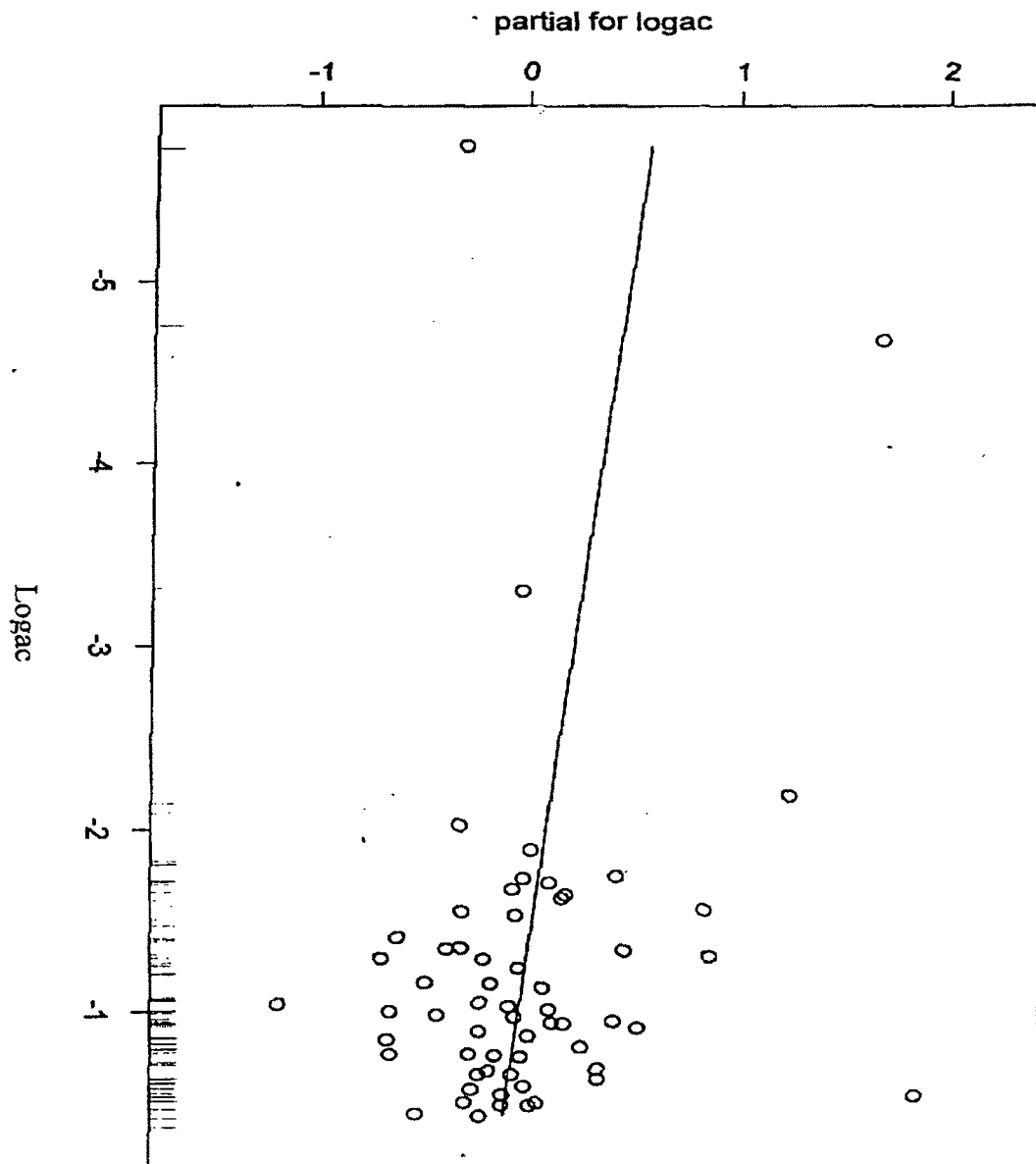


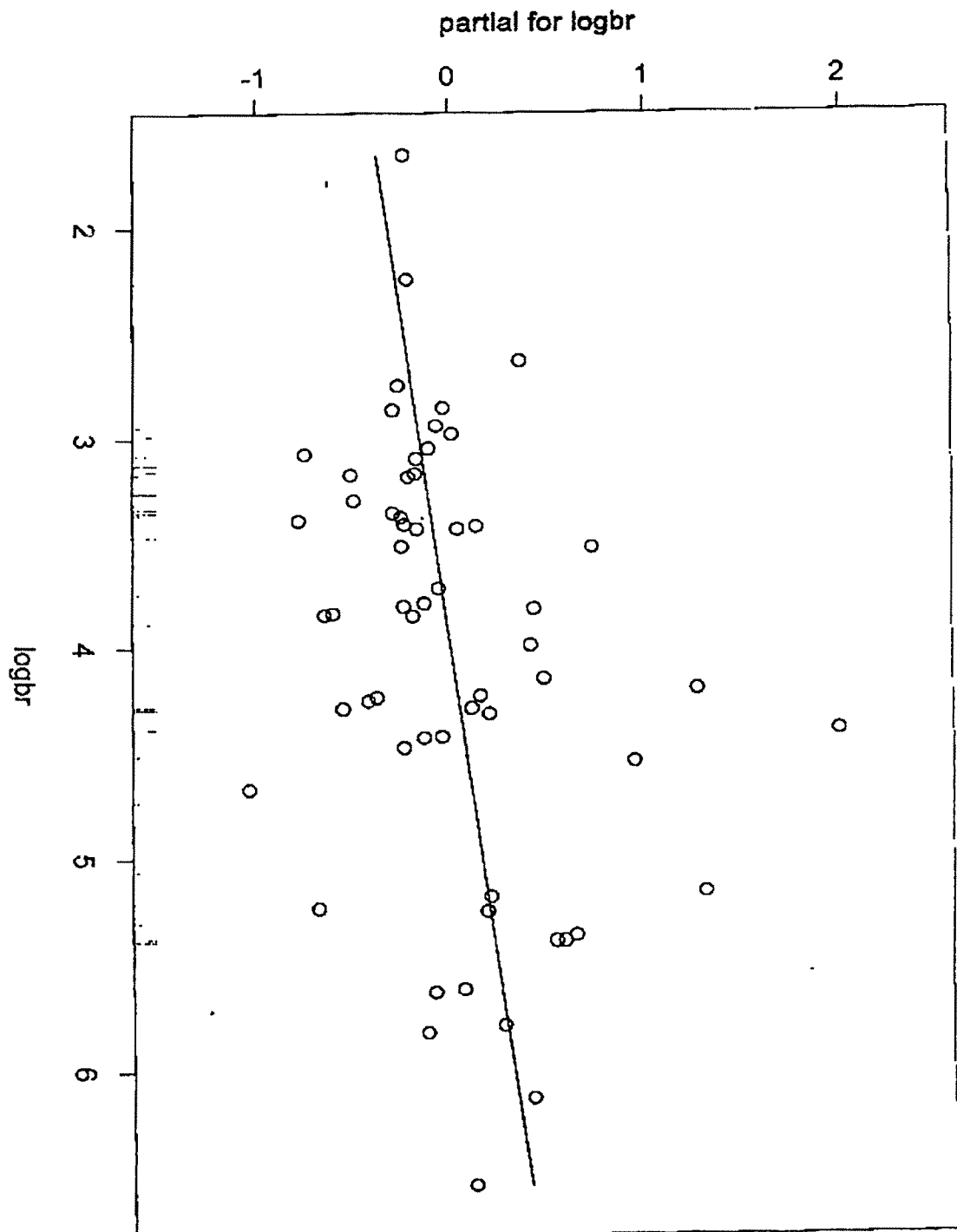
Appendix A

Scattergram for Public and Private Sector Companies

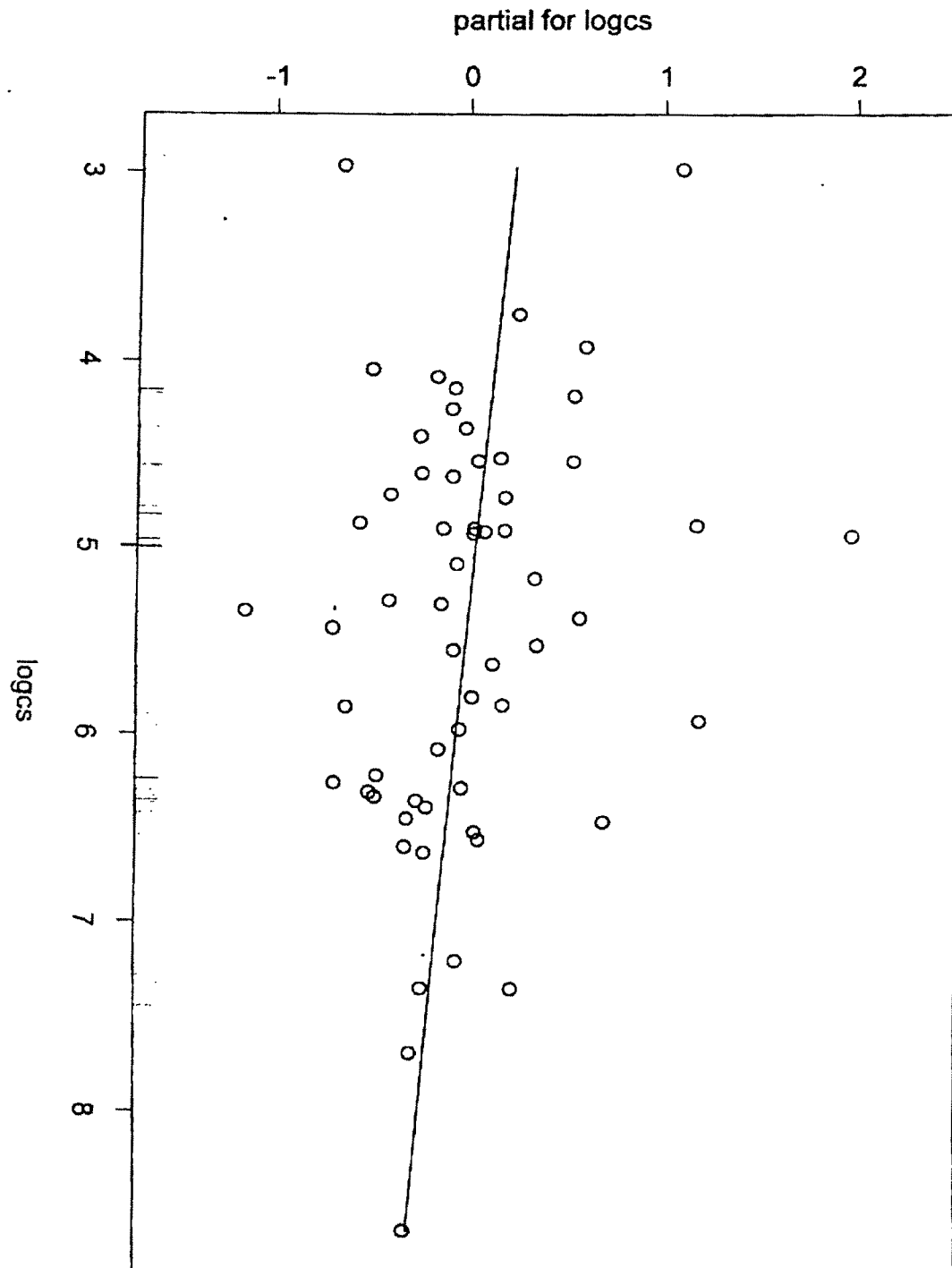
1. On the X axis log assets composition is shown and on the Y axis partial residuals for log assets composition is shown. Partial for log ac means log debt equity after removing the effect of log ac from it. Since the observed points lie close to the fitted line mostly, except a few outliers and do not follow any other definite pattern, the relationship is linear and negative between log ac and log de.



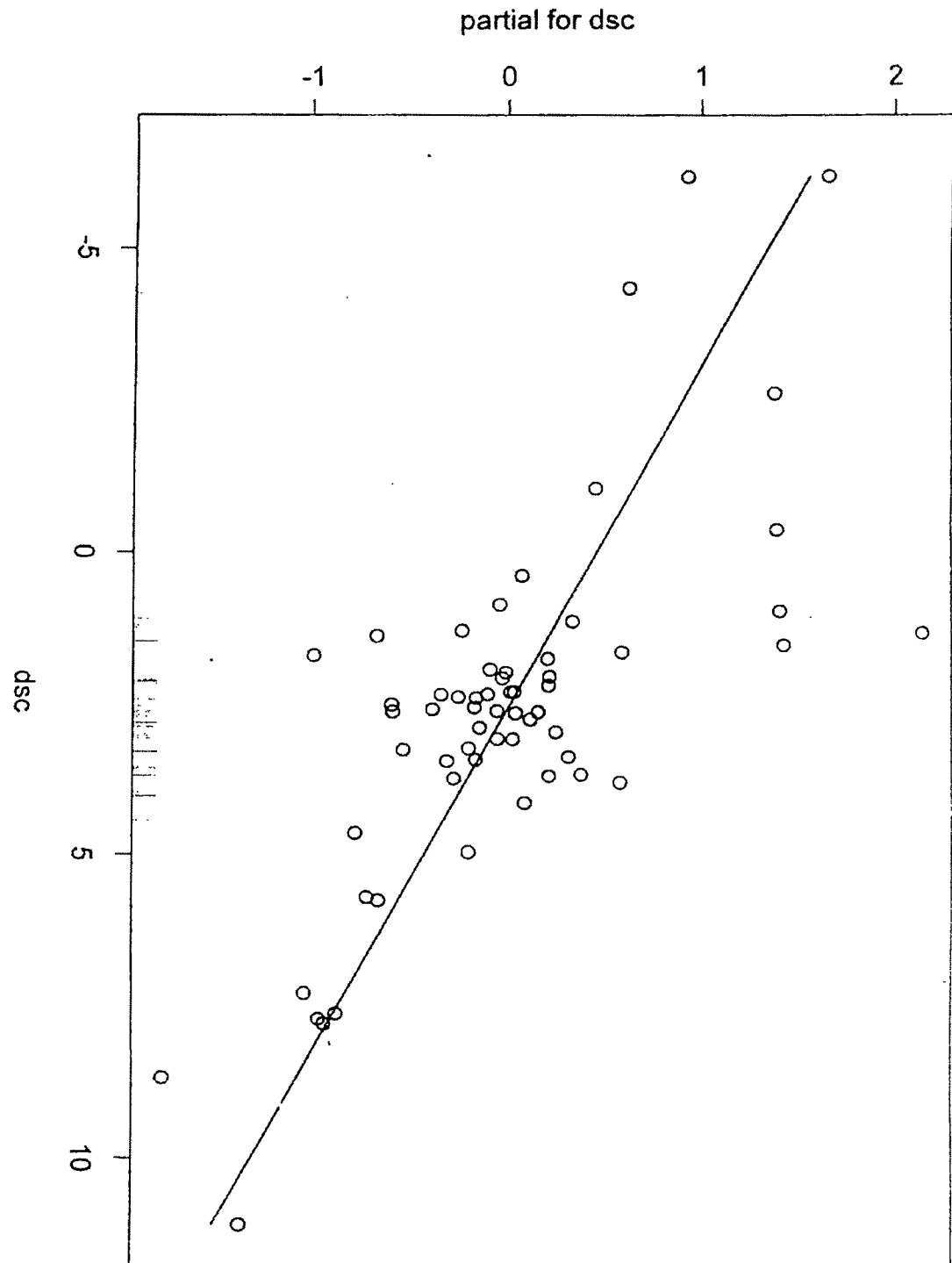
2. On the X axis log business risk and on the Y axis partial residuals for log business risk are shown . Partial for log br means log de after removing the effect of log br from it. Since most of the observed points (except a few outliers) lie close to the regression line, it means that linearity assumption is valid and it is clear that the relationship is positive.



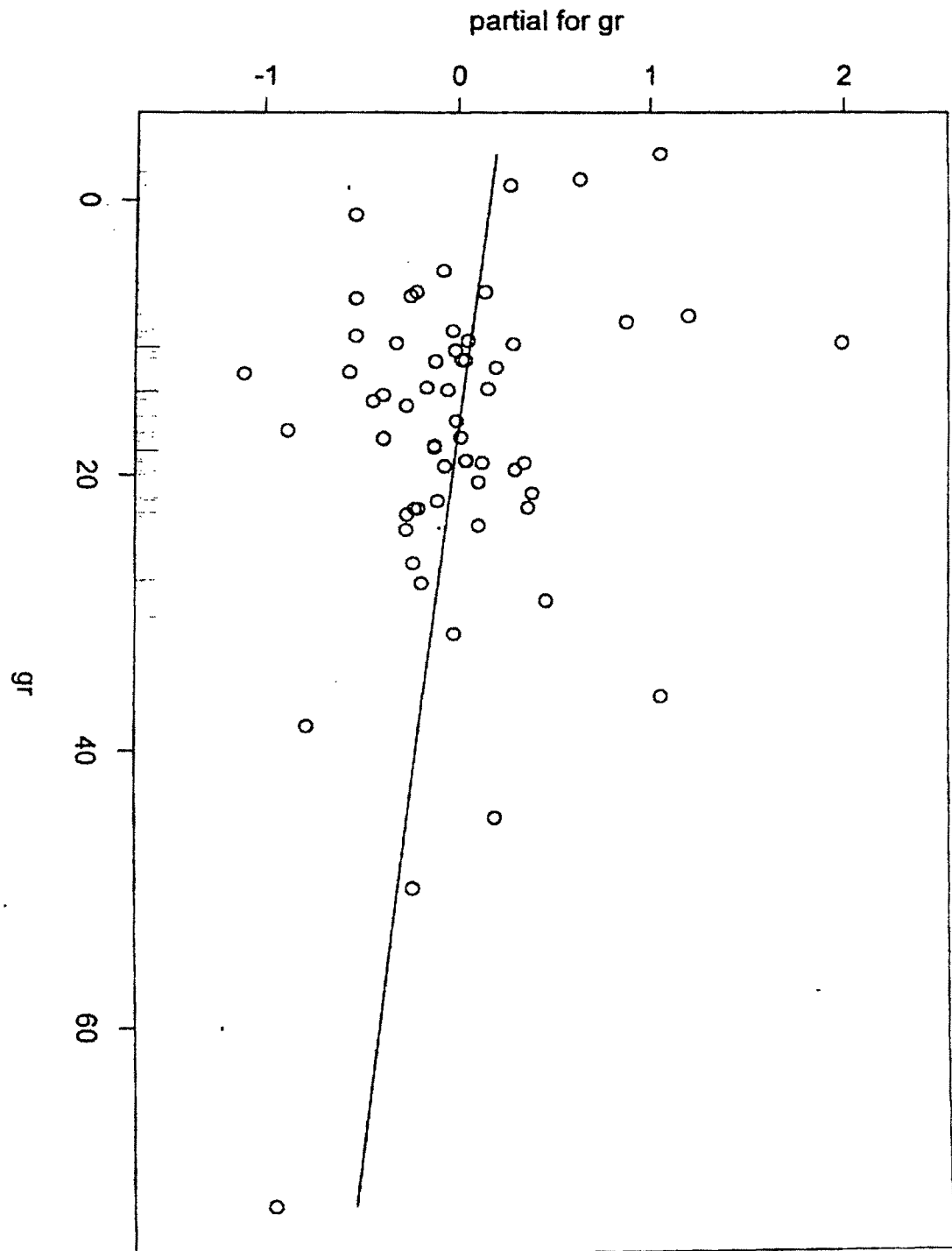
3. Since observed points lie close to the fitted line, it is a good fit and more or less follow linear pattern. On the X axis log corporate size is measured and on the Y axis partial residuals for log cs(or log de after removing log cs from it) is measured. From the graph it is clear that the relationship is negative.



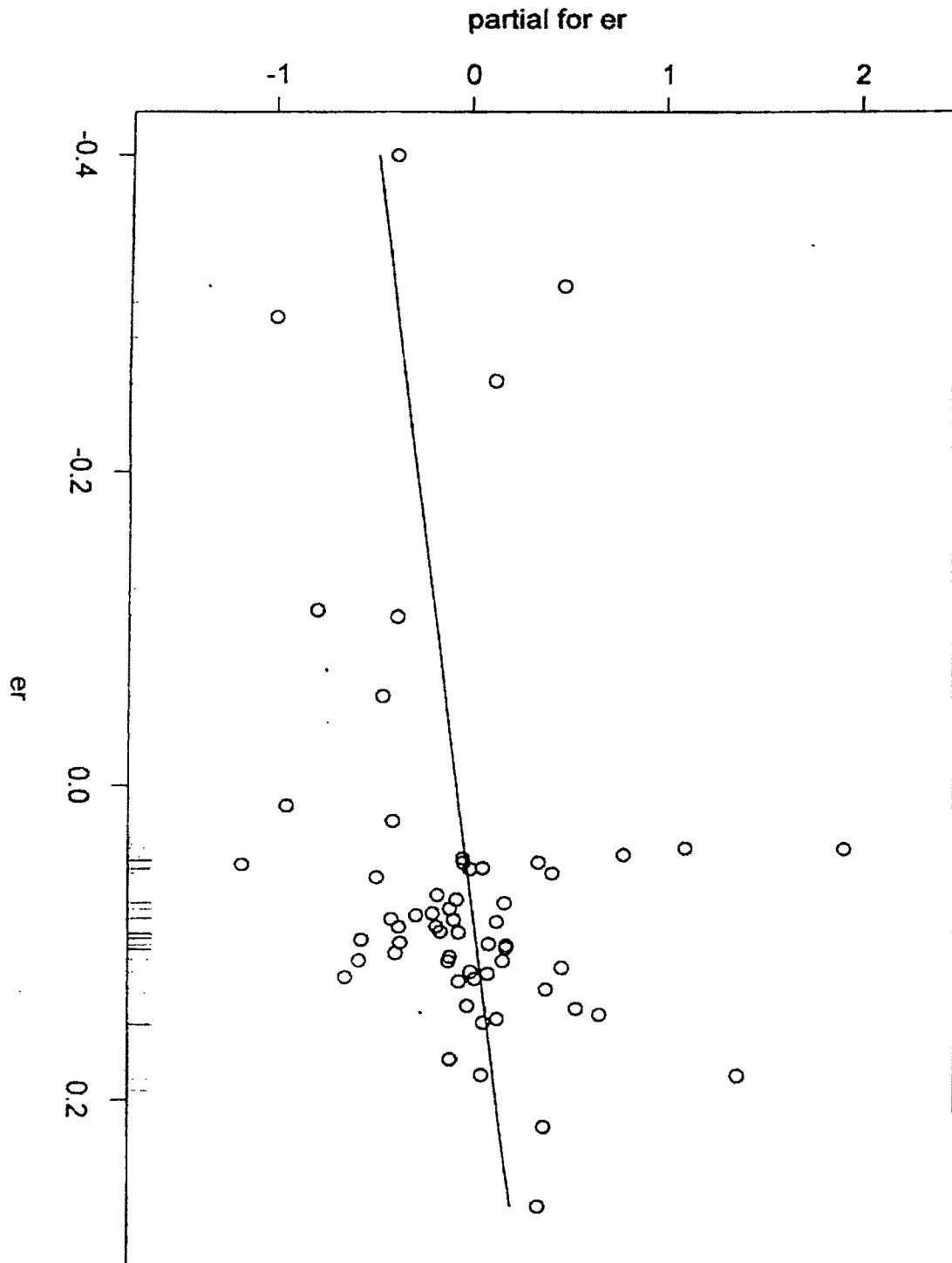
4. On the X axis debt service capacity is plotted and Y axis partial residuals for dsc is plotted. The observed points mostly lie close to the fitted line and more or less follow a linear pattern. As dsc increases, partial residuals decrease, so the relationship is negative.



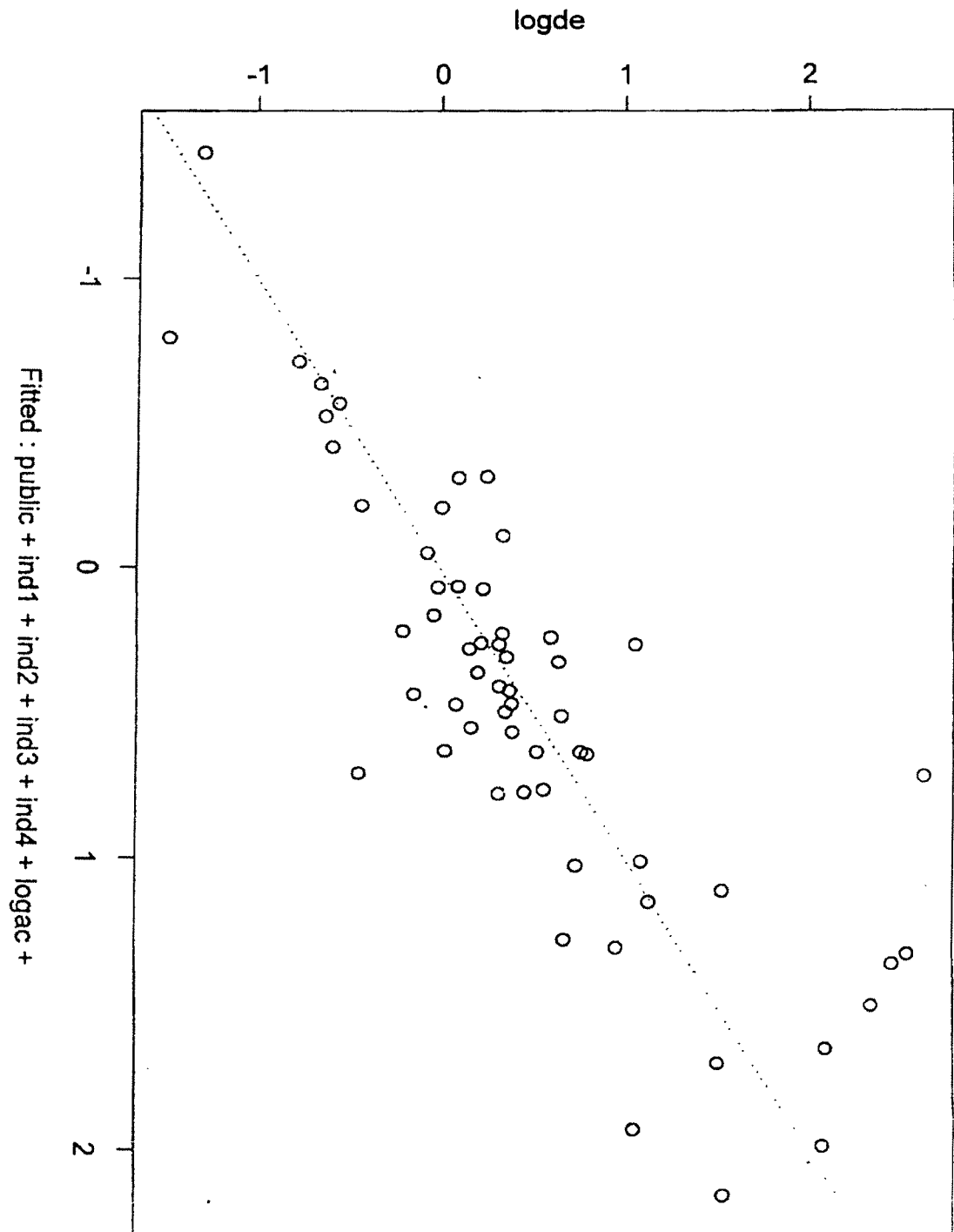
5. Here growth rate and partial residuals for growth rate are plotted. The relationship is linear, as the observed points lie close to the fitted line (except a few outliers), and from the graph it is clear that debt equity ratio is negatively related with gr.



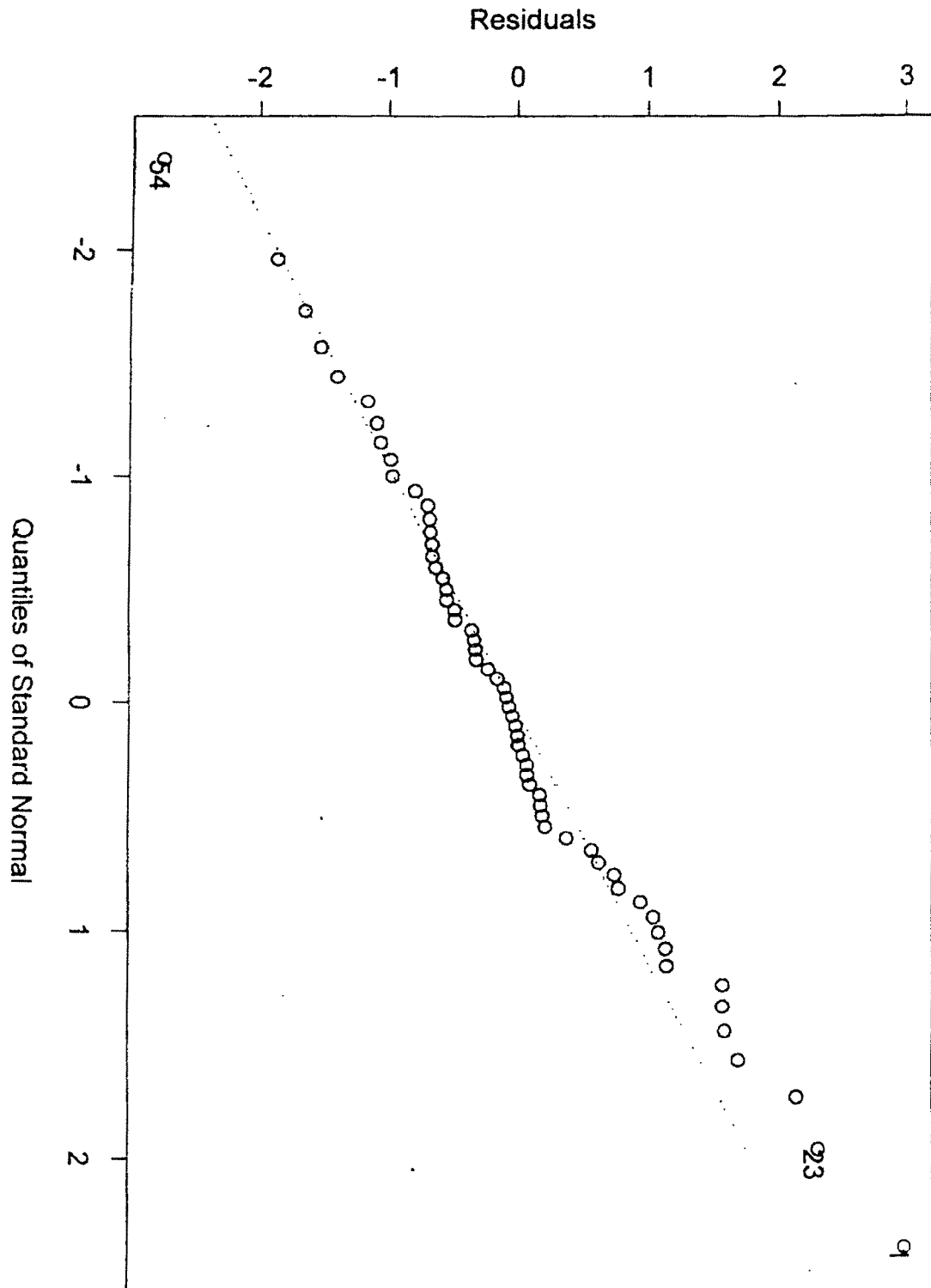
6. Here also the relationship between earning rate and partial residuals for er is linear, as the observed points lie close to the fitted line. And the relationship between er (earning rate) and de (debt equity) is positive.



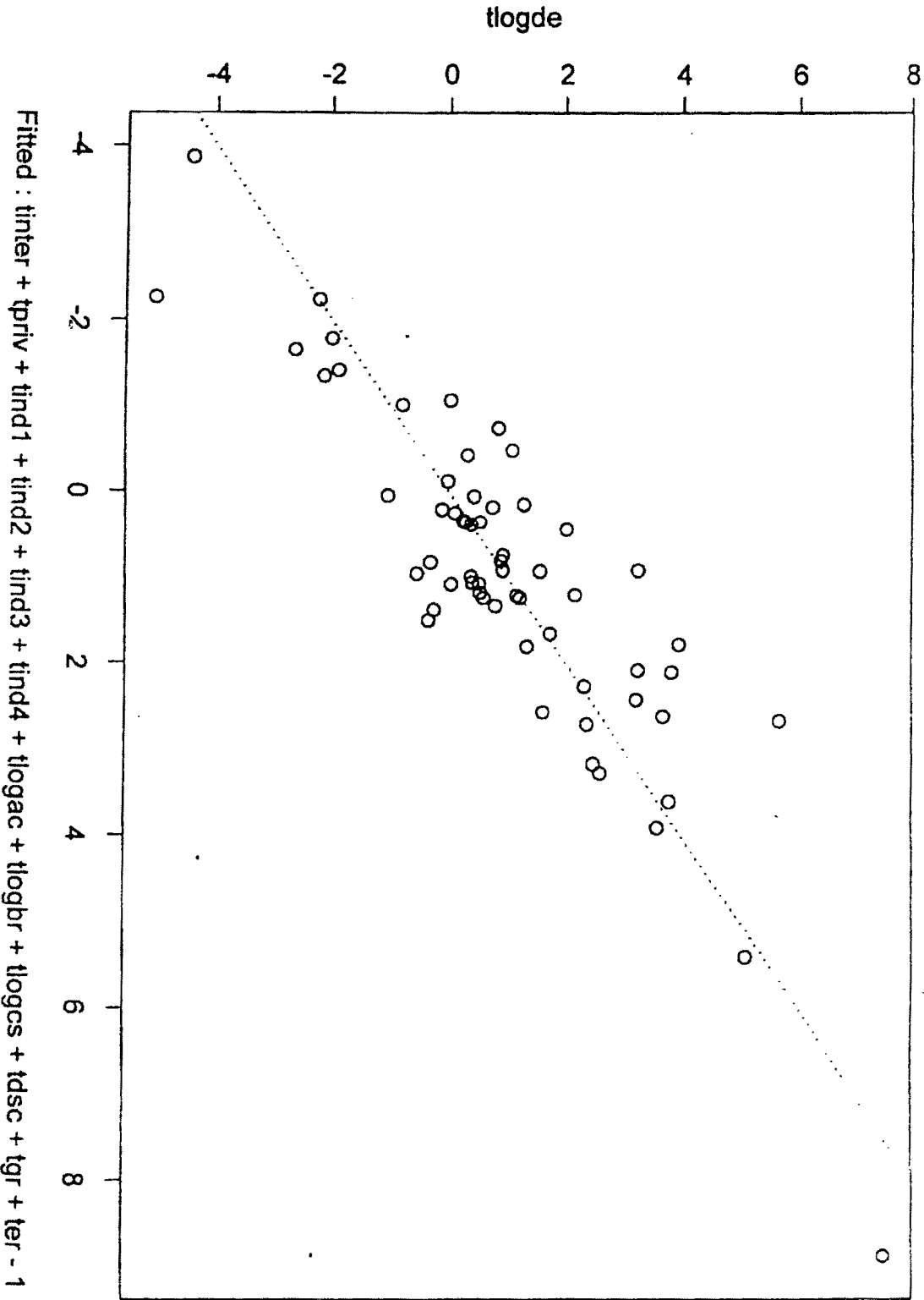
7. On the X axis all independent variables are plotted and on the Y axis dependent variable is plotted. Observed log de should be similarly distributed with majority of the points clustered around 0, and symmetrically distributed about 0, or $N(0, \sigma^2)$ (i.e. average or mean value of the deviations of any given X should be zero). But from the observed versus fitted data it is clear that error may not be homoscedastic.



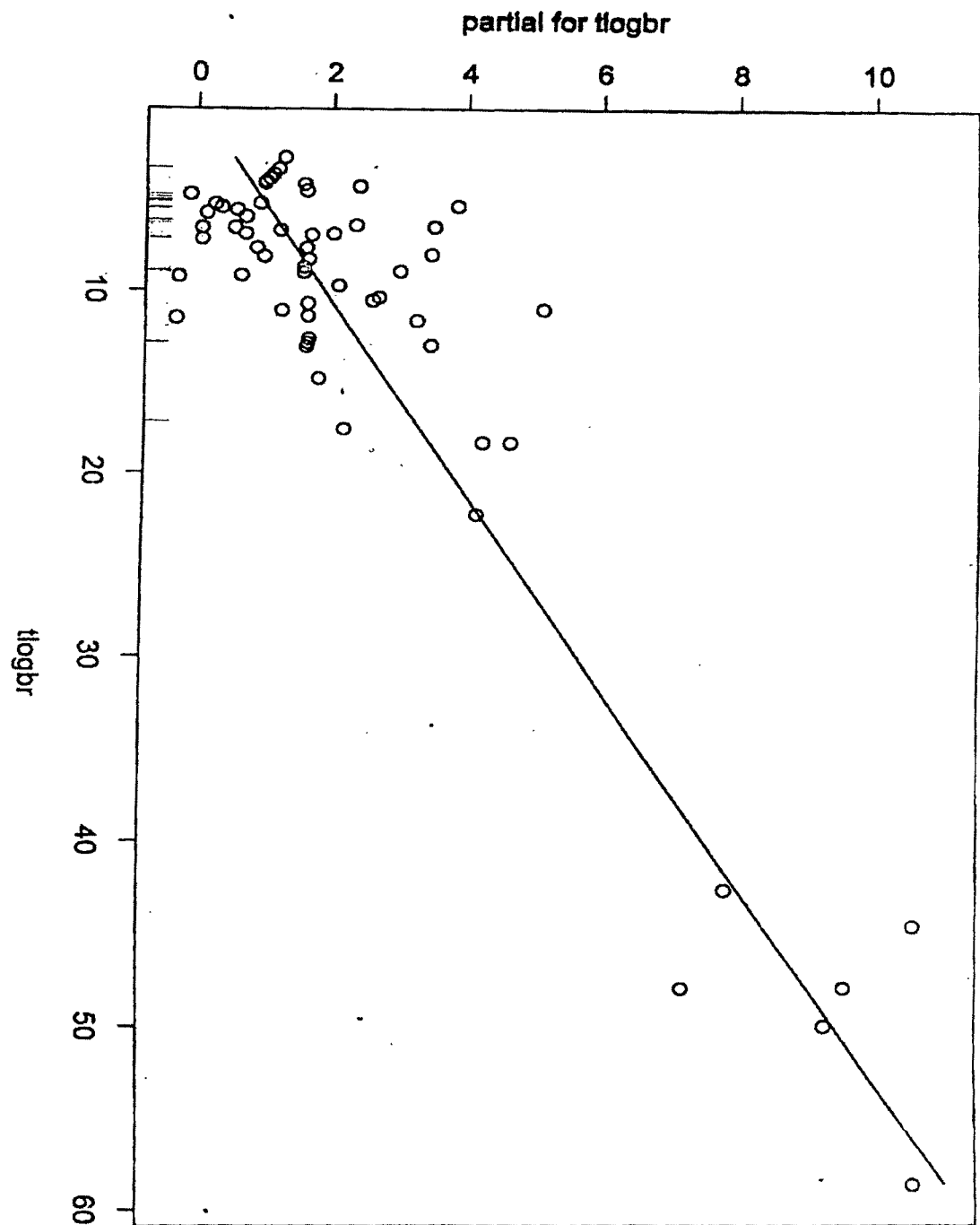
8. Here on the X axis quantiles of standard normal and on the Y axis residuals are plotted. As the residuals follow a similar pattern and lie very close to the line, The assumption of normality of the distributions of residuals is justified.



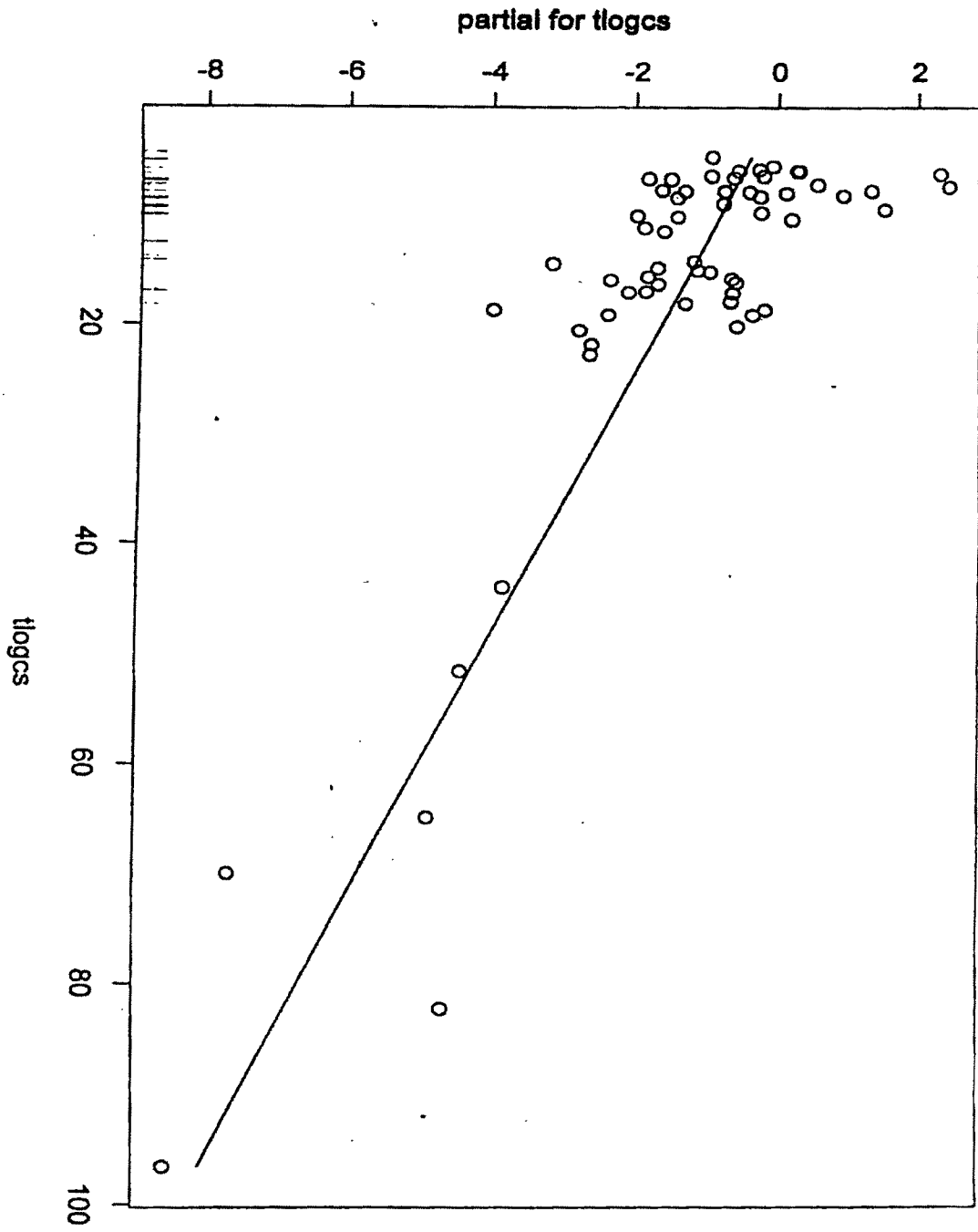
9. This is a good fit of the observed versus fitted data, since most of the points lie very close to the regression line.



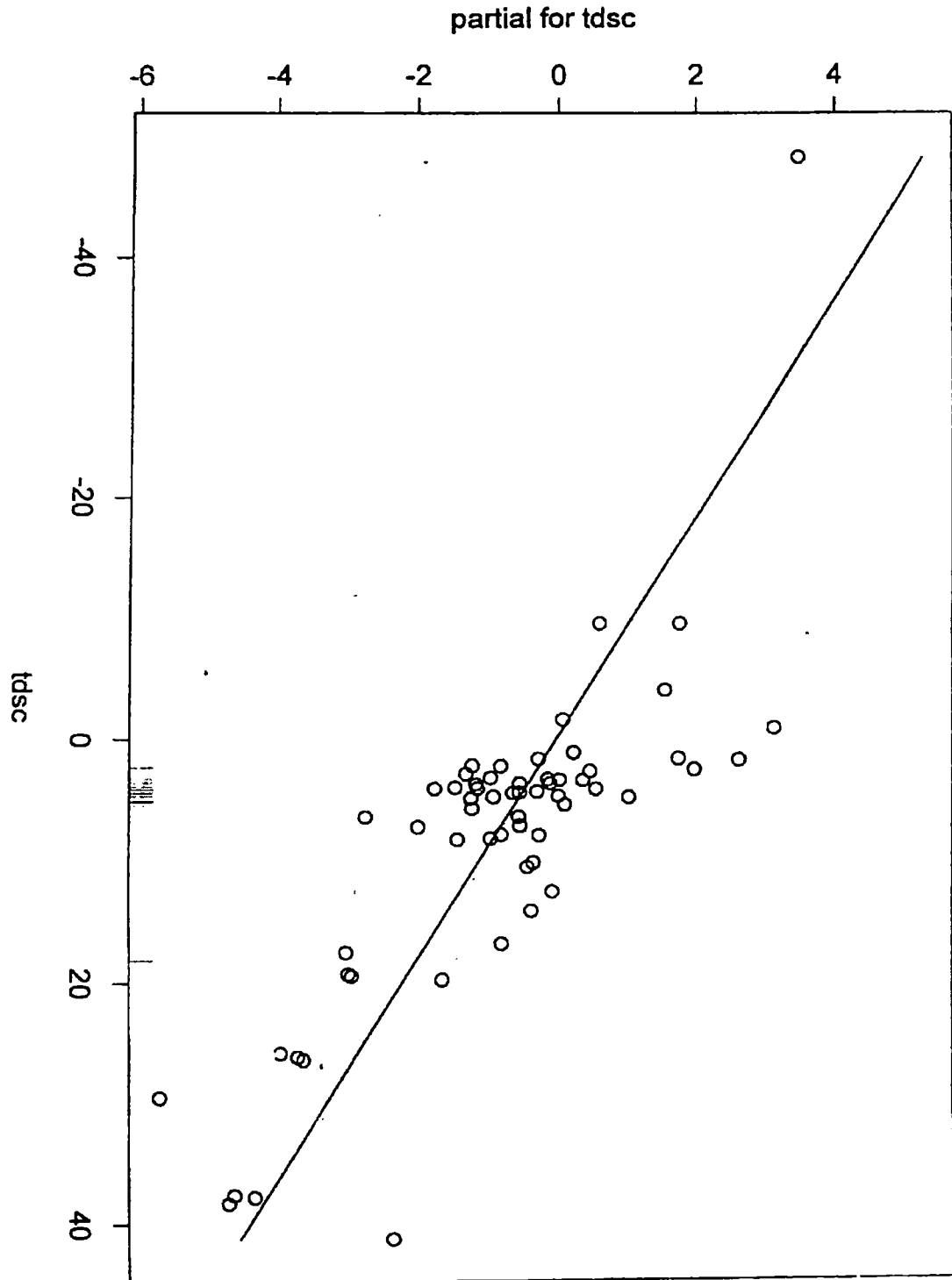
10. Partial residual plots (under selected subset, to avoid multicollinearity) indicate the validity of our linear assumptions in case of business risk, as most of points, except a few outliers lie close to the fitted line and the relation is positive.



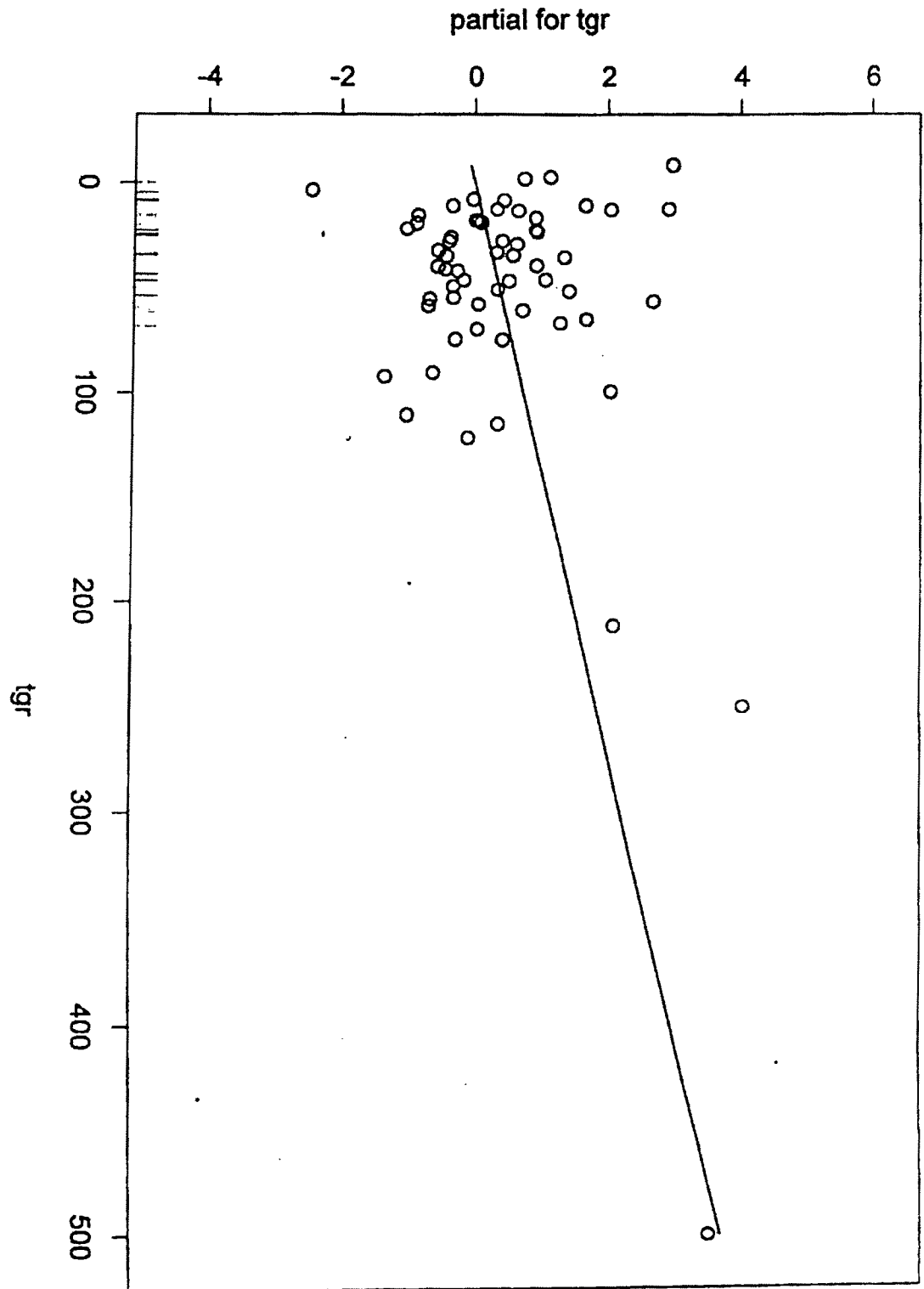
11. Partial residuals for corporate size support linear assumption and relationship is negative.



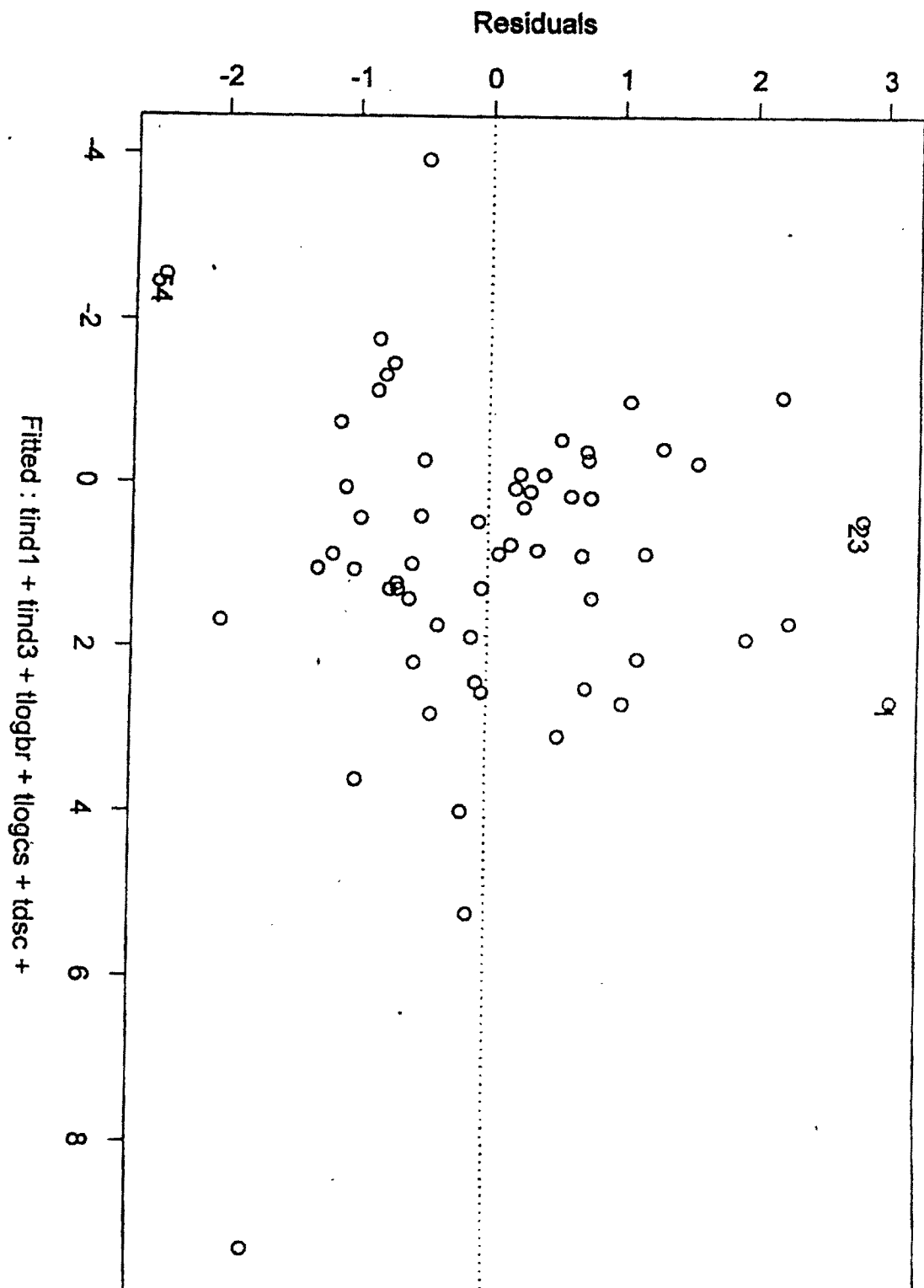
12. Partial residuals for debt service capacity support the linear assumption. Since most of the observed points lie close to the line and relationship is negative.



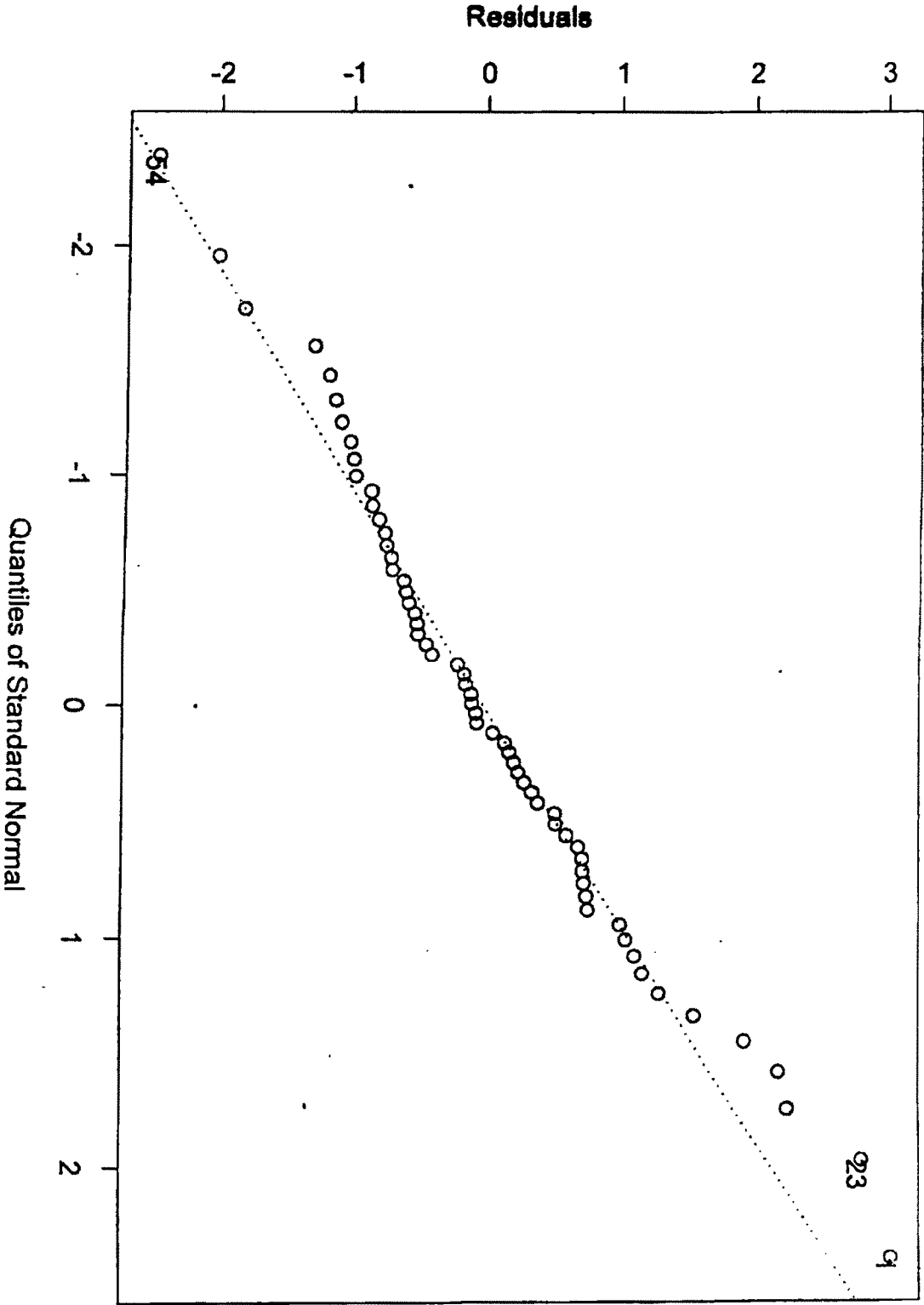
13. Here the observed partial residuals for growth rate (under selected sub set) indicates the validity of our linearity assumption, and the relationship is positive.



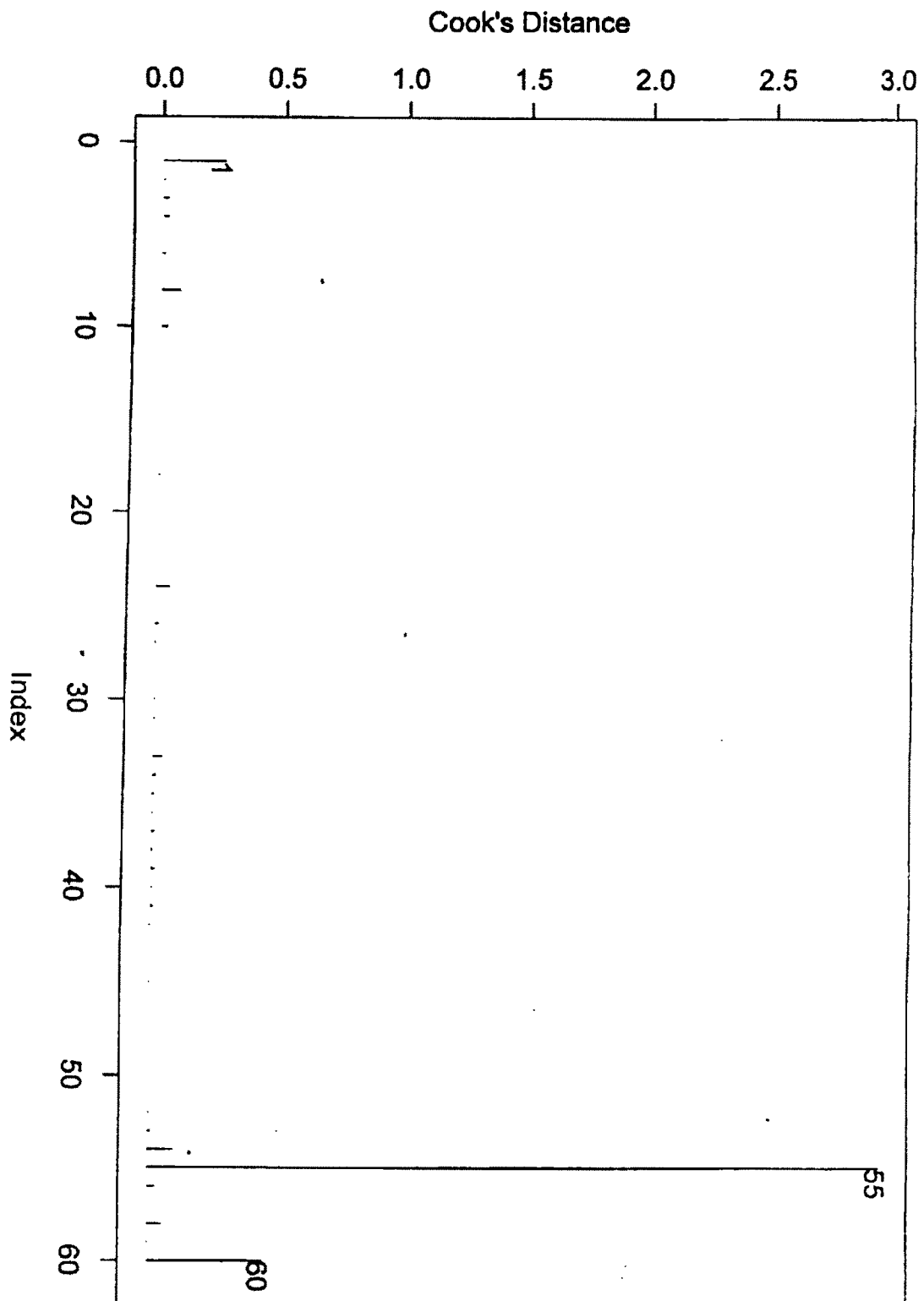
14. Here, under selected subset, the observed residuals are more or less symmetrically distributed about 0, and clustered around 0, it shows that homoscedasticity assumption is valid.



15. Since the residuals lie very close to the fitted line (under selected subset) and follow an approximate linear pattern, it means that the normality assumption is valid.



16. The diagram clearly shows that company 1, company 55 and company 60 are outliers and according to COOK's distance larger than rest of the companies.



17. Gamma (γ) 1 (here gamma is a parameter) is significantly influenced by comp.1 γ 3 is significantly influenced by company 60. γ 4 is significantly influenced by company 55 & company 60. γ 5 is significantly influenced by company 55.

