HW #1 – Econ 895 Markus Bjoerkheim Prof. Bryan Caplan 9/29/17

2)

Holiday and birthday gift-giving could be one example of a seemingly dysfunctional practice. Economists such as Joel Waldfogel have used various techniques to estimate how much recipients value the gifts they receive, and have typically found estimates between 2/3 and 90% of the cost of purchasing the items, suggesting a dead-weight loss between 10% and 33%. Does the existence of deadweight losses in this very persistent practice prove that people signal conformity? No, but in this case, it sends such a strong signal of non-conformity to not give your significant other, family members, etc. gifts on their birthday/holiday, that most people conform to the practice even if they personally may wish otherwise. It is striking to me that the non-conformity signal of even deviating slightly from this practice is strong enough to prevent most people from doing so. For instance, it is a commonly known that stores have January sales, which means that a given gift budget's purchasing power could be significantly greater, by just waiting a couple weeks to exchange gifts, and yet I know of very few people doing this.

Of course, in a competitive space we would expect people to look for ways to minimize such deadweight losses. It seems to me that one important way this has occurred is through gift cards, for which under certain circumstances the only deadweight cost is the production of the gift card.

3. Pick one of the main reasons why "Signaling 'Simply Doesn't Make Sense" (chapter 1). Argue that the reason is more compelling than Caplan claims.

Signaling shouldn't take years. Chapter 1 does not address why the equilibrium strategy to signal conformity and conscientiousness is currently spending *a long time* in school. While I understand that hiring based on scores and simply asking whether someone is a hard worker would yield a "babbling-

equilibrium" where everyone says they're a hard worker, this does not necessarily imply that "easy-tofake" traits such as conformity and conscientiousness can't be signaled as effectively in other ways, at a lower cost. If I was an employer, I would strongly prefer a student who finished a 4-year degree in 2 or 3, while simultaneously participating in some program that requires hard work and discipline such as ROTC or even being a student-athlete, to someone that stayed in school until they receive a master's degree, all else equal. Hence, while I agree *the* signal has to take *some* time, it's far from obvious why the marginal years after say 2 years of college signals all that much besides a moderate willingness to jump through hoops for an extended period of time. If the signals are linear functions in the eyes of employers, it seems to me that surely there exist some combination of more challenging coursework, over a shorter than normal time-period, combined with extracurriculars which would send an equally strong signal to employers at a lower cost to students than spending several extra years in school.

First, as Caplan points out himself, most students don't work all that hard while in college, which raises the question of why employers value something that's just not all that costly. It also suggests students could signal a slightly different package of somewhat more ability and conscientiousness, with somewhat less social conformity, by finishing a degree in shorter time than the norm. While it may be technically true that an employer may raise an eyebrow over someone finishing a degree ahead of schedule, I can hardly picture this being treated as much of a negative sign, and further, the additional ability and conscientiousness it signals should vastly outweigh the non-conformity.

Stated differently, Caplan needs to address why additional years of education remains revealing about the package of ability, conformity, and conscientiousness, even after 16, 18, 21 years of education. I must say, it's hard for me to accept that simply spending additional years in school getting an advanced degree is all that revealing relative to the average college graduate who simply spends the same total energy on doing their job well and enhancing their careers through other means like networking or acquiring new skills. For the signaling story to be internally consistent against the above critique, one of two things have to be true: either employers have vastly different perceptions than I do of the non-conformity etc. sent by alternative signals, or students perceive alternative signals to be, on the margin, more costly for a given amount of reward, than additional years of education. The latter is hard to justify for some forms of education (the opportunity cost of not working for a year or even a semester, or the tuition and effort many young professionals spend getting an advanced degree while working full time are quite large).

To summarize, these are some reasons why I am not convinced that *more years of education* is the outcome we should expect to see if the returns to education is largely signaling the mentioned package of ability, conformity, and conscientiousness.

5) List all the classes you took in the last two semesters. Rate them by "usefulness" using Caplan's classifications, and explain your rationale, class-by-class.

The last two semesters I took Microeconomics 1 and 2, Mathematical Economics, and Macroeconomics 2, all at the PhD level.

Microeconomics 1 – low: This is the course I feel most confidently should be categorized as low. While we did cover some technical techniques (Lagrange multipliers, various demand estimations, Engelcurves) these are, as far as I can tell, rarely used outside of Microeconomics coursework. Even worse, it is my impression that like me, most other students had been exposed to these and the other material already. On a related note, I think it raises questions for human-capital purists that departments are so reluctant to letting students test out of coursework.

Microeconomics 2 – low/medium: Some technical skills were taught but I would categorize these as general enough in nature that other majors/degrees could readily compete on these dimensions

(present value calculations, basic regression interpretations) or simply not used very much outside of the classroom (game theory, general equilibrium theory). I accept that there are some students who will go on to spend significant amount of time working with the techniques mentioned, however, it is my impression that this is almost always at a much higher level than what is covered in a class, and thus the class exposure to say game theory can only get partial credit.

Mathematical Economics – medium: Among the required courses this is probably the one that covers the most technical skills, followed by Macro 1 (which I took in the past and thus not rated). In my opinion this course both taught technical skills, most of which I can imagine being useful as an economist in various positions, also outside the classroom. I furthermore suspect that had I not taken this course, the absence of this exposure could make be appear less knowledgeable when interacting with economists that do various technical work. While you may say this is true about techniques mentioned in other courses, a key difference is that it was the first time I was exposed to much of the material in this course.

Macroeconomics 2 – low: Taught very few, if any, technical skills. I'd say 60% of the material I was already quite familiar with and don't expect to see any long-term change in my understand of. If it did, I can only plausibly imagine it would affect my ability to "fit in" with the very small subset of economist knowledgeable in the history of economic thought. This may be "over the top", but my opinion is that some of the particular topics covered in this course (Austrian business cycle theory, Hayekian production triangles, and the history of various schools of thought) could even lower the perceived ability of the average student who is not looking for employment directly related to these niche areas. These areas are largely disregarded by mainstream academics, therefore showing your knowledge and understanding of them may be perceived as a signal that you don't do the kind of economics that mainstream economists do.

Someone might believe Caplan ignores the effects of education on discipline and socialization for many reasons. A believer might accept some of Caplan's evidence on measured learning, but still notice that students are usually more disciplined and socialized than drop outs. This need of course not be causally related, and in the case of education there are undoubtedly strong selection effects, and thus little if anything to infer from such crude observations.

I believe Caplan would primarily respond by asking *for who* and *relative to what*? Does education teach discipline? For an economist to answer this question, he would need to know what would happen otherwise, that is what is the relevant opportunity cost. If a student would have enrolled in the military, had it not been for the education the student has been provided free of charge, the answer to said question is the net between the discipline attained through education and what the student would have attained in the military. What instills more discipline is in several plausible cases an open question. Another point I think Caplan would bring up is that literally the same education does not impact all students the same way. It's a well-known fact that instructors in primary education spend a disproportionate share of their time and resources on a minority of students. If you are a well above average student, it probably doesn't teach you much discipline to work with material that doesn't challenge you, let alone waiting some troublemaker to be quiet. Through my step-mom who is a teacher I've heard that students who are both intellectually gifted and patient enough that they won't create problems if they are not challenged, are frequently neglected by teachers.

Graduate Level Question:

I chose the literature on *measured learning* from chapter 2, specifically the papers "Lifetime Maintenance of High School Mathematics Content" by Bahrick and Hall (1991), "Literacy in Everyday Life" by Kutner et al. (2007), and I also read parts of Daniel Kahneman's Thinking, fast and slow (2011) in response to a reference in the book. Based on my reading, how fair and accurate is Caplan's use of the above evidence? The first part of my answer to this is to note that I will evaluate this against two bars; the lowest bar is simply whether the referenced estimations from the research are reported accurately, the second and somewhat higher bar is whether one could accuse the author of "cherry-picking" the evidence, for instance through only citing a piece when the results are convenient.

Caplan accurately reports the measured results of Bahrick and Hall's estimated math retention scores, but a couple of points may be worth noting. Given that Caplan later in the analysis will assess the impact of education on foreign language attainment one might argue Caplan should have mentioned Bahrick's studies on Spanish vocabulary retainment which are cited in *Lifetime Maintenance of Mathematics*. These studies show that students who complete one semester of a foreign language retain almost no vocabulary 3 years later, but those who take 4 semesters still achieve 60% of their original recall score, 25 years later.¹ Vocabulary recall is not the same as mastering a language and the level respondents achieved after 4 semesters could be very low, nevertheless I suspect a less sympathetic reader would think these are relevant to address in the foreign language section. While I understand vocabulary scores are crude measures of language ability, it is not immediately obvious to me that self-reported evaluations are superior. I should say, I think the evaluation of foreign language attainment remains

¹ pp. 30 in Lifetime Maintenance of Mathematics. I believe the relevant paper is Bahrick 1984 – Semantic memory content in permastore: 50 years of memory for Spanish learning in school.

about as strong as it is presented in CAE, however, if such findings are not addressed critical readers may object and dismiss the argument in entirety.

Literacy in Everyday Life is portrayed accurately and fairly. While surprising, the report does indeed show some glaring results in terms of basic literacy and numeracy held by the respondents. In fact, the results suggest a summary like "education is not about knowledge transfer", or something along those lines, as the literacy and numeracy levels are generally not very impressive. If the main benefit of schooling is to teach this kind of knowledge then we're not receiving much of a return, even before costs.

Daniel Kahneman is cited briefly after a statement highlighting the importance of statistics and a reference to Thinking fast and slow(TFS) which states "Daniel Kahneman shows that statistical literacy underpins many foolish real-world choices". After reading several sections of TFS I am not quite in agreement with the quote as I think it exaggerates the impact of statistical ability, and diminishes the importance that Kahneman lays on the proper application of said ability. One of the key points that Kahneman's personal story revolves around, which he also states explicitly, was his finding (with Amos Tversky) that "Even statisticians were not good intuitive statisticians" (TFS, p. 5). Both the personal story, but also several of the specific claims in TFS (base rates comes to mind) are to me more the cause of individuals failing to apply the statistical ability that is possessed, rather than poor statistical ability per se.

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