



Inequality and the Sergey Brin Effect

By Arnold Kling and Nick Schulz

From the Magazine: Wednesday, October 1, 2008

Filed under: Big Ideas, Science & Technology

To understand what's driving inequality in America, it helps to study the founder of Google.



When politicians and pundits decry growing inequality in America, they are talking about Sergey Brin. A co-founder of Google, Brin is the fifth richest man in the United States, with a net worth of over \$18 billion. He is just 35 years old and became spectacularly rich at a rate faster than people such as Warren Buffett and Bill Gates. And he epitomizes the main forces at work in widening the income gaps in this country. He represents:

Technology: Brin's wealth comes from the famous search engine he pioneered with cofounder Larry Page. Their company is a mere ten years old. And yet in the blink of an eye, he has become one of the richest men in the world.

Winners-take-most markets: Certain mass-market fields tend to simulate tournaments in that they produce just a few big winners along with many losers. These include technology/software, as in the case of Google, but also entertainment (Céline Dion), book publishing (Stephen King), athletics (Tiger Woods), and even some parts of academia, finance, law, and politics (as the impressive post-presidential earnings of George H. W. Bush and Bill Clinton demonstrate).

Family structure: Both of Brin's parents were highly educated mathematicians. This increased the likelihood that Brin, too, would be well educated. He studied computer science at the University of Maryland and was in graduate school at Stanford when the Internet business he had built lured him away.

Immigration: Brin was born in Russia, and his family moved to the United States when he was six. He and other foreign-born executives such as Andy Grove of Intel have built wealth at the top of the income distribution. At the same time, a large influx of hard-working but low-skilled immigrants has enlarged the bottom of the income distribution, at least until they achieve the assimilation that historically has required

a couple of generations.

Income inequality in the United States consists of two gaps. The first gap is an upper-lower gap, between those with a college education and those without. The second is an upper-upper gap, between those with high incomes and those with extraordinarily high incomes.

A trend that promotes income inequality is that more Americans may be engaging in a kind of gambling behavior in their choice of occupation.

The upper-lower gap reflects changes in the structure of the economy. New technologies place a premium on cognitive ability. Harvard University economists Claudia Goldin and Lawrence Katz have dubbed this “skill-biased technological change.” In today’s economy, more value added comes from knowledge work, and relatively less comes from unskilled labor.

The widening gap between the incomes for college graduates and those for workers who never attend college raises a question. Why doesn’t the supply of college graduates increase? Indeed, despite the benefits that come with higher education, the rate of high school graduation is actually falling, according to the American Bar Foundation’s Paul A. LaFontaine and Nobel laureate James Heckman of the University of Chicago.

It might seem natural to pin the blame for the disappointing rate of high school graduation and college training on America’s education system. However, Heckman and others find little evidence that education can reduce differences in cognitive skills that arise from genetic endowments and early childhood experience.

Instead, early family conditions seem to be a major factor in the upper-lower income gap. The Manhattan Institute’s Kay Hymowitz, in her book *Marriage and Caste in America*, has documented that for upper-income Americans marital stability has recovered from the disruptions of the 1970s. But for lower-income Americans the problem remains. Since 1980, the proportion of never-married mothers among college graduates has stabilized near 3 percent, while the proportion among high school graduates has risen from 3 percent to 10 percent, and the proportion among high school dropouts has doubled to nearly 15 percent. These figures are important because, as Hymowitz points out, “Virtually all—92 percent—of children whose families make over \$75,000 are living with both parents. On the other end of the income scale, the situation is reversed: only about 20 percent of kids in families earning under \$15,000 live with both parents.”

There is also another factor at work. A trend is underway in America for marriage to be increasingly “assortative.” That means children of well-educated parents tend to marry one another and the children of less educated parents tend to marry one another. This was less the case a few generations ago. For example, sociologists Christine Schwartz of the University of Wisconsin and Robert Mare of UCLA found that beginning in the early 1970s there was a striking “decline in the odds that those with very low levels of education marry up.” And they found that between 1940 and the late 1970s the likelihood that someone with only a high-school diploma would marry someone with a college degree dropped by over 40 percent.

Two generations ago, a couple married to share production. Today, they choose one another because they have similar tastes in consumption.

Indeed, economists Betsey Stevenson and Justin Wolfers at the Wharton School at the University of Pennsylvania believe that a revolution in modern marriage has taken place. According to their view, two generations ago, a husband and wife married in order to share production, with the man working in the market and the woman working at home. Today, the husband and wife are both likely to work in the market, and they choose one another because they have similar tastes in consumption.

Some have viewed the rising numbers of two-income earners as a sign of economic distress. This has been dubbed the “two-income trap” hypothesis and the claim is that both parents must work to make ends

meet. A different explanation is more likely. As women have become better educated and live longer, the opportunity cost of staying at home instead of earning money in the marketplace is much higher. This has no doubt tempted more couples, united by their interest in shared consumption, to have both partners work outside the home. Indeed, Stevenson and Wolfers are themselves domestic partners, emblematic of the highly educated assortative mates described here.

Stevenson and Wolfers point out that it may well have been the case a few generations ago that “opposites attract” and the production-based marriage benefited from differences in backgrounds and skills. Today, the consumption-based marriage benefits from the couple’s similarities. Thus, marriage becomes less a driver of mobility across income segments and more a driver of income inequality.

A final trend that promotes income inequality is that more Americans may be engaging in a kind of gambling behavior in their choice of occupation. They are increasingly choosing to play in winners-take-most tournaments, such as the contest to build the leading Internet search engine. For every Sergey Brin, there were thousands of software engineers who played in the search-engine contest and lost.

As best-selling writer and investor Nassim Nicholas Taleb points out in *The Black Swan*, safe occupations are those where the worker is paid a fixed amount per unit of time. An accountant or a nurse is not going to become extremely rich or extremely poor; they could be called “billers,” because they bill for their time. On the other hand, a professional singer or a software entrepreneur is playing in a winners-take-most tournament. The difference in talent between an international pop star and an unknown lounge singer may actually be quite small. However, the nature of these fields is that the difference in rewards can be enormous. People who choose these sorts of occupations could be called “players.”

There is little evidence that education can reduce differences in cognitive skills that arise from genetic endowments and early childhood experience.

Winners-take-most tournaments widen the distribution of income. First, they create a gap between the winning players and ordinary billers. Sergey Brin could have earned a nice salary writing software for Microsoft or for Bank of America, but that would not have made him a billionaire.

Second, winners-take-most tournaments lure people from the security of earning salaries as billers. People who quit their day jobs—or graduates who delay taking one—to “pursue their dream” often end up on the lower end of the income distribution, at least until they “sell out” and join the working drudges. Of course, some of them actually succeed in escaping the cubicle world. Back in the 1990s, one of us (Kling) did just that by leaving a stable job as a biller at a large financial services firm and founding a start-up technology business.

Several factors have made it a lot easier to quit as a biller in order to take a fling at being a player. The Internet is one. As writer Daniel Pink has noted, the low cost of creating a business on the Web has fulfilled Karl Marx’s dream—an ordinary worker can now own the means of production.

What’s more, technological progress is most likely speeding up, leading to more of what Joseph Schumpeter called “creative destruction.” Many jobs destroyed in a modern economy are for billers, which force them to change and in some cases prompts them to try their hand at entrepreneurial, player-type enterprises.

Lots of the opportunities created during this dynamic process are for players. We are seeing greater numbers of successful players, and the biggest winners, like Sergey Brin, are taking in larger rewards than ever.

There is little evidence that education can reduce differences in cognitive skills that arise from genetic endowments and early childhood experience.

The supply of players also may be increasing. The change in marital patterns can facilitate this. With fewer

households dependent on a single income, it is possible for one spouse to try being a player, while the other spouse remains a biller. The country's relative level of wealth and the sheer size of its middle class also play a role. In today's America both parents may remain billers, but their recent college graduate may become a player, knowing that the parents can provide support until the gamble pays off or the humbled child takes a regular job. A few generations ago, entertaining such a thought was a luxury as many parents needed their child to take a stable job to support their retirement.

What can government policy do about widening income inequality in the United States? Critics of the country's current immigration policies want to severely restrict low-skilled immigration. That may make a dent in inequality, but the effect is likely to be small. Meanwhile, restrictions on low-skilled immigrants themselves raise tricky political and moral issues.

And barring skilled immigrants who build wealth at the top of the income distribution doesn't seem much of a solution, even if these immigrants exacerbate inequality. Such restrictions would deprive them of opportunities to deploy their considerable talent and entrepreneurial spirit. It's plain in this instance that whatever the desirability of lessening inequality, some solutions are not morally neat and tidy.

As for winners-take-most markets, it's not clear that there's an easy fix either. Some critics have proposed a wealth tax on winners and redistribution of the proceeds to the economy's less well off. On average, this is likely to reduce the income of players. In that case, more people will choose to be billers rather than players. Fewer people will chase their dreams.

Given the other forces driving inequality, there may be less that government can do than one might hope. Research from Heckman suggests that education is a relatively feeble remedy for the effects of family background (although Heckman believes that early intervention, in preschool or even before, shows promise).

In order to make a dramatic impact on inequality, government would have to do something about the fundamental causes: technology and marriage patterns. However, putting a brake on technological progress seems hardly feasible or desirable. And forcing people to select mates at random rather than on the basis of similar backgrounds and tastes seems similarly unlikely. As much as inequality may be a problem, no real solution is in sight.

Arnold Kling is an economist and the author of *Under the Radar: Starting Your Net Business Without Venture Capital* (Perseus). He co-hosts EconLog, a popular economics blog. Nick Schulz is the DeWitt Wallace fellow at The American Enterprise Institute and the editor-in-chief of THE AMERICAN. Kling and Schulz are co-authors of *Economics 2.0*, forthcoming from Encounter.

Illustration by Matt Selva.