

Review by Pedro S. Martins (QMUL) on

"Essays on Social Interactions and Policy Evaluation"

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The dissertation examines the role of peer effects on smoking and sexual behaviour (first two chapters) and the effectiveness of cuts to an early retirement scheme on labour market participation (third chapter), drawing on Czech micro data. In my view, these are interesting topics, of clear policy relevance. Moreover, these topics are examined carefully, using modern and appropriate econometric techniques, sound data, and always bearing in mind potential identification pitfalls. In my opinion, the research work presented by the candidate merits the award of a PhD title.

Next I review each chapter and list some aspects that may benefit from some revision in the future.

Chapter 1, "Sorting into secondary education and peer effects in youth smoking"

The analysis considers the effects of peers on youth smoking at secondary school, drawing on information about peers smoking habits before they progressed to secondary school. The main regression (a linear probability model), takes the probability of smoking as the dependent variable and average pre-secondary school smoking of peers (defined as students in the same class) as the key explanatory variable. There are additional control variables, including individual and average peer characteristics, and older schoolmates smoking experience. The results document significant peer effects, but only for boys.

Suggestions:

1.1 There are several statements that "peers effects amplify public policy interventions against smoking". However, one could also say that peer effects attenuate or even cancel the those public policy interventions if they are more resilient or reach their targets more quickly.

1.2 It would be useful to provide more background on the extent to which enrolment in secondary schools is driven by choice (students and/or schools) or is random, as this is key to identification. For instance, would it be possible to say what percentage of the secondary school peers of each student were in fact also peers when they were attending pre-secondary school? One important aspect here would be whether ability grouping is common in primary schools in the Czech Republic: that would make it more likely that peers would not change dramatically from primary to secondary school, which would create problems to identification. Another aspect is the number of primary and secondary schools per "county" - if small, again I suppose peers would be more likely to stay together over time, at the two types of schools.

1.3 The percentage of young people smoking marijuana (around 20%) appears high - and makes me wonder that maybe looking at marijuana smoking peer effects could be an interesting - and original - extension to the paper (or a new paper altogether).

1.4 The variable of interest appears to concern the percentage of peers that smoked before joining the student in a given secondary school class. It would be good to report measures of the extent to which there is "considerable" variation in that variable, both within a class but also across classes.

1.5 An interesting extension in this regard - following on the important gender asymmetries documented in the results - would be to split the peers variable by gender, so one could test the hypothesis that, say, female peers smoking affect girls even if the entire class smoking does not. A related aspect would be to check if girls may report their behaviour with different levels of bias than boys (maybe boys over-report their "bad" behaviour while girls under-report it?).

1.6 Editorial issues: It would probably be better to split Table 7 into several tables so that there would be space to report other coefficients than those of the peer effects. On the other hand, there is some repetition in the introductory part that could be avoided. The variables GPA12, etc are not described in the paper.

Chapter 2, "Don't drink and... avoid risky sex of your peers[...]"

The chapter examines the effect of opposite gender peer drinking on sexual behaviour, controlling for a number of variables. Again, there is evidence of gender asymmetry in the effects, as girls drinking appears to affect males while the reverse is not true.

Suggestions:

2.1 The choice of the peer variable in this chapter appears a bit surprising: wouldn't it be more interesting to test the effects of the drinking behaviour of colleagues of the same gender? This would address the age discrepancy issue (girls have sex with older boys, according to the data).

2.2 There is a typo in the last paragraph in page 45, I think ("female's sexual behaviour" should be "female's drinking behaviour").

2.3 Similar comments as the ones made about the class composition and its dispersion in Chapter 1 also apply here.

Chapter 3, "The impact of early retirement incentives on labour market participation [...]"

The chapter examines the effectiveness of a reduction in early retirement benefits in terms of the labour market participation of older male workers in the Czech Republic. The results indicate that this reform was effective.

Suggestions:

3.1 There appears to be a considerable increase in disability retirement at the same time as early retirement falls (after the reform was introduced) and by an approximately similar magnitude. Even the time pattern in the years after again correspond to the (inverse of the) early retirement

numbers. Could it be the case that people that otherwise would have been directly affected by the early retirement reform applied instead for disability retirement?

3.2 Could the results attributed to the reform of the early retirement scheme reflect cohort effects? People that were subject to the reform (aged 60 something in 2000) correspond to the last generation born during the second world war, while those born after them will be the first members of the baby generation (assuming there was one in the then Czechoslovakia).

3.3 The results in Table 4 appear to be very sensitive to the inclusion of district dummies - only one coefficient is significant, and only at the 10% significance level, even if the sample size is large (over 50k observations). What explains the small precision of the results?

3.4 The lack of information on wages is reported as an important problem in the analysis. Would it be possible to draw on Mincer estimates for a similar time period and a different Czech data set and then use those coefficients and the human capital variables in the participation data to predict wages in the main data set? This seems particularly important given the big differences documents across human capital and geographic characteristics.

3.5 Martins, Novo and Portugal (IZA DP, 2008) may be a nice reference in this line of research.