CHAPTER SEVEN

Conclusions and Solutions

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Part 1: John H. Cochrane

Why and How We Care about Inequality

Wrapping up a wonderful conference about facts, our panel is supposed to talk about "solutions" to the "problem" of inequality.

We have before us one "solution," the demand from the left for confiscatory income and wealth taxation and a substantial enlargement of the control of economic activity by the state.

Note I don't say "redistribution," though some academics dream about it. We all know there isn't enough money, especially to address real global poverty, and the sad fact is that government checks don't cure poverty. President Obama was refreshingly clear, calling for confiscatory taxation even if it raised no income. "Off with their heads" solves inequality, in a French-Revolution sort of way, and not by using the hair to make wigs for the poor.

The agenda includes a big expansion of spending on government programs, minimum wages, "living wages," government control of wages, especially by minutely divided groups, CEO pay regulation, unions, "regulation" of banks, central direction of all finance, and so on. The logic is inescapable. To "solve inequality," don't just take money from the rich. Stop people, and especially the "wrong" people, from getting rich in the first place.

In this context, I think it is a mistake to accept the premise that inequality, per se, is a "problem" needing to be "solved," and to craft "alternative solutions."

Just why is inequality, per se, a problem?

Suppose a sack of money blows in the room. Some of you get $100, some get $10. Are we collectively better off? If you think "inequality" is a problem, no. We should decline the gift. We should, in fact, take something from people who got nothing, to keep the lucky ones from their $100. This is a hard case to make.

One sensible response is to acknowledge that inequality, by itself, is not a problem. Inequality is a symptom of other problems. I think this is exactly the constructive tone that this conference has taken.

But there are lots of different kinds of inequality, and an enormous variety of different mechanisms at work. Lumping them all together, and attacking the symptom, "inequality," without attacking the problems is a mistake. It's like saying, "Fever is a problem. So medicine shall consist of reducing fevers."

Yes, the reported, pre-tax income and wealth of the top 1 percent in the United States and many other countries has grown. We have an interesting debate whether this is "good" or "market" inequality (Steve Jobs starts a company that invents the iPhone, takes home one-tenth of 1 percent of the welfare—consumer surplus—the iPhone created, and lives in a nice house and flies in a private jet) or "bad," "rent-seeking" inequality, cronyism, exploiting favors from the government. Josh Rauh made a good case for "market." It's interesting how we even use different language. Emmanuel Saez spoke of how much income the 1 percent "get," and Josh how much the 1 percent "earn."

In middle incomes, as Kevin Murphy told us, the "returns to skill" have increased. This has nothing to do with top-end cronyism. As Kevin so nicely reminds us, wages go up when demand for skill goes up *and supply does not.* He locates the supply restriction in awful public schools, taken over by teachers' unions. Limits on high-skill immigration also restrict supply and drive up the skill premium. There's a problem we know how to fix. Confiscatory taxation isn't going to help!

More "education" is one obvious "solution." But we need to be careful here, and not too quickly join the chorus asking that our industry be further subsidized. The returns to education chosen and worked hard for are not necessarily replicated in education subsidized or forced. Free tuition for all majors draws people into art history, too. Forgiving student loans for people who go to nonprofits or government work, or a large increase in wealth and income taxation, remove the market signal to study computer programming rather than art history, which raises the skill premium even more. Saudi Arabia spends a lot on "education" in madrassas around the world. In a Becker memorial conference, remember three rules: supply matters, not just demand; don't redistribute income by distorting prices; and human capital investments respond to incentives. (By the way, I'm all for art history. Just don't pretend that the measured economic returns to education will apply.)

America has a real problem on the lower income end, epitomized by Charles Murray's "Fishtown" (in his book, *Coming Apart: The State of White America, 1960–2010*). A segment of America is stuck in widespread single motherhood, leading to terrible early-child experiences, awful education, substance abuse, and criminality. Seventy percent of male black high school dropouts will end up in prison, hence essentially unemployable and with poor marriage prospects. Less than half are even looking for legal work.

This is a social and economic disaster. And it has nothing to do with whether hedge-fund managers fly private or commercial. It is immune to floods of government cash and, as Casey Mulligan reminded us, government programs are arguably as much of the problem as the solution. So are drug laws, as much of the earlier discussion reminded us.

Around the world, about a billion people still live on $2 a day, have no electricity, drinking water, or even latrines. If you care about “inequality,” minimum-wage earners in the US should be *paying* Piketty taxes.

These cases all represent completely different problems. Where there are problems, we should fix them. But we should fix them to fix the problems, not to “reduce inequality.”

Kinds of inequality

More puzzling, why are critics on the left so focused on the 1 percent in the US, when by many measures we live in an era of great leveling?

Earnings inequality between men and women has narrowed drastically, as Kevin Murphy reminded us. Inequality *across countries,* and thus across people around the globe, has also been shrinking dramatically even as income inequality within advanced countries has risen. One billion Chinese were rescued from totalitarian misery, and a billion Indians sort-of-rescued from British-style “License-Raj” socialism. These are wonderful events for human progress as well as, incidentally, for global inequality. Sure, these countries have many political and economic problems left, but the “it’s all getting worse” story just ain’t so.

“Inequality” is about more than income or wealth reported to tax authorities. Consumption is much flatter than income. Rich people mostly give away or reinvest their wealth. It’s hard to see just how this is a problem.

Political, social, cultural inequality, inequality of lifespan, of health, of social status, even of schooling are all much flatter than they used to be. (Nick Eberstadt recently summarized these in a nice *Wall Street Journal* op-ed.) Mark Zuckerberg wears a hoodie, not a top hat.

Look at Versailles. Nobody, not even Bill Gates, lives like Marie Antoinette. And nobody in the US lives like her peasants. In 1960, Mao Tse-tung waved his hand and 20 millions died. In 1935, Josef Stalin did the same. Neither reported a lot of income to tax authorities for economists to measure "inequality." It is preposterous to claim that even the citizens of Ferguson, Missouri, with all their problems and injustices, are less equal now than they were in 1950. Or 1850.

Why does it matter at all to a vegetable picker in Fresno, or an unemployed teenager on the south side of Chicago, whether ten or a hundred hedge-fund managers in Greenwich have private jets? How do they even *know* how many hedge-fund managers fly private? They have hard lives, and a lot of problems. But just what problem does top 1 percent inequality really represent to them?

I've been reading Thomas Piketty, Emmanuel Saez, Paul Krugman, Joe Stiglitz, the *New York Times* editorial pages to find the answers. They all recognize that inequality per se is not a persuasive problem, so they must convince us that inequality causes some other social or economic ill.

Here's one. Standard & Poor's economists wrote a recent summary report on inequality, perhaps as penance for downgrading the US debt. They wrote:

> As income inequality increased before the crisis, less affluent households took on more and more debt to keep up—or, in this case, catch up—with the Joneses . . .

In *Vanity Fair*, Joe Stiglitz wrote similarly that inequality is a problem because it causes:

> . . . a well-documented lifestyle effect—people outside the top 1 percent increasingly live beyond their means . . . trickle-down behaviorism . . .

Aha! Our vegetable picker in Fresno hears that the number of hedge-fund managers in Greenwich with private jets has doubled. So, he goes out and buys a pickup truck he can't afford. Therefore, Stiglitz is telling us, we must quash inequality with confiscatory wealth taxation . . . in order to encourage thrift in the lower classes?

If this argument held any water, wouldn't banning "Keeping up with the Kardashians" be far more effective? (Or, better, rap music videos!) If the problem is truly overspending by low-income Americans, can we not think of more directed solutions? For example, might we not want to remove the enormous taxation of savings that they face through social programs?

Another example: the S&P report moved on to a new story—inequality is a problem because rich people save too much of their money, and poor people don't. So, by transferring money from rich to poor, we can increase overall consumption and escape "secular stagnation."

I see. Now the problem is too much saving, not too much consumption. We need to forcibly transfer wealth from the rich to the poor in order to overcome our deep problem of national thriftiness.

I may be bludgeoning the obvious, but let's point out just a few ways this is incoherent. If Keynesian "spending" and "aggregate demand" are the problems behind low long-run growth rates—and that's a big if—standard Keynesian answers are a lot easier solutions than confiscatory wealth taxation and redistribution. Which is why standard Keynesians argued for monetary and fiscal policies, not confiscatory anti-inequality taxation, until the latter became politically popular.

In a series of recent blog posts, Paul Krugman offers evidence that people vastly underestimate how wealthy the rich are, bemoans how they live separate lives—my fry cook has, in fact, no idea of their lifestyle—and argues for confiscatory taxation to eliminate the “externality” of their *excessive* consumption by the wealthy. Are they consuming too much or too little? Well, I’m glad logical consistency isn’t holding back these arguments.

The most common argument is that we have to reduce income inequality to avoid political instability. If we don’t redistribute the wealth, the poor will rise up and take it. As a cause-and-effect claim about human affairs, this is dubious amateur political science, one that would look especially amateurish to the political scientists and historians at this Hoover Institution on War, Revolution, and Peace. Maybe the poor should rise up and overthrow the rich, but they never have. Inequality was pretty bad on Thomas Jefferson’s farm. But he started a revolution, not his slaves.

These are just three examples, and I won’t go on since time is short. But there are some interesting patterns. The answer is always the same—confiscatory wealth taxation and expansion of the state. The “problem” this answer is supposed to solve keeps changing. When an actual economic problem is adduced—excessive spending by the poor, inadequate spending by the rich, political instability—they don’t advocate the problem’s natural solution. These “problems” are being thought up afterward to justify the desired answer. And amazing, novel, and undocumented cause-and-effect assertions about public policy are dreamed up and passed around like Internet cat videos.

Politics and money

But these are serious people. Let’s recognize this is all the balderdash and distraction that it seems, and that we are circling around the elephant in the room. Let's try to find the core issue that they are really talking about. Let's find a common ground, a resolvable difference, so we can stop talking past each other.

In the end, most of these authors are pretty clear about the real problem they see: money and politics. They worry that too much money is corrupting politics, and they want to take away the money to purify the politics.

That explains the obsessive focus on the income and wealth of the top 1 percent. Consumption may be flatter, but income and wealth buy political connections. And all of our concern about the status of the poor, the returns to skill, awful education, the effects of widespread incarceration, all this is irrelevant to the money-and-politics nexus.

Now, the critique of an increasingly rent-seeking society echoes from both the Left and the libertarians. Rent-seeking is a big problem. Cronyism is a big problem. George Stigler finds a lot to agree with in Joe Stiglitz. As do Milton Friedman, James Buchanan, and so forth.

But now comes the most astounding lack of logic of all. If the central problem is rent-seeking—abuse of the power of the state—to deliver economic goods to the wealthy and politically powerful, how in the world is *more government* the answer?

If we increase the statutory maximum federal income tax rate 70 percent, on top of state and local taxes, estate taxes, payroll taxes, corporate taxes, sales taxes, and on and on—at a Becker conference, always add up all the taxes, not just the one you want to raise and pretend the others are zero—will that not simply, dramatically, *increase* the demand for tax lawyers, lobbyists, and loopholes?

If you believe cronyism is the problem, why is the first item on your agenda not to repeal the Dodd-Frank act and Obamacare, surely two of the biggest invitations to cronyism of our lifetimes? And move on to the rotten energy section of the corporate tax code.

They don't, and here I think lies the important and resolvable difference. Stiglitz wrote that "wealth is a main determinant of power." Stigler might answer, no, power is a main determinant of wealth. To Stiglitz, if the state grabs all the wealth, even if that wealth is fairly won, then the state can ignore rent-seeking and benevolently exercise its power on behalf of the common man. Stigler would say that government power inevitably invites rent-seeking. His solution to cronyism is to limit the government's ability to hand out goodies in the first place. We want a simple, transparent, fair, flat, and low tax system.

Here is where I think Josh Rauh's masterful collection of data—that the upper 1 percent in the US are making their money fairly—falls flat to Left ears. They think even *fairly* gotten money will pervert politics.

Now we have boiled the argument down to a simple question of cause and effect. They believe that raising tax rates and a large increase in state direction of economic activity will *reduce* rent-seeking and cronyism. I assert the opposite, which is the rather traditional conclusion of the vast literature on public choice as well as obvious experience. If I were trying to be polite, I might say it's an interesting new theory to be debated and investigated. But I'm not, and it isn't. It is the cream on the crop of amateur ad-hoc assertions of cause-and-effect relationships in human affairs, changing the *sign* of everything we know.

As we look around the world, cronyism, rent-seeking—using the power of the state to deliver riches to yourself and privilege to your family—is a huge problem, not just driving inequality, but driving most of poverty, lack of growth, and human misery throughout the world. But Egypt, say, does not suffer because it is *not good enough* at grabbing wealth, stifling markets, and blocking the rise of entrepreneurs. Quite the opposite.

China and India did not start growing by confiscatory taxation of income and wealth and increasing state intervention in markets. Exactly the opposite. And the parts of the world left or falling behind—parts of the Middle East, Latin America (think Venezuela), parts of Africa—have just nothing to do with the private-jet purchases of US hedge-fund billionaires.

Politics and the agenda

But let's go with their argument. At least now the argument makes sense, in a way that limiting envy-induced spend-thriftery does not. But looked at in the light of day, the argument is truly scary. They are saying that the government must confiscate individual wealth so that individual wealth cannot influence politics in directions they don't like. Koch brothers, no. Public employee unions, yes.

We finally agree on a cause-and-effect proposition. Yes, expanding the power of the state to direct economic activity and strip people of wealth is a well-proven way to cement the power of the state and quash dissent.

So now you see why I rebel at the presumption that "inequality" is a problem, and why I rebel at the task of articulating an alternative "solution." "Inequality" has become a meaningless buzzword, or code word for "on our team," like "sustainability," or "social justice." Should we discuss "free-market solutions" to address "social justice?"

"Inequality" has become a code word for endless, thoughtless, and counterproductive intrusions into economic activity. Minimum wages, stronger teachers' unions, even prison guard unions, are all advocated on the grounds of "providing middle-class jobs" to "reduce inequality," though they do the opposite. Mayor Bill de Blasio has already reduced it to farce. As reported in the *New York Times,* the latest energy efficiency standards for fancy New York high-rises are being put in place. Why? To cool the planet by a billionth of a degree? To stem the rise of the oceans by a nanometer? No, first on the list . . . to reduce inequality. Poor people pay more of their incomes in heating bills, you see.

Finally, why is "inequality" so strongly on the political agenda right now? Here I am not referring to academics. Kevin has been studying the skill premium for thirty years. Emmanuel likewise has devoted his career to important measurement questions, and will do so whether or not the *New York Times* editorial page cheers. All of economics has been studying various poverty traps for a generation, as represented well by the other authors at this conference. Why is there a big *political* debate just now? Why are the administration and its allies in the punditry, such as Paul Krugman and Joe Stiglitz, all atwitter about "inequality?" Why are otherwise generally sensible institutions like the IMF [International Monetary Fund], the S&P, and even the IPCC [Intergovernmental Panel on Climate Change] jumping on the "inequality" bandwagon?

That answer seems pretty clear. Because they don't want to talk about Obamacare, Dodd-Frank, bailouts, debt, the stimulus, the rotten cronyism of energy policy, denial of education to the poor and to minorities, the abject failure of their policies to help poor and middle-class people, and especially sclerotic growth. Restarting a centuries-old fight about "inequality" and "tax the rich," class envy resurrected from a Huey Long speech in the 1930s, is like throwing a puppy into a third grade math class that isn't going well. You know you will make it to the bell.

That observation, together with the obvious incoherence of ideas the political inequality writers bring us, leads me to a happy thought that this too will pass, and once a new set of talking points emerges we can go on to something else.

But if that is our circumstance, clearly we should not fall for the trap. Don't surrender the agenda. State our own agenda. We care about prosperity. We care about fixing the real, serious, economic problems our country faces and especially that people on the bottom of society face. Globally, we care about the billion on $2 a day that no amount of tax and transfer will help.

The "solutions," the secrets of prosperity, are simple and old-fashioned: property rights, rule of law, honest government, economic and political freedom. A decent government, yes, providing decent roads, schools, and laws necessary for the common good. Confiscatory taxation and extensive government direction of economic activity are simply not on the list.

Part 2: Lee E. Ohanian

My view is that inequality is not an issue that policy should address. Some have argued that policy should redistribute income away from the highest earners. This view is counterproductive, as it does not sufficiently recognize that our top earners create enormous surpluses for society. Bill Gates at Microsoft, Steve Jobs at Apple, Fred Smith at FedEx, Sam Walton of Wal-Mart, and many others who started new businesses have directly and indirectly created millions of new jobs, created new industries, and transformed our society. And these individuals have received only a tiny fraction of the economic value that they have created.

Society, however, should care about economic opportunities for the lowest earners. I therefore will focus my remarks on expanding opportunities and raising the productivity of these workers. I want to focus on the lowest earners for two reasons. One is because for the last thirty to forty years, workers with low levels of human capital have been swimming upstream against technology. My work with [Per] Krusell, [José-Víctor] Rios-Rull, and [Giovanni] Violante, and the work of Kevin Murphy and others, indicates that technological improvements over this period are complements to highly skilled workers, raising their marginal productivity, but are substitutes for low-skilled workers, reducing their marginal productivity. This means that increasingly sophisticated technologies that keep making capital goods better and cheaper will continue to place downward pressure on the wages and opportunities of the lowest earners.

The second reason I will focus on the lowest-income workers is that many of our policies toward lower earners are schizophrenic. On the one hand, we have policies now that provide much larger transfers to the lowest earners today than they did in the past. For example, a family of four at the poverty level has about $22,300 per year of pre-tax income. Consumption for that same family of four on average, however, is about $44,000 per year, which means that their consumption level is about twice as high as their income. But consider the relationship between consumption and income among poverty-level families prior to LBJ's Great Society initiatives in 1964. At this time, a family of four at the poverty level was consuming only about 10 percent in excess of their income. We're certainly providing many more resources to low-earning families today. But on the other hand, we have policies in place that either limit economic opportunities for low earners and/distort the incentives for those earners to achieve prosperity.

I'm going to focus on K-12 education and immigration policy as areas of reform that in my view would expand economic opportunities for low earners as well as increase their productivity and skills.

I will focus on introducing competition into K-12 education as an important reform for increasing student skills and performance. I will begin with some statistics on student math achievement, which have been produced by Eric Hanushek of the Hoover Institution. The statistics are grim and paint a dismal picture of how we are preparing many US students for careers, particularly those from low-income households. The Organization for Economic Cooperation and Development (OECD) administers the Program for International Student Assessment test (PISA). It's given to about half a million students between fifteen and sixteen years old, in forty-four countries. Thirty-four of those are OECD countries, which are the advanced, high-income countries, including Canada, and the countries of Western Europe.

The US does not perform well in this assessment. US fifteen- and sixteen-year-olds rank thirty-fourth out of all forty-four countries, and the US is twenty-seventh out of the thirty-four OECD countries. Our proficiency rate in math is only 32 percent. Only five states have a proficiency rate of 40 percent or higher: two large states, Massachusetts and New Jersey, and three small states, Kansas, North Dakota, and Vermont. Proficiency in California is just 24 percent, which is worse than Kazakhstan. New York's proficiency is at 30 percent. The US proficiency rate is particularly low for minorities. It is 11 percent for African Americans and it is 15 percent for Hispanics.

Low US performance is not simply due to the fact that our student population is more heterogeneous than some other countries. Comparing the top achiever in this international assessment, which is Shanghai, China, with our best state, which is Massachusetts, shows a difference in math achievement that is equivalent to two full years of education. American students on average clearly do not have sufficient math aptitude.

To learn more about this, I examined representative questions from the PISA test. There are six levels of questions. A representative level two question is recognizing that two-fourths and five-tenths are the same number within a one-sentence word problem. Twenty-five percent of US students are not proficient at level two math. PISA test developers define level two proficiency as being able to be self-sufficient in terms of being able to understand common transactions. Level three questions involve rank-ordering numbers with decimal points. Forty percent of US students are not proficient at level three. Just 2 percent of fifteen- and sixteen-year-old US students are proficient at level six. A representative level six question involves using the familiar distance/time/rate formula, within a sentence. For example, "Helen rode her bike five kilometers and it took her fifteen minutes. On the way home, she took a shortcut, which involved a four kilometer ride, and it took her thirteen minutes. Calculate the average speed on Helen's trip." Only 2 percent of our fifteen- to sixteen-year-olds can answer this question. This level of math proficiency is simply unacceptable, and current US performance statistics mean that many of our children will not be competitive for jobs involving quantitative and logical skills that extend beyond the most basic levels.

Low math performance by US students is not due to insufficient spending on K-12 education. In fact, we spend more per pupil than almost any country. Our spending per pupil is twice as much as the Slovak Republic, which outperforms us, as do Estonia, Vietnam, Slovenia, and the Czech Republic. These are all low-income non-OECD countries in the PISA assessment that do not spend nearly as much on K-12 education as the US.

Improving K-12 education requires introducing competition in this process, including teacher tenure reform, which will make it feasible to replace the worst-performing teachers. Nationwide, the dismissal rate for teachers is 0.1 percent. In California, the dismissal rate is even lower than that, with about two dismissals per year out of 275,000 K-12 teachers, which is about .0008 percent. To put this in perspective, dismissal rates across occupations range from about 3 percent to about 9 percent per year, depending upon age, education, and occupation.

Dismissal rates in K-12 are so low because the process can cost up to $250,000 per case due to costly litigation, and the dismissal process can take several years. Dismissal protection and seniority-based layoff procedures are endemic in teacher union contracts, and they substantially impact teaching quality by protecting the worst-performing teachers. A recent lawsuit filed by nine California schoolchildren, Vergara v. California, argued that many students are receiving deficient educations because of ineffective teachers. The court agreed, and found that seniority-based layoffs and teacher tenure were unconstitutional. The court noted that "the evidence on grossly ineffective teachers is compelling, and indeed shocking."

Ineffective teachers are an important reason why some students are not able to succeed. Eric Hanushek of the Hoover Institution finds that if the bottom 8 percent of teachers were replaced with the average of the truncated distribution, then math and science scores in the US would rise substantially. He estimates present discounted value of about $100 trillion in increased national income. Others, including Raj Chetty, now at Stanford, have estimated similar gains.

A teacher who is one standard deviation above the mean in terms of effectiveness generates marginal gains of about $400,000 in present value of student earnings. If kids are lucky enough to have a ninetieth percentile teacher, they can expect about a $900,000 PDV (present discounted value) gain in future incomes relative to having a median teacher. The value of a good teacher is enormous.

The second aspect of introducing competitive pressure in K-12 education is merit-based pay. Teacher salaries are typically set by rigid schedules that depend upon seniority and the number of degrees held by the teacher. Typically, there are no salary differences across teaching areas, and salary doesn't depend on effort or performance. This salary policy distorts incentives and guarantees shortages by teaching areas like math and science. The Los Angeles Unified School District is estimated to pay about $500 million per year in salary to teachers with additional degrees that have zero correlation with improved teaching performance.

Union compensation policies are also distorting the incentives to become teachers and are resulting in fewer highly capable individuals pursuing teaching as a career. Caroline Hoxby of Hoover and Andrew Lee find that there has been a significant decrease in the number of high-ability individuals who enter teaching, as a consequence of wage compression and the lack of merit-based pay. They find that those in the bottom 25 percent of the SAT distribution now make up about 40 percent of K-12 teachers. And they find that much of this change in composition is due to wage compression, reflecting these types of salary schedules.

The policy recommendation is straightforward. Introduce competition into K-12 education. Reform teacher tenure and adopt merit-based pay. Don't protect the poorest performing teachers. Pay the best teachers very well. Pay teaching specialists, such as math and science teachers, according to relative scarcity. To improve student achievement, we need to reward the best teachers and provide incentives for highly skilled and ambitious individuals to enter the teaching profession. I anticipate that these reforms will significantly contribute to enabling our children to become skilled in math and logical thinking, and to develop the necessary quantitative skills to be competitive in a labor market that is changing almost continuously in response to advances in technology.

The second policy reform I will discuss is immigration reform. Reforming immigration for high-skilled workers and entrepreneurs is necessary to increase new business formation. As we all know, macroeconomic performance continues to be weak. The employment-to-population ratio is down by about 7 percent relative to its 2007 level, and business sector labor productivity growth, which has averaged 2.5 percent per year from the late 1940s until recently, is now growing at 0.9 percent per year since mid-2009.

I cannot overstate the importance and severity of this productivity growth shortfall. Historically, the US doubled labor productivity in the business sector every twenty-eight years. At its current growth rate of 0.9 percent per year, however, it will take roughly seventy-two years to double. We need to increase business start-ups and entrepreneurship because new business creation is fundamental for job creation and for increasing productivity. The new business creation rate is down 35 percent from the 1980s, with much of this decline coming in the last ten years. The start-up rate in every state, even North Dakota, which is experiencing a boom in energy production, has declined substantially.

New businesses are a key factor in the process of economic growth because thirty years from now, the biggest employers will likely be the start-ups from today or from the recent past. Half of the Fortune 500 list of the biggest companies turns over roughly every ten years. This is a symptom of the fact that all businesses have a life cycle, in which even the most successful ultimately stop growing. This means that creating a persistently growing economy requires a persistent flow of successful new businesses. To get a sense of just how important start-ups are, note that in most years the economy actually loses jobs on net if you take out job creation by start-ups. In terms of gross job creation, start-ups and young, high-growth firms account for nearly two-thirds of job creation. And in terms of productivity growth, start-ups are responsible for many of our most important innovations, including the airplane, automobiles, air conditioning, the computer, electrification, railroads, refrigeration, the telephone, and many Internet applications.

The question is: who's going to be the next Intel, the next Microsoft, the next Amgen, the next Oracle, or the next Apple? There is no reason to think that our economy will improve significantly, or that opportunities for low earners will improve significantly, unless we increase the number of start-ups.

Immigration reform is important for developing more new businesses. US immigration restrictions make it difficult for skilled foreign nationals to stay here. We have many foreign nationals who are ambitious, skilled, talented people, and who would like to stay in the United States. But we make it difficult for them to remain. Half of all successful high-technology start-ups are founded or co-founded by an immigrant. Forty percent of the Fortune 500 were founded by an immigrant or by the child of an immigrant. Intel, Google, and Yahoo are recent examples.

In the high technology area, most immigrant start-ups are from China or India. And yet we have country-specific quotas on immigrants, some of which date back to the 1980s. The problem is so severe that there is a start-up incubator called Blueseed which was planning to purchase an ocean liner, have it docked twelve miles off of San Francisco port in international waters, and have it house about 1,500 entrepreneurs who would get in skiffs and come to Silicon Valley and stay as long as they can in accordance with immigration rules. Then they will go back to the Blueseed boat. This highlights the importance of restricting high-skilled immigration. By expanding high-skilled immigration, we will increase start-ups, which in turn will increase job creation and productivity growth, and expand opportunities for low earners.

The lowest earners need more human capital to increase their skills and productivity, and a healthier economy with more job creation. Reforming K-12 education policies through competition, and expanding new business creation by allowing immigrant entrepreneurs to remain in the US, will help our lowest earners succeed.

Part 3: George P. Shultz

I am also going to focus on the low end of the distribution and talk particularly about people who are trying to do something about getting people out of poverty. But let me make a couple of remarks first.

There has been reference a couple of times to the fact that the huge increase in prosperity in China has lifted lots of people out of poverty, and that's attributed to Chinese policy. Let me recall a remark made to me by Deng Xiaoping in the early 1980s. We were meeting and talking about this and he said, "Well, China's ready for the two openings." I said, "What are they?" He said, "Well, the first opening is inside China, and we're going to make it possible for people to move around more and seek good opportunities." I said, "What's the second opening?" And he said, "The second opening is to the outside world, and I'm glad there's a reasonably coherent world to open up to."

In other words, he realized that with a tremendous amount of leadership from the United States, there had been created in the world an economic and security commons that everybody benefited from. I might note that nowadays that commons is coming apart at the seams. And it's one of the factors that's going to make it hard for what happened in China to be duplicated.

The other question I have is on the top end, and I ask the John Taylors and John Cochranes of this world, who know all about the Fed, what it does and why. Why are they working so hard to increase inequality by jacking up the income of the wealthy? After all, with this gusher of liquidity they've produced, as far as I can see, they're pushing on a string as far as the real economy is concerned and they're pumping up asset prices like mad. So they seem to have a determined policy of increasing inequality. What's going on here, anyway? Is this a government program of some sort? [Laughter]

You're laughing. I'm crying. [Laughter]

Well, my first example of a person who's really trying to work at the problems of the poor is Muhammad Yunus, and you probably all know him. He's a Bangladeshi who got some economic education at Vanderbilt, went back to Bangladesh, and noticed that poor people who were trying to get something going paid huge interest rates. So he started micro-lending mostly to women who could buy sewing machines or other things and start little businesses. In a sense, they would use entrepreneurship to get themselves out of poverty with these small loans.

This has spread around now. It's the kind of thing that is scalable. There are quite a few Grameen Banks in the United States and they're in various other countries. It's a way of helping people get out of poverty by exercising their own efforts and ingenuity. It seems to me this is a really good development. And I'm interested in the fact that Muhammad has now decided, having been banker for the poor, to be the health care provider for the poor.

So what is he doing? Apparently there are several of these clinics in Bangladesh now, but I know of at least one starting in the United States as an experiment. Yunus is creating clinics located in poor areas, and he's realizing that one of the reasons people stay poor is that they have bad health. If they were healthier, they would have a better chance of getting along. So he puts the clinic in a poor area and people can become members of the clinic. He says, "You cannot give them membership; they must pay something, even if it's an IOU, because if you give it to them, they won't put any value on it. But if they put even an IOU in, at least they're acknowledging psychologically that this is a thing of value."

What are these clinics? Well, there are doctors and nurses, but most of the people in them are called coaches who coach their clients to move toward a lifestyle that the doctors and the nurses think they should have—things like stopping smoking and walking around the block once in a while. At least in the early returns from Bangladesh, people are getting healthier. We'll see what happens in this country. I think it's a very interesting insight. Part of the problems the poor have stem from their health, and this is a way of getting at it. It's a matter of lifestyle, and improved lifestyle will improve health.

So that's one example of somebody working at this problem. I don't know to what extent it's been studied, but I think it's worth looking at because, anecdotally, it's done a lot of good and has some real prospects.

The other person is completely different, and the scalability is harder, maybe impossible, although something is beginning to happen. This is something in San Francisco called Delancey Street.

Many of you may be familiar with it. It is run by a woman named Mimi Silbert—a tiny, dynamic woman. She says, "You people at Stanford try to pick the best people to come to Stanford. I pick the worst people to come to Delancey Street: criminals, murderers, the worst." She interviews every person. They have to want to come to Delancey Street. That's the only requirement.

At Delancey Street, the doors are not locked from the inside. If you want to go out, you can go out, but the doors lock once you have left. You can't get back in again. The residents, as she calls them (not inmates), do everything to make Delancey Street work. If you try to give Mimi money as a philanthropist, she won't take it because, she says, "Our object at Delancey Street is to make sure our residents, no matter how they come in, leave with the equivalent of a high school degree, a marketable skill, and an attitude that, 'I can make it legitimately in the real world if I get a crack at it.' That's the object."

So she says, "I have to run an organization the same way. Delancey Street has to be self-supporting." They run a moving service, they run a good restaurant, and they make enough money to support themselves. You go into Delancey Street and the place is absolutely spotless. She makes sure the residents keep it clean. And it is a success because they graduate residents who make it in the real world. They start with the bottom of the pile, not the top of the pile.

It's hard to replicate because there's only one Mimi Silbert, but there are now five or six semi-replications. She's not satisfied with them. She was telling me the other day, "Some of the people running them insist on getting paid. You can't have that. You've got to live like everybody else." She lives in Delancey Street and she eats the same food the residents do and she's there all the time, so she's part of it. And it is interesting to see how this tiny little woman (I don't know if she's even five feet tall) has hulking big murderers shaking in front of her and doing what she wants. This is heroic, and I should think some of her ideas ought to get into our prisons so that when people come out, maybe they're a little better.

Right now, when some young kid is caught with minor possession of some drug, he gets thrown in jail, and that's where he learns to be a real criminal. By the time he comes out, you have a problem on your hands. It doesn't make sense. A lot of these drug-related convicts shouldn't be there in the first place, in my opinion. But at any rate, I should think we could do a better job in our jails of working with people and turning people like Mimi loose on the jails.

In a sense, these examples are not about economics. You're not playing with supply and demand. You're saying, "Here is a person who sees a problem and takes it on." And the message I get is that you can do something about these problems if you're willing to work at them and have people who are motivated enough to give it a good try.

I go along completely with Eric Hanushek's notion that you have to introduce more choice into education. Certainly K-12 education is a huge problem, as you brought out. The statistics are appalling in this country. And I think it's the case that the Alliance for School Choice is beginning to make some headway. Milton's foundation (Friedman Foundation for Educational Choice) has been working at this, of course, and has long advocated vouchers. Vouchers have become a bad word. The current administration has sued Louisiana for using vouchers to move some kids into a better school. I don't know what in the world explains that lawsuit, but vouchers are a way to improve education. Giving tax advantages for paying tuition is one way, and there are lots of other ways in which school choice is being expanded.

I have some fun with Governor Brown about once a year. When he was mayor of Oakland, he started something called the Oakland Military Institute. I helped him along the way, and it was clear that he had a terrible time getting it established. The education bureaucracy tried to block it. It was only because he was a former governor that finally he was able to get it into being. He has a luncheon every year and usually I'm one of the speakers. I say to him, "Jerry, you have seen how hard it is to get choice through the bureaucracy. I want to congratulate you on beating the bureaucracy and getting this thing into effect. And you also know that every student in this school comes here as a matter of choice. Nobody has to come here. And the school knows that unless it is attractive to students, nobody will come." And so they graduate practically everybody. They go on to college. It's a great thing.

So I say, "Governor, why can't you spread this around a little bit in California?" It's hard. Do you know why it's hard? The teachers' union has elected everybody and so those elected have a hard time bucking them. So I think the root of our problem is political.

We had an initiative on the ballot put there by Arnold Schwarzenegger. You get tenure in a California school after you're there for two years—just two years. We had an initiative on the ballot to change it to four years. That's still ridiculous. The teachers' union beat it, hands down. There's a lot of power there. So somehow we've got to face up to this.

I have one final piece of experience that is my way of saying programmatically that you can do things. Way back in my career I used to be a labor economist. And when I was at the University of Chicago, the late Al Rees and I worried about unemployment in the ghetto and what could be done about it. For some reason, that became known in Washington and I found myself invited to the White House. Lyndon Johnson was also worried about this problem and he had White House task forces to work on subjects that were not secret, but they were quiet and private—small things.

So he asked me to chair a task force on this problem and I agreed to do it. Then he says to me, "George, if you come up with a good idea and it turns out to be your idea, it's probably not going to go very far. But if that idea turns out to be *my* idea, it just might go somewhere. Am I making myself clear?" [Laughter]

So we had a good task force with some good staff from the Labor Department, and we did a lot of work. We came up with a good idea and President Johnson took it and ran with it very effectively. The essence of the idea was that you're never going to get anywhere trying to use training programs for these people. Many of them don't even know how to be in the labor force. So you have to create a situation where they go to a place of employment and get trained and oriented to a specific job. So we got Henry Ford to chair a big employer group, and somebody said to him, "How are you going to get companies to cooperate?" He said, "All our suppliers will cooperate."

Anyway, it spread all over the country and it did a lot of good work for quite a long while. These things have a tendency to peter out after a while, but nevertheless, they show you that things can be done. And in terms of training programs, one of the things that was clear from this is that if you link a training program to a specific job setting, you're much better off. You're going to get somewhere and maybe have a chance that it will work.

JOHN TAYLOR: We've had a lot of suggestions, a lot of solutions, some more difficult than others. These extraordinary inspiring examples—you referred to Muhammad Yunus and San Francisco—are intriguing.

I worked for President George W. Bush, and also [George] H. W. Bush. And there was this idea of a thousand points of light. And the idea was that somehow you could get more people interested in the kinds of things you're talking about. But it doesn't really happen that much. So I keep thinking, what would you do to generate more of that? It may be that some of our programs crowd that activity out, but I'm sure if you asked these people, they would say, "No, we want more of those programs." So the question is, what do you do, George, to get more of what you're talking about?

GEORGE SHULTZ: Well, I think the Muhammad Yunus model, that's scalable. You can have micro-lending and it is spreading. And if this health care notion works, it makes common sense. That's scalable, too. In fact, I think you might even try to apply it to education, and getting people in school and keeping them in school and so on, this notion of coaches. Because often the basic problem is the home. And if you can somehow provide coaches in that model, perhaps you can get somewhere. So I think that's scalable.

The Mimi Silbert side is harder because she's such a driver on the one hand, but nevertheless, the ideas are there: that it's possible to take these people who have terrible records and turn them around and get them to at least a high school level and get them with a skill of some kind so they can sell it when they get out in the world. Otherwise, when you get out of jail, what happens? They give you $200 and send you off with no skills and you have no chance of getting a job. So what happens? Criminality happens. So there's an idea here that if we work at it hard enough, perhaps we can move.

QUESTION: Thanks. Great session. I really appreciated all the presentations. We heard a lot about the need for public school reform. That part of our human capital development process is broken and we need to fix it. I'm thoroughly on board with that and I like the ideas I heard, about increasing choice and competitive pressure. But there is another part of our human capital development process in the United States that has become increasingly broken, and that is the opportunities for less-educated, less-credentialed people to develop their human capital once they're in the labor market.

So in a number of respects, the labor market has become a less hospitable place in the United States over time for people who enter with less education. Kevin Murphy made the point that the kinds of jobs that those people traditionally held have diminished, *but I think there's something else that has happened as well. We talked about the expanse of occupational licensing. That's hugely expanded in the United States, which makes it more difficult for less educated people to enter certain jobs that they might find attractive.*

But there are many other things that have happened as well. There's been an erosion of the employment-at-will doctrine over time in the United States. There's been an expansion in the protected classes of workers based on age, race, gender, and so on. These things make employers more cautious in their hiring decisions, more reluctant to take chances on people who have a spotty record, limited educational background. There's been an enormous expansion of imprisonment rates in certain demographic groups, less-educated black men. It's quite extraordinary.

You put all that together with the fact that it has become easier technologically for employers over time to screen people out because of the information revolution, the expansion of data, on everything from contact with the criminal justice system, spotty credit records, and so on. And it has become much harder for people who either were not suited for learning through education in the first place, or had the misfortune to be stuck in one of these lousy public school education systems, to acquire human capital, and by learning by doing on the job, that kind of thing. This is related to declining fluidity and entrepreneurship in the labor market.

If you look across states over time, you see the states in which measures of entrepreneurship and fluidity in the labor market have declined the most. Those are the same states where you see the biggest declines in employment rates among less-educated workers and younger workers. So I think that part of our human capital development process is also in serious need of repair.

SHULTZ: Well, I agree with your point. So there are a lot of different kinds of things that can be done. I don't want to get into the whole drug issue, but we could change our policy toward drugs, to great advantage I believe, and start focusing more on how to persuade people not to take them and so on. Focus on that, rather than the war on drugs and throwing them in jail. So that's a whole big other issue.

Personally, I think the community college system is a really important system. It's not been getting the kind of funding it deserves lately, and community colleges that work closely with the employer base, as I think most of them do, can do a great deal in this area.

OHANIAN: It seems that the California Correctional Peace Officers Association, which is the union that represents prison guards, is a huge impediment to reforming inmates. California used to be among the top three in the United States in terms of recidivism. Today we're dead last, or close to it, and when you look at the political positions taken by the California prison guards association, as George noted, we have a three-strikes law, which places many nonviolent offenders in prison for close to life sentences.

I have a personal experience with this. My gardener in LA, whom I've had for fifteen years, is a Mexican immigrant. He's close to seventy, and is a self-made guy. He owns two six-unit apartment buildings in Santa Monica, which makes him wealthier than many of us in this room. He still gardens. His oldest son is in prison. He was caught three times for selling marijuana. My gardener spent $150,000 in legal fees to defend him. He gets out in eighteen years. Every time a potential revision to the three-strikes law comes up, it's fought tooth and nail by the California prison guards association, because it means fewer jobs for California prison guards. But locking up nonviolent marijuana dealers in prison for two decades doesn't seem to make much sense.

It's their market, and many of these prison guards are paid six-figure salaries. When you look at prison guard salaries, California stands way out, at about $90,000 per year. New Jersey is around $70,000 and then the other salaries for prison guards are more in line with other police officer salaries. And Arnold Schwarzenegger, when he was governor, was so upset about this that he was not able to agree on a new contract with the prison guards' union. And if a new contract can't be formulated, then the existing contract simply rolls over.

And then quickly after earning office, maybe George can comment on this, Governor Brown quickly agreed to a new contract with the California prison guards association. And virtually every newspaper in the state took issue with Brown's capitulation despite the fact that most major newspapers in this state tend to be politically liberal newspapers. In some sense there's a direct fix here that would help us substantially, in terms of incarceration.

SHULTZ: The phenomenon of automatic deduction of union dues and having to be a member of the union means the flow to the unions is just gigantic. I remember in the old days when I used to work in the labor relations field. There was a wonderful guy that everybody looked to, a leader who really knew what was on the rank and file. They wanted to have the check-off and he opposed it. He said, "No, I don't want to check off. I want to go around and collect dues from my members, one by one. Because there's no time like when a guy's giving you some money that he's willing to tell you what's on his mind." And that was why he was so much better informed than everybody else. But now they all want the check-off. And they have it.

QUESTION: Do I recall correctly that there is a sort of sad epilogue to the Grameen Bank story, that the Bangladesh government charged Yunus and forced him out of the bank that he had created? And what was the political dynamic that brought about that kind of outcome, if you know?

SHULTZ: From what I understand, they're so jealous of Muhammad and his popularity and his Nobel Prize and so on, they're doing everything they can to knock him down. And so they've said, "You're too old to be in your bank," and so he can't be chairman of his bank anymore. Nevertheless, the idea continues to spread.

QUESTION: *I've been reading a little bit about the launch of the war on poverty fifty years ago, when President Lyndon Johnson invoked Abraham Lincoln as inspiring him. So John, I want to ask you this question. He said the marker that they would use to measure success in the war on poverty was the unemployment rate for teenagers who were African American males. And he said, "Look how much higher this unemployment rate was." And I think it was maybe—I don't want to get the number wrong—let's say it was 24 percent, which was 10 percent higher than it was for other American teenage males.*

And you know that rate now is quite high. So why is the minimum wage still considered a good idea, when the people who lose jobs because of the minimum wage, it seems to me, are these high school kids, who maybe don't have a lot of skills, who've got a functional illiteracy rate of 20 percent, and they can't get a basic job because they're blocked? Is that something you see as fixable, and am I alone in thinking that's a problem?

COCHRANE: Not just the unemployment rate, but the employment-to-population ratio, the labor force participation rate is truly tragic. It went exactly the wrong way. And I think that's the problem of not defining what we're talking about in inequality. You end up saying silly things. You end up with, "We need to raise minimum wages to help poor people." But it doesn't help people who don't have jobs, and so it is unlikely to flatten inequality. That's why I objected so much to just using the term without defining it. It gets used as this vague buzzword for whatever's on your mind today.

OHANIAN: Even if you look at the employment rate of sixteen- to nineteen-year-olds, it's crashed since the economy went south in 2008. In 2000, the employment rate of sixteen- to nineteen-year-olds was 44 percent. Today it's 21 percent. The young people are the ones who've really been impacted by a weak economy.

QUESTION: *I know nothing about labor economics, but I've looked at some numbers and I've never gotten anyone to give me a straight answer to the numbers. And I'm not good at remembering numbers, but it's something like 10 million undocumented workers and 10 million high school dropouts in the labor force. And I ask, does this have an effect on the earnings of high school dropouts? And the answer I usually get is, "I don't know," or, "Yes, people have studied that, but the effect is very small." So I'll ask it to this august group.*

SHULTZ: Well, if you are trying to run a farm, you have a hell of a time hiring anybody but an immigrant. I think something like 80 percent of the people working on US farms are immigrants because they're the only ones who will take those jobs. Ask a caterer in San Francisco. A lot of big events go on in San Francisco, where lots of people come and caterers put on the meals. And they'll tell you that you can't hire anybody in San Francisco because they're all on unemployment compensation. They'd rather be on unemployment compensation than take a job with a caterer. If you take a job with a caterer, you're going to work. It's much better to be on unemployment compensation. So I think there are some real problems. And immigration is not one of them.

OHANIAN: If you go back to those proficiency statistics, 25 percent of fifteen- to sixteen-year-olds don't recognize two-fourths and five-tenths are the same number. That's probably going to be disproportionately the group that are high school dropouts. So these are people who have very few marketable skills. So

I suspect, whether there are a lot of low-skilled immigrants or not, these are people that are going to be struggling.

COCHRANE: My impression of the numbers is that there is an effect. But it's small because, as George mentioned colorfully, there's not that much substitution between domestic and immigrant low-skilled labor. High-skilled immigrants are very good for low-skilled Americans because they're complements, not substitutes.

And a point Kevin made which I thought was very good—supply and demand. If you can help some low-skilled Americans escape into high skill, that lowers the numbers of low-skilled Americans left and therefore will raise the wages to those who are left. I think the bottom line in empirical literature is that low-skilled immigration isn't that much of a substitute, and high-skilled immigration would help them a lot.

QUESTION: A couple of quick points. Number one, surely we have too many people in prison for the three-strikes stuff and minor drug offenses and so on. But California spends more per incarcerated inmate than the after-tax take-home pay of a median American family. So the spending isn't primarily on the prison guards. That's a part of it, but the whole prison-industrial complex is a sinkhole and disaster. We need to incarcerate some people but, you know, the recidivism's high.

The second point I was going to say is that there's been a lot of focus, refocus, on early childhood interventions, before school. We've had fits and starts with Head Start, not to try to create a pun or anything. And the evaluation of it has come and gone. For a while it looked like it might have worked, then it didn't really. And people are arguing about that now. Jim Heckman has this place in the Midwest with a specific intervention that he thinks is the silver bullet. So I'm just wondering if any of you guys have thought about any of those things and if you have *anything to add to my kind of very simplistic summary of the literature.*

SHULTZ: I'd just put Mimi in charge of the prison system.

OHANIAN: I would add something on early childhood intervention. Look at Fishtown, as described by Charles Murray's book *Coming Apart.* You're looking at 70 percent, 80 percent, 90 percent single mothers. So if you have a poor, uneducated, single mother, you're just at a horrible cognitive disadvantage and essentially having the federal government trying to bring up small children instead of a married couple. I'd rather think about where that problem came from. It didn't used to be that way.

QUESTION: This may be partly a plea, but I'm struck because the title of the conference is inequality, and what you've been talking about correctly is poverty. And it seems to be that one way that might start making the conversation a little better is to be very clear that what we're concerned about is the low-income folks and giving them better opportunities, and improving education to help this stuff, and we're much less concerned about whether that low-income bracket gets X percent or X+1, or whether the top little bit has gone up. I mean, it seems to me these are two different conversations, and the one we're having now is perfectly healthy, whereas the one on the top has something to it, and we want to look at that too, but it's not the same thing.

A statistic I love, which came from Bob Fogel about 2004 or 2005, is that if you took the then poverty standard, which I don't remember what it was, and you looked at the population in the United States in the year 1900, 5 percent to 6 percent of Americans lived above the then poverty line. It's a great statistic, because the whole point is that what we've done very well is raise many incomes. We still have groups that aren't above the line. We still need growth and all the rest of it. But, please, let's distinguish between the two.

COCHRANE: That's what my point was. And I don't care how hedge-fund managers travel or how much money they have. Even if we make them all fly commercial and take all their money, we've got to fix this problem at the lower end. And to frame it as a solution to inequality, I think, is just a mistake.

OHANIAN: And I think that your point really highlights that economic growth's a wonderful thing, and so much of it comes from total factor productivity. Again, one thing that really disturbs me is the fact that business sector productivity, now for five years, has slowed from 2.5 percent to 0.9 percent. When you look at Europe, if you construct total factor productivity (TFP) using Penn World Tables data and using traditional one-third/two-thirds income shares, France, Italy, and Germany TFPs are either flat or lower today than they were in the late 1970s, which is shocking. Spanish TFP is down about 15 percent since the 1990s. Spanish TFP grew substantially from the 1970s up to about the early 1990s.

So I think that's a great question, because it brings back the idea of, "Economic growth can raise all boats." In some countries, you're not doing that. And productivity is the key. Some advanced countries are having a hard time and it looks like we might be entering that phase, based on the statistics that Steve and John have done. Maybe that's another topic for another conference.