## Discussion of Hardy & Marcotte (2018)

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- Argue there is a negative effect of poverty and income volatility on HS graduation, College Entry & Persistence.
- Use a Linear Probability Model.
- Apply it to PSID data on 18 year olds in 2005-2010.
- SAT score is used to control for ability selection.

- The study of income volatility effects
- The study of poverty effects different from studying family income.
- In fact, attempts are made to understand the mechanism behind the association between poverty and academic outcomes.
  - Marital and location stability are found to be important channels through which the effect transpires.

- SAT may not adequately control for ability selection.
- By ability I mean any persistent characteristic that helps a student do well in school.
  - A single test score may not accurately reflect those relevant characteristics.
  - Think of using GPA in freshmen year of HS to better control for those student fixed effects.
  - Think of using the panel dimension of the data to better control for those fixed effects. To do so, you would have to use some annual measure of academic performance as your oucome measure. This approach could help tease out the causal effects of temporary poverty.

- Marital/location stability are found important.
- What other channels?
- What additional data can be used to shed more light on the mechanism?
- Is there information on time allocation patterns?
  - It is actually not obvious that low income students necessarily work more and study less in college. (Not in the 80s. Possibly different today.)
  - In fact, working while in college has a 0 effect on academic performance in college (many papers on this).

## Do Low Income Students Work More in College?

SES q	annual earnings	fraction FT	annual hours
1	4.246	0.061	670
2	4.834	0.082	758
3	4.688	0.065	698
4	4.232	0.047	606

- Scott-Clayton et al. (2012) (figure 3) displays a time series of hours worked by fulltime college students (based on October CPS data). Mean hours worked do not vary systematically across family income quartiles.
- Bozick (2007) finds that the fraction of college students who work more than 20 hours per week differs by 2.5% between the highest and the lowest.
- Notably, Scott-Clayton et al. (2012) (table 2) find that low income students work 25% more than high income students (based on 2003-2004 NPSAS data).

## Does Work Affect Academic Progress?

	college GPA	pass. rate	cred. earned	cred. att
weekly hrs	-0.001	-0.000	-0.065***	-0.058***
HS GPA	0.012***	0.002***	0.091***	0.048***
senior test	0.003***	0.000	0.010	0.007
Private HS	0.075*	0.008	0.176	-0.251
SES percentile	0.090***	0.018*	0.216	-0.182
female	0.000	0.000	0.000	0.000
type = 2	-0.266***	0.034***	1.971***	1.432***
type = 3	-0.284***	0.027**	1.297**	0.919*
type = 4	-0.318***	0.023*	1.965***	1.749***
private	0.127***	0.032***	1.620***	0.816*
Constant	1.750***	0.771***	20.642***	26.355***
Observations	2910	2924	2924	2924
<i>R</i> <sup>2</sup>	0.240	0.122	0.157	0.086

\*p below 0.05, \*\*p below 0.01, \*\*\*p below 0.001

- The evidence on this question is quite limited.
- Walpole (2003) finds a gap in study time of 10% between students in the top and bottom SES quintiles. This is based on the 1985-94 CIRP freshmen surveys (where one may question the quality of the responses).
- Stinebrickner and Stinebrickner (2004) find no difference in study times between high and low income students for Berea College.