxxx says...

On Aug 9, 11:47 am, jonesor <[owen.jo...@xxxxxxxxxxxxxxxx](mailto:owen.jo...@xxxxxxxxxxxxxxxx)> wrote:

Hi,

Can someone please outline what the problems are with using a ratio as a response variable in a regression model.

I know there are problems with using a ratio who's denominator is also an explanatory variable but what are the issues if the denominator is NOT among the explanatory variables?

What do you call a variable that is neither an explanatory nor a response variable?

Hope this helps.

Greg

I suspect that the OP meant an lhs variable that is a proportion, ie between zero and one. If so, then one standard problem in a regression context is that you can't guarantee that, once you've estimated the regression coefficients, that  $x'b\text{-hat}$  (ie, your estimated predictor of the lhs) is between zero and one, which makes interpretation somewhat problematic.

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Re: Ratio as a response variable

Phil Viton  
Ohio State University