What we have done for ourselves alone, dies with us, what we have done for others, and the world, remains ... immortal. — Albert Pike

Over the past two decades, Thomas Piketty of the Paris School of Economics has built up a body of empirical research into income and wealth inequality that has hardly any parallel and has led some economists to nominate him for a Nobel Prize. Piketty’s research with varying co-authors has established new and important facts about the evolving share of different types of incomes, derived from labor, businesses, and other forms of investment. The data he uses draw on decades of individual income tax returns in numerous industrialized countries. Even though Chris Giles of the Financial Times succeeded in identifying some clear data errors, it is noteworthy how remarkably similar ‘Glees’ adjusted time series are to those of Piketty when it comes to the evolution of wealth inequality in the United States, Britain, France, and Sweden. Piketty’s work on income inequality has gone unchallenged so far. In short, Piketty has credibly moved forward our empirical knowledge about inequality.

Piketty’s book Capital in the Twenty-First Century summarizes that data for a wide audience. But the book also attempts to be much more. As its title says, it is not meant to look back and trace the evolution of economic inequality. Instead, it aims to preview the future. Piketty places himself in a direct line with David Ricardo (the inventor of the principle of comparative advantage), Karl Marx (the inventor of Marxism), and Simon Kuznets (the inventor of gross domestic product, or GDP). His main critique of these three predecessors is that their findings have been challenged by the economic history that followed. At least in that regard, Piketty shares their fate: even now, data series have the unfortunate habit of ending in the present. That means it takes more than collecting data to predict the economic future. Will income inequality rise or fall? For an explanation, we need two elements: discernible patterns in the data that we can expect to extend into the future, and a theory that connects the facts to an explanation.

Piketty elicits two main tenets from this historic work. His first tenet holds that the real return on physical capital (r) will exceed the economy-wide growth rate of output in the future (g), expressed as r > g. His second tenet holds that the ratio between physical capital and annual output Y is now back at its historic peak level and the upward trend may continue: the capital-output ratio, expressed as β = K/Y, has reached factors of 6 to 7, meaning that it would now take six to seven years to reproduce our entire physical capital stock if we consumed none of our income but saved it all in investment, and the ratio seems to keep rising.

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Is Inequality Inescapable?

Professor Thad Kousser

“Ballot Initiative for Cutting up California, and the Ramifications for the University of California”

Wednesday, October 8, 3 - 4:30 PM

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Is Inequality Inescapable? As Piketty documents himself, the two tenets are projections based on relatively recent developments. For several earlier decades, the real return to physical capital (r) fell short of the economy-wide growth rate (g) and the capital-to-output ratio (β) used to be considered basically low. Under what conditions can we expect Piketty’s two main tenets to be right? If we hold that both these conditions imply a low (β) used to be considered basically low. Under what conditions can we expect Piketty’s two main tenets to be right? If we hold that both these conditions imply a low (β), then one can rise and β keep rising. Second, as a society we may aspire to double the output rate to increase the capital-output ratio (β) and wealth; then the wealth and income disparity have been made into a movie. It is appropriate to revisit it: “As Noah was gathering the animals for his ark he found anadder lying on a wooden table in front of the ark. He reminded the adder that according to God’s commandment there needed to be a spouse so that they could go forth and multiply. Whereupon the adder replied: ‘I am not going to multiply on a log table so it takes one only.’” (Another bad scientist joke from Kurt Shuler.)

Anecdote

By Sandy Lakoff

This Week magazine, a sort of Reader’s Digest for news, runs a weekly contest. In July, after the excitement over the World Cup soccer matches, when only 23 million Americans watched Team USA’s loss to Belgium—many fewer than watch the World Series—our contest posed this question: “In seven words or less, describe how you would change soccer rules to make the game more appealing to Americans.” The winning answers were:

1. Shorten it by 90 minutes
2. Substitutes may enter driving monster trucks

An American classic limerick (one of the few from this collection fit to reprint in a family newsletter):

There was a young lady from Chichester Whose beauty made saints in their niches stir. One morning at matins Her breast was one satin Made the bishop of Chichester’s britches stir.

--Isaac Asimov and John Ciardi Limericks Too Gross (Norton)
Inescapable?... Why is it so difficult for Americans to see that it is time to change our behavior? One possible reason is that we are all so accustomed to the idea that we can continue to live the way we want to live, even if it means that others cannot have the same opportunities. But this is a mistake. The reality is that our actions have consequences that go beyond our own communities and countries. We are all connected by the global economy and the environment, and we all share the responsibility for making sure that human rights are respected and that the planet is cared for.

The economic division of society into the wealthy haves and the working have-nots is perhaps the most limiting when it comes to quest ions of global inequality. Comparing capital owners to workers inside economies is informative, and Piketty and his co-authors have advanced our understanding of the relative income and wealth changes in the 20th century arguably more than any other research team. But a two-group perspective on inequality largely confines the approach to a repeated analysis of domestic inequality by country, obscuring the other main aspect of global inequality, namely the evolving income gaps between countries.

On a global scale, inequality has remained broadly constant since around the end of the First World War, because of two opposing tendencies. Between-country inequality worsened until the mid-20th century, but within-country inequality fell between the two World Wars on worldwide average, possibly because the wars wiped out much wealth. The two opposing forces kept global inequality roughly stable. In contrast, between-country inequality has largely stopped worsening in the mid-20th century, but within-country inequality has also stopped falling. As a consequence, worldwide income inequality has remained fairly stable since the end of World War I, whereas it used to increase relatively faster during the first wave of globalization prior to the First World War.

There are more capital owners today than just one percent of the overall population. In fact, for a capital-output ratio of β between 6 and 7, an interest rate r of 6 to 7 percent or so, the capital share in national income a = rβ is roughly equal to between 36 and 49 percent. In recent years, the percent of top earners in the United States pocket nearly one-quarter of national income. To fill the gap between that one-quarter and the 36 to 49 per

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This month is notable for three environmental anniversaries: a 30th for the California Wilderness Act of 1984, a 50th for the Wilderness Act of 1964, and a 150th for the landmark "Yosemite Grant" signed in 1864 by Abra ham Lin coln – the nation’s first allocation of "wild land" for the enjoyment of people, a precedent for the later development of national parks.
gilt-edged connection with the Nixon White House in Caspar Weinberger, formerly California’s Finance Director and now Director of the Office of Management and Budget (OMB). The tactical arm of the Executive in determining all agency budgets. It was late June, 1972, on the very day Nixon went public with his first denial of any role in the Watergate burglary, that White House aide John Ehrlichman scribbled “no problem” in the margin of a proposed statement opposing the new road project. There is no written record of Nixon involving himself directly in the forest road issue.

Meanwhile, Livermore knew that given the heart opportunity, Reagan was always ready to mount a horse and enjoy a ride over scenic terrain. And so he mastered an event that LA Times political columnist George Skidmore later called “the greatest political photo-op ever.” It was a backcountry press conference and Ike knew exactly where he wanted it held. On June 28, 1972, Governor Reagan flew to Mammoth Lakes Airport and motored to Red’s Meadow Pack Station near the Middle Fork of the San Joaquin River. Awaiting him were local political leaders and representatives of the appropriate government agencies. Also present were several out of place reporters wishing to be back at one of Mammoth Lakes taverns constructing their stories from a press release.

But there was no advance release for giving witness participants helped me reconstruct the scene.

Reagan arrived with a security detail determined to fan out into the forest on either side, trikes in hand. But it didn’t work that way. Packstock (mules) and saddle stock (horses) are trained to follow closely on the narrow trail. It was a way bandwagon and identified the only funding source big enough for the project: the Interstate Trust Fund. Now the Eastern Sierras faced the specter of a six-to-eight-lane interstate, the logistical extension of I-70 that terminates in Utah because it has no useful place to go. Those touting the supposed economic benefits of the new road seemed on the verge of winning the battle.

Among those who stopped them, one hero stands out. His name is Norman Livermore. “Just call me Ike,” were his first words to me. After beginning his working life as a mule-pack leader Sierra Club-sponsored pack trains began the work. Within the range, he earned an MBA at Stanford, competed in the 1936 Olympics, became a lumber company executive, and later served in Governor Ronald Reagan’s cabinet as Resource Secretary. Even while leading pack trains, Ike promised himself to use any power he might acquire to prevent roads from penetrating parks included, Ike was politically savvy enough to know when to seek help higher authority. Governor Reagan and Livermore had as a consequence joining the high-term guess looking back in history over the 20th century is that perpetual productivity change actually keeps propelling the global economy at a long-term growth rate of 3 percent or so. The second source of growth is capital deepening: an increase in the ratio of capital per worker means that workers get matched with more equipment to help them produce. The third source of growth of total output is simply growth of the working population. In one of Piketty’s doom scenarios, productivity change and population growth both come to a complete standstill and output keeps growing at a small rate g only because of the one remaining source of capital. What does this do to the scenario mean for inequality and the change in the income share of capital? As we saw above, a = β. If capital deepens relatively fast so that β is large, then inequality decreases relative to the likely fall in the interest rate, then increases and inequality worsens. However, in this doom scenario the one and only source of growth is capital accumulation.

Therefore, in this scenario, it is perhaps hard to make the moral argument that capital owners should not receive a relatively large share of income. Whether the capital deepening scenario provides the only source of growth at all.

One way to measure poverty is to ask what fraction of a country’s income goes to those with less than two U.S. dollars or fifty cents a day. A common measure of extreme poverty is the fraction of the population that lives on less than $1.25 a day. In the industrialized countries, we tend to measure poverty not in such absolute terms but with comparisons to the income of a person in the middle of our income distribution. We therefore tend to confuse poverty and inequality in the rich world even in our statistics. Both poverty and inequality are two conceptually distinct things: poverty is about the quality of life for the least fortunate,

Is Inequality Inescapable?

cont. from pg. 2

also the percentage return to human capital exceeds that of growth g, or even exceeds r? Could we infer anything about the evolution of overall inequality? Maybe, maybe not. My point is simply that r > g alone tells us little to nothing about the projected evolution of inequality. To rigorously infer how inequality will evolve, we either need to bring in more information on the return to human capital, or we need to do some more theory. I do not have the tax return data to compute the average net income of workers in each capital, so let me pursue a final theoretical thought about Piketty’s doom scenario that global growth will slowly downward.

Reagan agreed with a security detail determined to fan out into the forest on either side, rifles in hand. It didn’t work that way. Packstock (mules) and saddle stock (horses) are trained to follow closely on the narrow trail. It was a challenging climb to their destination, Summit Meadow, and its 360-degree panorama of surrounding peaks; also a place where pavement might be laid should a superhighway be allowed to course through the contested corridor. Following sandwiches and soft drinks, Reagan took command of his audience. After a few preliminary remarks he pulled something from his pocket and slowly unfolded it...a telegram from the White House! To a stunned audience he announced that by order of President Nixon, all federal funding for proposed road improvements nearby were canceled. The president had just resigned an appropriation favored by three of his own cabinet secretaries.

Stopping the Road...
characteristically willing to provide an extensive reading list. As a result, I read Thoreau and Muir and Aldo Leopold and the more recent historiography by Lisa Brinkman and Roderick Nash, among others. Whether I qualify for tackling this subject awaits the judgment of my supervisor Readers unfamiliar with the wonders of digital libraries sometimes comment on my “exhaustive research” but for anyone accoustoed to UCSD’s Geisel or Berkeley’s Bancroft, the documentation of these events is easily found and retrieved. Furthermore, I located more than a dozen of the original “road warriors,” as I call them now in their nineties, all willing to recall their experiences. Their three-phase battle was fought and won between 1966 and 1984 at three sites: Sacramento’s Capitol, where an undeveloped forest road was excluded from the state’s highway grid; the White House, where funds were already appropriated for improvement of the contested road were withdrawn by presidential decree; and Congress, where new wilderness legislation obliterated a corridor set aside in 1930 for another thoroughfare across the Sierra Nevada.

Proponents of a new highway were centered in the Western Slope counties of Fresno and Madera. Led by elected state representatives and supported by editorials in the Fresno Bee (whose clipping files were an unexpected goldmine for me), they exerted constant pressure, using every political maneuver available. But they ignored the unwavering conviction of the state Division of Highways that building and maintaining an all-season highway at elevations considerably higher than Donner Summit was madness at best. Keeping I-80 open year round already consumed 20 percent of the Caltrans snow-removal budget. A congressmen joined the high-
gilt-edged connection with the Nixon White House in Caspar Weinberger, formerly California’s Finance Director and now Director of the Office of Management and Budget (OMB), the critical arm of the Executive in determining all agency budgets. It was late June, 1972, on the very day Nixon went public with his first denial of any role in a certain recent burglary, that White House aide Ehrlichman scribbled “no problem” in the margin of a proposed statement opposing the new road project. There is no written record of Nixon involving himself directly in the forest road issue.

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Among those who stopped them, one hero stands out. His name is Norman Livermore. “Just call me Ike,” were his first words to me. After beginning his working life as a mule-packer leading Sierra Club-sponsored pack trains over the Rubicon, he earned an MBA at Stanford, competed in the 1936 Olympics, became a lumber company executive, and later served in Governor Ronald Reagan’s cabinet as Resource Secretary. Even while leading pack trains, Ike promised himself to use any power he might acquire to keep present roads from penetrating the wilderness any farther. Forty-two years later, he would hold the necessary power.

Facing resistance from all federal agencies operating in the region, stidents of the forests and parks included, Ike was politically savvy enough to know when to seek help higher authority. Governor Reagan and Livermore had as Is Inequality Inescapable? cont. from pg. 2 also the percentage return to human capital exceeds that of growth 
, or even exceeds it? Could we infer anything about the evolution of overall inequality? Maybe, maybe not. My point is simply that r > g alone tells us little to nothing about the projected evolution of inequality. To rigorously infer how inequality will evolve, we either need to bring in more information on the return to human capital, or we need to do some more theory. I do not have the tax return data to compute the average return to capital, so let me pursue a final theoretical thought about Piketty’s doom scenario that global growth will slow down. The second source of growth of total output is simply growth of the working population. In one of Piketty’s doom scenarios, productivity change and population growth both come to a complete standstill and output grows at a small rate only because of the one remaining source of growth, capital deepening. What does the remaining scenario mean for inequality and the change in the income share of capital? As we saw above, a = β. If capital deepens relatively fast so that r > g, the rate of return to capital is likely to fall in the interest rate, then increases and inequality worsens. However, in this doom scenario the one and only source of growth is capital accumulation. Therefore, in this scenario, it is perhaps hard to make the moral argument that capital owners should not receive a relatively large share of income. But Piketty’s doom scenario provides the only source of growth after all.

One way to measure poverty is to ask what fraction of a country’s income goes to less than two U.S. dollars and fifty cents a day. A common measure of extreme poverty is the fraction of the population that lives on less than $1.25 a day. In the industrialized countries, we tend to measure poverty not in such absolute terms but with comparisons to the average income in the middle of our income distribution. We therefore tend to confuse poverty and inequality in the rich world even in our statistics. Both poverty and inequality are two conceptually distinct things: poverty is about the quality of life for the least fortunate, understanding that it’s politics. Before he left Summit Meadow, he proposed that the two adjoining wilderness areas be permanently joined. And something close to that happened. Democratic Senator Alan Cranston introduced legislation that later earned support from Republican Senator Pete Williams that the 1984 Wilderness Act actually did was enlarge one wilderness and eliminate the other, replacing it with a larger Ansel Adams Wilderness Area. The corridor was gone but the iconic photographer had altered his position from fighting to promoting another trans-Sierra! For more on this irony, read the book.
Stopping Another Trans-Sierra Highway

By Jack Fisher
Professor Emeritus of Surgery
Jack Fisher, Stopping the Road: The Campaign Against Another Trans-Sierra Highway (The Sager Group, 2014). Available at the Campus Bookstore or via Amazon.

This month is notable for three environmental anniversaries: a 30th for the California Wilderness Act of 1984, a 50th for the Wilderness Act of 1964, and a 150th for the landmark "Yosemite Grant" signed in 1864 by Abrahama Lincoln – the nation’s first allocation of "wild land" for the enjoyment of people, a precedent for the later development of national parks.

Stopping the Road tells the story of a remarkable group of Eastern Sierra citizens with a single objective in mind: protecting an uninterrupted two-hundred-mile Sierra Nevada wilderness from determined road builders. Benefiting from both the 1864 and 1964 legislation, they influenced the dimensions of the 1984 expansion of California wilderness areas, thus eliminating for all time any prospect that the Sierra Nevada would be bisected by another interstate highway.

My personal link with the Eastern Sierra goes back to early days at UCSD with my wife’s attempts to take me beyond the range of the medical center’s paging system. The San Jacintos were not far enough away but the Sierra Nevadas were. Our family discovered Mammoth Lakes and environments and we’ve returned countless times since. I write this piece while perched at 9000 feet in a familiar cabin overlooking the Sierra Crest.

I decided to study economic history following retirement, and while highways are one facet of economic development, I enjoyed no background in environmental history. Happily, my mentors in UCSD’s History Department were

Richard Somerville named Dickson Professor

The 2014 Edward A. Dickson Emeriti Professorship has been awarded to Richard C.J. Somer‐ ville, a distinguished professor, emeritus and research professor at SIO.

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Somerlville joined the SIO faculty as a full professor in 1979. He was the first professor of atmospheric sciences at Scripps. His main research was in climate science and the interface between the science of climate change and public policy. He was a coordinating lead author for the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), which appeared in 2007. The IPCC shared the 2007 Nobel Peace Prize equally with Al Gore.

The award is named for Edward A. Dickson, who was a Regent of the University of California from 1913 to 1956, the year he died. This is the longest tenure of any regent in the history of the university. In 1955, Dickson presented the university with an endowment to support and maintain special annual professorships to be awarded to retired UC faculty members. Now each campus choice one emeritus professor each year as a Dickson Emeriti Professor and makes an award of $10,000 to her or him.

Previous recipients of the award at UC San Diego have been Sanford Lakoff, Kurt Benischke, Mel Green, Marjorie Cae‐ serio, Lee Rudee, Jerry Schnei‐ der, Peter Farrell, and Robert Hah‐burger.
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As Piketty documents himself, the two tenets are projections based on historical development. For several earlier decades, the real return to physical capital (r) has been that of the economy-wide growth rate (g) and the capital-output ratio (β) used to be considered low. Under what conditions can we expect Piketty’s main tenets to be right? If we hold, why do these conditions imply for growth as the distribution of income between capital and labor? Piketty is quite clear about this: take out post-growth by isomorphism to drop in the rate, so r > g will happen. What is more, Piketty argues that both tenets will interact to aggravate income inequality.

Well, not so far. There are at least four reasons to pause. First, there is an aura of inevitability about Piketty’s two tenets but it is not a foregone conclusion that inequality will worsen, even if we end up with r > g and β keeps rising. Second, as a society we may aspire to slowdown time, to reduce the growth rate, to lift the poor out of poverty, and to accelerate social mobility, while inequality need not contravene any of those three objectives. Third, gazing at our own economies is a good start but perhaps just as important is whether we are likely to find a way to achieve a lower rate of income disparity, or at least to lift the poor out of poverty, to reduce the growth rate, and to accelerate social mobility. And finally, we may need to know if we are likely to find a way to achieve a lower rate of income disparity, or at least to lift the poor out of poverty.

To figure out how Piketty’s two tenets relate to income inequality, we need one more Greek letter: α, the share of capital owners’ incomes in national income. I promise that will be for Greek letters. The definition is α = rK/Y. Piketty likes to call the capital-output ratio β = K/Y, so we can also write α = r/β. Why bother with α? Quite simply, α is all we need to know for inequality. In a society with only two groups—capital owners and workers—inequality will worsen only if α increases.3 We don’t need much math to figure out how precarious the relationship between Piketty’s two tenets and income inequality is. Suppose that Piketty’s two tenets are right: r > g from now on and the capital-output ratio β keeps rising indefinitely, because the wealthy accumulate capital faster than output grows. But then, for any given real return on capital r > g, as the capital-output ratio β rises and α rises, α > r/β must be rising and rising, too, until it reaches a level of one and then breaches through that level. Well, hang on, how can the share of capital incomes in total income be more than 100 percent? Of course, it cannot. Or in other words, at some point in the future, either r must be falling or β must stop rising and in inequality won’t go up anymore. Put yet another way, the mere mechanics of the definitions mean that Piketty’s two tenets must contradict each other at some point, or inequality stops rising. The thought experiment is extreme, I agree, because we may be a long time off the future time point when the contradiction finally kicks in. So let’s stay within the narrow term. Does r > g really imply that inequality must worsen? It is a funny economic convention about returns to capital that we measure them in percentages, rather than as an absolute annual income per capital owner. A side effect is that Piketty can compare r to g. But that does not mean the comparison is informative. Suppose for a minute people are numbers, too. I know it may be offensive, but just for the sake of clarifying what r means. Suppose you compute the value of the person the same way as Piketty and his co-author, namely the value of assets in their empirical work. Income tax returns of the capitalists do not necessarily add up to the amount of invested capital, so Piketty’s semipirical approach is to use rK, combined with what he knows about typical returns for certain asset classes, and to infer backwards the value of the invested capital. We could also ask a question: How many fewer than the world’s economy as a whole, so few can afford to go to the movies? By driving through town on a rainy day, the driver can multiply on a log table so it takes only one.” (Another bad scientist joke from Kurt Shuler.)

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Authors Note: This article shares main points with my slightly more technical note entitled “Piketty’s Capital in the Twenty-First Century” under the Lens of a Simple Economic Model.” The note is available at econweb.ucsd.edu/mmunder.

Thanks: Peter Greve, Stephen Ruggard and Valerie Ramsay for insightful comments on the technical note. Of course, any mistakes are only mine.

Footnote

3 To be precise, inequality will rise if α increases and if capital owners command a larger share of national income than their head count would suggest. I derive this fact and all of my following points in a slightly more elaborate note entitled “Piketty’s Capital in the Twenty-First Century under the Lens of a Simple Economic Model.” The note is available at econweb.ucsd.edu/mmunder.
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Thad Kousser, Associate Professor, Political Science

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Topic: "America’s Right: Anti-Establishment Conservatism from Goldwater to the Tea Party."

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The capital-output ratio, expressed as \( \beta = K/Y \), has reached factors of 0.5 to 0.7, meaning that it would now take six to seven years to reproduce our entire physical capital stock if we consumed none of our income but saved it all in investment, and the ratio seems to keep rising.

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