The Diversity Lottery: Some Rough Open Borders Arithmetic

How many people want to immigrate to the U.S.? In my past work, I've appealed to both surveys and black market prices to ballpark the answer. Another approach, however, is to take a look at the U.S. Diversity lottery. Every year, the U.S. takes applications from would-be immigrants all over the world. Countries like Mexico, China, and India that already send lots of immigrants to the U.S. are excluded. Further requirements:

If selected, to qualify for the immigrant visa, they must have completed at least a high school education or at least two years of work experience in an occupation which requires at least two other years of training or experience. They must also satisfy general immigration requirements, such as means of support, no criminal background, and good health.

The lottery has roughly 125,000 "finalists" and 50,000 actual slots.* Finalists are invited to apply for a green card, but optimistically only half of applicants actually get the visa. This implies that about 100,000 out of the 125,000 finalists apply – about 80%.

Since this is an actual lottery, we can plausibly infer that 80% of *all* applicants would come if they won. In 2018, there were about 15M applications for a total of 23M would-be immigrants. If they were all admitted, that comes to 18.4M immigrants *per year*. In 2018, non-lottery immigration was roughly 1 M.

Does this mean that open borders would multiply immigration roughly by a factor of 20? That's too simple, but complications go in both directions. An immigrant flow that large might lead to short-run labor market disruptions large enough to keep some would-be immigrants at home. Similarly, if immigration were that high, U.S.-based relatives would be less willing and able to help new arrivals get on their feet. This, too, would deter migration. Note: Even if these effects are initially mild, they would likely build over time. One year of 20M migrants might not hurt a would-be immigrant's labor prospects too much, but five years in a row of such immigration probably would.

Furthermore, current Diversity lottery applicants are probably *highly* motivated to move to the U.S. A few years of open borders would allow all highly-motivated would-be migrants to come, leading to lower subsequent migration in equilibrium.

On the other hand, however, *many* millions of would-be immigrants currently fail to enter to the Diversity lottery because (a) they've never heard of it; (b) the odds seem hopelessly low; (c) people hate filling out paperwork; and (d) they don't want to separate from their families. Open borders would drastically mitigate all four problems.

Which factors would dominate? I honestly don't know. Yet if we're only trying to ballpark immigration under open borders, 20M a year is not bad guess.

* Officially, there are 55,000 slots, but 5000 have been diverted to the NACARA program.