**Nine Weekly Assignment: “Can You Make a PB&J with Jiffy and Hand Made Jam from the Local Farm?”**



**In this week’s work, we will be examining the role that partnering has had on some economic outcomes over the past 70 years or so, and have you think about the role that partnering plays going forward.**

**PART ONE: Pairing Up**

We would like you to read and review several papers/articles that discuss the concept of “Assortative Mating.” Parts A through E will examine the first paper, the rest will examine the second. Use your library resources to locate these papers.

Greenwood, Jeremy, Nezih Guner, Georgi Kocharkov, and Cezar Santos. 2014. "Marry Your Like: Assortative Mating and Income Inequality." *American Economic Review*, 104 (5): [348-53](https://www.aeaweb.org/articles?id=10.1257/aer.104.5.348).

Mare, Robert. 2016. “Educational Homogamy in Two Gilded Ages: Evidence from Intergenerational Social Mobility Data,” *The Annals of the American Academy of Political and Social Science*, Vol. 663, Living in a High-Inequality Regime (January 2016), pp. 117-139 ([23 pages](https://www-jstor-org.ezp.lib.rochester.edu/stable/24541903?refreqid=excelsior%3Afb5285d729ac1fb7ed4236ff0111f95f&seq=1))

**Part A)** Describe generally what we mean by the concept of “Assortative Mating” and explain how the authors in the first paper provide a numerical estimate of what that is.

Assortative Mating in this context was used to describe how more people have been mating within similar education levels within the US from the periods 1969 to 2005. To illustrate this, the authors used a regression analysis that mapped the husband's years of education, and time in marriage to the wives. Finally, three residues of the linear regression, Yt, Tt and St were then used as a numerical estimate of assortative mating.

**Part B)** Illustrate the earnings advantage of being partnered today versus being partnered in 1960. In other words, please walk us through the data in Table 1, and please do so in a way that non-economists would easily understand.

In the data under "Marital income by educational pairing," there are two different increases in household income as education increases. Both 1960 and 2005 show an upward trend in household income relative to the mean as education increases but the strenght of this trend was stronger in 2005 data.

Unlike the 1960 data which where there was albeit almost similar outcomes in some instances among the groups for example a pre High School husband and a post College wife had .038 points above a post college and pre high school wife. All through the 1960 set, there were not very multiples of differences in outcomes.

However, in 2005, the data is such that increased education was a prominent factor in determining income relative to the mean. And the differences in outomes are a lot more. For example the highest educated couples who had post college education had 5.36 times above the lowest educated couple of pre high school education. This is in stack difference to the 1960 data where the the highest educated couple had 2.306 times the value of the lowest educated couple.

The data showed that economic differences have increased based on the education of couples.

**Part C)** Demonstrate the “problem” with male high school dropouts.

In 1960, male high school drop outs had about 0.485 points while male high school graduates had 0.279.

Then in 2005, the sum of male high school dropouts decreased to 0.084 while male high school graduates increased to 0.346. When compared to male post college sum of 0.132 for 2005 and 0.06 for 1960, it looks like the males high school dropout rate actually decreased even if it did not decrease as much as male post college education had increased.

**Part D)** The popular narrative regarding these results is that “people no longer marry down.” But I don’t see that in Table 1. Illustrate what I mean. So, what do they mean when they say there is more assortative mating?

The data in Fig 1 shows that even though people might still marry down, they often do not do so as much as they used to and this decrease is often significant except in extreme categories. A supportive argument could be that there are not often as many people to marry down to within the community of more educated people. The argument that there is more assortative mating becomes apparent when we check the data in income outcomes based on how people have mated when compared to their education. There is significant differences that tended strongly positive for higher educated couples.

**Part E)** The authors of the paper argue that this “positive sorting” has not only increased sharply (i.e. we partner much less across class today than in the past) but that it plays a major factor in explaining the rise in inequality we have seen in the U.S. over the past half-century.

First, how does this explanation square with what you have been taught and what you have heard were the causes of inequality in the U.S.?

The authors' argument that marriage plays a significant factor in the rise in inequality is analogous to saying that better outcomes results when couples who are better equipped partner together. This is true but that does not necessarily explain why other people might not be equipped for success.

Second, illustrate just how powerful a force this sorting seems to have been. Use numbers and I think it makes sense to compare US inequality metrics to that of other “more just” countries.

Post college educated couples have 5.36 times the relative household income to the mean of pre High School couples. This is a lot when compared to 1960's data of 2.31.

There is always a big difference between incomes based on education and now it seems that the skills pre high school couples currently possess may not be as economically valuable as those of post college couples.

**Part F)** The second paper also examines the same question – it is how men and women of different educational and class backgrounds have tended to marry over the course of the 20th century. Illustrate the results of this paper and compare them with the first paper.

If a regression line is drawn across the graph of figure 1 in the second article, it would show a positively sloping line illustrating a significant increase in educationally homogenous marriages.

**Part G)** Having browsed this second paper, and reflecting up both it and the first paper, and the implications for what you wrote/calculated in Part E, how would you describe the ***causal*** relationship between cross-class interactions and the level of inequality in a country?

I understand that marriage is often about compatibility between two people who benefit each other by having similar interests and/or by being similarly interested in each other.

Cross class interactions is not necessarily a solution to inequality because cross-classed interactions as a term is an expression of established classism and superiority. Social interactions that are termed cross-classed would have notions, cues and dynamics of social recognition and expectations inherent in classism which would often not favourable to the "lower classed" people if we were to use the terms of cross-class interactions.

However, because classism exists in every system that has a wide gap in outcomes of people, it is essentially for lower classed people to learn the skills that have helped upper class people to become successful. If lower classed people are able to interact with upperclass people under a platform that is geared towards economic mobility towards more economic valuable skills, there will be more people with those skills, and due to supply and demand, the pay would become distributed towards an equilibrium point. And as I argue that people often mate based on compatibility and interests, these interactions could lead to mating.

Relying on mating and learning of known economic viable skills among cross-classed people is great for determining the casual relationship between cross-Can you find a paper that tracks what has happened to theclassed interactions and inequality in a country but even in this description of how cross-classed interactions could positively reduce inequality, there are often cross-classed interactions that may reinforce inequality especially if the lower-classed people do not know how to learn.

**Part H)** One point of extra credit. Can you find a paper that tracks what has happened to the class/educational differences if non-traditional marriage pairs? If so, please share it here and summarize what they have found.

Online Exogamy Reconsidered: Estimating the Internet’s Effects on Racial, Educational, Religious, Political and Age Assortative Mating by Reuben J Thomas.

They used data on online mating preferences and found that more people are mating less similarly on the internet but what they knew on the results of such negative assortatibe mating was very small.

**PART TWO: Dare to Share**.

If I were to be forced to provide individuals with *personal* advice on how best to avoid the worst luck and life outcomes the world can throw at you, I might be inclined to tell them, “finish your schooling and find a partner.” You can begin to see why from the papers we covered above. There are lots and lots of papers out there that show the benefits to health, longevity, job security, childrens’ outcomes, earnings, and a lot more, from completing school and forming an in-tact household.

In this part, we’d like you to construct a very simple model for how to think about this, and perhaps add a back-of-the-envelope calculation to the mix.

While it used to be the case that many marriages/partnerships in the past were engaged into as a way for couples to find insurance and lower the shared cost of living, today we see that many more of us are partnering because of the “amenity” value of the match – we spend more time traveling and cooking and enjoying each other’s company. But that seems to be a luxury that the higher-income and more highly-educated individuals get to enjoy.

With that said, please check out this paper:

Buhmann et al., “Equivalence Scales, Well-Being, Inequality, and Poverty,” *Review of Income and Wealth*, [1988](http://www.roiw.org/1988/115.pdf).

In order to get a handle on poverty and well-being, our statistics need to make some adjustment of income to take account of need. What we do is try to take into account various household/family characteristics that impact “need” and we refer to these as “equivalence scales.”

We don’t simply want to look at the total amount of income divided by the total number of people in a household. Why? Well, think about my particular existence, or what your family’s may have been like growing up. If you share your home with a partner/spouse, surely you are sacrificing some space as compared to if you lived in that house alone. But, it is likely the case that each of the n persons in the house enjoys more than 1/n of the benefits of that house – after all, not all rooms are in constant use, nor are all household resources in constant use. In other words, for many pieces of our “home life consumption bundle” the consumption of the item by one person does ***NOT*** restrict the ability of other household members to enjoy them. In other words, we want to understand how much of our shared existence is non-rival. Even some things that seem rivalrous may not be – for example, just think of how often you finished your siblings’ snacks or meals!

If you think about the kind of satisfaction an individual obtains from living in a shared household, you might express it something like:

In this simple model, you can think of the exponent, a, as an indication of how much you can actually “share” the goods/services in your household. For example, my streaming service allows us to have up to five users. Thus if all of our household items were like FuboTV, then a=1. If on the other hand, we all just pool our income, buy things, and then separately consume the things we buy, then a =1.

There is no question in my mind that a < 1. And as the paper above indicates, this fact is even built into the way we measure poverty and need.

**Part I)** Where do you think in your future potentially partnered lives that the exponent “a” falls. It would be helpful for you to discuss if you think this factor differs based on different educational and other demographic backgrounds. And show your work.

**Part J)** The question above and the paper linked focus on household size adjustments though you can imagine generalizing this approach a bit more.

What about that factor lambda? What is it? If you are looking at a married couple without kids, it would be 2. So for the rest of this, assume your Satisfaction Equation looks like:

In the paper, you will notice the authors explore four different strategies to come to an estimate of what “a” is; in the paper they are labeled STAT, PROG, CONS, and SUBJ. For this paper, let’s not worry about the particulars. What is relevant is that the empirical results for 10 different countries does seem to depend on which of the four methods that are used. On page 122 of the paper, they list what these results show. Please reproduce them below.

Now, using these results, I would like you to construct a table that shows you, for each of the different statistical methods employed, what the “effective consumption” of each person in a shared household would be, what the “Gain to the higher-earning spouse” would be and what the “Gain to the lower-earning spouse would be under two different earnings scenarios.

Scenario #1: The higher-earning spouse earns $100,000 while the lower-earning spouse earns $40,000. Scenario #2: The higher-earning spouse earns $75,000 while the lower-earning spouse earns $65,000.

In other words, use your formula and compute the overall “Satisfaction” (i.e. effective consumption) when family income is $140,000 under each of the different assumptions for “a” and then show us how much each individual in the household benefits from being together as compared to being alone.

**Part K)** I prefer methods to evaluate rivalry that rely upon the consumers themselves. As such, I am much more partial to the SUBJ metric (asking people) and the CONS metric (examining their actual spending behavior). Government statistical approaches yield larger numbers.

**One)** Describe the relationship of the magnitude of the gains (overall, and to each earner) as we change the empirical assumption we used to estimate (a).

**Two)** It is obvious that low-earning spouses do ***really well*** by partnering up, but describe the situation that faces higher-earning spouses as they consider partnering up for the sake of economic security.

**Part L)** All of these calculations above are ignoring lots of other evidence on the value of a partnership including what economists know about the marriage premium itself. Therefore the “real” impact of partnerships on well-being is going to be far larger than even these rough calculations suggest. If this is the case, and it surely is, then why are so many people not knowledgeable about this? Are your high school teachers and life coaches and sports coaches informing you about this? What about all of the “poverty activists” out there ([here is one example](https://www.amazon.com/Class-Dismissed-Cannot-Teach-Inequality/dp/1583672435/ref=sr_1_1?s=books&ie=UTF8&qid=1317149479&sr=1-1))? If we are truly interested in helping those who are less fortunate than us, then why is this “golden goose” treated like the monster under the bed?

This assignment is due by Sunday, April 4th at 7pm. Please follow the usual submission guidelines.