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Robert H. Frank

Kevin M. Murphy

Sherwin Rosen

Cass R. Sunstein

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# The Wages of Stardom: Law and the Winner-Take-All Society

## A DEBATE

Each year *The Roundtable* sponsors symposia on topics in which law and some other academic or social interest intersect. "The Wages of Stardom: Law and the Winner-Take-All Society" is our first symposium of 1999, and it focused on how the "Winner-Take-All" phenomenon affects lawyer salaries and faculty hiring and how both relate to the overall legal profession, legal representation, income inequality, and other issues.

The "superstar" or "winner-take-all" phenomenon is the idea that, under certain market conditions, a small increase in talent can result in a disproportionately large economic benefit to the "winner," presenting problems to both economic efficiency and social equality. On Friday, February 26, 1999, The Roundtable invited four renowned scholars to debate whether, and to what degree, the superstar/winner-take-all phenomenon exists and affects the legal community. Cass R. Sunstein, the Karl N. Llewellyn Professor of Jurisprudence at the University of Chicago Law School, acted as our moderator. Professor Sunstein is widely regarded as one of the nation's foremost legal scholars in the fields of constitutional law, administrative law, environmental law and how laws influence human behavior and vice versa. A few of his recent books include *After the Rights Revolution: Reconceiving the Regulatory State* and *Free Markets and Social Justice*. Robert H. Frank is a professor of economics at the Johnson Graduate School of Management at Cornell University and is Goldwin Smith Professor of Economics, Ethics, and Public Policy at Cornell's College of Arts and Sciences. Professor Frank, more than anyone, has brought the debate about the "winner-take-all" phenomenon to the public eye, particularly with the 1995 book he co-authored with Philip Cook, *The Winner-Take-All Society*. His most recent book is the widely acclaimed *Luxury Fever: Why Money Fails to Satisfy in an Era of Excess*. Sherwin Rosen is the Edwin and Betty Bergman Distinguished Service Professor of Economics at the University of Chicago and Senior Fellow at the Hoover Institution. He is considered one of the world's foremost experts in the fields of labor economics, applied microeconomics and income distribution. In 1981, Professor

Rosen started the academic debate on our topic with his article “The Economics of Superstars” in *The American Economic Review*. Kevin M. Murphy is the George Pratt Shultz Professor of Economics at the University of Chicago’s Graduate School of Business. In 1997, The American Economic Association awarded Professor Murphy the John Bates Clark Medal, a prize given every two years to the best American economist under the age of forty. He is widely recognized as one of the top economists in the world for his work on the causes and consequences of income inequality, unemployment and economic growth, and his research on labor, minimum wages, human capital and education are considered groundbreaking.

Both Robert Frank and Cass Sunstein argued that the Superstar/Winner-Take-All phenomenon is real and poses serious problems for society—problems that perhaps government intervention can solve. Sherwin Rosen and Kevin Murphy were more skeptical about this problem and argued that the free market can take care of any such distortions.

**WENDY MOORE:** Good afternoon, my name is Wendy Moore and I am the interdisciplinary programs editor of *The University of Chicago Law School Roundtable*. I would like to thank all of you for coming out and would like to welcome you to our winter symposium: The Wages of Stardom.

The other day, Robert [Peterson], Ariana [Almajan] and I were talking with Professor [Joseph] Isenbergh and he pointed out the obvious irony that all of our panelists were superstars. I guess that goes to show how far this phenomenon has permeated our society and also the law school. Indeed each of our panelists is a superstar in his field. Sherwin Rosen is a Professor of Economics here at the University of Chicago and he first wrote about the superstar phenomenon in his 1981 article, “The Economics of Superstars.”<sup>1</sup> Professor Robert Frank of Cornell University followed up these ideas and expanded on them in a number of his works including a 1995 book he co-authored with Philip Cook called *The Winner-Take-All Society*.<sup>2</sup> Kevin Murphy is a professor here at the business school and he is widely regarded as one of the best young American economists and is widely renowned for his work in labor economics. Finally, Professor Sunstein here at the law school is well known to all and is widely respected for his work in constitutional law and law and human behavior.

Each of our panelists will give a brief speech on the topic and then we will turn it over to our audience and your questions. Now I will turn it over to Cass Sunstein our moderator and participant. Thank you.

**CASS SUNSTEIN:** Welcome to all of you and a special thanks to the Roundtable whose members have done a wonderful job with this and have made it a pleasure for all of us. We have opening statements that are reasonably short. That may be a surprise to our panelists because I haven’t told them about it. Do

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1. Sherwin Rosen, “The Economics of Superstars,” 71 *American Economic Review* 845 (Dec 1981).

2. Robert H. Frank and Philip J. Cook, *The Winner-Take-All Society* (Free Press 1995).

they look sad or happy? [Laughter] The statements will be about ten to fifteen minutes each. We'll begin with Professor Frank.

**ROBERT FRANK:** Thank you Cass, I am pleased to be invited to talk with you today and special thanks to Wendy for calling me a superstar. That, I think, illustrates an important point in the superstar phenomenon and that is it is highly local. The only reasonable sense in which I could be considered a superstar is that I am the best at what I happen to do in economics, but since nobody else does that it is a modest claim to fame. [Laughter]

As Wendy pointed out, Sherwin wrote a very important article in the *American Economic Review* in 1981 called "The Economics of Superstars." He picked up on an idea that Alfred Marshall had actually developed in the late 19<sup>th</sup> century and the idea is a very important and simple idea. In the 19<sup>th</sup> century most of us listened to music in person. I heard an interesting statistic on an NPR program about a year ago that in the State of Iowa alone in the year 1900 there were 1300 opera houses. I had to get on the Internet the next day to make sure that I had heard right. After a little digging, I came to find out that the program director didn't mean opera houses in the traditional sense, but more like live music halls. In the State of Iowa this is still a very impressive number in such a small, largely rural state. That was the difference: if you wanted to hear music back then, you went to hear it live. Everyone at that time would have been delighted to hear the best soprano, no doubt, but the best soprano couldn't be everywhere at once. So there was a very brisk market for hundreds, literally thousands of sopranos. The best earned more, to be sure, but the ones down in the ranking around 2,000 were actually able to make a living because of the demand.

Not so any longer, when most of the music that you now hear is recorded. You can take Kathleen Battle's master tapes—no one does the Mozart arias any better, at least not that I've heard—and can stamp out copies of them at near zero marginal cost. Thus, there is really no purpose at this point, if you're listening to recorded music, to listen to the second-best soprano. You may have some desire to hear a few sopranos but really it is a short list. The best players, because of the ability to expand their reach, have, over time, captured a larger share of the national income.

In 1979, the 95<sup>th</sup> percentile earner earned ten times the 5<sup>th</sup> percentile earner. By 1993, that ratio had grown to 25. It doesn't matter how you slice it. In every category, occupation, or region that you look at, movements in that ratio have been similar. The standard human capital model that we use as economists tries to explain differences in wage earners, or why we earn more over time. That model, taken in its narrow form at least, doesn't seem to give much purchase on the change in wage distribution. There doesn't seem to have been, according to my human capital friends, any huge change in the distribution of human capital, this loose amalgam of all those personal characteristics that determine how productive you are. The smartest people aren't any smarter than they were before, the ambitious are not any more ambitious. The mix of stuff is pretty much the same there. The return to certain kinds of human capital has changed. For ex-

ample, if you look at the return to education, college graduates earn a larger return on their degrees than they did in the seventies. But even if you look within the distribution of college graduates, you will see that the college graduates at the top are doing very well and those at the bottom are struggling to hold their own, even losing ground. It is clearly better to be in some fields rather than others. If you are a computer scientist, then you have done well over the last fifteen years. If your master's degree was in English literature, then it has been a tougher struggle for you. There was a *New Yorker* cartoon that I clipped about two or three years ago—there are two young men standing in a field on sticks, scarecrows essentially, one calling out to the other, “English Lit, how about you?” as in, what is your major? But slice it a different way, look at the English literature majors. Those who are making it in that field are making it in a way that people didn't in the past.

Cook and I suggested that one explanation that seems common in many of these changes in income distribution is the phenomenon of increased leverage. Technology is enabling top players to extend their reach in a variety of other fields as well. Top players are more productive now so that a good executive decision at one time only meant being able to do well in your local market, then your regional market, then national market and now finally a global market. A bad executive decision, at one time, meant that there was not much of a threat of reprisal because there were not many competitors in your local market and others didn't even know who you were. Now a bad decision at the top means many potential rival firms ready to pounce on your operation, seize market share from you and so on. So as both the value of a good decision and the penalty for a bad one has increased, I think that we have seen the penalty for mistakes grow higher.

That doesn't explain why executive salaries in the U.S. have risen with respect to executive salaries in Europe, where the ratio is not as pronounced. Another important ingredient to the process, Cook and I argued, was the free agency system, which, as you will recall in sports, was the gateway event that led to the explosion in star salaries in sports. It was not until the courts awarded free agency rights to players that we saw the real escalation of player's salaries. It is similar in business where it used to be the norm—not any legal requirement, a fairly little-violated norm—that promotion took place from within the company. It wasn't believed that an executive from a tobacco company could run a computer company. That has all changed in a profound way, I think, in the last twenty years. The number of CEOs promoted from the outside has risen about 50 percent during that period. It is not uncommon any longer to see a Lou Gerstner to go from RJR to IBM because he is a good manager and to have seen the stock of IBM go up many fold. It is also no surprise to see his compensation package go up with the value added. It is this combination of greater technological leverage, the ability to expand your reach and have more of a difference on the bottom line, and the added competition that attends the transactions as people bid for talent in the market today.

What we see in the law is that there are similar expansions. It is in the law, I think, less due to any technological breakthroughs that allow people to expand their reach and just more of a case of the stakes being so much higher in many important legal arenas. Thus a lawyer who once sued on behalf of a client with a stiff neck for \$10,000, now heads up a class action where there may be two or three billion dollars at stake. The mergers and acquisitions lawyers now arrange deals not in the tens of millions of dollars but in the tens of billions of dollars and the crumbs from that cake add up to real money.

This is a good development for the students at the U of C law school. Many of you will take jobs with the mergers and acquisitions firms and other high-profile firms and those firms control the gateways and the entry-level positions that lead to seven figure salaries in fairly short order and with fairly high regularity. It is a very much sought after career path, and, not surprisingly, it is harder to get on that career path. What Cook and I discovered is that the credentials that you need to present in order to get into an elite school are now much more formidable than they were twenty years ago. You have to occupy a much higher position on the percentile range in terms of your test scores and grades and your activities.

You will apply for these positions, there will be mail-sack after mail-sack unloaded in the admissions personnel office. They will not have time to interview everybody; they won't even have time to give each application careful consideration. Whom will they contact? The easy cut is to talk to the people from U of C, from Harvard, Yale and a handful of other schools. They are the ones, after all, who are more likely to be the top players in the next generation of lawyers. They have been screened carefully by those schools. Not only that, they have a credential that identifies them to the client without a moment's further discussion that they are from the elite. The firms that recruit know perfectly well that there are extremely talented law students coming out of the University of Illinois, many of them smarter than you are. However, that doesn't count if you have a brief time to persuade the client that if there is \$25 billion worth of deal at stake and you want the very best law firm that you can find to manage it, who are you going to call? There is a brisk competition for the reputation of premier law firms to manage the premier deals. As long as that competition goes on—and there is no reason to think that it will get less intense—I think that you people are in the driver's seat.

There are some problems that have emerged in society as a result of these forces—incomes have grown more disparate; people in the middle are feeling more pressed. They are attempting to keep up with consumption standards that are further and further out of reach. People feel that they can't vote tax increases to pay the teachers or to fix the potholes in the roads and this will be an issue that you will confront. Do you want to have seven figure private salaries and sit for an hour in a traffic jam on your way to work? Or do you want to consider the possibility of taking fiscal steps to try to clean up the overall social investment picture? That is a decision that you will confront and I think that when you make that decision try to bear in mind how lucky you have been to have arrived

at the point were you are now. It is very hard to claim the moral high ground from where you sit. Sure you've worked hard, but why do you work hard? That is explained by genes and environment. We don't know what mix of genes and environment explains why you are here, but it is some mix of those two and which of those two do you think you are morally entitled to claim great credit for? So rather than protect these seven figure salaries to the last breath, consider what might be done with them in the public arena.

**SHERWIN ROSEN:** We have a saying around here: "One is world famous in Hyde Park." We are all world-famous here. *[Laughter]*

We had a nice Ph.D. dissertation last year by Mark Fisher, who also has a law degree. From either here or Harvard. He gathered some nice data, for those of you who are lawyers, about earnings among lawyers in top law firms. He himself is working at Sullivan & Cromwell, which pays among the highest salaries. An average associate there earns about \$150,000. This figure does not just reflect the new hires but the associates as a whole group. The average partner income, profit per partner, is about \$1.5 million.

I basically agree with Bob *[Frank]*. I had written down some remarks because I am sort of verbally challenged. I would rather read than think of things extemporaneously—that is why I'm not a lawyer, I guess. Bob said so many things that I agree with, except those towards the end. *[In a loud voice]* Do not work for any non-profit organizations! Make as much money as you can and give it to worthy causes! *[Laughter]* The invisible hand works here, too.

Basically, let me reiterate the point that all income distributions and all earnings distributions in every society that have ever been studied—and this probably includes the Soviet Union, but nobody ever studied it I guess—is right skewed. That is, it looks like a log normal; at the right tail there are some very high income earners, and that is universal. Now sometimes the tail is longer in some societies than in others, but they all look like that. A lot of the people who make a lot of money are lawyers and doctors, where there is great expense in learning the trade. But these other things, when you look at the real huge earners like Marcia Clark, one of the great lawyers, and the guy in the coonskin cap that she talks to—what characterizes those types of activities is that the cost of production has the characteristic that average cost is much bigger than marginal cost. There is kind of a scale economy: once you get by the first unit, everything else is gravy.

It is like that old joke about why the guy who is selling something to you so cheap, he is losing a nickel on each item, but he's making it up in volume. *[Laughter]* That is how these things work. How much would you pay to watch Oprah Winfrey on television? A couple of bucks maybe? But there are millions of people who are willing to do that, and it is that volume effect that allows her income to be so large. Her services are not congested because they go on television.

If I write a book... *[Looking at Frank]* How much money did you make on that book, anyway? *[Laughter]* I bet it isn't so much, but it is still a great book.

**FRANK:** Wouldn't pay the interest on their loans. [*More laughter*]

**ROSEN:** One hour of a lawyer's time—pretty good!

Once you write the book—all of the cost in writing it is in the first copy. Then the marginal cost of producing another copy is basically zero. I was reading in *The New York Times* that there is a movie in China that Disney is showing. It is a story taken after Chinese legend, and it was thought that the Chinese government wouldn't let it into China, but they finally did. However, nobody is paying to watch it in Shanghai because it was pirated before they allowed it in. Now you can buy a copy of this movie for two bucks, which is much less than the price that they are charging to let people at the theater see it.

That is the nature of these kinds of activities and for control decisions in big businesses as well as on Wall Street, where if I can invest a dollar better than you, well then I'll invest a billion better than you, and I'll get all the business. I won't make much money per dollar, but I've got a lot of dollars on the table. These hedge funds, they make very small margins—I mean they work on practically nothing. But they are rolling over an incredible amount of money on each transaction. That is how they make it.

Now for lawyers, I think it is in the size of the claims. The top lawyers work on big claims. The people at Sullivan & Cromwell, Kirkland & Ellis and those firms that you are going to enter if you go into that line of work are handling enormous claims because they are probably the most talented people as far as anyone can tell.

You can't run up a bunch of store-front lawyers into a major big-time law firm partner. When I was thinking of going into the law, all the lawyers that I knew were second-story lawyers, above stores. The trade has changed a fair bit since that time. You can't take those kind of lawyers and make a good one. You have to go hire one of the top people. Thus, it is economic to allocate the big claims to the big talent because that is where the stakes are the biggest and where the input makes the most difference. These lawyers have very large marginal products. They're worth the money to the clients that hire them. As the disputes get bigger, as Bob said, then the income gets bigger.

What's been surprising to me in the law is that the incomes of lawyers has been rising for so long. I had once studied it. Since the mid-sixties, litigation went crazy, nobody understands exactly why, and I don't understand why, either. But lawyers' incomes haven't missed a beat since then. There was a little drop-off in the early nineties, but when the economy took off, so did the income of lawyers. As a result, what seems to me to need explanation, and relative to some of the remarks in Cook and Frank's book, is that you've had a huge increase in supply of lawyers, and yet apparently the demand keeps racing ahead of supply. It is hard for me to understand that; I wish that I had a better understanding of what it is that makes legal services so valuable. I suspect that it has to do a lot with the growth of wealth. The services of lawyers are only interesting when there is wealth on the table, and we are the richest society in the world. We are also the most competitive, and so we are going to have a lot of disputes. That is



what sustains the high lawyer population here, which is higher than anywhere else in the world. But other than that, I do not have many thoughts on the matter.

There is another thing that I would like to bring to the table, again emphasized by Bob. What I see—and this is completely speculative—when I see the increase in inequality in the U.S. (and the U.S. is the economy that I know the best) I think that we have seen a lot more stratification in higher education and maybe lower education. I have a friend, a very distinguished academic, whose kid is in sixth, maybe seventh grade, who spends half of his time doing her homework for her in order to build her credentials so that she can get into the U of C Law School one day. The cram schools in Japan have this quality. I think the Koreans banned the use of cram schools at one point. I think that this is troublesome, and something that I would like to get you to think about because I don't understand it.

There are only about ten schools, when we are talking about big time money in elite law partnerships—we're talking about this place and Harvard and Boalt Hall and Yale and a few other places. And then there is a tremendous drop-off. If you get an MBA from U of C business school, the average guy is making \$125,000, which is almost what Columbia offered to pay Robert Barro. However, if you go to just the University of X and get an MBA, then you're going to get a job for \$60,000, if you are lucky. There is a tremendous concentration. Since I went to kind of crummy schools, except the University of Chicago where I got my Ph.D., I feel that the talent is a lot more spread out than that. Thus, I find it kind of curious about Sullivan & Cromwell—I looked it up—that 80 percent of their lawyers are from the top fifteen schools and maybe half are from the top five. There is this enormous heaping.

Now let me just close with the statement that this is true in graduate schools all over the place—even in Economics—where there really is not very much money in it. We live a quiet life instead. A lot of top economists come from only five or six or ten schools, of which we are one and MIT is one and so on. Law is a much bigger profession than economics, so in some sense law is much more concentrated in sorting people than Economics is. Law must be fifty times the size of—more than fifty, hundreds of times the size of—the Economics profession, so this concentration in law schools is a bit troublesome to me.

**KEVIN MURPHY:** Thank you. What I'd like to do is broaden things out a bit and try to put today's discussion into a wider context. I do most of my work on income inequality and relative wages. It is kind of funny—sometimes I get drawn into things like this symposium today where we think about the “super-stars,” or sometimes it is the “super-rich,” and we hear these stories that the top two percent is getting everything and everybody else is getting nothing. Then I bounce around and go to some poverty discussion, and we talk about the underclass and how the bottom guys are falling away from the rest of us, while “we” are still doing okay.

This is the reason, I guess, that the story I try to tell people is that the growth in inequality is really a much broader phenomenon than what everyone typically talks about. It is not a story of the super-rich; and it is not a story of the under-class. Rising income inequality is really a story in which the higher up the income ladder you are the better you have done, and the lower down you are the worse you have done. If I were to make a graph—and those of you who have been in my class have seen this graph—and I put what income percentile you are in, from the first percentile to the 99<sup>th</sup> percentile, on this axis [*drawing an imaginary X-axis*], and how much your wages have gone up over the past thirty years on this axis [*drawing an imaginary Y-axis*], you would basically get a straight line. You would see that wage growth has been highest at the top and lowest at the bottom, but there has been expansion between the guy at the 25<sup>th</sup> percentile and the 75<sup>th</sup> percentile; expansion between the guy at the 50<sup>th</sup> and the 10<sup>th</sup>. While we might think that the superstar phenomenon is relevant in certain places, it is clearly not the whole story. There is a much broader set of phenomena going on out there than the superstar phenomenon.

Also, many people talk about growing income inequality along another dimension—the growth in income inequality both within and between groups. Probably the most important area here to think about is education. There certainly has been a growth in the premium paid for education. The premium paid for college graduates over high school graduates roughly doubled from 1980 to the early nineties. The premium paid for a graduate degree has gone up even more. In fact, in recent years, this is probably the education level that has done the very best—graduate degrees relative to the college degrees.

Nonetheless, we are not talking about the very tip-top as opposed to everybody else. In terms of inequality, we are talking about a widening of the distribution generally. The notion is that among lawyers, earnings inequality has gone up—but it is also true that earnings inequality has gone up among secretaries and among janitors as well. I don't know, maybe there is competition to have the utmost greatest janitor in the world, but somehow that one missed me. [*Laughter*]

I guess what I'm saying is that I believe the superstar phenomenon is real. I think it is important. But I don't think it is as important even if inequality hadn't grown.

I think we have to know that it's there. But why is it? People talk about the growth in inequality, but I don't think they realize the level of inequality that is there to begin with. We talk about one person earning twenty times what another does. Or talk about basketball players where one earns a hundred times or a thousand times what another basketball player does. What these figures don't mention is that it has to be that somehow these people can do something in a *different* way. It's not that Michael Jordan can play basketball against a thousand guys and beat them. He's good, but he's not *that* good. With a thousand guys on the court, he couldn't move. [*Laughter*] The point is—and it is like that courtroom—you can't have a thousand storefront lawyers in that courtroom competing against that one guy. It is really the existence of congestion on the number-

of-people margin without congestion on the other resources margin that really is the game being played in the superstar phenomenon.

Now what might have caused this phenomenon to grow over time? Improved capital markets—that is something that people might think about. Improvements in information and the flow of information are other possibilities. The ability of mass media, clearly.

Why does Michael Jordan make so much? Well, you think about the difference between Michael Jordan and another player on the team. Surely Jordan makes it more likely that you are going to win, but he also sells a completely different product. He is a hero. You could have a combination of players who contribute just as much to winning, but they wouldn't be a hero. Jordan is a national spokesman. He sells products. In essence, he is able to make that record that is replicated for thousands and thousands or millions of individuals.

So the superstar phenomenon is there, we know that it is part of the story. However, in my opinion, it is not clear that it is the major part of the story of overall growth in inequality.

One of the things we know, for example, is that a lot of the growth of inequality occurs across occupations. That is that certain occupations, historically the high-skilled occupations, have done better than the less-skilled occupations. Surely there has been growth in inequality among the high-skilled jobs, but there also has been growth among the low-skilled ones. Again, one of the amazing facts is how similar the growth in inequality is among the low-skilled occupations as it is among the high skilled occupations. It is also interesting as to how similar the growth in inequality is in occupations where there is this economy of scale—for example in one area of academics, as opposed to something like the law—as it is in other areas.

Secondly, I'd like to say that just because these forces are at work, doesn't mean that we are immune to the laws of supply and demand. I think that that is important. One thing that we have seen is that the faster the college-educated population grows, the slower the premium for college graduates increases. The faster the premium grows, the more people want to go on to college. The supply side does respond.

I think that this is important to realize because we now have a growing premium for education. That means that we are going to have more people going on to school, and more people going to school is going to improve people's earnings and the productivity of the economy as a whole. In fact, the notion that as you get more educated you do different things is really a big part of progress, right? The point is that when you go to school you don't learn how to dig a hole faster than the other guy, you learn how to build a bulldozer to dig the hole for you—that is the idea. But this is important, right? It has to be important, otherwise you would not see such vast earnings differentials if it was just a question of how much better you could do a particular activity. It has to be that you can do it in a *different* way—that you can bring in other resources to work with you. That is the essence of the superstar phenomenon. That is the essence of progress generally. That is, we did not just learn how to do better what we used to know how

to do; we learned how to do it in a different way which allowed us to substitute other resources—economists call it capital—for our own human resources.

So where am I going with this? I guess that I would say two things. First, we have seen a broad across-the-board growth in inequality in the U.S.: low-end, high-end, middle, within groups, between groups, across education levels, within education levels. Message one is that we need a broad story.

Second, I would also say that it seems that some of that growth is due to the fact that we have had growth in the demand for those high-skilled occupations and industries. That is where the growth has been. What sector of the economy has grown the fastest? Professional services. Why is that surprising, then, that the inputs hired by that sector have done very well—namely educated, professionally educated, individuals? The laws of supply and demand still seem to apply, still seem to fit with the data of who seems to do better.

I think, actually, if you are going to emphasize the superstars point, it is critical to understand why there are such big differences at a given point in time—even more so than understanding growth over time. I actually think that in explaining growth over time, the supply and demand stories, to me, make a lot of sense. There may be particular areas—for example, the media—where there has been technical change far more complementary with the superstars-type effects. However, in general, I would say that the more traditional forces of the relative demands and supplies of highly skilled and less-skilled individuals have been driving things.

Finally, there is always the tendency to look at the down side of wealth and relative wages. When the premium for schooling goes up or when inequality rises we say, “isn’t that terrible.” We agree that there are some bad elements, but you have to remember there also are some positive consequences. As we’ve seen growth in the premium for schooling, more people have gone on to school and we will continue to see that take place. Also, if we don’t have improvements in the quality of human capital and the amount people invest in it, it is hard to see how we are going to continue to improve our standard of living generally. Thank you.

**CASS SUNSTEIN:** Okay, the last speaker. This set of ideas has a lot of implications for law. You might think that it shows that competition can produce unjust inequalities by magnifying small differences in capacity or willingness to work hard. Also, maybe more interestingly, it produces inefficiencies as well as unjustified inequalities. These inefficiencies may take the form of overcrowding, as when a lot of people enter winner-take-all markets inflicting externalities on one another. Another set of inefficiencies may take the form of arms races as when people use steroids to be better in football and are in a difficult position in reaching a voluntary agreement not to up the ante. That probably captures more segments of economic markets that are familiar to us. I think what the Frank and Cook book does is to lay down a challenge for those of us who are interested in the appropriate role of law to think what might be done to handle these problems.

I am going to talk about the broadcasting market. What I am going to suggest in particular is that there ought to be not a law but a code. There oughta be—"o-u-g-h-t-a"—be a code, by which broadcasters engage in self-regulation; they cartelize themselves. This shouldn't be a violation of the antitrust laws. The Justice Department should be thrilled.

There was a Presidential Advisory committee on public interest obligations of broadcasters in the last couple of years. Here are two puzzles: the broadcasters on the committee were extremely happy with the idea of a code—in fact they pushed it, it is what they liked the best. Their self-defense was that this is a winner-take-all market, which creates some social pathologies. (I'll get to those in a minute.)

But the National Association of Broadcasters, the trade organization, hated the idea. They came within half-an-inch of killing it. As they hated it, they said, with a big smile in their face, this would violate the antitrust laws.

The puzzle is that usually members of an industry are not smiling when they talk about how an activity, which they might voluntarily engage in, would violate the antitrust laws. Why were they smiling then, and why were the broadcasters on the committee so enthusiastic about something that the National Association of Broadcasters despised?

The second and related puzzle is that one way of making legal controls on this market, with winner-take-all features, less damaging to profits is to tell ABC or CBS or Fox you can do something good for the culture or you can pay if you are not going to, thus providing an economic incentive. You can provide some educational programming for kids or, if not, you give some money to PBS. That would be a replacement for current legal regulation, which is rigid. It is "play." It is not "play or pay." The oddity was that most of the broadcasters on the committee didn't like play or pay. They liked play. Now why was that? I mean here to try to untangle those two puzzles.

Why might we think that broadcasting markets aren't something that will serve our culture entirely well? Off-hand, there are pervasive problems with broadcasting markets. For example, there is relatively little educational programming for children, at least on non-cable stations, and about 40 percent of Americans don't get cable at all. There is very little educational programming, and what little there is tends not to be so good. Television programming is pervasively violent. The level of murders per hour is high, not low. Also, there are now a series of studies linking, plausibly, violence on television to violence in the world.

With respect to democratic processes, it is very expensive for a candidate for political office to get on television, and this creates a couple of problems. One is an arms race to raise more and more money, sometimes illegally, and also a system in which democratic or civic broadcasting on television is infrequent. And when it is there, it tends to be really fast and sensationalistic rather than substantive. We might think that with respect to children, the level of criminal activity, and the level of democratic or civil programming, our media market is doing

very poorly. And by objective measures, in America it is worse, not better, than in European nations.

Is there a market failure here, or are we complaining about market success? There is a little of both in the account that I would give. We don't have an ordinary market with respect to television programming. One problem is that individual viewers infrequently purchase programs. Individual viewers are a commodity. Eyeballs are a commodity delivered by networks to advertisers.

Does that introduce distortions? Both no and yes. No, it does not, in the sense that advertisers, other things being equal, want more people to be watching rather than fewer. You might think that it is a proxy, but it is a crude proxy. It is a crude proxy, in the sense that advertisers are willing to sacrifice something in terms of viewer volume in order to do something good for product sales. Thus, if they can get somewhat fewer viewers but happier-buying-mood viewers, they are very willing to do that. So advertisers will sometimes not sponsor a show that would get a lot of viewers because the people wouldn't be in a very receptive buying-mood.

One reason that we don't have much controversial programming on ABC, CBS, NBC or Fox—substantively controversial programming—is that advertisers are very nervous about supporting it. That is a bit of a market failure if we think that what we want to do is promote viewer sovereignty. We don't quite have that.

There are also externalities—both positive and negative—from broadcasting, and those externalities won't be controlled by an unregulated market. A system in which we have civic or democratic programming can produce civic and democratic benefits. But those aren't things that are fully internalized by broadcasters or advertisers. The fact that eyeballs are a commodity—and the presence of externalities—point to something like a democratic failure.

We might think also that what is on television helps form preferences. There is a preference forming role to popular media, everybody knows that, and the public might have aspirations—in fact it *does*—that preferences be formed in a desirable rather than undesirable way. That might point in the direction of educational programming, civic and democratic programming and less in the way, just as an example, of violence.

Now why might we think that a code would be a good solution to this? Well, we might think that it is a little more flexible than rigid governmental commands in the sense that it can be both designed and implemented by the television industry.

The idea of a code is actually not new—it was followed by the National Association of Broadcasters between 1928 and 1979. The idea was that it would respond to all of these concerns with an unrestricted market. These concerns are heightened, not lowered, in an intensely competitive, winner-take-all market where one bad program dealing with, say, South Africa, can kill a career and one good program dealing with Monica [Lewinsky] or actually getting Monica to speak can make or fortify a career.

A code is less intrusive than direct regulation, and it would be a way of controlling the problems just identified without getting bureaucrats involved in dictating content. We could think off-hand of what it would look like. It might say, for example, there should be four hours of educational programming each week. The code would be administered by the National Association of Broadcasters. It might say that in the two months before a Presidential election, each week there shall be two hours of free broadcasting time for candidates for public office. You could imagine vaguer provisions dealing, with, let's say, gratuitous or sexualized violence—especially, but maybe not only, at times when children are likely to be in the audience. That actually borrows from the old N.A.B. code.

My suggestion is that this notion would counteract some of the pathologies in our current television market. It would counteract some of the difficulties faced by those who don't have cable, ensuring programming for kids. It would probably have beneficial results in reducing violence at least a little bit and reducing anxiety maybe more than a little bit. It would promote civic and democratic aspirations. It could be and should be administered by the National Association of Broadcasters. If they are unwilling to do it, then there should be a watchdog group that gets a lot of attention that can do the same thing. And in the environmental area, this kind of response to externalities has often had tremendous payoff because of the sheer fact of publicity.

Okay, now I think we are in a position to say something about the puzzles with which I began. Why is it that the broadcasters on the committee were enthusiastic about the idea of a code but the National Association of Broadcasters hated the idea? You might think that economic self-interest is not disconnected from this seemingly anomalous pair of results. The broadcasters on the committee were selected by virtue, in part, of their commitment not to government regulation, which they don't much like, but to civic-minded broadcasting. Their economic enemy, in part, is cable television and other broadcasters who have different goals in mind. They are threatened by competition from people who wouldn't obey a code, which they themselves in their individual capacity are probably implicitly acting in accordance with, whether or not it exists. For each of these broadcasters, a code is a benefit and probably not a harm. It would prevent competition that might harm them.

The National Association of Broadcasters, by contrast, is in a position of protecting the broadcasting industry against, most importantly, the cable industry. And the broadcasting industry is a net loser from a code even if individual broadcasters are neutral or net gainers.

But why on earth, now we might ask, would the broadcasters not want the kind of flexibility that would be introduced by "pay or play"? The reason appears to be—this is a speculation—that these broadcasters were going to play anyhow. Either because that was their commitment as a matter of principle, or because their particular constituency demanded it. They were going to have some educational programming, some civic-minded programming, some free air time programming whether or not there is a code.

On the other hand, what they were frightened by is the prospect that their competitors wouldn't be bound by the obligation that government currently imposes. A pay or play option would give their competitors, who are not civic-minded, an opportunity to "pay," maybe not them, but maybe PBS. And the good broadcasters would be stuck "playing" with a lower audience share. It makes perfect sense for them to reject pay or play options on the grounds that it puts them at a competitive disadvantage compared to "pay"! Exclamation point! Just as it makes perfect sense for them to favor a code, or at least not to be disturbed by a code, when the industry itself is unhappy with it.

A few general, very brief thoughts. The first suggestion is that a code—much more than governmental regulation because of its flexibility—would help counteract some of the adverse effects of winner-take-all pressures with respect to the mass media, especially with respect to programming for kids and programming that serves democratic functions. The second suggestion is that all this contains a quite general lesson about the uses of the antitrust laws to prevent voluntary actions by public spirited producers designed to counteract some of the baleful effects of races to the bottom and winner take all pressures. I'm hearing a lot of whispering there [*from the other panelists*] and I would like to hear it aloud, if it is whispered, well—is this a little cartel on our left? [*Laughter*]

ROSEN: This is winner-take-all. [*Laughter*]

MURPHY: This is the first time that Sherwin and I have been on the left. [*More laughter*]

SUNSTEIN: The last suggestion is that it is unclear whether American government will emerge with anything like a third way between unrestricted—let's call it Reaganism—and command and control government of the sort that arose in the Johnson era. My suggestion is that cooperation of the kind discussed can, in winner-take-all contexts, provide such a third way between frequently disastrous competition on the one hand and excessive bureaucratic mandates on the other.

Now I think we should take questions and feel free to talk among ourselves. If anyone would like to say anything but maybe we should just take questions. Yes, sir?

QUESTION: Professor Sunstein, you mentioned that one of the bad things about winner-take-all is that there is overcrowding in the industry. How do you define overcrowding and could you elaborate on that, and then could the other panelists say whether they think that overcrowding in fact exists and whether that is a good or a bad thing?

SUNSTEIN: I'd be happy to take that but since it is Professor Frank's argument, probably he could best answer...



**FRANK:** Okay, you don't automatically get overcrowding in a winner-take-all market, and by winner-take-all market I guess we understand that we mean that it is a market where your reward depends in large measure on your *relative* performance in addition to perhaps your absolute performance. If contestants in a winner-take-all market get paid the value of what they produce, then there is a general set of conditions that does result in overcrowding in the market.

Essentially it is this: if I'm trying to decide whether to enter a market to compete, let's say, for a recording contract, I think about the expected payoff for me in doing that. What are the odds of winning number one? How much I will win if I win? I will weigh that against whatever else I might do, which might be to pursue some career that entailed less risk of failure and, albeit, a smaller salary in return for that. So that means that I'll just enter the market if the expected return beats what I could do otherwise. I won't take into account the fact that my presence competing for the trophy makes other competitors less likely to win it. In that sense it is like an over-fishing example. The fishing boat doesn't worry about the fact that some of the fish it will catch would have been caught by others had it stayed in port. You get this excessive effort at fishing as the common result there.

There is another kind of behavioral factor that drives overcrowding, which is that if you are going to choose between a safe career path like teaching in a law school or a risky career path like trying to become a mergers and acquisitions lawyer at Sullivan & Cromwell (if they even have them, I don't know), you've got to estimate your odds at succeeding if you enter that riskier arena. There is a very powerful set of evidence that suggests that when you consider your chances in risky ventures like that you're very likely to overestimate them. That ninety percent of drivers think that they are above average is the common statistic. That extends to factory workers: 92 percent of them think that they are more productive than the median colleague. Information doesn't seem to help that: 94 percent of college professors report in surveys that they are more productive than their median colleagues. Which is why, by the way, merit pay doesn't seem to work. It's a recipe for more than half the people being very disappointed with their pay.

On those scores, you tend to get too many people entering the competition, which has a cost in the lost output that you don't get if they had gone into some other line of occupations. So that's the basic overcrowding argument.

**MURPHY:** I just want to make a couple of points that tie into some of Cass' comments and some of the comments that just came up. I think when we start talking about what makes...first of all, there are things that create a superstars market, and then there are things that create a superstars market that are, to an economist's point of view, inefficient. And those two things are not at all the same. I want to make sure that's clear.

For example, when Cass started his comments, he started talking about unjustified gains. That is, small differences in skill that generate big differences in rewards. However, when I can produce a better television show for a hundred

million people, that's not a small difference. It's a small difference to any *one person*, but it's still cumulative. That ten cents every day I'm worth to ten million people is still a million dollars a day in value that is being created! So don't think that it is only ten cents better, so why am I getting a million dollars a day? No, I'm a million dollars better, and I'm getting a million dollars a day to pay for it! The fact that other people are not going to collect, the fact that we don't have—what was it, how many thousand people singing in Iowa?—is probably a great thing! [Laughter] I think that the fact that we all are listening to the CD in the car and not having to trudge down there and listen to some awful person singing in Podunk, Iowa is a good idea. [Laughter]

Second, we often talk about arms races. Now, arms races are arms races. It doesn't matter if we're competing to have the best general, or if we're seeing who can amass the biggest pile of foot soldiers—either way it's a wasteful race. But it's not a wasteful race because it's being fought by who has the best general rather than being fought by who can pile up the most men in a trench, either way it's wasteful.

Nor is it a winner-take-all notion. If we had five billion dollars on the table, and the strength of your argument determines whether you are going to get 50.1 percent of it or 49.9 percent of it, the debate would still command enormous resources. But it's not winner-take-all. It's just that there is going to be one guy in the courtroom making the argument and you can't have ten thousand lawyers competing against him.

When is this a problem? It is a problem when people only care about the relative position—that it's the relative position that generates the value. That being the winning team is what's important. Yet, don't confuse this with being the best in the end. That is, who is going to be successful in making computers? It is going to be the guy who is the best at that point in time in making computers. Does the fact that over time we compete and produce better and better computers mean that there is no value in that, even though at any point in time it is always just being the best that matters? What does it take to compete in the market? It is always a matter of being the best. Being better than the competition. That doesn't mean that there is no value to improving quality and no value to being better. Don't confuse those. It's very much a more narrow set—for winner-take-all to be a problem, you have to establish that consumers care directly about the relatives, not that the relatives are just a characteristic of who wins when consumers ultimately only care about absolutes.

**ROSEN:** Let me answer that, too, since I'm fourth. The fact is that there is no way of recognizing excess competition. There is no empirical test that anyone has ever been able to devise for it, that could be routinely used by, say, a regulatory agency. In terms of media and competition, I think we're talking about a race to the bottom—that is what it sounded like to me. However, the movie industry used to keep out communists, and the industry had a code—because they would corrupt youth and so on. This seems to me to be treading on very

strange grounds about free speech and so on. I don't see that it is related to winner-take-all. Maybe I missed something...maybe we should regulate rap music.

**SUNSTEIN:** There is a lot there. I will address a couple of points. I meant to separate the efficiency argument from the equality argument. And when Kevin says that someone is a million dollars better—well that depends on whether social and legal institutions allow that person to be a million dollars better. God didn't say that it's just to give a million dollars to the person who can produce two dollars more value for, say, 500,000 people. Give me a theory of justice that says that that person deserves a million dollars more!

It is right that we should separate the efficiency argument from the inequality argument, but we shouldn't disparage the inequality argument because it isn't an efficiency argument. That would be hasty. The inefficiency argument...

**ROSEN:** Tax them!

**SUNSTEIN:** That's a possible solution. The inefficiency argument has to do with arms races on the one hand and overcrowding on the other. Those are the two points. With respect to the code and communists—that wouldn't be unconstitutional. The lawyers in the room know, because the constitution only applies to the government and I can report that no one has suggested that any kind of political control of that sort should be a part of any code...

**ROSEN:** It is political...

**SUNSTEIN:** ...and the N.A.B. would resist, with many fans from all sides, any effort to control through government regulation. For example, between 1929 and 1979, there was never any kind of government control. If there were such an effort to control, Sherwin and I could join hands and urge that they eliminate that.

The connection to winner-take-all is that broadcasting markets, as the broadcasters are well aware, have a winner-take-all feature where relative position matters a lot, and it can be magnified into huge disparities with no...

**MURPHY:** I just disagree in terms of what is the definition of winner-take-all. What's key in the over-fishing case is that when I go out and fish, you catch less fish but the overall number of fish in the market remains the same. Nobody benefits from that. When I go out and compete against you in the computer market and we drive down the price of computers, that makes you less profitable but the consumer benefits from that. There is a technical externality in the terms of economics in the case of fishing that doesn't happen in the case of computers. You have to convince me why there is a technical externality in broadcasting. The fact that people want to watch the best TV shows is no different than that they want to go get the best haircut or to go eat the best dinner or anything else.

That doesn't mean that there is an over-fishing problem in the creating of restaurants or cutting hair. I ...

**FRANK:** What matters, Kevin, is that some of the payoff you get from consuming the thing depends on the ranking per se.

**MURPHY:** That's key, but that is not so clear that it's true on TV. I enjoy "The Simpsons"! I don't know what else is on TV, that's the only show I watch. *[Laughter]*

**SUNSTEIN:** What's "The Simpsons?" *[More laughter]*

**FRANK:** There is, I think, less disagreement than it sounds like at least on some issues. I think that Kevin is totally right that the fact that we all can listen to the best soprano now is a good thing. If you had a relative with a serious illness and you could turn to the reigning expert on the planet for advice about what to do, you would count yourself lucky for that—rather than have to go to the expert at the Tompkins Community Hospital [in Ithaca, New York], which is where we go when we get sick. If you can go on-line and send the data to London and that is where the person who knows the most is, and you can get that advice, then that is exactly what you want and there is enormous value in that. So the fact that technology allows the best performers to extend their reach is a terrific thing. There is no quarrel about that.

However, think about the quest to be Number One. Think about a lawsuit between Ford and General Motors. There is a new fuel injection system that Ford came up with, GM thinks that it violates a patent. It's a close call—maybe they invented around the patent, no one's really sure. There is no terrific social interest at stake in how the suit is resolved, but it is for a billion dollars. In that case, each of the two companies has an enormous interest in hiring the better lawyer. If it's such a close case that the better lawyer is almost certain to win it, then the equilibrium salary for the better lawyer will be a billion dollars, and the other lawyer gets nothing. In that case, there is such a premium to coming out ahead if you're competing for that job that you will invest on every margin that you can to position yourself to be better than the other lawyer. However, it's not clear, if the social value of resolving the case is a toss-up, that society gains anything from those investments.

**MURPHY:** I've got an alternative scheme. Let's decide who wins that case by how many janitors we can pile in a room. *[Laughter]* What is going to happen? We are going to spend a helluva lot building big rooms putting lots of janitors in, right? It doesn't have anything to do with the fact that there's a big thing on the table. There's a lot of models that'll dissipate that—whether it is spent by trying to get the best lawyers or spent trying to pile janitors into a room. Now, what you're saying is that because of technology, there's an implication for the income distribution of the nature of that competition in the growth in the size of the

pie—because of the technology. However, the inefficiency associated with competition for that pie would be there independent of whether it was that technology or the other one.

**FRANK:** Yes.

**MURPHY:** So there's a decoupling between the efficiency/inefficiency question—which has to do with splitting a pie—and the winner-take-all notion, which has to do with the technology of how you win the pie.

**FRANK:** Technically, the distinction is that, as in the fishing case where you send ten boats out, each boat comes back with a tenth of the total catch. The average catch is greater than what the tenth boat added to the total catch. If your average payment exceeds the marginal contribution that you make, then you will get this overcrowding inefficiency. That's doubly true in the case of searching for the best contestant in a field of ten contestants. Doubling the number of contestants does not double the value of the quality of the decision that you get in the closely contested legal decision. You get the decision, which may be a better decision. You're going to have more talent trying to get the job of writing the decision, so it probably won't be a worse decision, but, still, the social value of that decision doesn't go up in proportion to the number of people who competed to write it.

**ROSEN:** You can't even show that. I mean, there has been a lot of work in economics about patent races and whether people work too fast to discover things. There are no results there. You can't show that they work too fast. Sometimes they do, sometimes they don't. It depends on the way that you structure the model. If you tweak the models a little here or there, you get a different result. There's nothing that you can say.

Now, in these labor market phenomena, I think that what Kevin is saying is that there's no standard for judging whether it's only rank that matters or absolutes. You can't think of an example where it's only rank. You know, if we only care who is the...

**FRANK:** Doesn't need be only rank, Sherwin.

**ROSEN:** But so long as there is some absolutes in there, then...

**FRANK:** Then what?

**ROSEN:** Then you're going to get some efficiency from allocating these...

**FRANK:** Oh, you get a gain, but if rank matters, then there is this tendency to spend too much.

**MURPHY:** There are variables...

**ROSEN:** Give me an example.

**FRANK:** An example along the idea that a cartel is always a bad thing for the public interest. New England Auto Racing Association at one time had an agreement to try to limit the amount that competitors—auto racers—spent on tires. Auto racing has lots of limits of this sort. You have a limit on the size that your engine can be—weight restrictions, so on. These seem sensible. They are kind of like anti-steroid laws in athletics. Why spend more and more to put big engines in? Why not fix the size of the engine and see who can drive the car the best? That is the goal, to try to keep the cost of anointing a champion within bounds, and they found that they had pretty much controlled all of the competitive dimensions of auto-racing save one—namely the type of tires that the racers used. Naturally, that was the active margin. People spent more and more on tires—\$2,000 per tire, \$3,000 per tire, stickier tires, wider tires and so on. So they proposed, finally, to set out a standard specification for tires. They were going to call on companies to bid who would supply tires, all according to the same specifications, to the people who competed in these races. They chose a company to supply the tires. However, one of the losing bidders filed an antitrust suit and won relief in a district court.

Ivy/MIT. The Ivy/MIT agreement was that financial aid should go on the basis of need, not merit. It was a collusive agreement because without that agreement there would be very strong pressure for the schools to bid amongst themselves for the students with highest SAT scores.

**ROSEN:** You teach at one of those schools.

**FRANK:** Yes, of course—Ivy/MIT. If you think that a social purpose is served by steering financial aid to the students whose families are neediest rather than to the students whose SAT scores are highest among a group, all of whom have good credentials, then that cartel wasn't necessarily a bad thing.

**ROSEN:** It was price fixing! You were keeping the prices up!

**FRANK:** It was price fixing, absolutely! But by that fact alone we can't conclude necessarily that it was contrary to the public interest, which is my point.

**MURPHY:** But that is kind of like an argument that we should let poor guys have cartels or something. I mean, that's basically the argument! That as long as it's a bunch of poor guys getting together to raise the price of hot dogs, it's worth it. [*Laughter*] Come on, that's the same argument!

**SUNSTEIN:** And why is it so clear to you that that is a bad argument?

**MURPHY:** I'm just making a point. You guys decide. I'm just trying to make clear what we're arguing.

**SUNSTEIN:** There may be better ways to help poor people than allowing them to cartelize.

**MURPHY:** Yes, that's probably the best answer to that! See, I didn't even need to say it! [*Laughter*]

**FRANK:** On the justice thing, I think that the framework that most people argue about this is in terms of the standard Rawlsian thought experiment—where you've got people who don't know how good they are at the outset. They go behind a "veil of ignorance" that shields them from the knowledge of whether they'll come in first or second in the race. They're supposed to cook up rules behind the veil about how the pie should be split up once they find out who's got what talents.

Typically people would not vote for equal sharing of the pie when they go behind the veil of ignorance because, especially in a set up where there were a million people and everybody got one-millionth of the pie, the question would become: why should you bother to go to work? There would be little incentive if you were going to get essentially the same result whether you worked hard, took risks, or not. Rawls pointed out, I think correctly, that we are willing to allow some inequality, because, without it, we don't get any pie because nobody is going to have any incentives to work. The question is how much inequality? How much inequality do we think would be justified in the name of making the pie bigger? I think that the point I heard Cass making was that we're all comfortable if somebody has ten percent more talent and works ten percent harder, then that person should get ten or twenty or maybe even thirty percent more.

However, is it intuitively clear to our sense of justice that if you have one percent more talent or work half a percentage point harder that you ought to get a thousand times more? I think that's where the intuition about what is a "just" distribution of income comes into conflict with the distribution that results when we pay people—as Kevin pointed out—exactly what they are worth in a competitive sense. What you are worth to the enterprise isn't necessarily the same number that we would come up with as what seems fair given what people need to live on in a society.

**ROSEN:** There's a concept called "economic rent" and there's a theorem that if you have pure rent, you can tax the hell out of it and nothing will happen. Everybody agrees that it's true. If talent is all God-given and nobody ever does anything to acquire it and so on. Murphy has so many brains I want to tax them... [*Laughter*]

**MURPHY:** You won't be collecting much. [*Laughter*]

**FRANK:** I can't believe I just heard it! I'm going to walk away and say no more! The debate is over. [*More laughter*]

**ROSEN:** The question is, what is the elasticity of supply? It's not zero. If it's not zero, then the optimum tax is not a hundred percent.

**FRANK:** It is not a hundred percent, but we see the argument made that if an aspiring CEO for a Fortune 100 company were taxed not 40 percent but 42 percent, he or she would decide to take Friday afternoon to play golf. I think that vision of what drives the vice-presidents who are queuing up trying to be CEOs misses something fundamental. Their incentive to work harder isn't much affected by that marginal tax rate at those levels. We know that when the marginal tax rates in the U.S. were 60 percent or 70 percent, VPs trying to become CEOs didn't take time off. Japanese CEO aspirants face even higher tax rates than that, and they work harder...

**ROSEN:** Now they become basketball players. [*Laughter*]

**FRANK:** ...if we measure hours worked—than American aspiring CEOs. So I think that it is true that you need to pay the talent, if you don't want to lose the talent to a rival bidder. So yes, what you pay is critically important for getting the job done, but if the reward were lower by two percent for everyone there's no evidence that people would put forth significantly less effort in their attempt to become CEO. There's just absolutely no evidence for that.

**ROSEN:** Or the other way around.

**SUNSTEIN:** We have a question in the back.

**QUESTION:** It seems to me that there is a certain intuitive logic that in negotiating with somebody who has no other alternatives, you have a lot of control over the negotiations. My impression is that a lot of superstars aren't exactly autistic savants, but they really don't have another industry to go to or that they don't have another comparable industry to turn to. What is Cindy Crawford going to do or...

**ROSEN:** I think that she has a lot of opportunities.

**QUESTION:** ...or Michael Jordan—it turns out that he couldn't even play baseball. Since we sort of have these people over a barrel where they have nowhere else to go, no comparable alternatives—or, at least, in certain industries—why that isn't factored in the equation at least in certain industries?

**ROSEN:** Like lawyers.



**MURPHY:** I think that there is a big thing that is being missed here. Which is one of the things that in economics is pretty clear—that when you get the superstar phenomenon...now, we're talking *real* superstars here! Remember, a big part of the growth in inequality has not much to do with the guys making \$8 million. It has to do with the guys making \$65,000 rather than \$60,000 or the guys making \$13,000 rather than \$15,000.

Putting that aside, let's focus on the guys making over ten million. One of the problems is that the way that you collect so much is you sell yourself to a very big market. Unfortunately, what we know from economics is that as we expand sales in the market, prices tend to go down. Therefore, you are unable to capture a large part of what you create. Even though Michael Jordan captured—what, \$50 million or \$100 million last year—I would venture to say that the true value of having him to society was far in excess of that. Thus, if you cut back on Michael Jordan ten percent, then maybe that tax revenue that you would raise—which would be ten percent of what he gets—would be far less than what we would lose as a society. The same is true with Oprah Winfrey and with a lot of these people. They only capture a small part. They capture a lot but they create enormous value—great value generated solely by the fact that that market is so large. I mean, how much would each of us be willing to pay for Michael Jordan to be here rather than not? How much was he worth to have last year, rather than not?

**FRANK:** Kevin, do you think that if the top rate had been 42 percent, he would have made a different career choice or expended any less effort to win?

**MURPHY:** Yeah, a little bit. He would have put in a little less effort to have been "Michael Jordan." That's the point—it doesn't have to be a big jump.

**FRANK:** Why? Do you think that he was weighing \$30 million versus \$31 million in deciding how high to jump that time? I mean, this doesn't seem intuitively plausible.

**MURPHY:** I think people make those decisions when they decide when they're going to retire.

**FRANK:** It could in principle be true, but it just doesn't seem plausible.

**MURPHY:** You know, this is like the old story—whenever I teach my students the law of demand, they say, "Well, do people *really* buy less when you raise the price of a computer a nickel?" And I say, "Yeah, they buy less when it goes from \$1,000 to \$1,000 and five cents." They say, "Come on, no it doesn't!"

**FRANK:** Sherwin had it right—he said, when it's a rent, you can tax it and it will still be offered.

**MURPHY:** No—that is the same argument that people do not respond to raising it [the price of a computer] by a nickel. Nobody's going to walk into a computer store and say, "Yeah, I'd buy it for \$1,000 but a \$1,000 and a nickel, no way!" [Laughter] But the problem is that this argument falls down because if the nickel doesn't matter, let's go two nickels, ten nickels, a thousand nickels. We'll raise it a nickel at a time—pretty soon we're at a million dollars, and it had to matter at some point. The same is true of tax rates. The argument that going from 40 percent to 40.01 percent doesn't matter, does not imply that it is logically inconsistent to say that it matters going from 40 to 50.

**FRANK:** If you go to a hundred, you might say to hell with it. There's a point beyond which you wouldn't push.

**ROSEN:** It's a difference between the intensive margin and the extensive margin. Michael Jordan isn't going to do much if we take a few nickels away from him, but the probability of Michael Jordan being there at all is going to fall.

**MURPHY:** Exactly.

**ROSEN:** And that's the supply aspect that we're concerned with.

**SUNSTEIN:** But by how much?

**ROSEN:** Well, we see it in law. When wages in law went up, you've had enormous entry into law. For instance, a lot of smart women now come in and displaced a lot of dumb men. You've had an enormous increase in talent coming into it. The elasticity of supply into law is very high.

**SUNSTEIN:** But there is an argument by analogy here—which may or may not be true—that Kevin gave. It is true that if you raise the price of bread by a nickel, the demand for bread will fall. However, it doesn't follow from that analogy that if the marginal tax rate on people who make millions is raised a little bit, that the number or activity of those people will fall in any material way. It would be surprising if it went up, though that is conceivable; but that's an empirical question that can't be argued *a priori*.

**MURPHY:** But neither can bread. The supply of bread can't be argued either. There's an argument for both that's equally *a priori*.

**SUNSTEIN:** Yes but they're both empirical questions. We have a lot of evidence with respect to bread, but we don't have much evidence with respect to slightly higher tax rates on millionaires.

**ROSEN:** Well, you're talking about something like a capital levy. As when—this is a nice problem that has gotten a lot of discussion—I say that I am never

going to tax capital. As a result, I'm going to get a lot of capital created and I'm going to tax it once.

**SUNSTEIN:** How much?

**ROSEN:** A hundred percent.

**SUNSTEIN:** I'm against that. [*Laughter*]

**ROSEN:** But it's *inelastic*—it's inelastic at that point, but never again. That's kind of the argument we're having here. It seems crazy.

**MURPHY:** I guess my problem with this is that this is really not a discussion of superstars. Superstars may be the reason why there is so much inequality, but, in fact, the more this is due to the superstar phenomenon, the more that it's due to investments, the more it's due to the combination with complementary resources, then the more elastic that response is likely to be and therefore the bigger the effect things like taxes would seem to be in that kind of situation.

Thus, it seems to me, if you're really going to emphasize the superstar side, it is not clear as to why that argues for higher tax rates. If people were just born and one guy was a thousand times as good a basketball player as another, I could tax the hell out of that and I would never reduce the supply. The fact that it's due to investments and the fact that it's due to bringing complementary resources to bear with that person, is going to make the tax consequences in an efficiency sense larger, not smaller.

**FRANK:** You could ask this question—what if every basketball player on the planet had a vertical leap half an inch shorter than the current? By how much would the national wealth be smaller? It seems to me that there is a frame of reference that we need in order to decide whether...

**ROSEN:** ...as when all those Jewish guys were playing basketball... [*Laughter*]

**FRANK:** If the vertical leap becomes a foot smaller, then yes. We take pleasure in watching Michael Jordan, in part, because of the absolute height of his vertical leap, but more prominently because he hangs in the air longer than anyone else. The characteristics that define his being noteworthy are strictly positional.

**MURPHY:** But we have to be a little careful here. There are two examples—the car racing example that you gave and, really, to some extent, Michael Jordan, are somewhat different because competition is part of the product there. The product that we are talking about is who is going to win, and by definition there is going to be one winner. Now in a lot of other areas—for example, in making great movies and things like that—it's not that I want to go see the best movie.

If the best movie is terrible, then I don't want to see it, right? I want to see a *good* movie. The same analogy that you could make for a basketball player wouldn't apply, for example, to actors—would not apply to TV performers—because in those cases it is not that I sit down and say, "Boy, this person's terrible, but they're the best so I love it!" [*Laughter*] You get my point?

**SUNSTEIN:** Isn't that local news? You just described local news. [*Laughter*]

**MURPHY:** I cheer for the local high school team because they're going to win, and that's because the competition in the contest is part of the product. That's not the same as in a lot of other areas that are, quote, "winner-take-all." That's my point.

**FRANK:** Two quick responses. It's not just places like sports where competition is the defining feature. This is not an isolated thing. You want a car, that's all you want—something to get you from point A to point B, or there are other things that you care about. Most people like a stylish car and a car that performs well.

Think about a car that performs well. What does a car have to do in order to be counted as one that performs well? In 1920, if your car would get to 60 mph eventually, you would experience that subjectively as an excitingly fast car. There would be people you could take for a ride and impress them with how fast it was—you'd feel the acceleration when you put your foot on the accelerator. Everybody would experience a jolt of pleasure at driving that car. Today driving such a car would seem slow. There would be no jolt of satisfaction at all. Today a car has to accelerate to 60 mph in under seven seconds in order to feel moderately quick and under five seconds to be down there.

**ROSEN:** Because they're so safe.

**FRANK:** The engines get bigger, then our concept of what it means to be fast gets lower times. There is a rank component to many things we buy. It's not an isolated thing.

The other point that I wanted to make, just quickly, was that I think that to call it "winner-take-all" versus "superstar,"—in which superstar sort of concentrates attention on Michael Jordan. Phil Cook and I had a chapter in our book called minor league superstars, and I think that a lot of this phenomenon plays out at a very ordinary level of scale. If you think of a salesperson, what really counts in whether a salesman earns a lot or a little is not so much how he performs compared to his co-workers but what kind of task is he assigned to do. Is he assigned to a high-value task—is he selling bonds for a pension fund? Or is he selling shoes at a JC Penney? If you're a good salesman, you're a lot more valuable the further up that hierarchy they move you. Right now because of changes in technology if you're a little bit better than another salesman, you've got a fax, you've got a cell-phone, you've got a beeper, you've got e-mail, you can

service a larger client base. As a result, slightly better salesmen are knocking off slightly worse salesmen all the way down the ladder. You're getting this leverage effect—it's not just at the very top that it's pervasive. It's all through the labor market.

**QUESTION:** I have a question for Professor Murphy. I don't see how the question above was really answered. Because if a person doesn't have more lucrative options, then it doesn't matter how much you tax because they're not going to get out of the field until they amass a certain amount of wealth. If they don't have more lucrative options, it depends on how you value that wealth.

**MURPHY:** Well, this is the *ex ante-ex post* problem that Sherwin was talking about. Once people have made the investment, once they've gotten there, then maybe they don't have options. But what's going to be the extent to which people strive to reach those places, or strive to get to those goals? That's what's going to be affected. You know, when Michael Jordan was in high school he didn't know...if he had known he was going to earn eighty million, if he had known he was going to earn the most in the NBA, then what you've got in the NBA wouldn't of mattered. That is, even if NBA players had been paid half of what they were going to get paid, it wouldn't have mattered. When he was in high school, though, it did matter. You have to distinguish *ex ante* versus *ex post*.

What happens with people trying to go on to become Cindy Crawford? We don't know who the next Cindy Crawford is going to be. They don't know, either. What the next Cindy Crawford is going to earn and what the potential prize is *does* matter. In fact, it's kind of odd because I hear this talk about tax rates not mattering, but then one of the big inefficiencies of the big payoffs that you talk about in your book is that it draws all of these people in.

**FRANK:** Where they matter is for that person who is on the edge. The untalented contestant who is just barely thinking about trying for the NBA as opposed to taking some math courses.

**MURPHY:** But who's untalented? You don't know up front—that's the problem. I mean, I barely got out of high school...and I'm still untalented. [Laughter]

**QUESTION:** Back to a legal perspective here—I'm not really seeing the direct tie to the superstars, that is, if the case is worth \$50 billion, then a percentage of that increases in absolute terms as the value of the cases increase over time. The other question is, suppose that we have five top-tier law schools putting out a thousand students a year, does that period of entry have an effect on overcrowding, have an effect on the superstars within the thousand and then the thousand versus the rest?

**ROSEN:** The question is why are there five? That's the thing that is troubling me. I guess I'm closer to Bob on this than I'd like to admit. [*Laughter*] But there's free entry into high-quality law schools. There are no barriers there. It's not a cartel. It's not a group. Cass doesn't meet with Harvard, Yale professors like he wants to do for the broadcasters, to keep people out.

**SUNSTEIN:** Isn't it about information?

**ROSEN:** Right, but why is the information so centralized?

**FRANK:** Many of these things are very path dependent. Once you get good, it is easier to get better. Students are choosing you based on how good you are, then, if you get a little better, more people choose you. Then you can become more selective, which causes still more people to choose you and better faculty to want to work for your university and so there is enormous comparative advantage to the people who got there first and established reputations. It's not to say that they're impregnable. There have been movements in the rankings in academia, but if you aspire to be a top five law school, which of those five schools do you think that you're going to knock off, if you're the number 25 school? It's real tough prospect to think about knocking them off.

**ROSEN:** Why shouldn't it be the top 100? There's enough talent out there. Maybe there isn't...

**FRANK:** As you said, there is a sharp peak in the distribution of payoffs. There's only so many \$10 billion mergers to arrange, and they don't need 100 law schools' worth of students to hire do that—so the battle really is for certification to get access to those really good jobs.

**ROSEN:** Here is an economic argument I've heard of for why there's a greater value to sorting, and it relates to this increase in demand for skills that Kevin was talking about earlier. The nature of the changes in technology that seem to be driving a lot of these changes today have to do with increasing demand for intellectual-type human capital rather than for other types. Then you want to encourage production of that kind of capital. This is a supply-side argument and what you need for this argument is that there are complementarities between teacher and student quality. You don't want Cass teaching third-rate students. You want the best students to go to the schools with the best teachers or to associate with other students who also are as talented as them. You get some kind of assortive mating, in a marriage-market sense. The analogy is pretty strong.

Then, if you have an increase in demand for these kinds of skills, demand for sorting is going to go way up. It's going to be difficult to get into Chicago Law School, or the University of Chicago Economics Department, for that matter.

On the other hand, I would expect there to be more supply—more spaces to become available—to reflect that greater sorting.

Now, there's no doubt that there is more sorting of college students than there used to be. I know that when I was in college, I could have gone to Yale or Harvard if I wrote the check. Now it's impossible—it's basically impossible—to go to those places. Even the state schools like the University of Illinois system has many different units that are very stratified by student academic performance and so on. I think that there is an increase in sorting, but I think it's due to the increase in the value of sorting—social value, not an arms race. The trouble with that, I think, is why hasn't the supply of high quality law schools increased more than it has?

**QUESTION:** I'd be curious to know how your economic and legal models deal with almost what seems like a psycho-social phenomenon, sort of a cult of personality that seems to occur in a lot of these superstars. In the sense that David Copperfield does a card trick that is not ridiculously different than if someone else does a card trick, except that Copperfield makes \$70 million a year. It's not just in the entertainment industry—Jerry Seinfeld or whatever. I'm just very curious about that. It seems to be almost more of a psycho-social phenomenon that almost goes back to ancient ideas of kingship where people are really excited about a personality, and that there's a lot of effort in creating that personality.

**ROSEN:** Do you want tips on how to become such a person? [Laughter]

**SUNSTEIN:** It's a very good question. Part of it is that you can talk to others about the fact that you saw Michael Jordan or David Copperfield—they all know who he is. Thus, part of it is it is not just the experience of seeing, that it may be a magic trick that is not much better than others, but it's someone everyone else has heard of and that's part of the reason you pay for it.

**MURPHY:** Right, the point is that that doesn't make it of no social value, or make it not real. The point is that it is sort of arbitrary—that we could have picked anyone to be king, but we picked this guy and then people really enjoy listening to this guy talk. This is still a real phenomenon, and to not have that would create a problem. Now the question is, do the gains to having a “king” get dissipated as people compete to *be* king?

**ROSEN:** ...*The Closing of the American Mind* was such a book.<sup>3</sup> I mean, nobody ever read that book... Impossible to read... [Laughter]

**MURPHY:** This also gets back to a point that Bob Frank made a bit ago, which is this question about when somebody else's car goes faster and that

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3. Allan Bloom, *The Closing of the American Mind* (Simon & Schuster 1987).

makes me want a faster car, too. It's true that those models can lead to...models...and that's a problem that I've studied a lot. In fact, Bill [Landes] and Gary [Becker] and some other people have worked on problems like that and it turns out that relative position isn't the key feature. The question of whether you get too fast a car is not a question of whether me having a faster car makes you want to have a faster car, but the mode with which that operates. Does me having a faster car make you better off, or does me having a faster car make you worse off? It's not the complement between the speed of my car and the speed of your car that leads to inefficiency, even though that's what leads to the arms race element of it. I could have a case in which you having a faster car makes me want a slower car and that would be inefficient. There is no necessary connection between those two things.

**FRANK:** You see, that's a problematic response in the sense that if you could imagine a different pattern, then you could get a different result, so there's no result at all.

**MURPHY:** I'm just saying that this is what we have to study.

**ROSEN:** Sounds like a lawyer. [*Laughter*]

**MURPHY:** We have to study that. [*More laughter*]

**FRANK:** I'm just not aware that there is any serious argument to the effect that when cars get faster generally, people enjoy having a slow car more.

**MURPHY:** No, but do they enjoy their car less? If they don't enjoy it less—even if it really makes them want to have that faster car—if they don't enjoy it less, then there is no externality.

**FRANK:** All available evidence suggests that a car that goes to 60 mph in seven seconds seems slower—and, hence, less attractive if you care about speed—in a world where all cars get there in six seconds than in a world where they all get there in eight seconds. That's totally incontrovertible.

**MURPHY:** Do *I* enjoy it less? Has that been established?

**FRANK:** If you care about speed, then, yes, you enjoy it less. Yes, period.

**MURPHY:** Well, I don't know...

**FRANK:** Maybe you don't care about speed. But if you care about speed, then that's just the answer.



**ROSEN:** [*Gesturing towards Murphy*] Remember, he likes “The Simpsons.”  
[*Laughter*]

**MURPHY:** The point is, if I care about speed is saying one thing. But saying that you having a faster car makes me unhappy, is a different thing.

**FRANK:** It makes your car slower as you experience it. That’s known to be true. I mean there are a few things that we do know.

**QUESTION:** This is pretty much Kevin’s argument, perhaps. When we had kings and dukes and so on, society needed somebody to be in charge, that had a lot of leverage and so on. We did have a lot of counter-effects—namely that the dukes would start to fight with each other in wars, and that cost society a lot. So we don’t know which is better, whether we had a good scheme. You could say that we have something like that now, too. It’s not really very different. We only have a certain amount of slots—only one Michael Jordan, and I guess that we can’t replace him at the moment—but there are other certain fuzzies: how many we need at the top or how many we have. There’s something like that that goes on and there’s a huge amount of competition to get into that. Is that something like the wars of the medieval times, and so that it can be even counterproductive to society—is that what you’re saying?

**MURPHY:** Well, it could be if the method on which they competed didn’t independently create value. That’s the question. In the war case, in fact, it’s doubly bad because the method in which they competed created negative value, not only not independent value. In this case, it’s not clear at all that in fact—remember, they don’t collect the full amount of that value and that’s...

**FRANK:** That’s a good point.

**MURPHY:** ...and in this case Michael Jordan is not competing by having us kill each other off.

**FRANK:** We’re quite capable of doing that on our own. [*Laughter*]

**QUESTION:** There seems to be another way that superstars might work, like Michael Jordan. Michael Jordan brought the whole NBA industry up. There was a sort of an initial phase in which Michael Jordan had to create interest again in basketball, like the home run race in baseball. I think that after that there’s sort of another thing happening—that once people are interested again in basketball or baseball, that perhaps the superstars are not as necessary? I mean, we will still be watching basketball or baseball after Michael Jordan or Mark McGwire.

**MURPHY:** I think that what you are pointing to is a sort of diminishing returns to having superstars and that maybe superstars are very relevant when we're falling to a point where there's a critical level, a point at which we're going to fall from the public eye. There may be an element of that, but I think that also bolsters the view that Michael Jordan didn't collect a big part of the value that he created—neither did Mark McGwire or Sammy Sosa. Even though they're getting a lot in endorsements and the like, it's unlikely that they collect even a significant part of the value that they created in terms of the renewed interest in baseball.

**FRANK:** There's actually an estimate on Jordan. Ten billion was the estimate that I saw, value added.

**MURPHY:** Yeah, exactly.

**SUNSTEIN:** What we want to know is whether over-optimistic people, alert to the example of Michael Jordan and the \$30 million, are entering the basketball market trying to become professionals where there are other, better things—and that is the problem the book points to. There's a lot to study empirically here, about whether people who are entering superstar markets a) are over-optimistic and b) whether what they're doing is wasteful. Kevin is suggesting that often it is not. Often it isn't, but we want to know *how* often isn't it.

**QUESTION:** The only evidence that I've really heard from Bob is about these surveys where there are 90 percent of the people who think that they are above the mean or something like that. I'm just wondering how valuable that survey is? If I were to go ask my students in class—you know, at the beginning of the quarter—how many of them think that they are going to get above the mean grade, I'm sure most of them will state that they will. Partly because they don't want to give me a signal that they think that they are not as smart as they might be and that I might hold that against them or something else—but I'm not really sure what you can take from that type of survey. Simply because they honestly believe that everyone is going to be getting A's in the class? Or does it tell us something about what they think about—how other people are going to react if they reveal that they may not be as smart?

**SUNSTEIN:** Do you think if it's anonymous that you might get a different result? Note that this is very robust. It is not just about expected performance in a class. With respect to the incidence of cancer, heart disease, divorce—any bad thing that you can mention that people have control over—they think that they are less likely than most people to experience it. In fact, the only class of people with a realistic sense of their own capacities and what's going to happen to them and of what other people think of them—the only people who are realistic—are the clinically depressed.

**QUESTION:** But there seems to be concerns about winner's purses and people bidding on things—there seems to be evidence that we aren't making mistakes.

**MURPHY:** The other point is that the clear empirical test of this is whether, in fact, if I raise the variance of earnings in a profession, holding the mean constant, more people would enter that profession. Economists would expect fewer people would want to go in. You would say more people would want to go in. As far as I know, there do appear to be risk premiums that you do get—a premium for risk—which seem to counter the argument that in fact people over-enter markets in which there is too much risk. People tend to think that their stock portfolios are going to do better than they do as well. Yet, we still, when we look at the premium for risky stock returns, find a consistent premium for risk. I'm not sure that you can take that survey evidence on what they think—they think that they're better than the average guy picking stocks, but, on the other hand, we still end up with a risk premium. It doesn't necessarily translate into behavior.

**FRANK:** Those aren't consistent.

**MURPHY:** That's what I'm saying. But what's important for the inefficiency is that it translate into behavior—not that it translate into expectations.

**FRANK:** No, if you're risk averse, then not only will fewer people choose to compete in a high variance market, but fewer should compete on a welfare...

**MURPHY:** Yes, but somehow you're saying that the observed risk premium, then, is too small relative to what it should be.

**FRANK:** Risk aversion steers you away, and it should if it's risky. Overestimating your odds of winning steers you towards competing, and it shouldn't.

**MURPHY:** I guess what I'm saying is that, on net, it steers you away.

**ROSEN:** There's another factor here, and that is that risk is good when you can cut it off. There's an option value...

**MURPHY:** Realized risk, though.

**ROSEN:** ...so if I'm going to try to make partner in a big law firm, guys who don't make it do very well in less prestigious firms. They don't do as well as they would have had they made partner. If I'm going to be a boxer, and I start getting some data feedback that I'm not going to make it, then I go and do something else. Risk attracts people for that reason in a lot of occupations.

**SUNSTEIN:** That's a very helpful clarification because there the two are quite different. We may not have a problem of overcrowding, at least with respect to certain classes of lawyers, because those who end up not making partner still add value and do great. But, with respect to boxers, it's possible that they've invested a lot of wasted time in learning how to box instead of getting skills that...

**ROSEN:** You know how many boxers can make a full-time living at it?

**SUNSTEIN:** Yes, I know the exact number. [*Laughter*]

**ROSEN:** It's forty.

**MURPHY:** Let's go back to where we started today. We started today talking about opera singers and I wonder, if we looked at it, are more people working to be opera singers today? Probably the total payments to opera singers as a group are higher, and yet there are probably more people working to be professional opera singers now than there were back when there were 1,300 of them just in Iowa. Again, I think because people realize that their chances of making that huge record contract are pretty low. That would be an example that we could look at to say, has this situation increased the skewness of the results? I don't think the total pie is any smaller—but has the increased skewness of results led to more entry or less entry?

**FRANK:** This is not a claim that there is more or less entry. The question is, would it be better if there was less entry? If there are a lot of good magicians who can do card tricks and all you care about is watching the best known among them, then you don't increase the size of the pie by doubling the number of people in that competition. You get to see the best known of how many there are out there, if that's what you care about. And I think to an extent that is what we care about, primarily, in the case of sopranos when we're talking about the kinds of differences among contestants in this market. As Sherwin has noted, it's very hard for a trained listener to detect quality differences among the top 100 sopranos.

**ROSEN:** I've changed my mind. That was before I listened to any of them. [*Laughter*]

**MURPHY:** There's an issue, then, in the question of why I wouldn't buy for \$12 the CD of that person who is slightly less talented when the better person's CD sells for \$13. Clearly that seems to be contradicted by the facts. People think that that CD sitting in the bargain rack over there for \$4.99 doesn't sell like the one for \$13 from the person who is a little bit better.

**FRANK:** Again, we don't know whether that's because what they cared about was listening to the best known soprano. If that's what they care about *per se*—if they want to see Copperfield rather than another magician who does it just as well, because they know Copperfield—then you get that difference explained not because the extra quality is worth more, but by the fact that it is by the best-known performer. You're going to get a best known performer anyway, however many people you have competing. That's the distinction there.

**SUNSTEIN:** There's some statistic about the percentage of Division I college basketball players who think that they'll be in the NBA, something like...

**FRANK:** Sixty-odd percent.

**SUNSTEIN:** And what's the actual percent?

**FRANK:** A percent and a half, about.

**SUNSTEIN:** Right. Now that doesn't seem strategic in John [Lott]'s sense, that it doesn't have behavioral consequences. Does it mean that they are not adding value that they could?

**ROSEN:** What do you do about it? I mean, suppose you're right—then what do you do? Do you regulate it?

**FRANK:** No.

**SUNSTEIN:** Information first.

**ROSEN:** What do you mean?

**SUNSTEIN:** You say one and a half percent. It's easy.

**ROSEN:** Everybody *knows* that.

**SUNSTEIN:** They do? Then why do sixty percent say so?

**ROSEN:** Everybody knows that hardly anyone makes it into the big-time sports.

**SUNSTEIN:** Well, if you think that they're saying it, but they don't actually think it—is that what you think?

**ROSEN:** Maybe they think they're in the one percent.

**SUNSTEIN:** Well, they do!

**FRANK:** They're wrong—at least some of them are wrong.

**SUNSTEIN:** Most!

**ROSEN:** But do *you* know that they're wrong?

**FRANK:** Not which ones.

**ROSEN:** Right! You can't do anything about it! What's the point of talking about it?

**SUNSTEIN:** I'll tell you one ingenious advertising campaign that we want to know what its effects were. Here the government was alert. If you look at their drug advertisements and their drunk-driving advertisements, you will find that they are quite alert to this. Ninety percent of drivers think that they are safer than the average driver and less likely to be involved in an accident. The government's response wasn't to tax anybody or to have new laws. It said, "Drive defensively! Watch out for the other guy!"

**ROSEN:** Make cars like tanks. Everybody bought SUVs.

**SUNSTEIN:** No, that was not the government's response. But it would be interesting to know if this drive-defensively, watch-out-for-the-other-guy notion worked better than others. The behavioral prediction is that it would because people were excessively optimistic.

**ROSEN:** There's no evidence that that reduced the accident rate.

**SUNSTEIN:** Have you studied the data? In fact, there is very powerful evidence...What I've just said is based on nothing, but what he said was based on nothing, too. [*Laughter*]

**ROSEN:** Cars are a lot safer.

**SUNSTEIN:** Okay, I think we have time for one more question.

**QUESTION:** I don't know how much Michael Jordan made at the end of his career. I do think that he was the greatest basketball player that ever lived. But due to the salary cap and free agency, isn't there a way that the salary of the best basketball player drives up the salary of the succeeding basketball player who might be a novice and not have any certain value?

**FRANK:** There does seem to be a going rate for basketball players, for CEOs, and as each new frontier is breached the amount paid to others in the wake of...

**QUESTION:** For a while, Michael Jordan, although recognized...

**FRANK:** He didn't get his due.

**QUESTION:** ...he may have earned money for basketball and for the team, but he wasn't getting a commensurate salary himself. The new players might be getting more because of their potential.

**FRANK:** Sherwin posed a question of why legal earnings haven't gone down despite the flood of supply. Might that just be the old story of one lawyer in town, there's no business, two lawyers in town...?

**SUNSTEIN:** That's a good note on which to end. We should thank the panelists, especially Bob.