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## BY KARL RHODES

n Feb. 16, 2013, the *New York Times* published an opinion column, "The Myth of the Rich Who Flee From Taxes." On the following day, *Forbes* magazine countered with an online commentary, "Sorry New York Times, Tax Flight of the Rich Is Not a Myth."

The articles cited anecdotes of wealthy celebrities moving from high-tax states and nations, but data tracking the international mobility of large random samples of wealthy people over long periods of time is difficult, if not impossible, to find. So some economists have addressed this question by looking at observable subsets of wealthy populations. In 2013, for example, researchers from the London School of Economics (Henrik Kleven and Camille Landais) and the University of California, Berkeley (Emmanuel Saez) studied the mobility of professional soccer players among 14 Western European nations from 1985 through 2008. They found that the players —

especially foreign "superstars" do tend to migrate to countries with lower tax rates. (The authors defined "foreign" players as those who are not competing in their home countries.)

A more recent example comes from a 2015 working paper by Ufuk Akcigit and Salomé Baslandze of

the University of Pennsylvania and Stefanie Stantcheva of Harvard University. They study the impact of effective top tax rates on inventors' mobility; in particular, they look at inventors' movement among the United States, Canada, France, Germany, Great Britain, Italy, Japan, and Switzerland from 1977 through 2003. Inventors from these eight countries account for most of the patents issued by the U.S. Patent and Trademark Office and the European Patent Office.

For inventors who obtained patents in the United States, the authors employ panel data that was disambiguated recently by researchers at Harvard, Berkeley, and other institutions. (Disambiguation untangles name variations that could make one inventor appear to be multiple people and name duplications and similarities that could make multiple inventors appear to be one person.) For inventors who obtained patents in Europe, the authors use disambiguated panel data from the CRIOS-PatStat database developed by researchers at Bocconi University in Italy. By combining information from both sources, Akcigit, Baslandze, and Stantcheva are able to track most of the inventors who obtained patents during their study's timeframe.

The authors sort these data into "quality distributions" that rank each of the 1,868,967 inventors in their sample based on several factors related to the quantity and quality of his or her patents. The key indicator of an inventor's quality

"Taxation and the International Mobility of Inventors." Ufuk Akcigit, Salomé Baslandze, and Stefanie Stantcheva. National Bureau of Economic Research Working Paper No. 21024, March 2015.

is his or her number of citation-weighted patents. A citation occurs whenever an inventor's patent is referenced by a later patent. The resulting accumulation of citations varies widely among inventors. The average inventor in the sample has 42 citations, for example, while the average inventor in the top I percent of the sample has more than 1,000 citations. The authors refer to the top I percent as "superstars ... key drivers of economic growth."

Akcigit, Baslandze, and Stantcheva combine this patent data with international tax data to estimate each inventor's potential earnings in each country based on factors such as numbers of patents and citations and technological field. Other key considerations include whether or not an inventor works for a multinational corporation and how active that company is in each potential destination country. (Inventors who work for multinationals tend to be more mobile.)

The authors then develop a model to estimate elasticities with respect to effective top tax rates for domestic and foreign inventors. They find that top tax rates significantly influence location decisions among superstar inventors — especially foreign superstars. The elasticity for for-

eign superstars is 1.3, more than 30 times higher than for domestic superstars.

The elasticity of the domestic superstar inventors is somewhat lower than the elasticity of the domestic soccer players in the study by Kleven, Landais, and Saez. The authors of the soccer study speculate that the elasticity for soccer superstars may be greater than for other highly paid professionals because soccer superstars earn most of their income during just a few prime years and because professional soccer involves little country-specific capital. In addition, Akcigit, Baslandze, and Stantcheva point out that the soccer study considers migration only among Western European countries, while their inventor study also includes the United States, Canada, and Japan. "Expanding the [soccer] study to other continents might, one would expect, reduce the tax elasticities of migration," they suggest.

Both studies conclude that some wealthy individuals are substantially influenced by taxes when deciding where to live. The soccer research goes one step further by suggesting that tax-induced migration has translated into better-performing teams in lower-tax countries. The inventor study makes no parallel suggestion regarding higher levels of innovation from the migration of inventors, but it certainly raises the stakes from breakaway goals that win soccer games to breakthrough technologies that drive economic growth. **EF** 

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