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How many refugees should the US admit?

M. Christian Lehmann
University of Brasilia, Department of Economics, Brazil

Abstract

US refugee admissions reached a historical low in 2018, when the number of individuals seeking refuge from war and persecution is at a historical high. I show that the US is currently hosting too few refugees from the perspective of a utilitarian social planner. More generally, I illustrate the potential of Welfare Economics to inform the debate on how many refugees a country ought to admit.

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Contact: M. Christian Lehmann - christianlehmann0@gmail.com.
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1. Introduction

Former US President Ronald Reagan stressed "America's tradition as a land that welcomes peoples from other countries" and that the US would "continue to share the responsibility of welcoming and resettling those who flee oppression".[1] Yet, Figure 1 illustrates that the US has abdicated its leading role in refugee resettlement: while the US hosted 30 percent of the world's refugees in 1960, this share has declined steadily since then, reaching a historical low in 2018 (1.5 percent) when the number of individuals seeking refuge from war and persecution is at a historical high. In this short note I illustrate that, from the perspective of a utilitarian social planner, the US is currently far from sharing the responsibility of refugee resettlement. To my knowledge this is the first attempt to study refugee resettlement through the lens of Welfare Economics.[2]

2. Methods

My simulation is based on six assumptions: (i.) utility of host nations' citizens depends on their level of consumption, marginal utility is decreasing in consumption, and gdp per capita is a proxy for consumption; (ii.) a host nation makes cash transfers to refugees, sufficient to keep them out of consumption poverty; (iii.) these cash transfers are financed through lump sum taxes and, therefore, reduce consumption hence utility of citizens; (iv.) income of citizens is exogenous; (v.) each host nation provides the same amount of cash transfers (in PPP terms); and (vi.) only peaceful nations can host refugees.[3] The social planner's problem is to take the current stock of the world's refugees and allocate them across 139 currently peaceful nations in a way that maximizes global welfare. Formally,

$$\max_{r_h} W = \sum_{h=1}^{139} u\left(y_h - \frac{\alpha \cdot r_h}{n_h}\right) \cdot n_h \tag{1}$$

where r_h is the number of refugees that the planner allocates to host nation h, and n_h is the number of citizens (i.e., non-refugees) of that nation; y_h denotes current GDP per capita (in PPP terms, using 2011 US prices), which is my proxy for consumption; u is a utility function with standard properties $u' > 0$ (utility increases with consumption) and $u'' < 0$ (decreasing marginal utility of consumption).[4]

The parameter α is the annual aid (e.g., cash transfer) that a refugee receives from citizens, which I set to \$7,921 (the World Bank's poverty line for high-income countries, i.e., \$21.70 per day). The term in parentheses in equation (1) is thus intended to represent consumption of a host nation's representative citizen after cash transfers to refugees. This

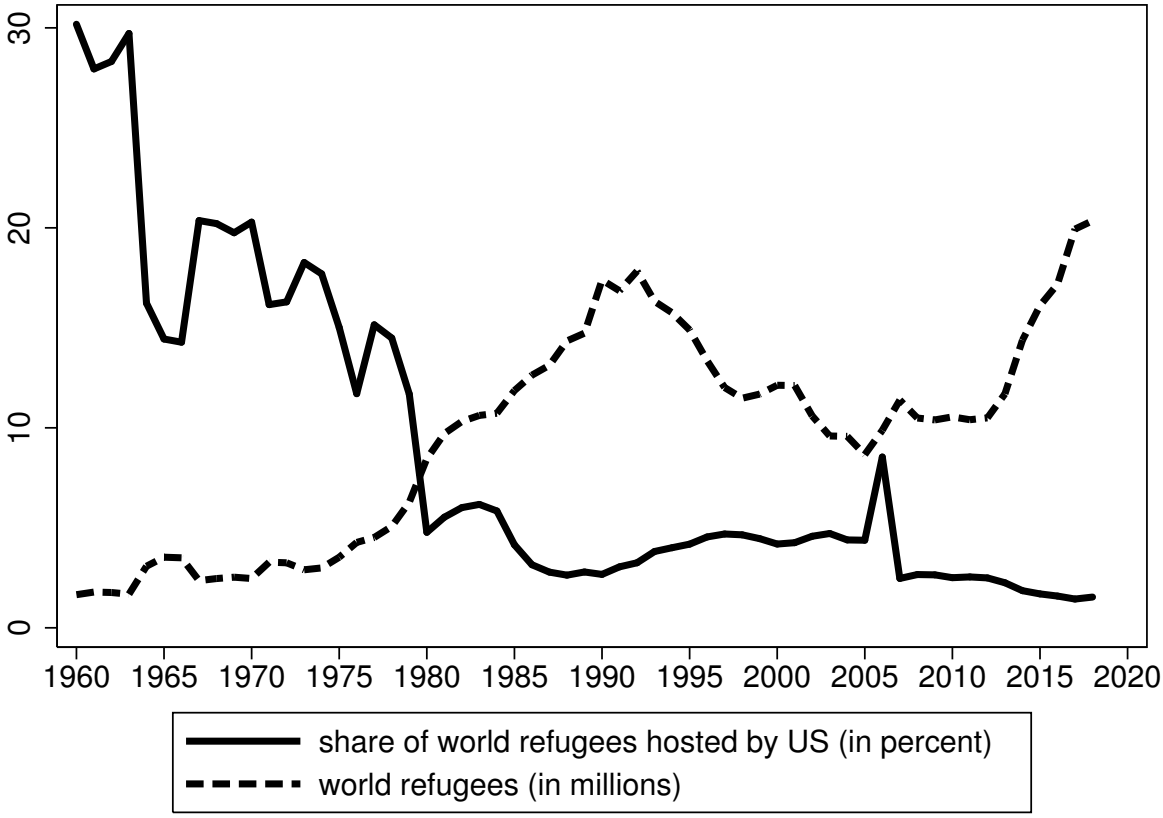
[1] Quoted in Kerwin (2018).

[2] See for example Gaubert (2018) and Acemoglu et al. (2018) for two recent applications of a social planner's optimization in the field of Industrial Organization, where the authors study the socially optimal geographic allocation and production of firms.

[3] I.e., I exclude countries with ongoing civil conflicts from the set of potential host countries.

[4] E.g., it is a well-established empirical fact that the correlation between GDP and measures of subjective well-being diminishes as GDP rises (Clark et al., 2008). In my simulation I follow the standard of the literature and use CRRA utility, see Acemoglu et al. (2018) for a recent example. GDP and population data come from the World Bank.

Figure 1: Refugees in the US



Source: http://popstats.unhcr.org.

is converted into utility and multiplied with the number of citizens to yield a host nation's utility. Global welfare, W, is the sum of the 139 nations' utilities.

Intuitively, the social planner will allocate more refugees to countries with (i.) higher GDP per capita, because they incur smaller utility losses than poor countries when aiding refugees, and (ii.) higher population, for the cost of aiding refugees is distributed across more citizens.

This is of course a highly simplistic setting. It ignores, among others, that refugees may support themselves (i.e., require no aid) and that their labor supply could decrease income (wages) of some native workers, or that refugees' demand for goods and services (e.g., food, housing, etc.) may increase incomes of native producers.[5] Adding these layers of complexity, I believe, is a fruitful avenue for future research.

The crucial feature of my setting is that the cost of hosting refugees — i.e., redistribution to refugees — is a major concern (source of disutility) to citizens. This is supported by a growing body of evidence that citizens oppose redistribution to refugees/immigrants:

[5]For empirical evidence, see for example Alix-Garcia and Saah (2009), Baez (2011), Maystadt and Verwimp (2014), Tumen (2016), Alix-Garcia et al. (2018), and Morales (2018).

Dahlberg et al. (2012) and Dustmann et al. (2018) exploit exogenous variation in the allocation of refugees to Swedish and Danish municipalities, and both find negative effects on residents' support for redistribution. The same happened on Greek islands that experienced large influxes of refugees (Vasilakis, 2018). Furthermore, Eger (2009) reports a negative correlation between immigrant shares in Swedish counties and survey-stated preferences of residents for social welfare expenditures, Jofre-Monseny et al. (2016) concludes that the arrival of immigrants reduced redistributive spending in Spanish municipalities, Runst (2018) provides experimental evidence that Germans lower their support for redistribution when primed with immigration information, and Harmon (2018) and Edo et al. (2019) find that immigration shifts electoral support away from parties favoring redistribution to parties with an anti-immigrant agenda in Denmark and France. Finally, Senik et al. (2009) and Alesina et al. (2019) use information from the European Social Survey (28 countries) and exploit within-country variations in the share of immigrants at the sub-national level, to find that native respondents display lower support for redistribution when the share of immigrants in their residence region increases. In a related paper, Alesina et al. (2018) provide experimental evidence that immigration decreases support for redistribution.

3. Results

Figure 2 shows the solution to the optimization problem in equation (1).[6] The United States is currently hosting roughly 1.9% of the world's refugees (by 'hosting' I mean refugees whom the US officially granted asylum), when it ought to host 3.3% according to the social planner. In other words, the US ought to admit roughly twice as much refugees as it currently does.

The US is not the only country that the social planner would urge to admit more refugees. All G7 countries, for example, host an inefficiently small number of refugees (see Figure 2). In relative terms (i.e., optimal allocation divided by current allocation), the US is actually doing better than most G7 countries. The ratio is 1.7 for the US, which is larger than that of France (1.3), but lower than that of Germany (1.9), Canada (2.7), United Kingdom (2.9), Italy (3.1), and Japan (129.2).

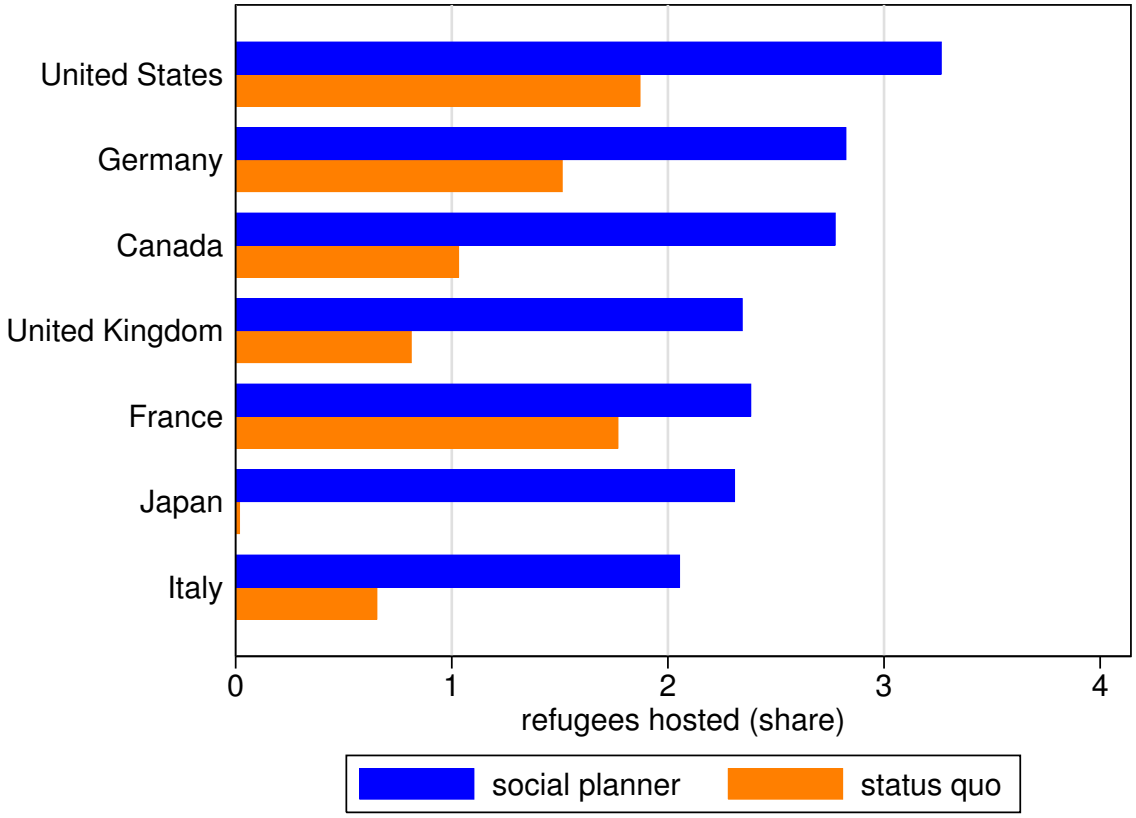
4. Conclusion

In the past, the United States played a leading role in responding to several large refugee crises, such as mass migration following World War II, the Vietnam conflict, or the Cuban revolution. Today, the US has abdicated this role, which reduces global welfare from a utilitarian perspective.

But opposition to the current anti-refugee US policy is growing (Kerwin, 2018). The European Union is also currently trying to reform the Dublin convention, which dictates that the country where refugees first arrive must take responsibility for them. But, so far, this debate has been unable to produce a transparent and objective allocation rule, i.e., a rule that gives the *exact* number of refugees that each country should admit. The tools of Welfare Economics, as I illustrated in this short note, are able to provide these numbers. Economists have until now been silent in this debate, and this must change, for they have

[6] I used MATLAB's fmincon solver.

Figure 2: Refugees hosted by G7 countries: social planner vs. status quo



Notes: Status quo figures are from the United Nations High Commissioner for Refugees (UNHCR), available at http://popstats.unhcr.org.

powerful tools to provide actionable solutions to a problem which right now causes great hardship for millions of people.

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