Prof. Bryan Caplan
bcaplan@gmu.edu
http://www.bcaplan.com
Econ 321

Weeks 14-15: Economics of the Family and Population

I. The Market for Mates, I
   A. Most people today probably marry for love, but few regard all attributes as equally lovable.
   B. Instead, most people are looking for a partner with desirable traits, such as:
      1. Looks
      2. Income potential
      3. Youth
      4. Positive attitude
      5. Conscientiousness
      6. Shared interests
      7. Shared religion
      8. Similar views on desired family size
   C. Normally people with a lot of desirable traits find it easy to get someone else with a lot of desirable traits to marry them. "She's out of your league."
   D. When there is a wide difference in perceived "mate quality," people wonder "What does she see in *him*?"
   E. This suggests that we can look at dating/love/marriage as a special kind of market.
   F. Two interesting things.
      1. It is usually a barter market, where a given level of "male mate value" enables you to "buy" a given level of "female mate value." (Exception: dowries, bride-prices).
      2. The S of men in the market for male mates is the same as the D for women in the market for female mates.
   G. This market works more or less like others: If a lot of men die in a major war, the price of men increases (and the price of women therefore decreases).
   H. Trickle-down economics in the market for mates: What happens when men's income rises? When women's income rises?
   I. Another interesting application: Polygamy. Demand for women is higher under polygamy.
   J. How does the fraction of gay men and women affect the market for heterosexual marriage?

II. The Market for Mates, II
   A. There are some attributes that most people agree are good: looks, income potential, etc. On traits like these, we should expect to see (and do) "assortative matching." People with "good" attributes date/love/marry other people who also have "good" attributes; if

someone is weak on one good attribute, we expect them to be especially strong on some other good attribute.

B. This sparks competitive pressure to acquire these near-universally desired traits, and - to some degree - increases their quantity.

C. For other attributes, people disagree. For example, Jews prefer to marry other Jews, but Gentiles prefer Gentiles. Backpackers like to marry each other. There is far less competition on this margin, because each niche has a mix of advantages and disadvantages.

D. Some spouse correlations: spouses are similar in education, religion, hobbies, and - to a lesser extent - politics. Personality correlations are weak. There is very little evidence of any negative correlations - opposites do not, on average, attract.

E. Standard truism from evolutionary psychology: Men are naturally polygamous, women are naturally "hypergamous." Oversimplified slogan: Men desire every fertile woman, women desire the one best man. Effects in the market for mates:
   1. More desirable men get more partners
   2. More desirable women get *better* partners

F. Additional effects: As stigma against premarital sex falls and women's income goes up, the demand for high-status men rises a lot, and the demand for low-status men actually falls.

G. Divorce can also be analyzed from an economic point of view. Individuals try to get divorces when they decide they are better off without their spouse.

H. Make divorce cheaper - more people get divorced. Ban divorce - people think harder about who to marry.

I. Complication - women's mate value generally falls more rapidly than men's. Lifetime benefits of a marriage can be equal for both men and women, but men's benefits are more "front-loaded" than women's.

J. Evolutionary psychology also helps explain why women initiate most divorces. Men break their marriage contract by seeking more women, women break their marriage contract by seeking a better man.

K. Alimony might be one way to try to keep incentives well-aligned, but it creates perverse incentives in other ways.

III. Household Production and the Theory of Household Labor Supply, I

A. So far we've categorized time as either "labor" or "leisure." Now let's sub-divide "leisure" further into "household production" and "fun."

B. Household production is cleaning, cooking, shopping, caring for children, and all of the other chores people do when they aren't working for others.

C. Usually we think of "the economic agent" as an individual. But we could also think of "the economic agent" as a family or household.

D. Interesting insight: Households with a man and a woman can be seen as a *single economic agent* with two kinds of labor to allocate - husband labor and wife labor - between labor, household production, and fun.

E. If both husband and wife are equally good at household production, what is the obvious way to decide who will do most of it? The person with the lowest market wage! The family sells its high-value time in the labor market, saving low-value time for household production.

1. Alternative: Have both husband and wife work, and pay someone else to do their household production. But for this to make sense the wife's wage must be fairly high (tax law reinforces this).

F. Two factors reinforce this point:

1. If the lower-wage labor is actually better at household production.
2. There are fixed costs of working - like commuting time.

G. In principle, either the husband or wife could be the higher-earner. But there are fundamental reasons why husbands usually earn more:

1. Children reduce women's job experience and interrupt their careers.
2. Anticipating this, women have weaker incentives to accumulate human capital. (Average education levels show little difference, but fewer women go into high-earning technical fields).

IV. Household Production and the Theory of Household Labor Supply, II

A. When needs for household production are large, there is a firm economic rationale for the traditional family, where the male earns almost all of the income and the female does almost all of the household production. The rationale in a nutshell:

1. The family needs one person to do household production and another to hold down a job.
2. If both are equally able to do household production, it makes sense for the higher-paid person to work outside the home. (Moreover, if women are actually better at household production, this decision is even clearer).
3. Because child-bearing interrupts careers, the lower-earning person will normally be the woman. If women anticipate this, they invest less human capital, making the wage gap larger.
4. With fixed costs of working, it makes little sense to work only a couple hours per week.

B. But: The need for household production is not fixed. It depends critically on both *technology* and the *number of children*.

C. Both factors slashed the need for household production during the 20^{th} century.

1. Technology for household production drastically improved - dishwashers, vacuum cleaners, washing machines, etc.
2. Average number of children has drastically fallen.

D. As time allocated to household production has fallen, women with children have become increasingly likely to remain in the job market - some in part-time work, others in full-time.

E. We are also seeing the rise of an even less traditional household structure, where women earn *more* than men, and largely support their children (if any) by themselves.
1. Gender imbalance in college suggests that this household structure is going to become common in the middle- and upper-classes.

F. Interesting links between husband and wife labor supply remain when both work.
1. If the demand for one kind of labor increases, the supply of the other decreases, all else equal. For example, if a wife's wage rises, then the family can afford to "buy" more of the husband's leisure. If a husband's wage rises, the family may decide that it can afford to have the wife stay home with the children.
2. Similarly, if one family member is temporarily unable to work, we would expect the other family member to work more due to this income effect.

V. Why the Standard History of Gender is Wrong

A. My take on the standard history of gender: Throughout human history, males arbitrarily forced women into a subordinate role. At long last, feminist thinkers began "raising awareness" of the plight of women. Through great struggle, women are at last - like men - able to pursue their dreams and ambitions, though of course full equality is still a long way off.

B. Why it's wrong:
1. The dating and marriage market has always been competitive. The only historical change involves ownership: Does a women own herself, or does her father own her?
2. Yes, women used to have very hard lives. But so did men!
3. The traditional family structure was technologically necessary for most of human history *assuming* women wanted to have children. An overwhelming majority did.
4. Family structure changed because technology reduced the burden of household production, and because families decided to reduce their number of children.
5. Technology also narrowed the male-female ability gap by de-emphasizing physical strength.
6. This for the first time made it feasible for women to have both careers and children.

7. Women broke into the business world quite rapidly considering the size of the change. Supposed "discrimination" reflected and continues to reflect real group *differences*.
8. Except for women who forego child-bearing, differences will persist until reproductive technology radically changes.
9. Women probably do face some *statistical discrimination*, but in the absence of regulatory burdens, women could contract around these. For example - penalty clauses for pregnancy enable women focused 100% on work to show how serious they are.
10. Feminist norms function as price controls in the marriage and dating market. "Raising awareness" has often been counter-productive insofar as it matters at all.

C. Note: We may be moving to a world where women are noticeably more successful than men. Productivity and competition provide better explanations than “reverse sexism.”

VI. The Economics of Family Size

A. While there is some element of chance, to a large extent families control the number of children they have.
B. We should expect the demand curve for children to have the usual negative slope. The cheaper it is to have kids, the more kids people have.
C. One big part of the expense is the mother's foregone labor earnings. The more income a mother can earn, the fewer kids we expect her to have. This is precisely what we see - high-income women have fewer kids, and family sizes are smaller in rich countries than in poor countries.
D. However, this argument is not air-tight. As wealth increases, demand for all goods - including kids - rises.
E. What we can say with confidence is that holding wealth constant, demand for kids is negatively sloped. Thus, changes in costs of childcare, free grandparent assistant, free schooling, and per-child tax deductions all increase family size.
F. Similarly, if children contribute to the family by working or doing chores, or eventually provide retirement income, family size will be greater than it otherwise would be.
G. Application: When children are expensive and/or single women are very poor, you see few non-marital births. In the pre-modern period, a husband's support was often crucial just to keep a child alive.
H. When children get cheaper, unmarried women have more kids. One simple way to make them cheaper is to pay benefits proportional to the number of children a mother has - a frequent criticism of the welfare system.

I. As incomes rise, it becomes more feasible for unmarried women to have children even without government help.

J. In the U.S., non-marital childbearing has risen for all social classes, but is much higher for poorer women. For poor women, extra welfare plausibly makes a big difference.

K. If higher income makes unmarried women more inclined to have children, why do the richest women have the fewest? Probably because on average they have higher "mate value" - when they want to have children, it is relatively easy to find a suitable husband. Lower-income women may face a choice between having a child without a husband or having no child at all.

VII. Family Size and the Quality-Quantity Trade-Off

A. Richer people and countries have fewer kids. The simple conclusion to draw is that kids, like potatoes, are "inferior goods."

B. However, richer people and countries also spend more time and money on *each kid*.

C. Most economists conclude that kids are a normal good after all. Its just that richer people care more about the *quality* of their kids than the quantity. They prefer one or two exceptionally healthy, smart, and ambitious kids to a three or four average kids.

D. The underlying idea is that there's a *quality-quantity trade-off*. You can improve your kids with investments of time and money. The more kids you have, the less time and money you've got per child – and the worse their outcomes.

E. Both economists and laymen take this quality-quantity trade-off for granted. But should they?

VIII. The Lessons of Behavioral Genetics

A. It's tempting to simply point to the fact that success runs in families and say "Yes." But this pattern could just as easily result from heredity!

B. A huge field known as "behavioral genetics" studies twins and adoptees to actually measure the effect of family environment on adult outcomes.

1. How adoption studies work
2. How twin studies work

C. Big lessons: the quality-quantity trade-off is vastly overrated. The long-run effect of parenting on kids' outcomes usually ranges from small to zero.

D. In *Selfish Reasons to Have More Kids*, I propose a "Parental Wish List" – the main traits parents hope to foster. Then I track down *all* the relevant twin and adoption research in medicine, psychology, economics, sociology, and beyond.

E. The Parental Wish List:

1. Health
2. Intelligence
3. Happiness

4. Success [education, income, crime]
5. Character
6. Values
7. Appreciation

F. Main results: Nurture/upbringing/parenting has little or no effect on health, intelligence, happiness, success, character, or fundamental values.

G. Parenting has a moderate effect on appreciation, and a big effect on superficial values (especially what religion and political party you *say* you belong to).

H. Key caveat: What you find depends on where you look. Behavioral geneticists focus on vaguely normal families in First World countries.

I. Upshot: Parents' may think they're substantially increasing their kids' quality by restricting their quantity. But they're wrong. Much parental "investment" yields roughly zero return.

J. In fact, if parental "investment" hurts the parent-child relationship, the return could easily be negative.

1. *Ask the Children*: Kids' main complaint isn't that their parents don't spend enough time with them. Their main complaint is that their parents are too tired, stressed, and angry!

K. Big life lesson: Behavioral genetics reveals a free lunch for parents and potential parents. You can get the kids of the quality you want for a fraction of the price the typical parent pays!

1. Graphs

IX. Family Size, Durable Goods, and Time Horizon

A. Kids have high upfront costs, and much of the benefit happens later in life.

B. In modern societies, most of this benefit is non-financial. Voluntary financial transfers from old to young vastly outweigh financial voluntary transfers from young to old.

C. Many people believe that in earlier times, people had kids purely for the financial return. But the evidence says that transfers have gone from old-young throughout all of human history.

1. Hunter-gatherer societies
2. Agricultural societies

D. Key Point: People used to die too young to enjoy much of their "pensions." The main reason to have kids has always been "consumption."

E. In some ways, parents' "retirement benefit" is bigger now than ever. The financial benefits are probably no worse than before, and the non-financial benefits are better and longer-lasting.

F. Since kids are "durable goods," economics advises us to maximize utility over our entire lifetimes – not myopically focus on how we're feeling today.

G. Do parents and potential parents actually do this? Or do people stop having kids because they're temporarily exhausted? I tend to think the latter.

X. What's the Optimal Number of People?
   A. People often worry about "overpopulation" or "underpopulation." What does this mean in economic terms?
   B. It's tempting to say "optimal population"="population with maximum GDP per capita." But:
      1. Anyone who has a baby rejects this at the household level. When my wife and I had twins, our family's per-capita income fell by 50% as a matter of pure arithmetic.
      2. By this standard, the existence of life-loving but below-average people is "suboptimal."
   C. Even by the "maximize per capita GDP" standard, though, the world still might be underpopulated. Consider: Over the last two centuries, both population and per capita GDP have massively increased.
   D. Furthermore, over the last 150 years, the real prices of food, fuel, and minerals have fallen by about 1%/year. The main commodity that keeps getting more expensive: labor. If we're "running out" of anything, it's people.
   E. In any case, economists' real standard for over- or underpopulation is whether *the marginal baby born has (on net) negative or positive externalities*.
   F. Slogan: "You don't have to raise the average to pull your weight."

XI. Negative Externalities of Population
   A. Many people, notes Landsburg, think that each child born gets a 1/7 billion share of world resources - implying negative externalities.
   B. This isn't how the world really works. Instead, when a family has one more child, each child in that family gets a *lot* less, with little effect on anyone else.
   C. This is especially clear from bequests. Picture a simple agricultural economy where kids always divide their parents' landholdings equally. If everyone but you has lots of kids, your kid inherits just as much land – and his land will actually be worth more due to higher demand.
   D. Lesson: With private property, parents who care about their kids automatically internalize any "poverty externality." Under socialism, in contrast, the poverty externality is very real. You can have an many kids as you like without reducing your family's consumption at all.
   E. Poverty aside, people also often worry about the negative *environmental* externalities of population.
   F. Key economic point: Limiting population to reduce environmental externalities is using a sword to kill a mosquito. Why not just raise the price of environmental damage with e.g. pollution taxes?

G. The same applies to congestion externalities. If the roads are crowded at rush hour, rush hour tolls are a much cheaper and humane solution than preventing people from existing.

XII. Positive Externalities of Population

A. Does population have any *positive* externalities? Yes!

B. Existence externality: Most people are happy to be alive, but parents can't charge you for the privilege of existing.
   1. In Singapore, though, you are financially responsible for your elderly parents.

C. Idea externality: Progress depends largely on ideas, and ideas come from people.
   1. Historically, almost all progress comes from populous, connected regions of the world – especially Eurasia.
   2. Historically, isolated areas with low populations have low, zero, or negative progress. See Tasmania.

D. Notice: Technology has now connected the whole world. A great idea anywhere quickly becomes a great idea everywhere.

E. Population increases both the supply and demand for new ideas. This is most obvious for languages, but works in all areas of idea creation.
   1. Imagine deleting half the names in your music collection, or half the Nobel prize-winners.

F. Choice externality: More population means more choices. See NYC vs. Hays, Kansas. The fact that urban rents are higher than rural rents shows that people prefer (people + the indirect effects of people) to splendid isolation.
   1. Question: Why don't people who complain about overpopulation move to the middle of nowhere?

G. Retirement externality: Government old-age programs are pyramid schemes. With lots of kids, low taxes can sustain high benefits. Low birth rates are a major reason why Social Security and Medicare are going to be in big trouble.
   1. What if government benefits for the elderly depended on your number of kids?

H. Even without government programs, the elderly benefit if other people have kids. Imagine: What would happen in seventy years if everyone stopped having kids today?

XIII. Why the Standard Story of Parenting Is Wrong

A. Standard story: People used to have lots of kids to help them run their farms. In the modern world, though, large families are no longer practical. To compete in today's competitive world, kids require massive parental investment. The only way parents can keep their lives halfway livable is to limit themselves to one or two kids. And we should be thankful they do, because overpopulation is a major world problem.

B. Why it's wrong:

1. Kids have *always* been bad investments from a purely financial point of view. Pre-modern farmers had lots of kids because they liked having lots of kids.
2. Behavioral genetics shows that parenting has little effect on kids' life outcomes. Parents make heavy sacrifices to help their kids, but these are largely waste, not "investment."
3. Parents are *slightly* less happy than otherwise identical non-parents. But their happiness gap is largely self-imposed. They could adopt a much more enjoyable parenting style without hurting their kids. Or have more kids and more fun at the same time.
4. The world remains underpopulated. Population and prosperity have been growing together for over two hundred years, and its no coincidence. Large populations are more creative, and creativity is the main cause of economic growth.