

Testimony before the National Commission on Military, National, and Public Service

Creating an Expectation of Service Hearing: An Infrastructure to Serve America

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I am testifying here today in two capacities, first as a researcher and teacher of behavioral economics. I have taught classes at Cornell University, Columbia University, and Vassar College in behavioral economics. My classes integrate ideas from psychology and sociology into the economic discipline and address the strategy and the ethics of the public sector. I am also testifying in my capacity as a professor who has mentored and advised many students interested in public service and in building startup companies based on social networks. I advise them based on my experience in the public sector, having worked for both the Clinton and George W. Bush administration, and my experience working with many tech startups.

My testimony therefore draws on my experiences in these sectors and on economic research. In particular, my testimony is rooted in what economists know about social networks and about how to increase participation. Like any economist, I will be sure to highlight the costs and benefits of each option.

FDR's vice president Harry Truman famously (perhaps apocryphally) lamented that he wanted a one-handed economist, because his economic advisers were always saying on the one hand, on the other hand... For better or worse, I will do the same here.

Economics has developed significantly as a discipline since the administration of Harry Truman. In recent decades, economics has become a primarily empirical profession, focused on measuring the costs and benefits of different economic factors in order to provide conclusive advice about the best option. Unfortunately, the field of behavioral economics is relatively new, and the factors at work in building a national voluntary service registration system such as identity, awareness, networks, and defaults, are new fields. Empirical evidence is mostly limited to small-scale case studies or localized experiments. Therefore, this will ultimately be a judgment call on how best to proceed with the economic studies at hand.

My testimony will proceed in two parts. I will begin by evaluating the bigger picture and the literature on matching markets and social networks, and then I will examine the psychological and social factors that affect program participation decisions.

[**The Economics of Matching Markets and Social Networks**](#)

The proposal for a national opt-in database that connects people with voluntary service opportunities is an example of what economists call a matching market. Notably, the economist Al Roth won the Nobel Prize in 2012 for his experimental work on how matching markets function examining case studies as diverse as how medical students get matched to residency

programs to how kidney donors get matched to recipients. A lot of the most successful matching markets in recent years have taken the form of online social networks like LinkedIn, which connects the majority of American workers. While researchers like Matthew Jackson¹ have done a lot of work to think about how the structure of social networks affects the behavior of the network, much depends on details. But there is one key feature that is true of matching markets in general and social networks in particular: size matters.

These markets exhibit what economists call “network externalities.” What that means is that they become more effective when a greater percentage of users use the same network. The classic example of this is telephone networks where belonging to a network becomes more useful when you can reach a greater percentage of your friends. The same is true for many of the Web 2.0 services we use today, from Facebook and Instagram, to behind the scene networks like the Ad network Google provides that matches advertisers to internet users.

What all of this means is that creating a new network is hard. I taught MBA students at Cornell interested in social entrepreneurship during the height of the Web 2.0 trend in the late 2000s when the biggest fortunes to be made were in creating social networks. These students were interested in creating companies that would help make the world a better place. The most common approach was through the creation of some kind of social network. My warning to them all, no matter how good the idea, was that this is a winner take all market; most attempts are going to fail.

Salganik, Dodds and Duncan Watts produced a groundbreaking study published in *Science* in 2006² where they created eight artificial online music sharing social networks that were separate from each other. That is, the authors created separate online “worlds” on which they could experiment independently. Users signed on and were presented with music from unknown bands that they could listen to. Users learned how popular each song was within their network.

A song has network externalities because when more of your friends like a song, the more likely it is that you will like it. People benefit from sharing experiences with friends, and people are more likely to like something with repeat exposure. Salganik et al. found that while quality helped a song to succeed, quality alone was no guarantee for success. A higher quality song was more likely to become popular in each of the either worlds, but it was also quite likely for high quality songs to flop in some worlds or for low quality songs to become #1.

The point is that starting any product that exhibits strong network externalities is going to have a high chance of failure. The internet is littered with many such attempts, from the attempts of all my former students, to the attempts to start new networks by companies like Google (see Google Plus which just shut down). It may be easier to partner with an incumbent like LinkedIn, though

¹ Jackson, Matthew O. *Social and Economic Networks*. Princeton University Press, 2008.

² Salganik, Matthew J & Duncan J Watts. “Leading the Herd Astray: An Experimental Study of Self-fulfilling Prophecies in an Artificial Cultural Market.” *Social Psychology Quarterly*, Vol, 71, No. 4, 2008. https://www.princeton.edu/~mjs3/salganik_watts08.pdf.

that has its own set of potential problems in having the federal government make a major investment in a single company.

Starting such a network backed by the federal government confers many advantages (although I will discuss some of the disadvantages of federal government association in the next section). And despite my misgivings, I always encouraged my students to push ahead. I just wanted to make sure they were aware of the high chance of failure. Making their product the best it can be will indeed increase the chance for success, but even the best products have a high chance of failure.

The Behavioral Economics of Program Take up

While there are dozens of psychological factors that affect the decision to register for a system for voluntary national service, behavioral economics tries to narrow that list to the ones most likely to affect decision making. I will do the same here and focus on three factors: Awareness and Inattention, Default effects, and Altruism and Identity.

The most relevant here is unawareness or inattention, the factor that is perhaps the most popular area in behavioral economics at the moment. People tend to exhibit significant inertia in their behavior. Neo-classical economics presumes that people make decisions by considering the universe of all possible options and then choosing the one option that is best of all. Realistically, we know this cannot be true. People are generally not aware of all possible options available to them. Abaluck and Gruber³ have a number of studies that look at the role of inattention on highly consequential health behaviors like choice of health insurance plan or eating habits, and they find that increasing awareness might not be enough. In a study of Oregon school district employees who had a choice of health insurance plans, they found that the typical employee could save \$600 by changing plans. They tried an intervention where they made employees aware of the potential savings, but this new information had little effect on getting employees to switch. This demonstrates the way that inertia affects our decision-making process: even when provided with new, accurate, and relevant information about a better option, people chose to stay with their original plan.

An example of an effective method for counteracting that inertia is through one of the most successful policy intervention inspired by behavioral economics called the default effect. The default effect was popularized by the book *Nudge* written by recent Nobel Prize Winner for Behavioral Economics Dick Thaler and Obama era OIRA administrator Cass Sunstein. The two wanted to promote the idea of soft paternalism, which is the idea that we should preserve freedom of choice instead of requiring people to take some action like register for selective service or eat more healthy foods. Soft paternalism employs a mechanism that takes advantage of their psychological biases and “nudges” them instead. One key idea is to capitalize on a person’s inertia when they are in the process of registering for something by setting the default to the choice that is better for society. The most well-known examples of this are retirement savings and organ donation, which have been verified in large scale trials and led to wide adoption of

³ Abaluck, Jason & Jonathan Gruber. “Less is More: Improving Choices by Limiting Choices in Health Insurance Markets.” <http://faculty.som.yale.edu/jasonabaluck/less-is-more-4-5-18-final.pdf>.

policy changes both in how organs are donated but also how we save for 401ks. Recent experimental evidence⁴ finds that changing the default for how much an employer withholds from salary into retirement savings plans can increase the rate of retirement savings by 50%. Similar evidence looking at organ donation decisions show that changing the defaults can increase the number of organ donors by as much as 90%.⁵

One obvious implication for the volunteer registry is to make the system opt-out rather than opt-in. When men register for selective service, instead of requiring them to check a box to opt into the system, make that box checked by default and allow them to uncheck it if they prefer to opt-out. Online advertisers widely make successful use of this strategy.

While much has been made of the wild success of this approach, economists have been quietly pushing back a bit, suggesting that there may be some costs. For example, in the case of organ donation, Kessler and Roth⁶ argue that changing the default choice for whether you donate organs or not (say by changing whether the box on your driver's license defaults to checked or unchecked) may not be as effective as hoped. One worry is that family members have ultimate decision-making power over whether the organs of the deceased are ultimately donated. A person who made the affirmative choice to donate their organs is different than someone who neglected to uncheck a box. Kessler and Roth find that when the default changes, family members become more likely to overrule the decisions of the deceased.

In the case of a national voluntary service registry, a person who affirmatively decided to register for the service may feel differently about a service than someone who got signed up by default. Benabou and Tirole⁷ (Nobel Prize winner from 2014) have a series of papers showing that identity is a key driver of why we participate in altruistic activities. We are often motivated to volunteer or to donate by a desire to look like a good person to ourselves or to others. Changing the default so that sign-up is automatic would make the registry feel less like an act of service and more like an obligation. This could lower engagement.

Ultimately, economists have started to recognize that identity is probably one of the most important factors that influence our take-up of most activities. A benefit of having a national service registry is that it can leverage the value of those who identify strongly with national service. At the same time, in an era of increased polarization, something associated with national identity may be a hard sell.

⁴ "Behavioral interventions to increase retirement savings: Key findings from the research." *Clearinghouse for Labor Evaluation and Research*. https://clear.dol.gov/sites/default/files/CLEAR_FinanceFindings_042016.pdf

⁵ Jaipuria, Tanjay. "The Power of Defaults." *Medium*. 11 April 2018. <https://medium.com/@tanayj/the-power-of-defaults-976bc8b015b7>.

⁶ Kessler, Judd B. & Alvin E. Roth. "Getting More Organs for Transplantation." https://web.stanford.edu/~alroth/papers/KesslerRoth_OrganLessons_PP_v10.pdf

⁷ Benabou, Roland & Jean Tirole. "Incentives and Prosocial Behavior." <https://www.princeton.edu/~rbenabou/papers/AER%202006.pdf> and the thousands of experimental papers that cite it.

Certain behaviors like vaccination become associated with certain identities for reasons that can be difficult to discern which invited anti-vax counter signaling.⁸ That association drives behavior. Researchers like myself⁹ have begun to grapple with how identity influences behavior. But for the moment, a lot of what we know is like the Salganic et al multiple worlds experiment: almost anything can happen.

⁸ Goldberg, Amir, and Sarah Stein. “Beyond Social Contagion: Associative Diffusion and the Emergence of Cultural Variation” <https://journals.sagepub.com/doi/abs/10.1177/0003122418797576>

⁹ Berger, Jonah & Benjamin Ho & Yogesh Joshi. “Identity Signaling with Social Capital: A Model of Symbolic Consumption.” *Marketing Science Institute*. 2011. <https://www.msi.org/reports/identity-signaling-with-social-capital-a-model-of-symbolic-consumption/>.