Abstract Submitted
for the APR09 Meeting of
The American Physical Society

Slow and steady doesn't win the race: How time-to-doctoral-degree impacts the career of physical scientists[1] GEOFF POTVIN, Department of Engineering & Science Education and Department of Mathematical Sciences, Clemson University, ROBERT TAI, Curry School of Education, University of Virginia — We report on survey data of 3220 PhD-holding physicists and chemists. Using regression analysis, we find that individuals' time-to-doctoral-degree is strongly correlated with their current salary: the model predicts that each year in graduate school corresponds to a significantly lower salary (by more than $3000 per year). This is true even after controlling for job-related factors (field of research, type of position/rank, type of institution, and seniority), demographic factors (age and gender), and measures of scientific merit (grant funding and publication rates). Separately, we also find that time-to-degree is mainly predicted by programmatic factors (such as field of research, amount of required coursework and graduate teaching load) rather than factors associated to students' academic performance, research experiences or research proficiency. These results imply that although time-to-degree is commonly used as a proxy for scientific merit, it is to a great extent out of the control of students.

[1]This work was suppported by the National Science Foundation, DRL Award No. 0440002.

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Date submitted: 09 Jul 2009 Electronic form version 1.4