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Guardian



THE

WINNER-

TAKE-ALL

SOCIETY

WHY THE FEW AT THE

TOP GET SO MUCH MORE

THAN THE REST OF US

ROBERT H. FRANK & PHILIP J. COOK

THE BESTSELLING AUTHOR OF
THE ECONOMIC NATURALIST



The Winner-Take-All Society

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Why the Few at the Top Get So
Much More Than the Rest of Us

Robert H. Frank and Philip J. Cook



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The Winner-Take-All Society

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For Mom
—R. H. F.

For Judy
—P. J. C.

Preface to the New Edition

Income and wealth inequality have been growing rapidly. The trend began in the United States during the 1970s. More recently, it has spread to the United Kingdom, Continental Europe, Asia and elsewhere.

Is this a problem? Many insist not. They argue that large differences in reward stimulate more rapid growth in GDP, which eventually trickles down to middle- and low-income families. Others, however, have begun to focus on the social and economic costs of rising inequality. Of course, a completely egalitarian society would be neither feasible nor desirable. But beyond some point, the costs of inequality clearly outweigh the benefits. In our view, we are well past that point.

If anything is to be done about rising inequality, the most important first step is to understand the forces that have been causing it. Much of what passes for expert commentary on this issue is off the mark. Popular accounts often attribute growing inequality to a breakdown in competitive forces. We're told that industrial behemoths conspire to drive out their rivals, thereby to extort ever higher payments from captive customers; that executives pack their boards with cronies, who agree to pay them exorbitant salaries and bonuses; that hedge fund managers rake in billions through illegal trades based on inside information.

To be sure, such abuses occur. But they're no worse now than they've always been. As Adam Smith wrote in *The Wealth of Nations*, "People of the same trade seldom meet together, even for merriment

and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices.”

If market manipulation is nothing new, why has inequality been rising? Some attribute it to growth in the “skill premium,” the higher wage that employers must offer in order to attract the increasing number of highly skilled workers they need. Yes, the earnings differential between college graduates and others is now wider than it was thirty years ago. Yet if we look only at the distribution of earnings among college graduates, we see the same pattern as for society as a whole. For most college graduates, wage increases have been either small or nonexistent in recent decades. The premium for college graduates exists because a relatively small number of the most successful graduates have enjoyed spectacular earnings growth during the same period.

Others argue that globalization has boosted inequality by forcing down the wages of the least skilled workers. Here, too, there is a measure of truth in the claim. Unions, for example, have lost some of their bargaining power as firms have become better able to move their operations to low-wage countries. Outsourcing via the Internet has put similar downward pressure on wages in many non-unionized occupations.

But these global pressures do not account for what’s happening in the professions. The growing inequality at the top is even more dramatic than at the bottom, as the most highly compensated corporate managers, lawyers and physicians have pulled away from the pack. In short, growth in inequality does not appear to have resulted from growing market imperfections or just from increased outsourcing to lower-paid workers in developing countries. What, then, has been driving it?

When this book was first published in the United States in 1995, we argued that growing inequality was a consequence of the fact that fundamental changes in technology and market institutions were providing growing leverage or amplification for the talents of the ablest individuals. In the entertainment industries the top performers go after a share of a huge global audience thanks to modern communications technology; there are not many “winners” in this game, but small differences in talent or sheer luck can produce jackpot rewards.

High stakes competitions do not necessarily involve mass audiences, but may involve access to wealth concentrations, as in the provision of services in finance and law, or the control of valuable assets, as in corporate management. The trends we have identified create ever greater leverage for those with the greatest ability, actual or perceived. The associated trends in compensation have been further accelerated by the breakdown of norms and institutions that had the effect of limiting top earnings. This is not a story of artificial limits on competition—rather just the opposite. Markets are actually far more competitive than they used to be.

Reasons for this change differ from case to case. But an important contributing factor in almost all cases has been the information revolution. In the 1950s, telephone connections across the Atlantic were so scarce that some firms hired clerks in the United States to spend their entire workday reading texts over the phone to clerks in European branches, just to keep lines open. In those days, international corporate operations were constrained by the costs of coordination and control. In many product areas, a firm could succeed by being the best producer in a fairly narrow locale.

But the scale and scope of individual markets have grown enormously in the intervening years. If one seller's offering is better than all others, buyers from around the world now quickly get word of that fact. Lower shipping costs, coupled with falling trade barriers, have made it easier than ever to serve buyers everywhere. The upshot is that if an economic opportunity arises anywhere in the networked world, ambitious entrepreneurs are able to discover and exploit it.

Capital markets have also become far more competitive. If a firm was mismanaged in the past, it was usually difficult for small shareholders to do anything about it. Now, large institutional investors hold much more power, and they are often quick to take control of companies whose executives fail to deliver. Ross Johnson, the former CEO of RJR Nabisco, squandered that company's resources in a variety of conspicuous ways. For example, he maintained a large fleet of company jets that flew him and his fellow executives to golf tournaments and other junkets around the country. But Johnson didn't last as long as he would have in earlier days. After a celebrated bidding war, the leveraged buyout firm KKR acquired control of the firm and

sent Johnson packing. KKR paid twice what the share price had been under Johnson's leadership, yet still managed to make money on the deal.

The forces driving recent trends in CEO pay shed additional light on the causes of rising inequality. In large companies, even small differences in managerial talent have always made an enormous difference. Consider a company with \$10 billion in annual earnings that has narrowed its CEO search to two finalists. If there is reason to believe that one had slightly better judgment than the other, amounting to a 3 percent swing in earnings, then that translates into an additional \$300 million. Even if the better performer is paid \$100 million, she's still a bargain.

This sort of leverage has long been a feature of corporate management positions. But clearly something has changed. CEOs of the largest American corporations, who were paid 42 times as much as the average worker as recently as 1980, are now paid more than 400 times as much. Similar trends exist in some other developed countries.

Critics complain that the explosive growth of CEO pay proves that executive labor markets are not really competitive—that CEOs appoint cronies to their boards who approve unjustifiably large pay packages. But CEOs have always appointed people they know to their boards, so that can't explain recent trends.

One reason for rapidly growing CEO pay is that companies themselves have become bigger. As the New York University economists Xavier Gabaix and Augustin Landier argue in a 2006 paper, executive pay in a competitive market should vary in direct proportion to the market capitalization of the company. They found that CEO compensation at large companies grew sixfold between 1980 and 2003, the same as the market-cap growth of these businesses.

Still, growth in the size of corporations does not fully account for the changes in how CEOs are rewarded over the postwar period. Take the case of Crawford Greenewalt, a Du Pont son-in-law and CEO of E.I. Du Pont de Nemours in 1959, whose \$300,000 annual compensation was (after adjusting for inflation) about one-quarter of that paid Charles O. Holliday Jr, the CEO in 2008, although back in the 1950s, Dupont was still a top performing company and during Holliday's tenure it brought just 2 percent return to its shareholders.

Increased competition for top talent is part of the explanation.

More intense competition has been fueled by a significant increase in executive mobility. In the not-so-distant past, about the only way to become a CEO was to have spent one's entire career with the company. With only a handful of plausible internal candidates, pay was essentially a matter of negotiation between the board and an individual who had no attractive prospects outside of the company. Increasingly, however, hiring committees believe that a talented executive from one industry can also deliver top performance in another.

A celebrated case in point was Louis V. Gerstner, Jr. Having produced record earnings at RJR Nabisco, he was hired by I.B.M., where he led the computer giant, then struggling, to a dramatic turnaround in the 1990s. This new spot market for talent has affected executive salaries in much the same way that free agency affected the salaries of professional athletes in recent decades.

Greater competition also creates positive feedback effects that amplify the growth of salaries at the top. Such effects appear to help explain growing inequality among dentists, for example. The dentists whose earnings have grown the most dramatically are often specialists in cosmetic dentistry, the demand for whose services has been fueled by higher top salaries in other occupations. And the highest paid dentists in turn often demand the services of the most highly paid specialists in other fields.

Beliefs matter. The erroneous belief that inequality has grown because markets have become less competitive has spawned policy remedies aimed at making markets more competitive. For example, a belief that insufficient competition in the university system was fueling rapid tuition growth led the antitrust division of the United States Justice Department to file suit against a group of elite American universities for colluding on decisions about financial aid to applicants. The suit succeeded. These universities are no longer permitted to coordinate their decisions about how much aid to offer specific students.

But if inequality has in fact grown because markets have become more competitive, not less, such remedies will prove counterproductive. Universities were coordinating their financial aid decisions to avoid a costly bidding war for the students with the most stellar credentials.

Their aim was to protect scarce financial aid dollars for the neediest families. Because the government's intervention prevented them from achieving this aim, there will be greater inequality in the next generation of graduates.

Here, too, we see the footprints of positive feedback loops. In chapter 8, for example, we argue that the bidding war for students with the best grades and standardized test scores had become more intense partly because the employers who offer the top starting salaries have been concentrating their recruiting efforts at the nation's leading universities. That change, in turn, reflects the increasing concentration of the best students at the leading universities. These universities, for their part, must continue to attract the top students, lest they forfeit the crucial rankings points that are based in part on the grades and test scores of those students. In short, growing salaries at the top kindle greater demands for elite educational credentials, which kindle fiercer competition among universities for scarce slots atop the academic pecking order. If universities are allowed to use financial aid offers to bid for top students, some will do so, and others will feel great pressure to follow suit. In the end, fewer financial aid dollars will be left for needy families, causing children from these families to graduate with growing debt burdens. It's another example of the "Matthew Effect", coined by sociologist Robert K. Merton and taking its name from a line in the biblical Gospel of Matthew – "For to all those who have, more will be given, and they will have an abundance; but from those who have nothing, even what they have will be taken away," in which success breeds success.

Events of the past fifteen years provide little reason to question our original conclusion that growing leverage in the "winners" positions, combined with growing competition to fill those positions, has been the most important cause of rising inequality at the top of the income distribution. On the contrary, markets have grown more competitive and the most productive players have gained additional leverage since the original publication of our book. Growth in earnings inequality has continued as predicted, with brief interruptions during the two downturns that have occurred.

According to Adam Smith's celebrated invisible hand theory, competitive forces harness the greed of individuals to produce the

greatest good for all. Seeking only to increase their profits by winning business from their rivals, producers introduce cost-saving innovations and improved product designs. These efforts succeed in the short run. But over time, other producers copy them, and additional competition drives prices back into line with the new, lower, production costs. The ultimate beneficiaries of all this churning, according to the theory, are consumers, who enjoy better products at lower prices.

To be sure, by extending the reach of the planet's most able performers, the same information revolution that heightened competition in recent decades has created enormous benefits for consumers. But unlike the most ardent of his latter-day disciples, Adam Smith never asserted that more competition *always* leads to better outcomes. His remarkable insight was that it does so under some circumstances. We and others have argued that those circumstances do not reliably include the competition for rank in markets organized like tournaments.

In addition to causing almost unprecedented growth in income and wealth inequality, heightened competitive forces have generated substantial waste. In chapter 6, for example, we argue that most of the millions of people who compete for a limited number of superstar positions in winner-take-all markets actually contribute very little to national output. And in chapter 7, we note that contestants for these positions jockey for position in a host of costly, but mutually offsetting, ways. National income would be higher if there were fewer contestants in these arenas, and if more of the most talented youths went into scientific or medical research rather than finance.

A far more important source of waste spawned by rising inequality involves the escalation of what families must spend to achieve basic economic goals. Consider, for example, the desire of most parents to send their children to good schools. The problem is that a "good" school is a relative concept. It is one that compares favorably with other schools in the same local environment. In some countries, school budgets are financed primarily by local property taxes, which means that the best schools are those in the neighborhoods with the most expensive houses. In other countries, school budgets are nearly the same in all districts, but even in those countries, the best schools tend to be located in the most expensive communities. (In part, this is

because school quality depends on student quality, and the children of more successful parents tend to be better students.)

The implication is that for a family at the median income level to send its children to a school of at least average quality, it must live in a district that has such schools—which by and large means spending as much on housing as other families with similar incomes. That's a problem, because rising inequality has spawned an expenditure cascade that (prior to the market crash of 2007) caused the median house price to rise much more rapidly than the median family's income.

The first step in this cascade occurred when the wealthiest families began spending more on housing, a step they took simply because they had much more money. The middle class didn't seem to mind. On the contrary, they gazed eagerly at magazine photos and news footage depicting the lavish new mansions. But the bigger houses of the rich shifted the frame of reference of those just below the rich, who traveled in many of the same social circles. (Perhaps the near rich felt they, too, needed to hold their daughters' wedding receptions at home rather than in hotels or clubs.) So the near rich built bigger. And that shifted the frame of reference for those just below them, and so on, all the way down the income ladder. In 1974, the median new house built in the US had 1,600 square feet of living space. By 2007, it had grown to over 2,400 square feet, despite the fact that the median real wage had not grown at all during the intervening years, and the average household had fewer people.

The problem is that even when all families spend more on housing, half of all children must still attend schools that are below average quality. From the median earner's perspective, the extra bidding for housing thus served only to raise the price of the median house. As in the familiar stadium metaphor, all stood to get a better view, yet no one saw any better than if all had remained comfortably seated.

Similar expenditure cascades have occurred across multiple domains. Because the rich are spending more on clothing, so is everyone else. If the median earner doesn't spend significantly more than before on an interview suit, he'll face reduced odds of getting the job. If he doesn't match the increased spending of others on gifts, he'll risk being seen as someone who failed to grasp the importance of a close friend's wedding or birthday. And so on. Much of this extra spending

is purely wasteful, since only relative consumption matters beyond a certain point. When the rich build bigger mansions, they succeed only in raising the bar that defines how big a mansion people in their circle feel they need.

There is little reason to celebrate waste. Yet waste presents opportunity. As we explain in chapter 11, simple changes in tax policy could divert many of the resources currently wasted in positional arms races to much more productive uses.

In chapter 10, we argue that the spread of winner-take-all markets has had a variety of adverse effects on the offerings of media and entertainment producers. Dramatic growth in the economic rewards for publishing best-selling book titles and producing blockbuster films has set publishers and producers scurrying after pots of gold. The result, we argue, has been a growing bias in favor of sequels to hit movies and a growing preference for books by celebrity authors.

Chris Anderson challenged our argument in a 2004 *Wired Magazine* article called “The Long Tail” and a 2006 book by the same name. The information revolution, he argued, has breathed new life into publishers’ lowest-selling titles. Titles with only occasional sales are uneconomical for conventional bricks and mortar retail stores to carry, but not so for online distribution giants like Amazon, Netflix, and Apple’s iTunes. These firms can hold enormous inventories even of titles that sell only once every few years. The result, Anderson argued, was that future cultural offerings would become more vibrant and diverse, rather than less so.

We were encouraged by Anderson’s optimistic view. But recent research suggests that the winner-take-all trend remains alive and well in culture and entertainment. For example, the top-selling 200 digital music tracks on Amazon had a market share of 18.7 percent in 2008, up from only 14.5 percent in 2004. (We are writing this just as the winner-take-all celebrity dynamic has launched Susan Boyle’s first album as the most successful release ever, building on the sensation generated by her performance on *Britain’s Got Talent*.) In publishing and movie rentals as well, the share of total sales accounted for by the top-selling titles has continued to rise. To be sure, it is easier than ever to purchase an obscure book or rent a little-known film. But that doesn’t mean that producing obscure books and films has become

economically attractive. It will be interesting to watch how things continue to develop in these industries. But for now, we see little reason to abandon our concerns about where things are heading.

What is clear, in any case, is that the economic forces that have been causing the spread and intensification of winner-take-all markets have by no means run their course. In non-recessionary times, we should expect continued growth in the intensity of competition on the buyers' side for the best talent, and on the sellers' side for the top positions. The result will be continued growth in income and wealth inequality, and increasing waste.

In late 2008, highly leveraged investment portfolios based on derivative securities helped precipitate the deepest financial crisis since the Great Depression. To combat the crisis, the central banks of the U.S. and the U.K. have pursued policies of aggressive monetary expansion. By all evidence, these policies have made the downturn both shorter and less severe than many had feared it would be. But an unintended side effect has been to create large windfall trading profits for the same financial institutions that assembled and marketed the risky securities that provoked the crisis.

Many outside the financial industry are understandably outraged by the prospect of another round of huge bonus payments at these firms. And although we are generally skeptical of government attempts to micromanage the pay practices of private institutions, the case for intervention in the financial industry merits a sympathetic hearing.

Financial industry executives complain that if they are not permitted to pay large bonuses, they will not be able to attract the talent they need to operate successfully. Nonsense. Productive traders often leave one financial firm for another that offers higher pay, yes, but if there were an across-the-board cap on bonuses, most would stay right where they are. Does anyone really think that the designers and marketers of risky derivative securities face similarly lucrative employment opportunities outside the financial industry?

Even if a bonus cap led some traders to migrate out of the financial industry in the long run, that might not be such a bad thing. As we argue in chapter 6, winner-take-all markets tend to attract talent far out of proportion to their contribution to national output. The financial industry is a quintessential winner-take-all market. The incentives that

have lured many of our best and brightest young people to become financial engineers have made our economies both weaker and less stable.

The financial industry needs to channel capital from lenders to those who can invest it most productively. This task requires competent people with sound judgment. But it is not rocket science. If smaller paychecks in the financial industry led some of the geniuses of Wall Street and the Square Mile to pursue other lines of work, so much the better.

As this case shows, there are practical policy solutions for the problems spawned by rising inequality. But we are unlikely to identify those solutions without first having understood the economic forces that have been causing the distribution of rewards to become more unequal, and average earnings to remain static for so long. Former President George W. Bush famously opined that his goal was to “make the pie higher.” Well and good, but it is also important that the available pie be shared more equitably. A better understanding of the forces that have given us the winner-take-all society can help us achieve both a bigger pie and a bigger slice for those who don’t end up in the winner’s circle.

Robert H. Frank and Philip J. Cook
November, 2009

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Our work on the project began formally in 1988, but our collaboration really dates from conversations as classmates and office mates in Berkeley's economics Ph.D. program more than twenty-five years ago. During the ensuing years, we worked separately on the economics of status competition and of participation in lotteries. These two areas at first seemed to have little in common, but as the 1980s progressed it became apparent that the competition for society's top positions was becoming more and more like participation in a lottery. And with this realization came the decision to merge our research programs and begin work on *The Winner-Take-All Society*.

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