Rational choice, independent utility and the inclusive classroom

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Abstract: Neoclassical models of individual utility maximisation seem logical and consistent to many students; however, they can seem unrealistic and alienating to many others. When students have such misgivings acknowledged, they are more open to learning. This article describes an in-class exercise designed to allow undergraduates to examine their own motivations and choices. When students identify and compare their diverse motivations to the widely assumed motivations of selfishness and individualism, they gain important critical thinking skills. This, in turn, facilitates their development of insight into, and confidence about their abilities to learn and critique rational choice theoretical models. Greater familiarity with abstraction in the development of theoretical arguments makes students more open to learning heterodox theories, methods and policy debates.

Keywords: utility maximisation; individual labour supply; gender and work; under-represented economics majors; economics education; rational choice assumptions; pluralistic economics education; experiential learning; inclusivity.


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1 Introduction

My course, ‘Political Economy of Women’ is designed to teach students how economists analyse gender inequality in the US and how they use theory to debate policy. It satisfies an elective graduation requirement for majors and minors in Economics, and for majors in Women Gender Sexuality Studies; it also satisfies a global education requirement for other majors in the College of Social and Behavioral Sciences.

As an elective course for economics majors and minors, PE of women is a topics course where students should gain moderately advanced (300-level) knowledge of theories, methods and policy applications. The one prerequisite is introductory
microeconomics. The students vary significantly in their understanding of abstraction and the practice of theorising about observations. Many students are accustomed to theoretical debates across paradigms, though not many have been asked to think critically about specific theories or their applications. The exercise described below attends to this diversity of experience and skill among the students.

In the first few lectures data about historical trends in women’s labour force participation, education and earnings are presented on slides. My role the first week include highlighting the gains American women have made, validating the knowledge and curiosity students reveal; describing structural and cyclical changes in the US economy over the last six decades; and previewing some of the theoretical arguments we will soon examine more closely.

As we examine the data and readings about the economic history of women in the US, students discuss shifts in social norms and labour market demographics, and brainstorm explanations for shifting participation, hours and earnings, (especially for white women) post-1970. Students participate in small group discussions, using the experiences of their mothers, grandmothers and other elders to demonstrate trends in participation and the variety of outcomes they experienced. My goals for the subsequent few weeks include examining how labour economists and others use rational choice theories about human capital investment, individual labour supply, specialisation, exchange and transactions costs, and bargaining to explain the observed participation, hours and earnings outcomes.

To make these rational choice theories accessible, I provide a fairly brief description of how economists develop theories and how they model behaviours of individuals. This reminds students of a major learning goal – to understand the role of economic theories and methods in policy development. Providing a broad description of theory is helpful when we review key concepts from the prerequisite course; and helps explain to students that the reading and lecture materials have been organised in a purposeful way: the data provide observations we wish to examine and explain with theories typically used in economics classes. The ungraded, small group exercise (below) on utility validates their personal behavioural motivations, while differentiating theirs from some of the more abstract motivations typically used in the models. As we move on to economic models that allow behavioural motivation to vary, students are more comfortable with the idea that assumptions inform economists’ analyses and policy positions.

2 Independent versus interdependent utility exercise

This exercise is an ungraded verbal exercise that students conduct in pairs. The students use their own experiences to examine how their own choices are motivated. Some of the models the students learn limit motivation to selfishness and/or competition and begin to appear limited in insight and applicability after the exercise. As we move to models informed by social, institutional, cultural (race, queer, feminist), and legal theory, students recognise the need for complexity, and feel empowered intellectually. Knowing that other-motivated choices are the norm, they accept readily the need for different assumptions and methods for analysing policy problems confronted by many women.

I prepare the students for the exercise by reviewing the concepts of rational choice and individual utility maximisation. The class slides on these topics often contain quotations from a microeconomics text or other sources. The students are required to read
Strober (2003) who cautions that some of the behavioural assumptions in mainstream economics are of limited use for scholars interested in feminist economics. Strober argues that specific concepts, including scarcity, efficiency, independent utility, and competition, require critical attention by scholars and policy makers for whom economic security for women is a goal. I ask the students to focus on what Strober calls selfishness as motivation for independent utility maximisation. I ask them to think about other motivations that might inform our individual choices. Parents or other students who provide care for a family member often volunteer examples. I ask them to describe their motivation, and how their choices might be constrained or enriched by their responsibilities. If there are no volunteers, I describe examples offered in previous semesters and refer students to other motivations such as altruism and cooperation in Strober (2003, p.8).

The exercise asks students, who sit in pairs, to identify and describe two different choices they’ve made in the last day or two. The first choice is called their independent utility choice. It should be made independent of any consideration for another person. It would be expected to generate utility for the student individually, without imposing any cost or benefit on another individual. Students are asked to describe a second choice that could be made with knowledge of, and might be constrained by, its impact on another person. The utility it generates could depend in part on how the choice benefits or harms others. We call this their ‘interdependent’ utility example. Usually the students meet this challenge energetically – convinced the choices they make affect themselves, rarely other people. After five to ten minutes in pairs, they are a bit less confident, but are willing to report the choices to their peers.

The students assert interdependent examples with confidence and I express my support and congratulations. These are often examples that show a willingness to sacrifice for friends or family without compensation. Interdependent utility choices include providing friends and relatives care, transportation, or other services, while individual utility choices range from flu shots, buying food items from vending machines, to working out at the gym, or skipping class. Before completing their presentations, students reporting independent choices begin to show doubt, while acknowledging how choices might affect other people. After all pairs finish reporting, I invite all students to comment on the examples offered. Peers focus on the independent choices – identifying impacts on others – not considered by the reporting pairs.

Students enter this exercise thinking that most of their daily choices yield independent utility, affecting no one but themselves. Since the pair exercise is usually just before the end of class, I encourage them to observe their daily choices until we next meet. The next class starts with a large group discussion of any new examples. Again, I invite class members to consider the examples volunteered; and (again) peers find fault with the independent utility examples. Someone else could almost always be affected. Even leisure activities enjoyed in isolation can benefit others in indirect ways.

Eventually, we agree that it is virtually impossible to identify real world examples of choices that yield independent utility. This is the beginning of students’ understanding of abstraction. The exercise ends in a moment of shared understanding by students from very different backgrounds, skill levels, and political persuasions about how assumptions help economists develop theory. It is a small step toward learning how to think critically about the theories they will encounter. It is empowering for the students, and an effective way for the instructor to teach that questioning assumptions is an important part of the analytical process.
This exercise was motivated by England (2003, p.34) who argues neoclassical economics "presumes that humans are autonomous, impermeable to social influences, and lack sufficient emotional connection to each other to feel any empathy". She lists as evidence three seldom-challenged behavioural assumptions applied to individuals: selfish actors; unchanging exogenous preferences; and the impossibility of interpersonal utility comparisons. England also examines the 'soluble selves' economists create to discuss utility optimisation in families. I visit that discussion later in the course when we review specialisation and exchange and other joint family decisions. The exercise allows me to engage students in this discourse while teaching them some fairly basic skills.

Other instructors have found it useful to teach economics students about observed behaviours. Karacuka and Zaman (2012) provide a detailed review of the behavioural economics literature on how choices motivated in real life differ from those assumed in rational choice models of utility. Beckman et al. (2011) find that student surveys demonstrate departures in student choices from what rational choice would predict which fosters rich discussions in their microeconomics theory classes. List (2014) assigns field experiments to help students answer questions about a variety of behaviours (responses to gains vs. losses; gender differences in job selection; and third-degree price discrimination). List (2014, p.88) observes: “Each example provides a different view to students … and gives them a good sense of how modern economists approach economics, thereby offering alternative ways to structure the empirical dialogue that we hold with our students”. List’s students develop a field experiment to study how differences between women and men in the choice of jobs they target contribute to the gender pay gap. In PE of women, analyses of employment and wage inequality are not focused on just choice, but give greater importance to social norms and processes as well as public and private practices. With this caveat, I agree with List that field experiments are a great way for students to inform their analyses with real world findings and foster critical thinking about behaviour. Students in my class use them occasionally for their term papers.

The utility exercise in Political Economy of Women helps students learn how assumptions are used in structural models, leading many students to understand that simplifying assumptions are warranted in specific occasions, though not always useful for policy analysis. Having a critique of behavioural assumptions on the table allows for richer and livelier policy discussions. Early in the course, assumptions of connectedness and interdependence are important to our analysis of different (individual) labour market supply choices for women with and without a second adult worker in the family. As we move forward, we revisit the idea of interdependence. Models from behavioural and experimental economics that assume and sometimes attempt to measure interpersonal utility are referenced when we study transactions costs and bargaining, for example. It’s fairly clear to students that women’s decisions about participation and hours are motivated differently for people with care obligations than for others. By the end of the semester, students are able to think critically about the role of assumptions in designing effective policy for trade or development.

Most students say the exercise is informative and fun. A senior economics major told me this exercise helped him connect what he learned and enjoyed in behavioural economics to his other economics courses. However, another student said he would prefer we only study the basic neoclassical models, without criticism or modification. I observe this sentiment indirectly in writing assignments by a few students: they prioritise the simplifying assumptions, rational choice and other neoclassical traditions; and
struggle with theories and readings that depart from that tradition and with empirical outcomes those theories fail to predict. Alternatively, some students may take the critiques as permission to deprioritise the rational choice models and applications in their learning, and have difficulty explaining the models and using critical thinking to examine them. I offer verbal and written feedback, cautioning students against either of these temptations. The feedback is accepted well; and rarely needs repeating if it is clear how and why their grades on related writing assignments or quizzes have been or may be affected.

The role of behavioural assumptions in decision theory is less challenging for students when I use this exercise. Later in the semester, a review of it and our earlier discussions about rational choice are important, especially when we examine the care economy and trade and development effects on women and families. Policy evaluation and design considerations are more concrete, better informed, and of interest to more students. Without prompting, many students now condition their answers to short essay assignments, or frame entire term papers around the role of assumptions and/or paradigmatic differences among theorists.

Though all students could benefit from clarification and review of the assumptions in rational choice theory, non-traditional majors seem to benefit more. Under-represented (international, Black and Latino, White women) students reveal a higher level of disbelief regarding rational choice – ranging from incredulity to alienation. Though the sample is small, they seem more likely to benefit from the exercise than other majors. The interdependent utility exercise helps many students realise they can do economics without accepting theories and policy perspectives that do not reflect their values or solve problems important to them. Students tend to be more engaged and confident when we discuss departures from rational choice, having learned more about the process of theorising and the specific role of behavioural assumptions. The readings about empirical research results, quite challenging for many students, are less fraught now that they understand the theories being tested.

Though the exercise is used in Political Economy of Women with specific goals for learning and critiquing specific applications of rational choice, it can be used successfully in other economics courses. I find it easily adaptable in teaching about trade and development, educational inequality, and statistical discrimination. Its applications should not be limited to topics about inequality, however. In microeconomics courses, an introduction to the role of simplifying assumptions and their implied biases will demystify the theory and engage more students. A version of this exercise was useful in my Masters Public Policy microeconomics course, recently. It enriched our discussions about equity (ability to pay), power relationships (voting), entrepreneurship externalities and public goods. It could be adapted and used to teach one or more topics in many theory and applied economics courses.

References


Notes

1. Though I have no formal measure of success, I debrief students after informal class exercises. This is one of the most popular class exercises. When I follow up with questions that connect it to other material students know, behavioral choices can be motivated in different ways and reflect different values.

2. In a small group exercise, students decided to tackle a public goods financing problem using cost-benefit analysis. One group member posed an exercise about a kid’s splash park in a white suburb bordering a black and Latino section of the city. The park was a popular investment in its first year, but higher than projected clean-up costs and intense use by the city kids soon reduced support for and use of the park by the suburban residents. The group advised raising fees and imposing parking restrictions to reduce use by non-residents. I asked them to come up with solutions motivated by different values. In the end, they saw this as an opportunity to strengthen communication between park users and between the two towns. We had a good discussion about the need to appeal to suburban voters willing to acknowledge measurable benefits from the diversity in the park exist that could offset the extra costs.