Institute for
New Economic Thinking

Working Papers
ineteconomics.org/workingpapers

The American Dual Economy: Race, Globalization, and the Politics of Exclusion

Peter Temin[1*]

Working Paper No. 26

November 2015

Abstract

I describe the American economy in the twenty-first century as a *dual economy* in the spirit of W. Arthur Lewis. Similar to the subsistence and capitalist economies characterized by Lewis, I distinguish a low-wage sector and a FTE (Finance, Technology, and Electronics) sector. The transition from the low-wage to the FTE sector is through education, which is becoming increasingly difficult for members of the low-wage sector because the FTE sector has largely abandoned the American tradition of quality public schools and universities. Policy debates about public education and other policies that serve the low-wage sector often characterize members of the low-wage sector as black even though the low-wage sector is largely white. This model of a modern dual economy explains difficulties in many current policy debates, including education, healthcare, criminal justice, infrastructure and household debts.

[1] Elisha Gray II Professor Emeritus of Economics, MIT
ptemin@mit.edu

[*] Thanks to Thomas Ferguson, Robert Johnson, Frank Levy and Robert M. Solow for useful comments and the Institute for New Economic Thinking for financial support.

JEL Codes: H53, J68, N32

Key words: inequality, dual economy, race, education, criminal justice, Nixon, Reagan, political economy

Introduction

The United States economy has come apart, with the rich getting richer and workers not advancing at all. As a politician said a decade ago, "We shouldn't have two different economies in America: one for people who are set for life, they know their kids and their grand-kids are going to be just fine; and then one for most Americans, people who live paycheck to paycheck (Edwards, 2004)."

This paper uses a simple but powerful economic model to articulate and explain this phenomenon. The model was created half a century ago to describe the path of developing economies as industrial employment grew. It turns out also to describe what can happen in mature economies when industrial employment declines. We have become a *dual economy*.

I use this model to argue that that the United States has retreated from its sense of economic unity in the postwar generation. This paper is a summary of common observations that indicate that conditions we were taught to regard as typical of developing nations are appearing in the world's most advanced nation.

Figures 1 and 2 illustrate the problem of increasing inequality in America. The first picture shows that the income share of the top one percent of the population has been rising rapidly since the mid-1980s. This is a familiar graph, and it reveals a pattern that extends further down the income stream. A graph of the next nineteen percent looks like Figure 1, albeit not as steep. And a graph of college graduates—representing something close to the top thirty percent of the population—shows that the educational premium has risen as well. The higher one goes in the income distribution, the more rapid the growth of incomes in recent decades, but the pattern of differential growth extends to the upper thirty percent of the income distribution (Reeves, 2015; Reeves and Joo, 2015; Goldin and Katz, 2008, 300).

The second picture shows that average real earnings stopped growing at the same time or even earlier. The compensation of full-time workers began to lag behind productivity growth in the 1970s stagflation, a trend that accelerated after 1980. This declining compensation of the average full-time worker is a useful way to describe how significant productivity growth since 1980 has translated into weak growth in earnings and compensation. Beginning in 1986, very high incomes began to increase rapidly and outstripped productivity growth through the present. The richest 1 percent of tax filers claimed 80 percent of all income gains reported in federal tax returns between 1980 and 2005.[1]

Graphs like Figures 1 and 2 have become common since the global financial crisis of 2008, although the two curves often are discussed separately. The decline in the growth of workers' compensation has been cited as a cause of the 2008 crisis as workers borrowed on the security of their houses to sustain their rising consumption which had been supported before 1980 by rising incomes. And the growth of high incomes has been the stuff of recent political discussions as fund-raising looms ever more important in American politics.

I argue here that the disparity between the two lines of Figures 1 and 2 has increased to the point where we should think of a dual economy in the United States. The upper sector represented in Figure 1 contains thirty percent of the population. The low-wage sector contains the remaining seventy percent whose income is not growing as shown in Figure 2. I analyze this disparity using a simple theory that helps us think about the effects of the disparity on the nature of American society, and I examine the important role that race plays in political choices that affect public policies in this dual economy.

While there are many causes of current economic conditions, I argue that policy initiatives in the Nixon Administration, many of them in 1971, are key to understanding subsequent developments in the American economy. I argue also that interactions between race and income reveals that these policies are rooted in American history. Even though African Americans are a small part of the total population, they play a large role in political discussions and decisions.

I describe the basic model and the background of race and gender in the next two sections. I then describe the three parts of the dual-economy model in the next sections: the FTE sector, the low-wage sector and the transition. The model then is used to understand current policies that affect individuals and the aggregate economy in turn. I close with some remarks on international inequality and conclusions.

The Basic Model

W. Arthur Lewis, then a Professor at the University of Manchester in England, proposed a theory of economic development in a paper published in 1954. He assumed that developing countries often have what has come to be called a dual economy. He termed the two sectors, "capitalist" and "subsidence" sectors. The capitalist sector was the home of modern production using both capital and labor as inputs. Its development was limited by the amount of capital in the economy. The subsistence sector was composed of poor farmers where the population was so large relative to the amount of capital or natural resources that the productivity of the last worker—called the marginal product by economists—was close to zero.

Lewis argued that wages in the capitalist sector were higher than in the subsistence sector, but they also were linked to the farmers' earnings. That is because capitalists needed to attract workers to their sector and had to offer a premium for the workers to leave their familiar homes and activities. He noted also that this linkage gave capitalists an incentive to keep down the wages of the subsistence workers.

The dynamics of this dual economy came from the expansion of the capitalist sector. Capital initially was scarce, giving rise to isolated locations of factory employment. Savings initially were low because subsistence workers consume all or close to all of their incomes. Savings increased as profits and rents grew in the capitalist sector, and the reinvestment of profits to purchase or construct more capital led to the expansion of the capitalist sector. Although the capitalist sector initially appeared as a series of islands, they can be seen as one sector due to the mobility of capital that equalized the earnings from capital. Not every island needed to have the same average productivity, but profits from the last bit of investment in each case—called the marginal profit by economists—would be the same (Lewis, 1954).

This model received a lot of attention when it was published, and Lewis received a Nobel Prize in Economics for it. His names for the sectors were transformed into urban and rural sectors in articles about the Lewis model and will be further transformed here. Lewis noted the link between wages in the two sectors without detailing the transition from one to the other. Some years later, other economists proposed that the transition be considered a rational choice by the worker. The farmer thinking of moving to the city was attracted by the wage available in the city, which was substantially higher than the wage he was earning in the countryside. He would leave if his *expected* wage in the city would be larger, where the expected wage is the product of the wage differential and the probability that the worker would find a well-paying job in the city. The farmer was assumed to anticipate both the higher wage and the difficulty of obtaining a job that paid this wage (Harris and Todaro, 1970).

I observe the division of the American economy into two separate groups in a different way than the typical division of urban and rural, but very much in the spirit of Lewis' model. I distinguish workers by the skills and occupations of the two sectors. The first and most familiar sector consists of skilled workers and managers who have college degrees and command good and even very high salaries in our technological economy. I call this the FTE sector to highlight the roles of Finance, Technology and Electronics in this part of the economy. The other group consists of low-skilled workers who are suffering the ills of globalization in its various aspects. I call this the low-wage sector to highlight the role of politics and technology in reducing the demand for semi-skilled workers.

The wages in the two sectors then can be seen in Figures 1 and 2. Figure 1 shows the wages of the top earners in the FTE sector. As noted already, the wages of others in this sector have risen in the last generation, although not at the same rate as the top one percent. Figure 2 shows the stagnation of average wages for the last generation. The workers with stagnant wages are the analogue of Lewis' subsistence sector, although these workers earn well above what we think of as biological subsistence. Lewis noted that wages typically were above that primitive threshold even in subsistence farming.

The division between the two sectors divides the economy unevenly. The FTE sector includes about thirty percent of the population, while the low-wage sector contains the other seventy percent. Thirty percent of Americans have graduated from college, and this may be used as a proxy for membership in the FTE sector. However, a college education does not by itself guarantee a high and rising income. The choice of major, the state of the business cycle, and other less intangible personal characteristics affect the relation between education-- called human capital by economists—and income.

Nevertheless, the link between these two parts of the dual economy is education, which provides a possible path that the children of low-wage workers can take to move into the FTE sector. This path however is difficult and strewn with obstacles that keep the numbers of children who make this transition small. Support for maintaining these obstacles often is presented in the context of keeping African Americans “in their place.” While blacks are a minority even in the low-wage sector, their prominence in public and political discussions helps to obscure the problems of low-wage whites.

The path to the FTE sector is difficult because education requires a change of attitude as well as an increase in knowledge. Education has a long payoff and requires attention over many years before its benefits are apparent. This difficulty may be seen within the FTE sector as similar to the issues in saving for retirement or persuading children to continue piano lessons. In addition, the gains from education are varied, and the educational system needs to be structured to help students learn many dimensions of knowledge. This is a result of politics and societal decisions in addition to the problems of individual students.

People in the low-wage sector can see the gains that accrue from moving into the FTE sector, but they know that any attempt has risks in it. Despite all the efforts they can muster for their children, there is only a small probability that their children will be able to stick out this long transition and make the desired transition. This probability is determined both by the attitudes of individual students and by the FTE sector’s choices about what kind of schools to maintain.

Lewis argued that the size of the FTE sector was limited by the amount of capital. I expand this argument by enlarging the kind of capital that is needed in the FTE sector. The FTE sector, in my version of a dual economy, is limited by the availability of three kinds of capital.

The first kind is physical capital, machines and buildings, which is used to produce products that people will buy. The second kind of capital is what economists call human capital, the gains one gets from education. The transition from the low-wage sector to the FTE sector was by education because education—that is, human capital—is needed for almost all jobs in the FTE sector. The third kind of capital is social capital, the widespread trust of others and networks that help people get jobs, find opportunities for advancement and provide feedback on innovative ideas.

The FTE sector functions in the long run as standard growth models predict. Capital, both physical and social, comes from savings and produces more output. It is important to include social capital on both the input and output sides. Trust and networks are important for productivity, and the capital of finance, for example, is not primarily physical capital. This is not the place to try and calculate the productivity of finance, but it clearly is a growing part of national income. The FTE sector retains much of the favored position of white males that characterized earlier growth. Women and blacks have made progress but there is still a way to go toward equality.

There is an important asymmetry between Figures 1 and 2. Far fewer people are described in Figure 1, but they exert far more political power. One purpose of this paper is to expose the framework within which many political decisions are made. Members of the FTE sector are largely unaware of the low-wage sector, and they often forget about the needs of the low-wage sector members. In addition, the top one percent shown in Figure 1 exert disproportionate power within the FTE sector, and their political decisions accentuate the differences between the two sectors because they would rather lower their taxes than deal with societal problems (Page, Bartels and Seawright, 2013). Their power has inhibited full recovery from the crisis of 2008 by refusing to approve fiscal policy expansion.

The members of the low-wage sector are diverse, but many who aspire to move into the FTE sector through education face growing difficulties. The first reason is the geography of residents. Poverty is concentrated in central cities, and schools in those areas are famously laggard in their ability to engage students in academic pursuits. Attempts to deal with school problems have led to universal testing which leads teachers and students to focus on elementary skills. The areas of education that are not tested increasingly are neglected. Gone is the excitement of exploring more advanced areas. Gone is attention to intangible aspects of education that promote social capital (Kozol, 2005).

The result is that education, which long ago was a force for homogenization of the labor force, has become a barrier reinforcing the dual economy. For most young people, education is appropriate for the economy they are growing in, and the contrast between suburban schools for the FTE sector and urban schools for the low-wage sector is growing. The decline of racially integrated schools is part of this process, as African Americans are concentrated in urban schools, and the politics of improving urban schools has become entangled with America's long history of racial politics. The problems of American education cannot be understood without understanding the racial and gender history of the United States. I survey them briefly in the next section to provide background for the following analysis.

Key political actions in 1971 changed the rules of the American economy and set off a chain of disruptive events that lasted for a decade. These actions crystalized resentments that had accumulated among those who had prospered in business during the postwar expansion and those who could not forget the structured society of the old South. The resentments were directed at labor that wanted a larger share of post-war prosperity and at African Americans who wanted to join the political and economic life of the United States. The first resentment was seen in the 1947 Taft Hartley Act, and the second rose to the boiling point with the 1965 Voting Rights Act.

The dual economies only became visible in the 1980s as economic conditions returned to a calmer pattern than in the turbulent 1970s, but they had their origins in decisions made a decade earlier by Richard Nixon and Lewis Powell. Nixon set the FTE sector in motion by switching the United States to a floating exchange rate, and he set the low-wage sector in motion by his Southern Strategy and War on Drugs. Powell set domestic policy on a new path and was appointed to the Supreme Court by Nixon to make important decisions advancing Nixon's agenda.

Race and Gender

W. Arthur Lewis was not only a Nobel Laureate, he was the first black Nobel Laureate in a field other than peace or literature. It is interesting that he was classified as black, that is, an African American, even though he was neither African nor American. He was born in the British Caribbean and became a British citizen. But according to the American "one drop rule" that says that a person with any ancestor of sub-Saharan-African ancestry is black, he was black. Lewis taught at Princeton University in later years, and he was resistant to being incorporated into the American racial system.

I discuss the history of race in America here because it plays an important part in discussions of policies related to inequality in the United States. The FTE sector includes the top thirty percent of earners, and the low-wage sector has the other seventy percent. Blacks make up less than fourteen percent of the American population. Even if they were all in the low-wage sector, they would still be less than one-fifth of the low-wage sector. It seems odd that much of the public discussion of public policies designed to help the poor is directed exclusively to blacks; but such is the power of the American racial system that it seems from the description that they are. Gender discrimination enters this story as well, providing a comparison with racism and revealing an important problem of American education.

Attitudes toward race in the United States have become divorced from scientific and historic evidence that races do not exist. Even though people from different areas may look different from one another and have other different characteristics, there is too much diversity within groups and too much similarity between groups to provide the basis for any biological definition of race. And, as the "one drop" rule implies, there are many mixed people who may or may not resemble others—all classified as black. In America, racism has become *racecraft*, analogous to witchcraft. We no longer believe that witches ride on brooms, but we continue to believe that races have powers that we should fear. "Racecraft is a ready-made propaganda weapon for use against the aspirations of the great majority of working Americans. Sooner or later, tacitly or openly, any move to tackle inequality brings racecraft into play (Fields and Fields, 2012, 283)."

A little historical background is needed to see how firmly racecraft has been imbedded into the American form of race relations. When Southern farmers first began to expand farming in the seventeenth century, they employed white and black workers equally, subject to many restrictions held over from medieval practices. Slavery was not one of them. The farmers' problem was not Africans; it was lack of labor to work their abundant land. They encouraged European immigration by reducing the restrictions on labor, but they did not apply this approach to African immigrants because they did not come to America voluntarily. As Handlin and Handlin (1950) stated in a classic article, “To raise the status of Europeans by shortening their terms would ultimately increase the available hands by inducing their compatriots to emigrate; to reduce the Negro’s term would produce an immediate loss and no ultimate gain.”

The expansion of the African slave trade at the end of the century produced a great influx of African workers, providing Southern planters with abundant labor in a framework that had developed to differentiate between whites and blacks. The difference that had opened up between European and African immigrants led to fears of “plots and conspiracies” among the black immigrants and restrictions on black workers. “At the opening of the eighteenth century, the Black was not only set off by economic and legal status; he was ‘abominable,’ another order of man.” The increasing need to get the consent of European workers during the eighteenth century contrasted sharply with decline in the independence of African workers—who went from villeins to chattels. “When, therefore, Southerners in the eighteenth century came to think of the nature of the rights of man they found it inconceivable that Negroes should participate in those rights. It was more in accord with the whole social setting to argue that the slaves could not share those rights because they were not fully men, or at least different kinds of men. In fact, to the extent that Southerners … thought of liberty as whole, natural, and inalienable, they were forced to conclude that the slave was wholly unfree, wholly lacking in personality, wholly a chattel.”[2]

The statement in the Declaration of Independence that “all men are created equal” meant that all *white* men were created equal. Black slaves were not included. And when slavery was abolished after the Civil War, the presumption that blacks were abominable and lacking in personality endured. As Reconstruction faltered and died after the assassination of President

Lincoln, Jim Crow laws and social control were created to produce something close to the ante-bellum relations between whites and blacks (Foner, 1988; Woodward, 1974).

The federal government did little to disturb Southern discrimination in the first half of the twentieth century since Southern Democrats had ample power to block any federal intervention. Southern Congressmen represented only white Southerners as few blacks were able to vote. In addition, representatives were selected by the local establishments since there was no opposition in the general election. And, once in Congress, they gained leadership positions and political power by the long tenure provided by this system.

They exercised this power by leaving African Americans out of federal programs indirectly. Instead of excluding them directly, they excluded occupations in which blacks were highly engaged, like farming and domestic service. They insisted that all federal social welfare programs be administered by state officials so that Southern officials were free to perpetuate Jim Crow standards. And they prevented Congress from including any anti-discrimination clauses into federal social welfare programs that distributed money to the South.

This system meant that Social Security did not extend to blacks for the first quarter-century of its existence. The GI Bill provided educational benefits for all veterans of the Second World War, but it did not guarantee admission to colleges. Few blacks were admitted to Northern colleges and universities due to bad Southern schooling. Blacks therefore applied to Southern black colleges—being excluded from Southern white colleges—which did not have capacity to take them. States refused to expand the facilities of black colleges, particularly dormitories, and much of the black demand for college education went nowhere. Black veterans also were not helped to get good jobs by the GI Bill. Local employment agencies funded by the bill directed them to traditional black jobs, ignoring learning that had occurred in the army and often refused loans to black veterans because they lacked capital or credit ratings and lived in unappetizing neighborhoods.

The results were that blacks lost ground relative to whites after the Second World War, as summarized by President Johnson in a speech celebrating the Voting Rights Act of 1965. The unemployment rate for blacks and whites was the same in 1930; the black rate was double that of whites in 1965. The unemployment rate for black teenage boys went from being slightly less than for whites in 1948 to being almost twice as high. And the median income of black men declined to 53 percent of the income of white men (Johnson, 1965; Katznelson, 2005).

Lower black incomes and employment reduced the accumulation of black wealth: "Entire legal structures were created to prevent African Americans from building economic security through home ownership. Legally-enforced segregation. Restrictive deeds. Redlining. Land contracts. Coming out of the Great Depression, America built a middle class, but systematic discrimination kept most African-American families from being part of it (Warren, 2015)."

The oppression of blacks, increasing rapidly after the war, began to meet opposition in the 1960s. The Civil Rights movement that Johnson supported and celebrated led to legislation that granted blacks legal rights to equal citizenship, but these laws were followed by the War on Drugs that generated a new system of mass incarceration that continued the Jim Crow tradition (Alexander, 2010).

The effect of race on redistributive politics has been described in many publications. A comparison of the United States with Europe concluded: "Racial discord plays a critical role in determining beliefs about the poor. … Opponents of redistribution in the United States have regularly used race-based rhetoric to resist left-wing politics (Alesina, Glaeser and Sacerdote, 2001)."

A recent econometric analysis of American counties is worth quoting in detail: "Whites who currently live in counties that had high concentrations of slaves in 1860 are on average more conservative and express colder feelings toward African-Americans that whites who live elsewhere in the South. That is, the larger the number of slaves per capita in his or her country of residence in 1860, the greater the probability that a white Southerner today will identify as a Republican, oppose affirmative action, and express positions that indicate some level of 'racial resentment' (Acharya, Blackwell and Sen, 2015)."

Racecraft can be illustrated by an example. Jews were discriminated against, restricted in where they could live, work and sometimes simply stay during the first half of the twentieth century—from the age of mass immigration from Eastern Europe to the end of the Second World War. There were a few rich Jews—the heirs of earlier court Jews—but they were the exception to the general rule. Most Jews were "others," lumped in with blacks even though not black. A hooked nose may have been used as identification, but no one thought of that as race. After the tragic effects of the Second World War and in postwar prosperity, Jews were accepted everywhere; they had become white folks. But while they had made the transition, their movement did not affect the structure of race relations in America. Being white in America meant being superior to blacks, and Jews adopted racecraft with their newly white status. They were happy to be in the dominant group and shared its conventions of exclusion (Brodkin, 1998).

Women were left out of the growing employment opportunities in the postwar years, although they shared prosperity with white males. Women of course were citizens in a way that African Americans were not until very recently, but women's relationship to the government was substantially different than that of men. The difference can be seen in struggles over women's suffrage at the start of the twentieth century and later over the Equal Rights Amendment and the interpretation of "equal rights" as stated in the Fourteenth Amendment.

The early United States adopted English family law without much thought or change. Married women owed their obligations to their husbands, not to the state, and husbands controlled much of what their wives could do. Not until the twentieth century were women's independent rights to property, suffrage and bodily integrity slowly established. And the right to bodily integrity is being threatened again in the early twenty-first century as politicians turn against organizations like Planned Parenthood. As this change progressed, "the complementary practices of substituting family duties for civic obligations slowly crumbled (Kerber, 1998, 305)."

The postwar sense of unity was restricted to white men moving to new suburbs, getting more education, and moving ahead in their careers. Women accompanied the men as wives rather than as workers. Blacks were excluded from the processes of suburbanization and education. Blacks found voices to protest their exclusion in the 1960s; women followed suit in the 1970s.

The FTE Sector

The United States was turbulent in the 1960s. The civil rights movement roiled the South and led President Johnson to propose and lobby Congress to pass the Voting Rights Act of 1965. At the same time, Johnson dramatically expanded American expenditures and manpower in Vietnam. Reluctant to raise taxes soon after the Kennedy tax cut of the previous year and lacking Congressional support to do so, he overheated the economy and put great pressure on the value of the dollar, fixed at that time by the Bretton Woods System. The post-war dollar shortage turned into a dollar glut (Triffin, 1961).

The FTE sector was born in the Nixon Shock of August 1971.[3] President Nixon abandoned the fixed exchange rate of the Bretton Woods System to deal with the strain on the dollar exerted by the expanding war in Vietnam. Switching to a floating exchange rate elevated monetary policy to the prime instrument of macroeconomic policy.[4] The Fed began a learning process about its new role, complicated greatly by the 1973 Oil Shock that sent many prices—including exchange rates—in motion.

It also raised the question of how the members of OPEC were going to hold their newly-acquired wealth. The highly regulated financial system of Bretton Woods could not easily absorb this large inflow of cash, and the cash found its temporary home in the lightly-regulated Eurodollar system of dollar deposits outside the United States. The combination of changing prices and large amounts of money seeking a safe home led to demands to deregulate the financial system that stimulated a general push for deregulation and affected policy decisions in the following decades.

The Fed did not seem to know how to contain the price shocks of the 1970s, and "stagflation" was the result. President Carter tried to end this monetary chaos by appointing Alfred Kahn to promote deregulation and then, under pressure, Paul Volcker to rein in the Fed.

The result was a sharp recession in 1981-82 with massive unemployment followed by stable prices. Exchange rates fluctuated widely, putting strain on many industries. Banking problems led the government to deregulate Savings and Loan Associations, leading to excessive borrowing and the S&L Crisis of the 1980s.

In retrospect, the S&L Crisis anticipated the financial crisis of 2008. It was not seen that way at the time, but rather as a bump in the road to economic deregulation that would come to be called neoliberalism. This trend originated in a secret memo by Lewis Powell, then a successful corporate attorney, to the United States Chamber of Commerce contemporaneous with the Nixon Shock. The coincident events of 1971 were tied together when Nixon appointed Powell to the Supreme Court later that year.

The memo opened: "No thoughtful person can question that the American economic system is under broad attack. This varies in scope, intensity, in the techniques employed, and in the level of visibility." It stated: "The overriding first need is for businessmen to recognize that the ultimate issue may be survival — survival of what we call the free enterprise system, and all that this means for the strength and prosperity of America and the freedom of our people." It argued that business should defend itself vigorously in the press, academically and in Congress and the courts.[5]

The Heritage Society was formed in 1973, shortly after Powell's memo. Its mission is stated on its web site: "The Heritage Foundation is a research and educational institution—a think tank—whose mission is to formulate and promote conservative public policies based on the principles of free enterprise, limited government, individual freedom, traditional American values, and a strong national defense."[6] The Cato Institute, a more academic conservative think tank, was formed five years later. Conservative foundations proliferated.[7]

The references to “the freedom of our people” by Powell and “individual freedom” by The Heritage Foundation were code words for opposition to unions. They harked back to a mythical past where individual and small factory owners bargained equally about pay and working conditions. This view of the past is totally inaccurate as a description of early industrialization. Laws at that time put workers at a great disadvantage, making it a criminal act to leave a job to search for a better one (Steinfeld, 2001). Destroying unions in the modern world puts workers again in a grossly inferior position when confronting employers.

The language also harked back to the Declaration of Independence, “We believe all men are created equal.” As described in the previous section, it never occurred to our forefathers that “all men” meant all men, that is, both white and black. It would not be until the Civil War was fought over this issue that the idea of expanding the idea of equality was even possible. Today, while the appeal to individual freedom has economics as its source, this appeal to an iconic American ideal also has a racial overtone.[8]

Powell also wrote that “few elements of American society today have as little influence in government as the American businessman.” Organized lobbying began at this time, stimulated in part by this statement. Lobbying is expensive to initiate but cheap to vary in size, leading to declining average costs and large lobbying firms. The result is the growth of lobbying firms that now make it very difficult for small firms to be heard and for Congress to pass coherent legislation. There are more than 300,000 words in both the Affordable Care Act and the Dodd-Frank Financial Reform Act (Drutman, 2015, 28).

Limited government found its first expression in the deregulation of finance and airlines, but individual freedom was code for the destruction of unions. The failure of a bill to reform labor law in 1978 reveals the change in opinion under way. The bill proposed a set of technical changes in labor law that would have preserved the legal framework in which the labor system operated. Despite the small scale of the bill, business groups mounted a large, inflammatory public campaign against it. The bill passed the House by a vote of 257 to 163 and undoubtedly would have passed the Senate as well, but employers arranged to have it stopped by a filibuster (Mills, 1979; Ferguson and Rogers, 1986).

The Volcker recession compressed a generation of normal change into a few years. Durable manufacturing firms–pillars of private sector unionization–were hit first by recession in the 1970s and then by a high dollar in the 1980s that crippled export sales. The Rural Renaissance of the 1970s became the Rust Belt of the 1980s as the low dollar during stagflation was succeeded by a high dollar in the 1980s. Unions largely ignored the need to organize a changing labor market and union membership fell (Levy and Temin, 2007).

The passivity of organized labor in all this economic turmoil is curious. Perhaps union leaders were unconscious of the erosion of their industrial base. More likely they were co-opted in the national fervor that supported the Vietnam War and failed to understand how this nationalism would come back to bite their members. They appear to have been like the European Socialist parties that forgot their primary aims when they supported their countries' entry into the First World War.

Nixon's Southern Strategy and Powell's call to arms for business cohered into what is now called a neoliberal philosophy. It is useful to see this new policy direction in terms of the Washington Consensus formulated for developing countries and The New Federalism that Nixon proposed in 1969 (Nixon, 1969). Among the recommendations in common with the Washington Consensus are the desire for fiscal discipline in place of Keynesian polices, low marginal tax rates, privatization of state enterprises and deregulation of private markets. Neoliberals added freedom of contracts, by which they typically mean opposition to labor unions, and abandoned the postwar mandate to maintain full employment. The New Federalism proposed to counter federal control of Roosevelt's New Deal by converting specific grants to states into block grants.

Reagan often is seen as the beginning of this policy stance as he lowered top marginal income tax rates for the rich and destroyed the flight controllers' union at the start of his administration. Deregulation and the privatization of government functions like the military and prisons started earlier and continued after he left office. And he famously used the lasting identification of the poor with blacks with his policies and his memorable image of Welfare Queens.

But the most important part of Nixon's program for the economic problems he faced was the deregulation of finance. Instead of bringing the Eurodollar system into the Bretton Woods System, new policies made American finance more like the Eurodollar system. There was a great need for financial help as the gyrations of prices and exchange rates took a fearsome toll on American industry.

Dramatic growth was underway in the nation's financial sector during the 1980s. High interest rates and large federal deficits stimulated trading in government securities and the market for corporate takeovers, expanding the demand for financial traders, investment bankers and corporate legal services. After stagnating in the 1970s, the Dow Jones Industrial Index tripled in the 1980s, attracting people to the brokerage industry (Wigmore, 1997).

The rising demand for financial services increased the size of the financial sector and the returns to those employed in it. As deregulation created more need for finance as well as more scope for financial innovation, more educated people were attracted to the field. During the Bretton Woods period, banking was highly regulated and did not attract highly educated people.

This changed in the tumultuous 1970s, and more educated people entered finance. The increasing human capital in finance explains most of the rise in financial incomes in the 1980s. Wages in finance exceeded the educational premium in other industries after that, perhaps because of increasing risk in finance. This part of the economy accounted for one-seventh of the increase in the incomes of the richest people shown in Figure 1 (Philippon and Reshef, 2012).

These high returns to finance have now become a matter of public concern. Hedge fund managers were handsomely paid in 2014 even though returns to hedge funds were not great. The top of the heap earned about one billion dollars apiece in 2014. These incomes are lightly taxed due to the carried interest exemption, as shown dramatically by presidential candidate Mitt Romney's tax returns. He only paid taxes of less than fifteen percent of his high income (which was smaller than the financial superstars' incomes just described). As a result of low taxes for high earners in finance, the United States has the most unequal distribution of after-tax income in the world for people under 60, that is, for working people (Stevenson, 2105; Bartlett, 2012; Gornick and Milanovic, 2015).

The rapid growth and high returns in finance raise questions about the role of finance. The rapid changes in trade and production after the end of Bretton Woods clearly required active finance to accommodate, and there is no reason to deny the importance of finance in allowing economies to adapt to new conditions. But the continuing inflation of financial incomes suggests that private gains to financial activity may be exceeding social gains. We may be attracting bright, educated people to finance when their productivity for economic growth would be better employed elsewhere. This suggestion of diminishing returns to finance may only be answered after we have accumulated more evidence (Zingales, 2015).[9]

The highest paid CEOs of non-financial corporations earned an order of magnitude less than those in finance, around $100 million in 2014 (Gelles, 2015). They represent top earners in the technology and electronics part of the FTE sector. The annual earning cutoff for the top one percent of earners shown in Figure 1 is about three orders of magnitude below this at $330,000, and the wealth cutoff for the top one percent is $4 million. Both groups include about 1.5 million families (Jones, 2015, 35).

The FTE sector includes the top thirty percent of American earners, roughly all college graduates even though a BA does not provide automatic access to the FTE sector. The top ten percent of American earners earn incomes in six figures of $100,000 and above.[10] That is a high enough income to live in a good school district, own your house and drive a new car. It is what we used to call a good middle-class living, although the term “now evokes anxiety, an uncertain future and a lifestyle that is increasingly out of reach.” (Chozick, 2015). The median worker earns around $40,000, and the dividing line between the FTE and low-wage sector lies in the gap between these two figures.

Workers in this gap struggle to maintain their middle-class life style. The median postsecondary teacher of economics, for example, earns around $100,000, which places him or her comfortably in the FTE sector. The median postsecondary teacher of English Language and Literature earns only around $60,000, putting him or her perilously close to the median worker in the low-wage sector (Bureau of Labor Standards, 2015).[11]

“John-David Bowman, who teaches Advanced Placement history and a class called Theory of Knowledge in the International Baccalaureate program at Westwood High School in Mesa, AZ, has not had a raise since he was hired, in 2008. He has two bachelor’s degrees and a master’s degree, and was voted Arizona’s Teacher of the Year for 2015.” The honor allowed him to shake hands with President Obama at the White House. Still, Mr. Bowman said, "I could retire in 20 years, under $50,000 (Santos and Rich, 20150)." This distinguished high-school teacher is and will remain in the low-wage sector if he continues teaching in this setting.

The Low-Wage Sector

President Nixon won the election in 1968 with the aid of a Southern Strategy focusing on regional racial tensions and the history of segregation.[12] The Southern Strategy appealed to white Southerners angered by the threat to their power from the civil rights movement and the expansion of the franchise. They were the heirs of slave owners who resorted to Jim Crow policies after Reconstruction ended to preserve their political power. Their policy was to maintain African Americans in the South in a subordinate position (Woodward, 1974).

The low-wage sector—like the FTE sector—was born in 1971 as President Nixon replaced Johnson's War on Poverty with his War on Drugs and nominated Lewis Powell to the Supreme Court. As the War on Drugs expanded in subsequent decades, it was enforced far more strongly for African Americans than for whites, becoming a new Jim Crow (Alexander, 2010).

Powell, author of the memorandum for the Chamber of Commerce described earlier, urged business to stand up against the perceived threats to democracy from left-wing attacks. Nixon's Southern Strategy unified the class interest of Powell with the race interest of white Southerners. Powell was presented as a moderate compared to Rehnquist—appointed to the Supreme Court at the same time—but Powell was part of Nixon's Southern Strategy. Nixon "told Powell of his responsibility to the South, to the Supreme Court, and to the country," in that order (Jeffries, 1994, 6). Powell's Supreme Court votes expanded Nixon's Southern Strategy into national policies.

Rural people sold food to cities in the Lewis model; members of the low-wage sector sell services to the FTE sector in this modern reincarnation. They work in fast-food restaurants and clean hospitals and hotels. They drive you around as needed, transport items in factories and stores, work in non-unionized industries, and engage in other similar activities that vary too much for robots to take over. Low wages are the result of increased supply coming from globalization—trade, immigration, moving production offshore—and decreased labor demand coming from improving technology.

These forces resulted in a change in the demand for specific jobs that created an "hour-glass" job profile, as shown in Figure 3. Jobs are arranged by wages in Figure 3, and it can be seen that the jobs in the middle of the range have been disappearing. They fell by six percent between 1993 and 2010, while jobs with higher and lower wages rose. This trend has split the American labor market into a low-wage and a higher wage part. The division marks the difference between the low-wage sector and the FTE sector of the higher paid workers.

Low-wage workers are laborers and service workers. Middling workers are clerks, operators and assemblers. Highly-paid workers are professionals and managers. A college education is needed to get hired into the top group. It may also be needed for some middling jobs, but these kinds of jobs are disappearing. Lower paying jobs barely allow workers to maintain the life style they grew up expecting. They do not provide enough income for people to save for retirement, which seems farther away than many current needs. The low-wage sector has very little impact on the progress of the FTE sector.

Figure 3 often is seen as the result of technological change. Technology is only part of the story; it is not the whole story. Three causes can be distinguished: technology, trade and foreign direct investment. The latter two causes are part of the general category of globalization, but they are worth separate discussion. All of them are effects of decisions made in the nascent FTE sector. Advances in technology and electronics were promoted by government—primarily military—spending. Globalization was accelerated by FTE policies opening international capital markets, promoting American foreign investment and American economic influence.

Computer capital increasingly substitutes for labor in routine tasks, that is, those that can be accomplished by following explicit rules. These are the factory jobs that were the basis of unions in the twentieth century. Computers are less able to deal with nonroutine tasks, that is, those that require problem solving and complex. Those can be divided into professional activities paying well and service jobs paying poorly (Autor, Levy and Murnane, 2003).[13]

Technology decreased the demand for labor within factories, and foreign competition reduced the number of factories. The massive inflow of Japanese and then Chinese products reduced the demand for American manufactures at the same time that computers changed the nature of factory work. Japanese cars in the 1980s and an abundance of Chinese consumer goods in the 1990s changed the composition of labor demand in the United States.

These imports had two causes. The growth pattern of these Asian countries was based on low exchange rates to promote exports. Just as Britain and Germany had expanded industrial exports in the late nineteenth century, these new industrial powers promoted exports to increase their growth a century later. The gyrations of the emerging FTE sector in the 1970s and 1980s noted in the last section changed exchange rates as well as domestic prices.

Finally, improved capital mobility coming from the removal of Bretton Woods capital controls allowed American firms to expand production in these and other industrializing countries. These firms used their offshore production in bargaining with their workers. American workers were told they had to accept lower wages in order to maintain their jobs.

These threats produced labor unrest, and the government increasingly favored employers as deregulation spread. Unions declined in membership and power.[14]

As a result of imports, immigration and threats of offshore investments, American wages are kept down. The members of the low-wage sector find themselves in a world labor market. The effects often are indirect, but they are no less potent for being distant. The cost of transportation is decreasing; even flowers and fish are brought from far away. And the decline of tariffs and other barriers to trade mean that governments increasingly open up their economies—and therefore national labor markets—to world influences (Freeman, 1995).

For example, under competition from foreign auto manufacturers and "transplants" (domestic producers of foreign-owned companies), GM implemented wage cuts in its 2009 bailout and bankruptcy: "Under agreement with the United Autoworkers union, the two-tier wage system was expanded, with wages for new hires cut to about half of the $29 per hour that longtime union members earned (although these wages were then raised to $17 an hour in 2011). Defined benefit pensions were eliminated for new hires and replaced with 401(k) plans. Overall wage and benefit costs at Chrysler and GM were brought down to be roughly in line with those at Honda and Toyota plants operating in the United States (Goolsbee and Krueger, 2015, 13)."

The union was not broken, but it clearly was unable to resist the pressures put upon it. It was not able to resist having new autoworkers paid only as much as those at the mostly Southern and non-union Honda and Toyota plants. Workers earning $17 an hour earn only about $35,000 a year. In addition, these jobs are being replaced by computers as shown in Figure 3, and there will not be many new ones. The few new auto workers will find themselves in the low-wage sector. Their earnings are small, and they are expected to save for their retirement out of it in their new 401(k) plans. But the incomes of members of the low-wage sector are not large enough for them to save for their own retirement.   A recent report on the economic well-being of households found that 40 percent of non-retirees "have given little or no thought to financial planning for retirement (Board of Governors of the Federal Reserve System, 2015, 2)."

The decline of manufacturing noted in the FTE sector had strong geographic effects on the low-wage sector. The growth of Japan and China accelerated the decline of American manufacturing and the demand for unskilled labor in and around factories. Industrial cities found that people were less mobile than jobs, and urban prosperity was replaced by urban joblessness. Blacks moved to northern cities to find jobs in the Great Migration, only to find that the jobs had disappeared.

Prosperous white urban residents left cities for the suburbs, avoiding newly integrated schools. They were encouraged by the GI Bill and other federal policies that provided generous mortgages for suburban houses and highways for suburbanites to drive to work. Pervasive redlining restricted similar mortgage stimulus in the cities, and funding for aging urban transportation systems declined. Home ownership and access to jobs became harder in the city. There is clear evidence of neighborhood tipping, that is, a rapid transition to a very high minority share in a census tract once the minority share reached a threshold varying from 5 percent to 20 percent minority (Katznelson, 2005; Boustan, 2010; Card, Mas and Rothstein, 2008).[15]

White urban workers were replaced by black migrants from the South, aggravating the competition for scarce jobs in the cities. Wages for less skilled jobs declined, and urban unemployment grew. ""Concentrated poverty is positively associated with joblessness (Wilson 1996, 42)." And the public face of the low-wage sector is black. This merging of class and race fed into political decisions that expanded the Southern Strategy into a national one.

Blacks are a minority of the population and of the low-wage sector, but the desire to preserve the inferior status of blacks has motivated policies against all members of the low-wage sector. Perhaps “black” is just a metaphor for “other.” Since the FTE sector includes only the upper thirty percent of the population, blacks—even if they all were members of the low-wage sector—account for less than twenty percent of the low-wage sector.

The Reagan and Bush administrations reduced city funding, causing federal funding to drop sharply in the 1980s. Nixon’s New Federalism converted federal programs into block grants to states in order to give states more choice in how to spend the money. Reagan then revealed the underlying aim of the New Federalism by reducing and eliminating block grants (Wilson, 1996).

Reagan and Bush were reversing fifty years of American domestic policy as they cut back federal grants to local and state governments that the federal government used to help poor people. Some benefits to individuals increased in the 1980s, but grants to governments declined or even—like general revenue sharing—disappeared. Public service jobs and job training were cut back sharply. The share of federal funding for large cities fell from twenty-two percent to six percent of their budgets. The decline of both private and public sources of employment in inner cities greatly reduced employment opportunities for white and black urban residents alike (Caraley, 1992).

The frustration of these unemployed and troubled people came out in the use of crack-cocaine (Wilson, 1996, 49). This fed into Nixon’s War on Drugs, and state governments rushed to pass punitive laws such as the infamous Three Strikes Laws that spread over the country in the 1990s. The prison population in the United States mushroomed from less than half a million to over two million today, with drug convictions accounting for half or more of the increase

(Mauer, 2006). Federal funding that formerly supported jobs in large cities now finances prisons in rural communities. There are now seven million people under the supervision of adult correctional systems, counting those in jail, on parole or waiting for a court appearance (Glaze and Kaeble, 2014). And although blacks are less than fourteen percent of the population, they are forty percent of the prison population.

If incarceration rates stay the same, one in three black males will go to prison during his lifetime (Bonczar, 2003).[16] This shocking estimate from life tables and prison records implies that every black family knows someone who is in jail or has been in jail. Those released from jail are denied access to social programs in most states, and these men are not good role models. The proportion of incarcerated black men makes it likely that most black families contain a man in jail or just out of jail. Young men growing up in the shadow of the incarcerated men find it hard to plan for the future, to gain skills that might help them in the future or even perhaps to think of the future or education at all.

The War on Drugs has been directed primarily toward urban black males, and it has made it harder for them to advance from the low-wage sector. The process of incarceration takes black men out of society where they might accumulate skills. After they get out of jail, their past convictions preclude obtaining help from any of the government programs that help poor people get jobs, food and training. And the prevalence of prison in the black population—everyone knows someone in jail or under adult correctional systems—indicates to everyone that personal effort probably will not be rewarded. The prevalence of mass incarceration has become a form of social control (Alexander, 2010).

The assertion that mass incarceration is for social control more than crime control is supported by the continuing rise in incarceration over the 1990s while the crime rate fell. The causes of declining crime are not fully understood, but evidence from cross-section comparisons indicate that increasing incarceration had little if any effect (Roeder, Eisen and Bowling, 2015). Only budget shortfalls in the aftermath of the financial crisis of 2008 have produced a halt in the rise in prisoners, and long-time prisoners are not provided any help or services to reenter society when they are released.

This repression falls most heavily on blacks, but it affects whites and other ethnic groups in the low-wage sector as well. After all, the majority of prison inmates are white. But while poor whites are numerous, they are less visible than blacks in public discussions of programs to help the poor. Reagan's famous invocation of Welfare Queens in his campaign to restrict government funding for the poor was a clear racial reference.[17] The War on Drugs appears to be a law-and-order program, but its administration focuses on blacks. And the resulting conditions of blacks are used as examples to discourage other government funding. Even though people generally avoid racial language today, the persistence of race prejudice can be seen in the hateful responses to President Obama's debut on Twitter (Davis, 2015).

The growing problems of white members of the low-wage sector are equally serious. White flight to the suburbs was by class as well as by race; it stranded poor whites in the inner cities, where they are subject to the same kind of economic and social pressures as poor blacks. As noted above, there are many more whites than blacks in the low-wage sector. The inability to earn an income sufficient to support a family increased among whites in poor urban neighborhoods. The urban white marriage rate dropped; the rate of urban white single-family households rose. The imprisonment rate among whites in poor urban neighborhoods rose along with the rising rate for blacks. And the decay of trust social capital among these whites was as severe as among blacks. The American dual economy would exist if there were no American blacks; only the political discussion would be different (Murray, 2012).

The loss of social capital in urban parts of the low-wage sector has been chronicled separately for blacks and whites. As chance would have it, two studies were done in different neighborhoods of Philadelphia. They are similar as they describe the decline of social capital, but only the one about a black neighborhood focuses on the role of police in this decline (Goffman, 2014; Smallacombe, 2006).[18]

The similarity of social capital losses in poor urban neighborhoods, whether white or black, supports Wilson's assertion that the pathology of black neighborhoods is due to the economic circumstances they found in these cities. He asked if each characteristic of their life—such as growing incarceration, declining marriage rate, and increasing single-parented families—were due to black culture or what he called institutional factors. He concluded that each one was due to institutional factors. This conclusion can be generalized to both white and black members of the low-wage sector; they are characteristic of people trapped in unfortunate economic conditions with little will or ability to escape (Wilson, 2009).

The trap has become more restrictive as the welfare system has been criminalized. "The public desire to deter and punish welfare cheating has overwhelmed the will to provide economic security to members of society. While welfare use has always borne the stigma of poverty, it now also bears the stigma of criminality (Gustafson, forthcoming)." The welfare system is increasingly being used to catch people with outstanding warrants. It is easy to have an outstanding warrant if you are on parole and miss a meeting with your parole officer or violate some other restriction on your actions. Drug felons are not only barred from voting in many states, but also from the welfare system—marginalizing them more fully from society.

Welfare payments have eroded so that they no longer provide enough funds to live on. Most welfare recipients consequently have to rely on other sources of income to make ends meet. They have to engage in some income-generating activity that needs to be hidden from the welfare office to maintain benefits. This concealment is deemed a fraud, even though it is encouraged by the welfare system itself. Drug programs similarly are discouraged as drug use is not permitted on welfare, and again fraud is encouraged. The system creates incentives that maintain poor members of the low-wage sector in a marginal existence (Gustafson, forthcoming).

Stories of people caught in this repressive system show its extent. On the one hand, urban workers caught in possibly criminal problems find they cannot pay the bail required to stay out of jail until their case is heard. They are under great pressure to confess to a crime to avoid jail—although this decision often makes them more vulnerable in the future. On the other hand, the system extends to small towns with only two or three policemen. In one such Vermont town, when the police found drugs, they only indicted whites twelve percent of the time, but they indicted blacks eighty-seven percent of the time, seven times as often (Pinto, 2015; Stockman, 2015).

Transition

As in more traditional dual economies, some members of the American low-wage sector aspire to transit into the FTE sector. The mechanism is education, which is hard for members of the low-wage sector for two reasons. First, education requires expenditure over a long period and resources that most members of the low-wage sector lack. Second, the FTE sector has made this transition increasingly costly over time. I discuss these barriers in turn.

It may appear that education is far more difficult than the tradition of moving to the city in developing economies. This may be true, but moving to the city was only the start of a long and uncertain process of finding gainful employment in the industrial economy. This process started later than education today and did not last as long as current education, but the whole process created a barrier to the initial change in location. Economists modeled the possibility of getting an urban job as chance, while aptitude for learning is also important today. Nonetheless, even if a member of the low-wage sector does well in school, he or she still has uncertainty similar to that in developing economies when seeking a high-paying job (Harris and Todaro, 1970).

In our modern dual economy, the student needs to start the transition process as a young child and continue for sixteen years or more to get a college education. Recalling that one of three black males will go to jail, it must be hard for any young black male child to make such long-range plans. True, some urban black families are "clean," that is, without any members in jail, and this obviously helps a small child. But when a student gets to junior high, the level when male black students tend to fall behind, he knows the odds are against him in the wider world. It becomes harder and harder for the student's parents to keep him motivated in school (Ferguson, 2007).

These problems continue into college. Many poor students drop out midway and do not graduate with a college degree—the entry ticket to the FTE sector. Only one-third of college students from the bottom quarter of households graduate, while two-thirds of students from the top quarter do. Both ability and class matter, and math tests show that ability matters more at low income levels. The probability of graduating college for students who scored low on the math test was four times as high for rich students as poor ones. This gap persists through the middle scores and decreases for the top math scores to about twice as likely for rich kids than poor kids (Baily and Dynarski, 2011; National Center for Education Statistics, 2015).

If a student manages to complete college, what are his chances to find a job that will lift him out of the low-wage sector? White students have a leg up on black students. Most jobs are found through a social network of relatives, school mates or friends who inform new graduates about jobs and sometimes recommend them for jobs. Black urban college graduates are not likely to know many people with jobs in the FTE sector or have many school mates who are moving into it. Their chances of finding a good job are correspondingly lower than for comparable whites.

Most white people are unaware of this difference in social capital. They describe their own careers as the results of their own efforts, not recognizing the contributions of families, friends and even the government. They therefore find it difficult to realize that a poor student in a poor urban neighborhood with poor schools and poor neighbors does not have the same social capital they do. Members of the FTE sector, having little personal contact with members of the low-wage sector, are particularly subject to this kind of blindness. Fish do not know they are living in water, and members of the FTE sector are not aware of the social capital that surrounds and sustains them (DiTomaso, 2013).

The problems of K-12 education will be discussed more fully in the next section. I now discuss changes in the availability of college education to aspiring members of the low-wage sector, because public universities have been subject to the same starvation as other state spending. State appropriations for higher education in real dollars have fallen forty percent since 1980. The revenue from students' tuition increased by half between 1999 and 2009. Major public research universities have become more and more like private institutions. State funding for 100 top public research universities fell from thirty-eight percent of their budgets in 1992 to twenty-three percent in 2010. State and local spending on higher education fell from sixty percent of all federal, state and local government and personal expenditures on higher education in 1975 to thirty-five percent in 2010 (Weerts and Ronca, 2006; National Science Board, 2012).

Declining state support for higher education leads directly to higher tuition charges to students. Inflation-adjusted tuition and fee charges rose from 1980 to 2012 by 250 percent at flagship state universities, by 230 percent for all state university state universities and colleges and by 165 percent for community colleges (Mortenson, 2012). These tuition increases are another barrier in the education link between the low-wage and the FTE sector.

Tuition increases also are a major source of the student loan crisis that holds back so many young people today. The debts are mainly to for-profit colleges and secondarily to community colleges. Most of these debtors did not finish college or get skills to move them into the FTE sector; they are still in the low-wage sector—but now with large (for them) debts (Dynarski, 2015).

Since states would not support public universities and colleges, federal help for poor students turned to providing Pell Grants, GI Bills, and other forms of financial aid to individuals. Private for-profit schools like the University of Phoenix have grown to accept all of these forms of government support. They were accredited to receive federal student support in 1972, and their focus is to increase the number of students in the short run—to keep up their stock prices—rather than to help students and preserve knowledge in the long run. The for-profit universities have been very profitable, but they typically have not educated students sufficiently to make it into the FTE sector (Kinser, 2006).

The federal government has found it impossible to control the for-profit colleges that have sprung up to profit off the individual subsidies. For-profit colleges enroll only twelve percent of college students, but they account for almost half of student loan defaults. The government is trying to contain the growing problem of for-profit colleges, but regulators are caught between the industry that complains of victimization and critics who say not enough is being done to prevent fraud and the abuse of students from the low-wage sector (Cohen, 2015; Looney and Yannelis, 2015).

The combination of poor students not completing college and private colleges that do not deliver degrees that help with employment in the FTE sector has left many students still in the low-wage sector with student debts. These debts cannot be discharged unless the former student can demonstrate "undue hardship" from the loan. The statute does not define undue hardship, and many courts use the Brunner test, derived from a 1987 opinion. This standard includes persistent poverty and a good-faith effort to pay the loan. In the view of some more recent opinions, this standard requires hopelessness that conditions will improve. In other words, the student faces a double bind: if he or she tries to transition to the FTE sector, he or she is hampered by his or her student loans. Only if he or she foregoes this ambition can the student loan be discharged (Bernard, 2015).

Lewis argued over fifty years ago that the capitalist sector had an incentive to keep earnings in the subsistence sector low. The FTE sector illustrates this aspect of the dual economy in a web of policies that now combine to keep earnings in the low-wage sector low. The New Federalism of Nixon and Reagan reduced federal aid to the states, which in turn reduced public support for state universities. Students were forced to pay more for their college education than the postwar generation, and they borrowed to fund their education. The FTE policy of deregulation allowed student loans to grow rapidly without government oversight or regulation, leading to widespread abuses of borrowers by the business firms that administer these loans. The FTE sector enlarged the effect of student loans by making them hard to reduce even in bankruptcy. And the FTE policy of privatization allowed for-profit colleges to grow to receive student loans from the government without providing students with the education to move into the FTE sector. The for-profit colleges advertise widely to attract students and government loans while lobbying the government to preserve their status.

Student loans are now held by over forty million people who owe more than $1.2 trillion in student-loan debt. This debt is now the second largest class of consumer debt, behind mortgages, and it has a depressing effect on spending. Lower spending in turn reduces the demand for labor in the low-wage sector, helping to keep wages flat as shown in Figure 2. And the growth of student debt makes the transition from the low-wage sector to the FTE sector ever more difficult (Consumer Financial Protection Bureau, 2015; Morgenson, 2015).

The decline in mobility between the two sectors is now apparent in aggregate data. There is an inverse relation between inequality and income mobility, which the Chair of the President's Council of Economic Advisers dubbed the Great Gatsby Curve. This relation appears in comparisons between countries and also within areas of the United States. There are many mechanisms that produce this relation, and the difficulty of making a transition from the low-wage sector to the FTE sector is one of them (Krueger, 2012). Lack of FTE support for public education is why a fine teacher like John-David Bowman is stuck in the low-wage sector despite his college degrees.

Current Politics Affecting Individuals

The preceding discussion of college education has revealed political choices made by the FTE sector that affect conditions in the low-wage sector. This section provides a survey of the policies undertaken by the members of the FTE sector to preserve the American dual economy. I begin with healthcare, K-12 education and mass incarceration.

The Affordable Care Act (ACA), known also as Obamacare, offered states a free ride for five years and generous support thereafter for expanding Medicaid. This offer was refused by almost half of the United States. It was rejected in states governed by Republicans in the former Confederacy, with an extension up the western bank of the Mississippi River; most of the affected people live in the area of the former Confederacy. A clearer illustration of the link between the legacy of slavery and current government policies could not be found. Almost immediately after the passage of the ACA, "An article on the Fox News Web site has put forward the theory that health reform is a stealth version of reparations for slavery; whites will foot the bill and, by some undisclosed mechanism, blacks will get all the care (Ehrenreich and Muhammad, 2009)."

Discussion of this issue has focused on the label, Obamacare, tying universal health care to the black President who proposed it. Medicaid is for the poor, and the poor are equated with being black by their identity and the President's black identity: "The racecraft synecdoche operates asymmetrically, since there is no parallel category of 'white president' for Obama's predecessors in office. It went without saying in the past that presidents were free to act in the interests of white Americans, and against the interest of black Americans, without paying a political price (Fields and Fields, 2012, 281-82)."[19]

We probably will never know, but it looks as if President Obama did not appreciate the role of racecraft in the Republican label, Obamacare. The Affordable Care Act was a hard-won victory and a legislative achievement; Obama seemed pleased to have his name associated with it. He does not seem to have realized that the label tied healthcare to the racial history of the United States, labeling Medicaid as a power grab by black Americans who should rightly have been taking orders from whites. It therefore needed to be resisted. Polls show that people like the ACA but dislike Obamacare. The apparent lapse of knowledge in fact makes perfect sense; it is the evocation of racecraft that overrules everything else. Obama would have done better to follow President Truman's lead when he proposed a plan to aid Europe after the Second World War. Truman called it the Marshall Plan because he thought Congress would not have approved a Truman Plan (CNN Political Unit, 2013; McCullough, 1992, 564-65).

The decline of urban education is as important as health because it affects the transition path between the two sectors of the dual economy. I discussed college education in the last section; I now focus on K-12 education. As so often in this account, history matters, and the history of public education involves gender as well as race. It also echoes the larger story of the interaction between public policies and technology.

American industrialization in the nineteenth century led to increasing specialization, and the gender roles on men and women became more distinct as part of this process. Women continued to have restricted job choices for two-thirds of the twentieth century. Many jobs held by women were still in cotton goods, clothing, and boots and shoes. Teaching remained a good job for women—considerably more interesting and probably more attractive than the alternatives (Goldin, 2006).

This changed in the 1970s as women greatly increased their college attendance and graduation rates. Oral contraceptives let women choose when to have their children; they could plan for their education and integrate family and career plans. With better education, women began to spread out into a variety of professional occupations. Teaching was no longer the only interesting job that American women could find. And wages for women with graduate education began to rise relative to female teachers in the late 1980s, climbing from twenty percent more to forty percent more by 2000 (Goldin and Katz, 2002; Temin, 2002).

Teaching increasingly was not the most interesting or the best paid job for bright educated young women. The result was that the most promising women became doctors and lawyers, leaving less promising ones to teach. Teacher unions became more strident as teachers lost ground in earnings. Waves of teacher strikes spread across the country in the 1970s and 1980s as teachers tried to keep up with other educated women. Despite some gains, the unions were unable to bring teachers' wages up to those of the newly opened jobs for women.

As a result, public education today is hobbled by the quality of the teaching staff. We can reorganize education in many ways, but we will not have a large effect on student learning if we cannot attract skilled and creative teachers to public education. But—like the public universities described in the last section—public education in American has suffered with inadequate resources. School districts cannot raise teachers' wages because they do not have the resources to do so. In many urban school districts, they do not even have enough money to maintain their buildings as a result of government policies at many levels.

An important decision by the Supreme Court in 1974 condemned urban school systems to growing poverty. Justice Powell was part of the 5-4 decision, as was Rehnquist, in *Milliken v. Bradley* (418 US 717). This case was brought by the NAACP to challenge the implementation of *Brown v. Board of Education*. That decision set out a straight-forward idea of integrated schools that proved very difficult to implement in light of the history of the Great Migration.

The case came from Detroit which had received a lot of black families seeking work. They were excluded from white neighborhoods by restricted access to mortgages and the opposition of white neighbors. The Detroit school district was two-third black by the 1970s, and the NAACP filed suit against Governor Milliken and others, charging direct discrimination against blacks in the drawing of school districts. The case was decided by the Supreme Court in 1974. It held that school districts were not obligated to desegregate unless it could be proven that the lines were drawn with racist intent. Arbitrary lines that produced segregated districts were not illegal.

This decision made it clear that white flight would be successful. The Supreme Court would not combine or otherwise alter existing school districts, and whites fleeing cities would be able to separate their kids and those of the urban blacks. The decision also mandated poverty for the urban school districts, which became poorer and blacker over time. The tax base for urban schools decreased as fleeing whites avoided paying for urban schools. The result was segregated schools with inadequate resources for urban black schools. Separated and unequal, one might say. Powell had made Nixon's Southern Strategy into a national policy. "The Court limited school busing across city boundaries, a rule that stalled integration efforts at a time of rising racial segregation between inner cities and suburbs (Farley, Danziger and Holzer, 2000; Tribe and Matz, 2014, 20)."

Milliken fit in with other government decisions that supported a massive movement of the population into suburbs in the following decades. Tax revenues were used to facilitate the suburban expansion by building roads, schools, water and sewage in the suburbs. In contrast, the maintenance of the urban infrastructure abandoned by the new suburbanites was gradually decreased (Jargowsky, 2015, 13).

The ability of cities to finance decent schools was made even harder in the 1980s as Reagan and Bush cut back federal grants to cities; federal grants to large cities fell over the decade by thirty-five percent, from $5.2 to $3.4 billion. Cuts were most severe in general revenue sharing, public service jobs and job training, and community development and other block grants. The schools of both black and white urban children lost resources and effectiveness. No wonder that poor urban children who got to college did worse than rich suburban kids (Caraley, 1992).

A recent paper used quasi-random judicial court-ordered desegregation to identify the effects of segregated education. It found that "school desegregation significantly increased educational attainment among blacks exposed to desegregation during their school-age years, with impacts found on … attending college, graduating with a 4-year college degree, and college quality (Johnson, 2011)."

The disadvantages of black students extended into the new suburbs. Public policy tried through subsidized housing to bring blacks into the suburbs. Political pressure from local residents however convinced the government to locate the new public housing in poor parts of town. The result was to recreate some of the conditions that formerly had been in the center of large cities to smaller towns. A famous case, *U.S. v. Yonkers*, was brought in 1980 to contest this pattern. The evidence showed that Yonkers was segregated in schools and housing, and the conflicts in enforcing the eventual judgment illustrate the anger of the new white suburbanites to having blacks among them. The concentration of poverty was decreased in the 1990s by rapid economic growth, but the trend was reversed after 2000 to produce more concentration of poverty, albeit now located in smaller cities and towns (Belkin, 1999; Jargowsky, 2015).[20]

American schools and particularly American urban schools have proven inadequate in recent years to fulfil the task set for them. But it will be very hard to improve school quality without attracting a new breed of teachers. None of the current reforms even comes close to making that attempt. They are doomed to failure as a result. The worst schools have become predominantly black, but the crisis extends to most public schools. Testing is popular as a way to evaluate schools, changing their role from informing teachers how well their students are learning to informing administrators how well their teachers are teaching. This further discourages good teachers from teaching, and it has not notably improved the quality of schools (Temin, 2002; Nocera, 2015).

The FTE sector is far from failing schools, and members of the FTE sector have options available for educating their children. They can move to suburbs with good schools, paying high taxes to support them. If that is not good enough for them, they send their children to private schools. (Only a few dedicated reformers send their kids to urban public schools.) At the lower end of the FTE sector, many parents are frustrated with the quality of their schools, but the FTE sector talks about improving schools without disturbing the current structure of American education.

Race is important here as well as in health care. Schools in the North have become as segregated as they were in the South before *Brown v. Board of Education*. The media are full of observations, analyses and hand-wringing about black schools. The push for privatization has produced charter schools that use public funds, but are not subject to the control of local school boards or unions. Charter schools are very diverse, but on average do even worse for students than public schools. Studies in various states confirm the failure of this reform and the poor condition of black public schools. For example, many ninth graders in neighborhood high schools in Philadelphia have been there two or more years, and many of the first-timers are over age or below grade level in reading and math (Bettinger, 2005: Bifulco and Ladd, 2006: Sass, 2006; Kozol, 2005; Nield and Balfanz, 2006).

The abandonment of urban public schools has produced a growing education gap between rich and poor. Comparison of reading and math skills between the richest and poorest ten percent of the population reveals a gap that has grown dramatically in the last few decades to be equivalent to several years of education. For children born in the postwar boom, educational results were more equal than the income that blacks could earn. For children born later, the income gap between rich and poor has grown to exceed the racial gap (Reardon, 2012; Porter, 2015).

The result of these government policies has been to make the transition from the low-wage to the FTE sector more difficult. It is not impossible, but fewer people can make the trip than in the decade after the Civil Rights legislation in the 1960s. Mass incarceration increased as school quality deteriorated. The two policies do not appeared to have been designed to complement each other but they do. As exit from the low-wage sector becomes harder, there is more reason for social control. And as more people go to jail, there is less pressure on the schools to try to retain and educate them.

Our criminal justice system is broken. Whites and blacks use drugs at the same rate, but blacks are far more likely to be charged and convicted on drug charges than whites. Given the small number of blacks in the United States, blacks are still a minority of people in jail today even though they are more likely to be arrested. The basic numbers are that blacks are about fourteen percent of the population and forty percent of inmates, making blacks three times as likely as whites to end up in jail. Marijuana arrests increased during the decade before 2010 and now account for over half of all drug arrests. Blacks are almost four times as likely to be arrested for marijuana possession, although whites and blacks use marijuana at the same rate. As noted above, whites in the low-wage sector have as low levels of social capital as blacks. They are the majority of inmates, and our judicial system keeps them down as well as being a new Jim Crow (Alexander, 2010; Stuntz, 2011; Edwards, Bunting and Garcia, 2013).

The United States now has more of its population in jail than any other industrial country. This of course costs a lot of money at a time when government resources are tight. There is pressure to reduce the prison population, and it has gone down slightly in recent years. This has been accomplished by freeing inmates who have been in jail a long time rather than changing the inflow into jails. To change arrest and conviction rates, a major change has to be made in laws and behavior. Since most incarceration happens at the state level, change would have to come there as well; it will be a long process even if it is eventually successful.[21]

This process is made more difficult by the growing influence of private prisons. As in education with charter schools and for-profit colleges, the American government has turned to competition for incarceration to solve society's problems without added cost to the government. Two prison firms dominate the expanding business of private prisons. Both firms were started in the 1980s, perhaps by entrepreneurs who realized that the decline in state revenues from the New Federalism and the rise in prison expenses from the War on Drugs would create an opening for privatization. The private prison firms have rapidly increased the penal population in their prisons, although they still account for only a small part of the county's mass incarceration. Their interest is getting more—not fewer—people into jail.

The firms communicate their interest in more prisoners to state legislators in various ways: by campaign contributions, personal relations and lobbying. They lobby directly and through ALEC (American Legislative Exchange Council) as well. ALEC is a conservative, non-profit organization whose mission is to advance conservative principles of free market, limited government and individual liberty. It drafts model legislation to achieve these ends and distributes them to state legislation, around one-fifth of its proposed legislation gets passed somewhere in the country. ALEC promoted model bills on mandatory sentencing and three-strikes legislation the helped promote the growth of mass incarceration. The influence of the private prison firms and ALEC will impede efforts to reduce American incarceration (Ashton and Petteruti, 2011).

Minow (2003) examined the pros and cons of public-private partnerships. One argument for involving private companies in education and incarceration is frustration with the low quality of government programs. Another argument is the presumed benefits of competition where dissatisfied critics can take their business elsewhere. But, says Minow, "If information that would allow for informed choice among options is not generated, or if people are not free or able to choose among options, the promised benefits are not likely to emerge." If the competitive model worked for charter schools, we should observe failing schools close and good schools expand and increase in number. These competitive adjustments do not happen as planned due to limited funds to pay adequate salaries, resistance by parents and teachers, and limited options. If competition does not bring anticipated benefits for schoolchildren and college students, even less will private prisons bring benefits for prisoners.

These are academic questions for members of the FTE sector, for they mostly do not know anyone in failing schools, for-profit universities, or prison. They may have divided views on the merits of privatization and the merits of competition in social services, but they can live with the choices that politicians make. To the extent that they think of these issues, they classify the people involved from the low-wage sector as blacks, immigrants or veterans to whom a military career was the best option. Even though there are not enough of these "others" to populate the low-wage sector, poor whites only occasionally are visible in public discussions. And since many poor whites do not vote, they have little effect on public policies (Burnham and Ferguson, 2014).

Current Politics Affecting the Whole Economy

Healthcare, education and criminal justice are not the only areas in which America's dual economy is destructive, since the FTE sector refuses to allocate resources to benefit low-wage people, particularly blacks. Other policies also suffer, and I extend this survey of economic policies in the American dual economy to thinking about the economy as a whole. I focus on two policies that have effects on people who did not choose the activity in question—called *externalities* by economists. Urban transportation systems affect all people who live in cities, not simply those who actively move around. And the overhang of mortgage debt affects the employment of people who are not involved with that remnant of the financial crisis of 2008. The richest one percent may be able to avoid these externalities, but most members of the FTE economy feel the effects of public policies toward American infrastructure and mortgages in default.

We can see the effects of recent policy in American infrastructure by looking at a few specific items, bridges and mass transit. The American Society of Civil Engineers (ASCE) provides a "report card" for American infrastructure every five years, most recently in 2013. An advisory council of ASCE members assigns grades according to eight criteria. They noted that grades have been near failing as we start the twenty-first century, averaging only Ds, due to delayed maintenance and underinvestment across most categories.[22]

ASCE gave American bridges a C+ in 2013, a low grade for one of the world's richest countries. The nation's 66,749 structurally deficient bridges make up one-third of the total bridge decking area in the country, indicating that there is a long way to go to universally reliable bridges. American bridges on average are over forty years old, near their fifty-year design life. ASCE concluded that preserving aging bridges while replacing deficient bridges is a significant challenge for cash-strapped state and local governments to manage.

ASCE gave American mass transit a D. Rail-based systems carry just over a third of all mass transit trips. But they have the greatest maintenance needs of all mass transit modes, with a backlog of $59 billion, compared with $18 billion for non-rail systems. Rail systems are some of the oldest assets still in use, particularly the heavy-rail systems in cities like New York, Chicago and Boston. Reducing the maintenance backlog is complicated as many transit agencies do not systematically monitor the conditions of their facilities. As with bridges, the funding needs are a significant challenge (American Society of Civil Engineers, 2013).

Problems are particularly acute in the Northeast Corridor from Washington DC to Boston. The interstate highway system was started in the 1950s and cut into railroad revenues in the following decade. While the roadbed for trucks was constructed and maintained by the government, the roadbed for trains was built and maintained by the railroads. The Post Office switched its business from trains to trucks and airplanes in 1966. Congress combined several troubled railroads into Amtrak in 1971—that fateful year—to preserve passenger train transport. Amtrak is private, and it was expected to make a profit, but Amtrak is heavily regulated and prevented by Congress from dropping unprofitable routes. Amtrak makes profits on the Northeast Corridor and large losses in less populated areas.

The ridership of Amtrak and commuter trains has doubled since 1971, but its infrastructure has not been updated. Its tracks, power lines, bridges and tunnels have begun to wear out. The result has been a series of delays and cancelations that have made passengers miserable. Passengers also are missing work, and the Northeast Corridor Infrastructure and Operations Commission established by Congress estimated that a one-day shutdown of the corridor would cost the country $100 million. The commission has a five-year plan to update the capital structure of transport in the Northeast Corridor, but it is woefully underfunded. (Northeast Corridor Commission, 2015; Fitzsimmons and Chen, 2015).

Recent decisions have not been productive. The governor of New Jersey canceled the proposed third Hudson River rail tunnel that would have increased mass transit access to New York City in 2010 on the grounds that the state was unable to pay its share of anticipated cost overruns. Every day, about 275,000 commute across the Hudson River to New York. During rush hour, Amtrak and regional trains are full and the two Hudson River tunnels are near or at capacity. The third tunnel would have provided room for 70,000 more commuters to reach Manhattan each day; in its absence, Amtrak says that rail delays may become the new normal (Forsberg, 2010; Zernike, 2015).

The tunnel would have increased the reliability of commuter trains, reduced car traffic, supported economic growth and increased home values. But the direct gains would have gone mainly to members of the low-wage sector, and the members of the FTE sector are not interested. Even though the FTE sector depends in part on the services of the low-wage sector, American politics do not seem to consider these indirect effects. Many members of the FTE sector would rather keep their taxes low than consider their own needs, much less the needs of the low-wage sector.

Boston received a wake-up call about its mass transit system in the winter of 2015 when extensive snowfall led to a protracted breakdown of the transit system. The governor of Massachusetts acknowledged the problem, but like the governor of New Jersey, he was not willing to spend money or raise taxes for mass transit (Scharfenberg, 2015). The result parallels recent educational reforms that have done their best without costing any extra money. The results have been disappointing because the reforms do not correct major problems. The same future appears to be likely in mass transit.[23]

This pattern is replicated in public policies that affect prosperity. The median worker did not see Figure 2 as it developed in the 1980s or the developing split of the American economy that was already under way. Instead, working families found increasing trouble trying to continue the spending habits they had developed before. In terms of Figure 2, they acted as if the earlier sharing of growing national production had continued unchanged.

How could these workers continue to increase their spending trends as their earnings stagnated? By relying on their largest asset, their homes. House values rose in the 1970s, and public policy encouraged home ownership for everyone. It seemed only natural to remortgage your house as its price rose to get the resources to support your previous life style.

As with the political decisions of 1971, the actions by individual workers took a while to affect the whole economy. The aggregate impact also was delayed for a decade as economic policies in the Clinton Administration led workers' earnings temporarily to resume their rise. Only after the start of the new millennium did the increasing demand for mortgage income run up against the aggregate supply of houses. It led to a massive housing boom which collapsed spectacularly in the financial crisis of 2008 (Rajan, 2010; Cynamon and Fazzari, 2014).

The fall in house prices and collapse of credit left households with massive debts—often more than the value of their houses. This normally is considered a problem for each individual, but the accumulation of household debt, which doubled relative to income since 1980, was encouraged by government subsidies of debt by tax deductions on home mortgages and Fannie Mae and Freddy Mac mortgage guarantees as well as by the stagnation of working incomes. The accumulation of mortgage debt has impeded personal expenditures, depressing consumer expenditures after the crash. The result is that employment has remained low since the financial crash in 2008 due to low consumer spending (Koo, 2008).[24]

Mortgage relief would be better than standard fiscal policies in promoting prosperity because it would help people most likely to increase spending. This can be seen by looking at the location of spending changes. The net worth of the poorest fifth of the population vanished in the crisis and rose to less than one-quarter of its previous value in the recovery. The net worth of the middle fifth—still in the low-wage sector—fell and rose, but still remains only three-quarters of its previous value. Consumption fell further in states where house prices decreased the most, and the consumption rebound has been much weaker in these same states (Mian and Sufi, 2014).

A recent report to Congress describes how plans to relieve mortgage problems after the financial crash of 2008 went astray. Congress included mortgage relief in the law authorizing the Troubled Asset Relief Program in 2008. The government announced in early 2009 its housing program, entitled the Home Affordable Modification Program (HAMP). Money was allocated for the modification of home mortgages, and mortgage holders in trouble were invited to apply to HAMP for help. But only a small proportion of the money was spent and few potential homeowners were helped. The problem was that the banks involved with HAMP rejected more than seven out of every ten homeowners who applied. Citibank denied eighty-seven percent of its HAMP requests. JP Morgan Chase rejected eighty-four percent, and Bank of America rejected eighty percent. The banks holding the mortgages refused to write them down even if subsidized by the government—and the government did not enforce this obligation on them (Special Inspector General for TARP, 2015).[25]

This should not have been a surprise. HAMP was designed to help banks rather than under-water debtors. Timothy Geithner, Secretary of the Treasurer, admitted, "We estimate that [the banks] can handle ten million foreclosures, over time. This program will help foam the runway (Barofsky, 2012, 156)." Just as planes cannot take off from foamed runways, home-owners cannot not get relief from their accumulated debts through HAMP.[26]

Mortgage and educational debt are parts of a single problem. The accumulation of these debts was promoted by public policies, subsidizing mortgages and withdrawing public support for college education. And they have left consumers, largely in the low-wage sector, burdened with debts that inhibit their spending. Government policy to reduce this debt and increase household net worth would be more effective than traditional fiscal policy in restoring prosperity to America. But the problems of debt relief are suggested by the difficulties of HAMP. The government, run by members of the FTE sector, has been unwilling and unable to pressure organizations run and owned by members of the FTE sector to engage in programs to help people in the low-wage sector.

These economic policy measures show how the leaders of the FTE sector ignore the needs of the members of the low-wage sector. A recent political action reveals both the pervasiveness of the dual economy and how the economic division is connected firmly to race. The Voting Rights Act of 1965 was passed in order to complete the integration started by the Civil Rights Act of the previous year. Giving all Americans the vote would lead to policies that would benefit all Americans.

This act was reauthorized by a succession of administrations of both parties and wide majorities in Congress, but the Supreme Court decided in *Shelby v. Holder* (570 U. S. 2013) that the preclearance requirements that some states—mostly Southern—needed for voting rights changes was based on old data and was an unconstitutional burden on these states. The result was an immediate explosion of Republican state actions to restrict voting in various ways. These actions have been contested as illegal, but the legal cases are of course subject to the dictates of the Supreme Court.[27]

Shelby v. Holder was decided in a 5-4 vote—as was *Milliken v. Bradley*—with Chief Justice John Roberts in the majority. Roberts clerked for Justice Rehnquist who had been appointed by Nixon, worked in the Reagan Administration and was appointed to the Supreme Court by Bush in 2005. His career has been intimately connected to Nixon's Southern Strategy, and some people have seen this consistency as part of a continuing conspiracy to roll back the accomplishments of the Civil Rights revolution of the 1960s (Rutenberg, 2015).

An implication of the dual economy model is that the FTE sector operates independently of the low-wage sector. If substantial parts of the low-wage sector in addition are not able to vote, then the neglect of the interests of the low-wage sector will not be represented in the political process. Present trends will continue and perhaps accelerate. The federal nature of the United States means that if a block of states operate with restricted voting, this block can have a powerful effect on national policies. This was described earlier in the geography of states that refused to expand Medicare under the Affordable Care Act.

International Comparisons

This paper is about the United States, but parts of the American Dual Economy model apply to other countries as well. The growth of inequality extends beyond the United States, but politics are different in other countries. Only in some countries have the politics turned the economic forces into a dual economy.

As we turn to international comparisons, we need to distinguish inequality within countries, as this paper has considered American inequality, from inequality between countries. While the former has increased in many countries, the latter has decreased around the world. Overall world inequality therefore has not changed much in recent decades. We must distinguish movements at the top of the distribution as well as those at the bottom, as argued earlier for the United States. Inequality between countries has decreased mostly due to economic growth in China and India, while inequality within countries has resulted mostly due to increasing incomes among the richest people (Bourguignon, 2015).

For the richest, the growth of finance, technology and electronics has increased their incomes both because they have done well within their own countries and because they have engaged in international commerce. Globalization increased the scope of financial and industrial activities, providing greater scope for any individual action. As American firms became active around the world, they have enlisted local counterparts and established subsidiaries in ways that approximate developments within the United States. Political decisions within countries have moderated the growth of inequality in some countries, and the degree of inequality across countries is a result of both economic and political decisions (Piketty, 2013).

For the poorest, the forces of globalization noted above for the American low-wage sector have subjected workers to ever more international competition. Add to that the technical change that enabled machines to do the work of semi-skilled workers, and you have similar divisions of workers around industrial countries.

Figure 4 extends the analysis of differential job growth to European countries, where the effect is stronger than in the United States. If the United States were added to Figure 4, it would be near the right-hand end, with a smaller effect of technology on mid-level jobs. The effect of the new technology was stronger in Europe than it was in the United States, and the share of EU workers in highly-paid jobs rose to slightly more than one-third in 2010. Political decisions moderated the effects of the shifting demand for labor on unskilled workers in several European countries, and the results on the distribution of income were affected by both economic and political decisions (Goos, Manning and Salomons, 2014).

The comparison of Figures 3 and 4 reveals the power of political choices in America. The effect of technology on the distribution of jobs was relatively small in the United States, but the increase in inequality was relatively large. This paper showed how the peculiar history of the United States led to the American dual economy. None of the European countries has America's long history of African slavery and subsequent efforts to subordinate African Americans in other ways. Without the American attempts to divide populations into different groups—us and them—economies of rich and poor may not have separated into dual economies. Only studies of individual countries will illuminate how economic and political factors have worked out within each country.

This account shows how the United States can stand at the top of the countries in per-capita income—behind only Switzerland and Norway—but rank sixteenth in social progress indicators. This is still high among the 133 countries listed, but distinctly lower than others of the richest countries in the index of basic human needs, foundations of wellbeing, and opportunity. Had we the data to see only the FTE sector, its social progress rank undoubtedly would be close to its per-capita income rank. But the low-wage sector does not do anywhere as well for its members and drags the national index down (Porter and Stern, 2015).

Conclusion

I have argued in this paper that the United States economy has developed into a dual economy in the spirit of W. Arthur Lewis. The prosperous economy, known as the FTE sector, is the economy most readers of this paper live in and envision as the American economy. The depressed economy, known as the low-wage sector, is part of the American economy nonetheless. The decline of the middle class has left us with these two economies, but with policies made by the FTE sector for the FTE sector.

These policies include keeping the low-wage sector relatively quiet by mass incarceration, housing segregation and disenfranchisement. These oppressive policies have been justified by racecraft, that is, the belief that races exist and that black Americans are lacking in individual personality. The low-wage sector includes roughly seventy percent of Americans, but African-Americans are only fourteen percent of the population. Even if all blacks are in the low-wage sector they still comprise only a minority there. Nonetheless the policies that are to keep the low-wage sector in place are supported by assertions that the members of the low-wage sector are black. It does not seem to bother political discussions that the overwhelming majority of people in the low-wage sector are white.

Any member of the low-wage who tries to rise into the FTE sector must do so through education. His or her way through the educational process to gain skills that offer a good chance of entering the FTE sector has been made difficult in several ways. The loss of social capital in the low-wage sector makes it hard for members to stay with education long enough to make this transition. And the policies of the FTE sector have crippled the fabled American educational system to the degree that very few members of the low-wage sector have access to schools that can pave the way to the FTE sector. This has been conceptualized as the failure of increasingly segregated black schools in the early twenty-first century, but the damage is much wider than the damage to this minority population. The failure of schools affects white members of the low-wage sector as much as blacks. Social mobility has decreased as inequality has increased.

The FTE sector makes plans for itself, typically ignoring the needs of the low-wage sector. This can be seen in health care, public education, mass incarceration, infrastructure investment and debt reduction since the financial crisis of 2008. Public support has eroded since the 1970s for both health care and public education, typically on the basis that the benefits would go primarily to blacks. As public education increasingly failed to provide a transition into the FTE sector for members of the low-wage sector, mass incarceration acted as a New Jim Crow policy to keep blacks in their place. The failure to keep up the nation's infrastructure and to revive the economy by reducing mortgages that could not be paid after the housing boom burst demonstrate the FTE's separation from the low-wage sector and its unwillingness to spend its money on things that do not benefit them directly, even though there might be indirect effects that benefit the whole economy (Wright, 2013).

The subset of the FTE sector shown in Figure 1 has disproportionate effect on economic policies. Even more than other members of the FTE sector, the top one percent resists tax increases and asserts that the government should cut government spending instead. They say that government debts are a larger problem than any of the problems discussed here. Their remedy is to cut spending on these programs even more (Page, Bartels and Seawright, 2013; Ferguson, 1995; Hacker and Pierson, 2010).

The division of the economy comes from the hollowing out of the wage distribution and the consequent destruction of the middle class. Autor (2015) argues that technical progress will continue and that the shape of employment will evolve. He likens the observers of the low-wage sector to Luddites and appeals to the industrialization that eventually raised their wages. But it took a half-century from the "Hungry Twenties"—the 1820s—for British wages to begin their assent, with many political changes along the way (Feinstein, 1998). The danger for America is that the combination of a dual economy and racecraft may lead to political decisions that will freeze the dual economy in place. It then will be hard for the forces of technological change and globalization to reunify the American economy in any reasonable time.

One picture is worth 1,000 words, and Figure 5, published in response to a stock market correction in August 2015, summarizes this paper well. And, as this paper is mostly words, it is appropriate to close with anther capsule description of the Dual Economy: "A society that protects some people through a safety net of schools, government-backed home loans, and ancestral wealth but can only protect you [my black son] with the club of criminal justice has either failed at enforcing its good intentions or has succeeded at something much darker (Coates, 2015, 17-18)."

References

Acharya, Avichit, Matthew Blackwell, and Maya Sen, "The Political Legacy of American Slavery," Harvard Kenned School Working Paper 14-057, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2538616 (March, 2015).

Alesina, Alberto, Edward Glaeser, and Bruce Sacerdote, "Why Doesn't the United States Have a European-Style Welfare State?" *Brookings Papers on Economic Activity*, Fall 2001: 187-278. Also available as NBER Working Paper 8524.

Alexander, Michelle, *The New Jim Crow: Mass Incarceration in the Age of Colorblindness* (New York: New Press, 2010).

American Society of Civil Engineers, *2013 Report Card for American Infrastructure*, available at http://www.infrastructurereportcard.org.

Ashton, Paul, and Amanda Petteruti, "Gaming the System: How the Political Strategies of Private Prison Companies Promote Ineffective Incarceration Policies," Washington, Justice Policy Institute, June, 2011.

Atkinson, Anthony B., *Inequality: What Can be Done?* (Cambridge MA: Harvard University Press, 2015).

Autor, David H., "Why Are There Still So Many Jobs? The History and Future of Workplace Automation," *Journal of Economic Perspectives*, 29 (3), 3-30 (Summer 2015).

Autor, David H., and David Dorn, "The Growth of Low-Skill Service Jobs and the Polarization of the US Labor Market," *American Economic Review*, 103, 1553-1597.

Autor, David H., Frank Levy, and Richard J. Murnane, "The Skill Content of Recent Technological Change: an Empirical Exploration," *Quarterly Journal of Economics*, 118: 1279-1333 (November 2003).

Averitt, Robert T., *The Dual Economy: The Dynamics of American Industry Structure* (New York: Norton, 1968.)

Baily, Martha J., and Susan M. Dynarski, "Inequality in Postsecondary Education," in Greg J. Duncan and Richard J. Murnane (eds.), *Whither Opportunity? Rising Inequality, Schools, and Children's Life Chances* (New York: Russell Sage, 2011), pp. 117-32.

Bartlett, Bruce, "Exploring Mitt Romney's Taxes and Tax Plan," *New York Times*, August 21, 2013.

Barofsky, Neil, *Bailout: An Inside Account of How Washington Abandoned Main Street While Rescuing Wall Street* (New York: Free Press, 2012).

Belkin, Lisa, *Show Me a Hero* (Boston: Little Brown, 1999.

Bennett, Jim, "Alabama Photo Voter ID Guide," *Office of the Secretary of State, State of Alabama*, March, 2014.

Bernard, Tara Siegel, "Judges Rebuke Limits on Wiping Out Student Loan Debt," *New York Times*, July 17, 2015.

Bettinger, Eric P., "The Effect of Charter Schools on Charter Students and Public Schools," *Economics of Education Review*, 24: 133-47 (April, 2005).

Bifulco, Robert, and Helen F. Ladd, "The Impact of Charter Schools on Student Achievement: Evidence from North Carolina," *Education Finance and Policy*, 1: 30-90 (Winter, 2006).

Board of Governors of the Federal Reserve System, “Report on the Economic Well-Being of U.S. Households in 2014,” May 2015. http://www.federalreserve.gov/econresdata/2014-report-economic-well-being-us-households-201505.pdf.

Bonczar, Thomas P., “Prevalence of Imprisonment in the U.S. Population, 1974-2001,” Washington DC: US Department of Justice, Bureau of Justice Statistics, Special Report, August 2003.

Bourguignon, Francois, *The Globalization of Inequality* (Princeton: Princeton University Press, 2015).

Boustan, Leah Platt, “Was Postwar Suburbanization ‘White Flight’? Evidence from the Black Migration,” *Quarterly Journal of Economics*, 125: 417-43 (February 2010).

Brodkin, Karen, *How Jews Became White Folks and What that Says about Race in America* (New Brunswick, NJ: Rutgers University Press, 1998.

Bureau of Labor Statistics, “Occupational Employment Statistics.” (2015) http://www.bls.gov/oes/current/oes_nat.htm#19-0000.

Burnham, Walter Dean, and Thomas Ferguson, “Americans Are Sick to Death of Both Parties: Why Our Politics Is in Worse Shape Than We Thought,” *Alternet*, December 18, 2014. Available at: http://www.alternet.org/americans-are-sick-death-both-parties-why-our-politics-worse-shape-we-thought.

Caraley, Demetrios, “Washington Abandons the Cities,” *Political Science Quarterly*, 107: 1-30 (1992).

Card, David, Alexandre Mas and Jesse Tohbard, “Tipping and the Dynamics of Segregation,” *Quarterly Journal of Economics*, 123: 177-218 (February 2008).

Cason, Mike, "State to close 5 parks, cut back services and license offices." *Alabama Media Group*, September, 2015. Available at: http://www.al.com/news/index.ssf/2015/09/state_announces_to_close_becau.html#incart_river_home

CNN Political Unit, "Poll: 'Obamacare' vs. 'Affordable Care Act,' " CCN, available at: http://politicalticker.blogs.cnn.com/2013/09/27/poll-obamacare-vs-affordable-care-act/

Coates, Ta-Nehisi, *Between the World and Me* (New York: Spiegel and Grau, 2015).

Cohen, Patricia, "For-Profit Colleges Accused of Fraud Still Receive U.S. Funds," *New York Times*, October 12, 2015.

Congressional Budget Office, "The Distribution of Household Income and Federal Taxes, 2011," November, 2014.

Consumer Financial Protection Bureau, "Student Loan Servicing," September, 2015. Available at: http://files.consumerfinance.gov/f/201509_cfpb_student-loan-servicing-report.pdf.

Cozick, Amy, "Middle Class Is Disappearing, at Least from Vocabulary of Possible 2016 Contenders," *New York Times*, May 11, 2015.

Cynamon, Barry Z., and Steven M. Fazzari,"Inequality, the Great Recession, and Slow Recovery," SSRN, October 24, 2015. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2205524.

Davis, Julie Hirschfeld, "Obama's Twitter Debut, @POTUS, Attracts Hate-Filled Posts," *New York Times*, May 21, 2015.

Dewan, Shaila, "Probation May Sound Light, but Punishments Can Land Hard," *New York Times*, August 2, 2015.

DiTomaso, Nancy, *The American Non-Dilemma: Racial Inequality without Racism* (New York: Russell Sage, 2013).

Doogan, Kevin, *New Capitalism? The Transformation of Work* (Cambridge: Polity, 2009).

Dreier, Peter, and Aditi Sen, "Hedge Funds: The Ultimate Absentee Landlords," *The American Prospect*, 25 (5), 40-45 (Fall 2015). Available at: http://prospect.org/article/hedge-funds-ultimate-absentee-landlords-fall-preview

Drutman, Lee, *The Business of America is Lobbying* (New York: Oxford University Press, 2015).

Dubner, Stephen J., "Toward a Unified Theory of Black America," *New York Times*, March 28, 2005.

Dynarski, Susan, "New Data Gives Clearer Picture of Student Debt," *New York Times*, September 10, 2015.

Edwards, Ezekiel, Will Bunting and Lynda Garcia, *The War on Marijuana in Black and White* (New York: American Civil Liberties Union, 2013).

Edwards, John, "Speech to the Democratic National Convention," July 28. 2004. Available at: http://www.washingtonpost.com/wp-dyn/articles/A22230-2004Jul28.html.

Ehrenreich, Barbara, and Dedrick Muhammad, "The Recession's Racial Divide," *New York Times*, September 13, 2009.

Eichengreen, Barry, *Exorbitant Privilege: The Rise and Fall of the Dollar and the Future of the International Monetary System* (New York: Oxford University Press, 2011).

Farley, Reynolds, Sheldon Danziger and Harry J. Holzer, *Detroit Divided* (New York: Russell Sage, 2000).

Feinstein, Charles H., “Pessimism Perpetuated: Real Wages and the Standard of Living during and after the Industrial Revolution,” *Journal of Economic History*, 58, 625-59 (September 1998).

Ferguson, Ronald F., *Towards Excellence with Equity: An Emerging for Closing the Achievement Gap* (Cambridge, MA: Harvard Education Press, 2007).

Ferguson, Thomas, *Golden Rule: The Investment Theory of Party Competition and the Logic of Money-Driven Political Systems* (Chicago: University of Chicago Press, 1995).

Ferguson, Thomas, and Joel Rogers, *Right Turn: The Decline of the Democrats and the Future of American Politics* (New York: Hill and Wang, 1986).

Fields, Karen E., and Barbara J. Fields, *Racecraft: The Soul of Inequality in American Life* (New York: Verso, 2012).

Fitzsimmons, Emma G., and David W. Chen, “Aging Infrastructure Plagues Nation’s Busiest Rail Corridor,” *New York Times*, July 26, 2015.

Foner, Eric, *Reconstruction: America’s Unfinished Revolution, 1863-77* (New York: Harper and Row, 1988).

Forsberg, Mary E., “A Hudson Tunnel That Goes One Way,” *New York Times*, October 27, 2010.

Fortner, Michael Javen, “The Real Roots of the ‘70s Drug Laws,” *New York Times*, September 28, 2015.

Fourcade, Marion, Etienne Ollion, and Yann Algan, “The Superiority of Economists,” *Journal of Economic Perspectives*, 29 (1), 89-113 (Winter 2015).

Freeman, Richard A., “Are Your Wages Set in Beijing?” *Journal of Economic Perspectives*, 9 (3), 15-32 (Winter 1995)

Gelles, David, “For the Highest Paid C.E.Os, the Party Goes On,” *New York Times*, May 16, 2015.

Gelman, Andrew, et al., *Red State, Blue State, Rich State, Poor State: Why Americans Vote the Way They Do* (Pinceton: Princeton University Press, 2008).

Goldin, Claudia, *Understanding the Gender Gap: An Economic History of American Women* (New York: Oxford University Press, 1990).

Goldin, Claudia, “The Quiet Revolution That Transformed Women’s Employment, Education, and Family,” *American Economic Review*, 96 (2), 1-12 (May 2006).

Goldin, Claudia, and Lawrence F. Katz, “The Power of the Pill: Oral Contraceptives and Women’s Career and Marriage Decisions,” *Journal of Political Economy*, 110, 730-70 (August 2002).

Goldin, Claudia, and Lawrence F. Katz, *The Race between Education and Technology* (Cambridge MA: Harvard University Press, 2008).

Goldstein, Matthew, “As Banks Retreat, Private Equity Rushes to Buy Troubled Home Mortgages,” *New York Times*, September 28, 2015.

Glaze, Lauren E., and Danielle Kaeble, “Correctional Populations in the United States, 2013,” Washington DC: US Department of Justice, Bureau of Justice Statistics, Bulletin, December 2014.

Goffman, Alice, *On the Run: Fugitive Life in an American City* (Chicago: University of Chicago Press, 2014).

Goolsbee, Austan D. and Alan B. Krueger, “A Retrospective Look at Rescuing and Restructuring General Motors and Chrysler,” *Journal of Economic Perspectives*, 29 (2): 3-24 (Spring 2015).

Goos, Maarten, Alan Manning, and Anna Salomons, “Explaining Job Polarization: Routine-Biased Technical Change and Offshoring,” *American Economic Review*, 104: 2509-26 (2014).

Gornick, Janet C., and Branko Milanovic, “Income Inequality in the United States in Cross-National Perspective: Redistribution Revisited,” Luxembourg Income Study Center Research Brief (1/2015).

Gustafron, Kaaryn, “The Criminalization of Poverty,” *Journal of Criminal Law and Criminology*, 99 (forthcoming).

Hacker, Jacob S., and Paul Pierson, *Winner-Take-All Politics: How Washington Made the Rich Richer—and Turned Its Back on the Middle Class* (New York: Simon & Schuster, 2010).

Hall, E. Robert, and Charles I. Jones, “Why Do Some Countries Produce So Much More Output per Worker than Others?” *Quarterly Journal of Economics*, 114: 83-116 (February 1999).

Handlin, Oscar, and Mary F. Handlin, “Origins of the Southern Labor System,” *William and Mary Quarterly*, 7: 199-222 (April 1950).

Harris, John R. and Michael P. Todaro, “Migration, Unemployment and Development: A Two-Sector Analysis,” *American Economic Review*, 60: 126-42 (1970).

Hasen, Richard L., *The Voting Wars: From Florida 2000 to the Next Election Meltdown* (New Haven: Yale University Press, 2012).

Jargowsky, Paul A., “The Architecture of Segregation: Civil Unrest, the Concentration of Poverty, and Public Policy,” Issue Brief (The Century Foundation, August 9, 2015).

Jeffries, John C., Jr., *Justice Lewis F. Powell, Jr.* (New York: Scribner’s, 1994).

Johnson, Lyndon B., "To Fulfill These Rights," *Public Papers of the Presidents of the United States: Lyndon B. Johnson, 1965*, Vol. II (Washington, DC: Government Printing Office, 1966), pp. 635-40.

Johnson, Rucker C., "Long-Run Impacts of School Desegregation and School Quality on Adult Attainment," NBER Working Paper 16664 (January 2011).

Jones, Charles I., "Pareto and Piketty: The Macroeconomics of Top Income and Wealth Inequality," *Journal of Economic Perspectives*, 29(1): 29-46 (Winter 2015).

Kanter, Rosabeth Moss, *Move: Putting America's Infrastructure Back in the Lead* (New York: Norton, 2015).

Katznelson, Ira, *When Affirmative Action was White: An Untold History of Racial Inequality in Twentieth-Century America* (New York: Norton, 2005).

Kerber, Linda K., *No Constitutional Right to be Ladies* (New York: Hill and Wang, 1998).

Kinser, Kevin, *From Main Street to Wall Street: The Transformation of For-Profit Higher Education*. ASHE Higher Education Report: V. 31, No. 5 (San Francisco: Jossey-Bass, 2006).

Koo, Richard, *The Holy Grail of Economics* (Singapore: Wiley, 2008).

Kozol, Jonathan, *The Shame of the Nation: The Restoration of Apartheid Schooling in America* (New York: Crown, 2005).

Krueger, Alan B., "The Rise and Consequences of Inequality," speech by the Chairman of the Council of Economic Advisers, January 12, 2012.

Levy, Frank, and Peter Temin, "Inequality and Institutions in 20th Century America," NBER Working Paper 13106 (May 2007).

Lewis, W. Arthur, "Economic Development with Unlimited Supplies of Labour," *Manchester School*, 22: 139-91 (1954).

Logan, Trevon, and John Parman, "The National Rise in Residential Segregation," NBER Working Paper 20934 (February 2015).

Looney, Adam, and Constantine Yannelis, "A Crisis in Student Loans? How changes in the characteristics of borrowers and in the institutions they attended contributed to rising loan defaults," *Brookings Papers on Economic Activity*, September 2015.

Mauer, Marc, *The Race to Incarcerate* (New York: New Press, 2006).

McCullough, David G., *Truman* (New York: Simon and Schuster, 1992).

Mian, Atif, and Amir Sufi, *House of Debt: How They (and You) Caused the Great Recession and How We Can Prevent It from Happening Again* (Chicago: University of Chicago Press, 2014).

Mills, D. Quinn. 1979. "Flawed Victory in Labor Law Reform," *Harvard Business Review*, 57, no. 3 (May-June), pp. 92-102.

Minow, Martha, "Public and Private Partnerships: Accounting for the New Religion," *Harvard Law Review*, 111: 1229-20 (2003).

Morgenson, Gretchen, "A Student Loan System Stacked Against the Borrower," *New York Times*, October 9, 2015.

Mortenson, Thomas G. "State Funding: A Race to the Bottom," American Council on Education, Winter 2012. Available at http://www.acenet.edu/the-presiency/columns-and-features/Pages/results.aspx?k=mortenson.

Murray, Charles, *Coming Apart: The State of White America, 1960-2010* (New York: Crown, 2012).

National Center for Education Statistics, "Postsecondary Attainment: Differences by Socioeconomic Status, 2015. http://nces.ed.gov/programs/coe/indicator_tva.asp.

National Science Board, "Diminishing Funding and Rising Expectations: Trends and Challenges for Public Research Universities," A Companion to *Science and Engineering Indicators*, 2012.

New York Times Editorial Board, "Alabama Puts Up More Hurdles for Voters," *New York Times*, October 8, 2015.

Nield, Ruth C., and Robert Balfanz, "An Extreme Degree of Difficulty: The Educational Demographics of Urban Neighborhood High Schools," *Journal of Education for Students Placed at Risk*, 11: 123-41 (April, 2006).

Nixon, Richard, "Address to the Nation on Domestic Programs," August 8, 1969. Online by Gerhard Peters and John T. Woolley, *The American Presidency Project*. http://www.presidency.ucsb.edu/ws/?pid=2191.

Nocera, Joe, "Zuckerberg's Expensive Lesson," *New York Times*, September 8, 2015.

Northeast Corridor Commission, "Five-Year Capital Plan, Fiscal Years 2016-2020" (2015), available at http://www.nec-commission.com/reports/nec-five-year-capital-plan-fy-2016-2020/.

Page, Benjamin I., Larry M. Bartels, and Jason Seawright, "Democracy and the Policy Preferences of Wealthy Americans," *Perspectives on Politics*, 11: 51-73 (March, 2013).

Philippon, Thomas, and Ariell Reshef, "Wages and Human Capital in the U.S. Finance Industry> 1909-2006," *Quarterly Journal of Economics*, 127: 1551-1609 (November 2012).

Piketty, Thomas, *Capital in the Twenty-First Century* (Cambridge MA: Harvard University Press, 2013).

Pinto, Nick, “The Bail Trap,” *New York Times*, August 13, 2015.

Porter, Eduardo, “Education Gap Between Rich and Poor Is Growing Wider,” *New York Times*, September 22, 2015.

Putnam, Robert D., *Bowling Alone: The Collapse and Revival of American Community* (New York: Simon and Schuster, 2000).

Razan, Radhuram, *Fault Lines: How Hidden Fractures Still Threaten the World Economy* (Princeton: Princeton University Press, 2010).

Reardon, Sean F., “The Widening Academic Achievement Gap between the Rich and the Poor,” *Community Investments*, 24, 19-30 (Summer 2012).

Reeves, Richard V., “The Dangerous Separation of the American Middle Class,” Social Mobility Memos, Brookings Institution, September 3, 2015. Available at: http://www.brookings.edu/blogs/social-mobility-memos/posts/2015/09/03-separation-upper-middle-class-reeves.

Reeves, Richard V., and Nathan Joo, “Not Just the 1%: Upper Middle Class Income Separation,” Social Mobility Memos, Brookings Institution, September 10, 2015. Available at: http://www.brookings.edu/blogs/social-mobility-memos/posts/2015/09/10-not-just-1-percent-income-reeves.

Reich, Robert B., *The Work of Nations: Preparing Ourselves for 21st-Century Capitalism* (New York: Knopf, 1991).

Roeder, Oliver, Lauren-Brooke Eisen, and Julia Bowling, *What Caused the Crime Decline?* (New York: Brennan Center for Justice at NYU, 2015).

Rutenberg, Jim, “Voting Rights Act, a Dream Undone,” *New York Times*, August 2, 2015.

Santos, Fernanda, and Motoko Rich, "Recession, Politics and Policy Stretch Arizona School Budgets," *New York Times*, June 5, 2015.

Sass, Tim R., "Charter Schools and Student Achievement in Florida," *Education Finance and Policy*, 1: 91-122 (Winter, 2006).

Scharfenberg, David, "MBTA repair bill up to $7.3b, and may rise, panel says" *Boston Globe*, August 31, 2015.

Smallacombe, Patricia Stern, "Rootedness, Isolation, and Social Capital in an Inner-City White Neighborhood," in Richardson Dilworth (ed.), *Social Capital in the City: Community and Civil Life in Philadelphia* (Philadelphia: Temple University Press, 2006), pp. 177-195.

Solow, Barbara, *The Economic Consequences of the Atlantic Slave Trade* (New York: Lexington Books, 2014).

Solow, Robert M., "A Contribution to the Theory of Economic Growth," *Quarterly Journal of Economics*, 70: 65-90 (February 1956).

Special Inspector General for the Troubled Asset Relief Program, *Quarterly Report to Congress*, July 29, 2015. Available at http://www.sigtarp.gov/Quarterly%20Reports/July_29_2015_Report_to_Congress.pdf.

Steinfeld, Robert J., *Coercion, Contract, and Free Labour in the Nineteenth Century* (Cambridge: Cambridge University Press, 2001).

Stevenson, Alexandra, "For Top 25 Hedge Fund Managers, a Difficult 2014 Still Paid Well," *New York Times*, May 5, 2015.

Stiglitz, Joseph E., *The Price of Inequality* (New York: Norton, 2012).

Stockman, Farah, "Sex, Drugs, and Racist Policing in Rutland, VT," *Boston Globe*, August 27, 2015.

Stuntz, William J., *The Collapse of American Criminal Justice* (Cambridge: Harvard University Press, 2011

Temin, Peter, "Teacher Quality and the Future of America," *Eastern Economic Journal*, 28: 285-300 (Summer 2002).

Tirman, John, *Dream Chasers: Immigration and the American Backlash* (Cambridge MA: MIT Press, 2015).

Tribe, Laurence, and Joshua Matz, *Uncertain Justice: The Roberts Court and the Constitution* (New York: Henry Holt, 2014).

Triffin, Robert, *Gold and the Dollar Crisis: The Future of Convertibility* (New Haven: Yale University Press, 1961).

Warren, Elizabeth, "Speech on Racial Inequality," Edward M Kennedy Institute for the United States Senate on Sunday, September 27, 2015. Available at: http://www.warren.senate.gov/?p=press_release&id=967

Weets, David J., and Justin M. Ronca, "Examining Differences in State Support for Higher Education: A Comparative Study of State Appropriations for Research Universities," *Journal of Higher Education*, 77: 935-67 (November-December, 2006).

"'Welfare Queen' Becomes Issue in Reagan Campaign," *New York Times*, February 15, 1976.

Wigmore, Barrie A., *Securities Markets in the 1980s: The New Regime, 1979-1984* (New York: Oxford University Press, 1997).

Wilson, William Julius, *When Work Disappears: The World of the New Urban Poor* (New York: Knopf, 1996).

Wilson, William Julius, *More than Just Race: Being Black and Poor in the Inner City* (New York: Norton, 2009).

Wines, Michael, and Lizette Alvarez, "Council of Conservative Citizens Promotes White Primacy, and G.O.P. Ties," *New York Times*, June 22, 2015.

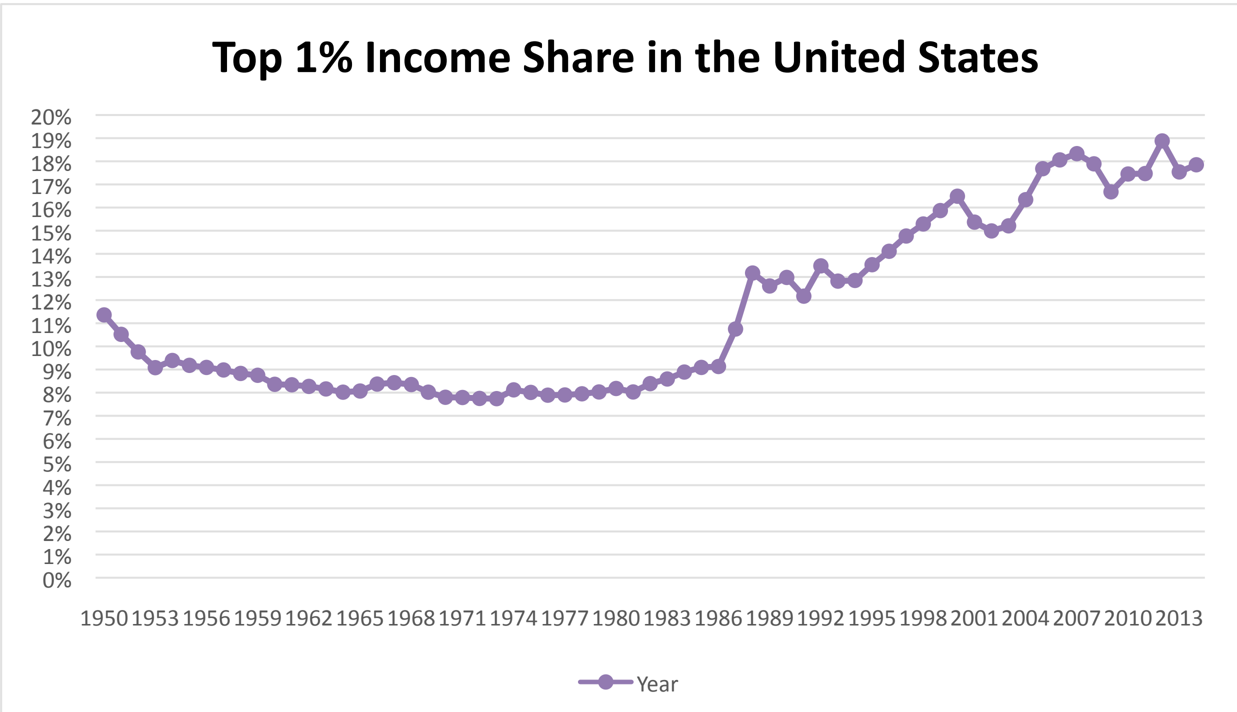
Woodward, C. Vann, *The Strange Career of Jim Crow* (New York: Oxford University Press, 1974).

Wright, Gavin, *Sharing the Prize: The Economics of the Civil Rights Revolution in the American South* (Cambridge: Harvard University Press, 2013).

Zernike, Kate, "Amtrak Official Says Rail Delays May Become 'Norm'" *New York Times*, August 10, 2015.

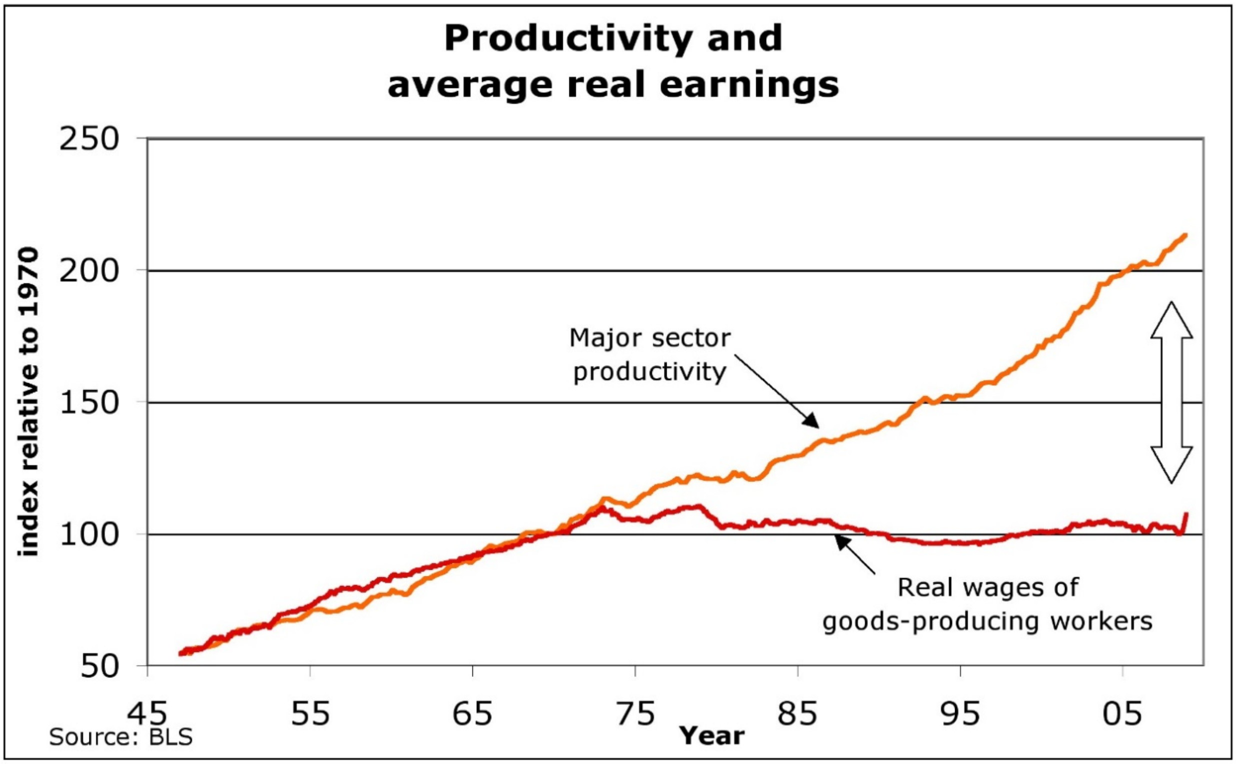
Zingales, Luigi, "Does Finance Benefit Society?" Presidential Address to the American Finance Association, January, 2015.

Figure 1



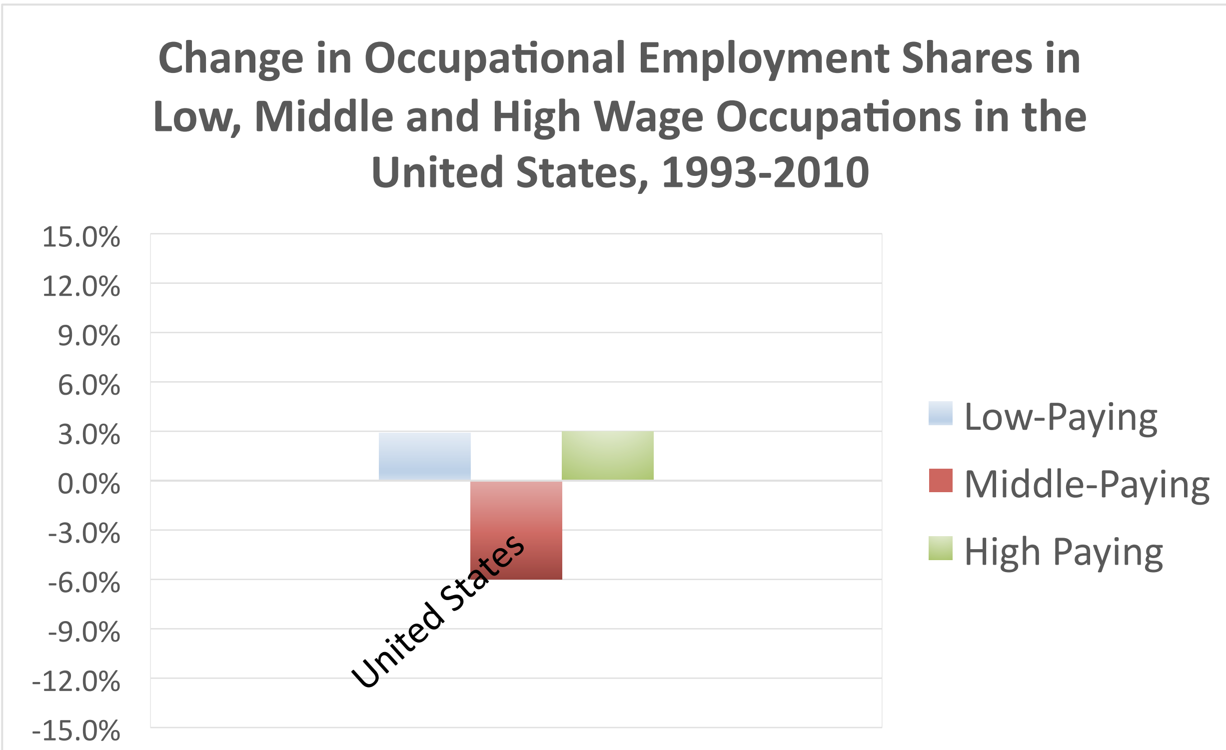
Source: http://topincomes.parisschoolofeconomics.eu/

Figure 2



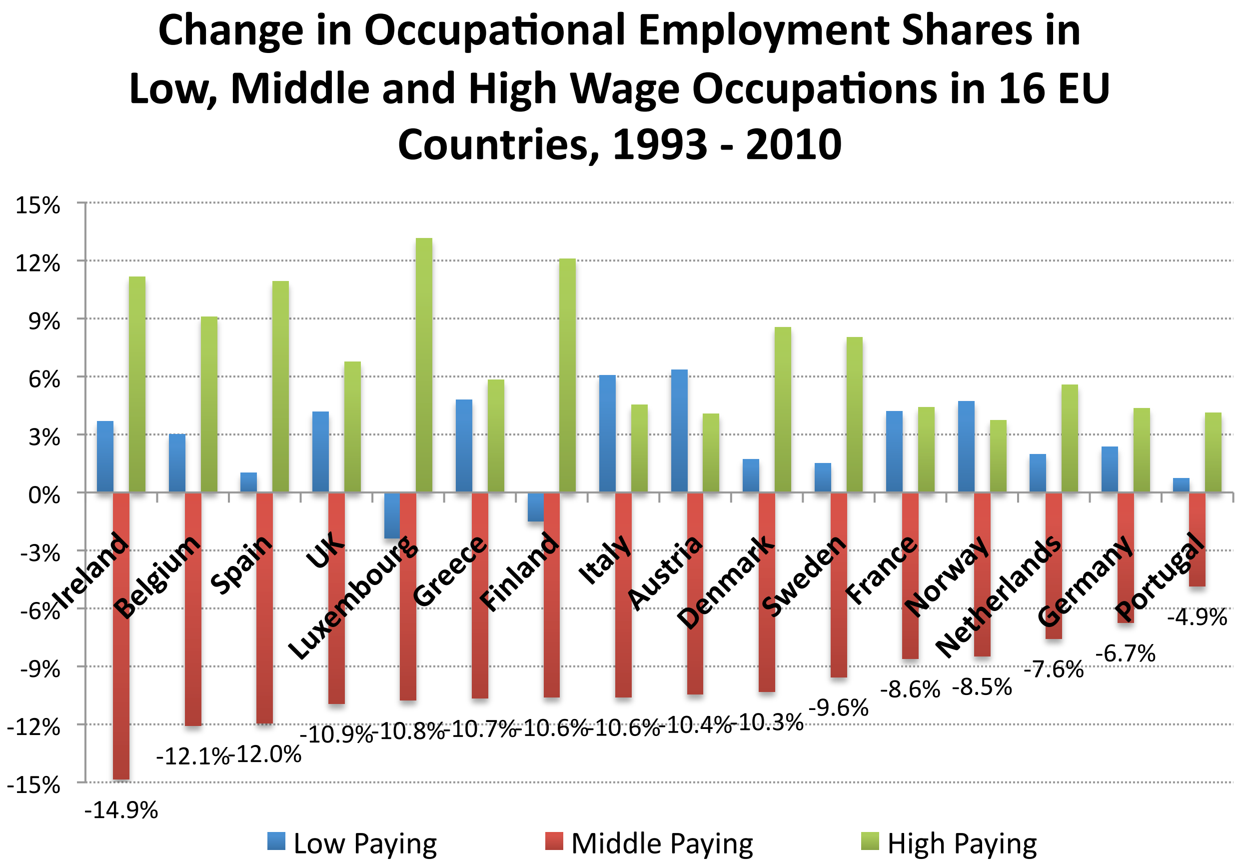
Source: https://thecurrentmoment.wordpress.com/2011/08/18/productivity-inequality-poverty/

Figure 3



Source: Autor and Dorn, 2013.

Figure 4



Source: Goos, Manning and Salomons, 2014.

Figure 5

Source: Cartoons by Dan Wasserman, *The Boston Globe*, August 25, 2015

Notes

[1] The Congressional Budget Office (2014) summarized these graphs as follows: “For households in the top 1 percent of the income distribution, inflation-adjusted after-tax income grew at an estimated average rate of 3.5 percent per year. As a result, inflation-adjusted after-tax income was 200 percent higher in 2011 than it was in 1979 for households in that group. In contrast, households in the bottom quintile experienced inflation-adjusted after-tax income growth of 1.2 percent per year, on average. Consequently, inflation-adjusted after-tax income was 48 percent higher in 2011 than it was in 1979 for that income group.”

[2] Quotations from Handlin and Handlin, 1950, pp. 211, 216, 221-22

[3] The Nixon Shock was a combination of three policies, but the change in exchange-rate regime was the lasting and important one. Nixon (1971).

[4] This should have been obvious from Bagehot and Keynes, since the primary function of a central bank with a fixed exchange rate is to preserve the exchange rate. The Mundell-Fleming model which formalized this insight was only a decade old and probably not yet widely understood. Eichengreen (2011).

[5] http://reclaimdemocracy.org/powell_memo_lewis/. Powell’s Memo is not even mentioned by his biographer, who spends 600 pages arguing that Powell was a moderate judge. Jeffries (1994).

[6] Doogan (2009), 34; http://www.heritage.org/about.

[7] Ferguson and Rogers (1986) date the political shift at this time, during the recession of 1973-75.

[8] There are still ties between White Supremacist organizations and conservative politicians today (Wines and Alvarez, 2015).

[9] Here is an intriguing cross-section case; we admire Cuban artists and ball players because talented Cubans cannot go into finance.

[10] http://topincomes.parisschoolofeconomics.eu/#Database: Atkinson (2015, 38) puts the thresholds a bit higher than Jones: $400,000 for the top 1% and $150,000 for the top 10%.

[11] The earnings variation between academic fields is echoed by variation within fields. The top 10 percent of English teachers earn above $100,000 a year and are comfortably within the FTE sector (Fourcade, Ollion and Algan, 2015).

[12] Gelman (2008, 71-73) notes that prosperity leads people to vote Republican, but that race still has effects on voting in the South.

[13] This segmentation of the labor market was anticipated by Reich (1991).

[14] American political and military intervention in other countries, particularly in Central America, also stimulated immigration to the United States (Tirman, 2015).

[15] Recent research observes increasing segregation even before the Second World War and that in both urban and rural settings. Residential segregation may have reached a peak after *Brown v. Board of Education*, but it did not start with it. See Logan and Parman (2015).

[16] This estimate was derived from historical data for 2001, but it undoubtedly is still accurate today. The prison population has declined somewhat in recent years, but through the release of inmates with long sentences early, not from a reduction of arrest and conviction rates. Some blacks encouraged increased police attention to their neighborhoods to protect themselves (Fortner, 2015). I doubt whether any of them foresaw how much drug laws would affect their communities.

[17] “Welfare Queen,” 1976. Reagan found someone using aliases and greatly exaggerated the amount of money involved and number of aliases she used.

[18] Putnam (2000) differentiates bridging and bonding social capital. Bridging social capital is inclusive and extends to civic groups; bonding social capital is exclusive and restrictive. In poor neighborhoods, people lack bridging social capital that can help them find education and jobs, but they have bonding social capital within family and church groups.

[19] The framers of the ACA did not intend the expansion of Medicaid to be optional for states; that was added by the Supreme Court in National Federation of Independent Business et al. v. Sebelius, Secretary of Health and Human Services, et al., Certiorary to the United States Court of Appeals for the Eleventh Circuit, No. 11-393, Decided June 28, 2012.

[20] Ferguson, MO, where a white policeman shot an unarmed young black man in 2014, was 75 percent white in 1990, but it had become two-thirds black by 2010 as white flight spread from inner cities to inner suburbs (Jargowski, 2015).

[21] The reach of our broken criminal justice system extends far beyond prisons, since freed inmates do not return fully to civil society. They are a sort of underclass not eligible for many kinds of government assistance and often subject to fees for probate visits or other legal needs. In addition, people may be induced to confess to crimes and become subject to the probate system. A tiny black woman was stopped taking friends home from a party. She may or may not have been speeding on a residential street and was not warned and let go. She was taken to the police station and was borderline on a breathalyzer test that the police forced on her against her will. She pled guilty to driving under the influence and was put on suspension that led to years of court appearances, fines and various court expenses that made her lose jobs and feel harassed over several years. This is an extreme story, but it illustrates the long reach of the law—particularly for black Americans (Alexander, 2010; Dewan, 2015).)

[22] The eight criteria are capacity, condition, funding, future need, operation and maintenance, public safety, resilience, and innovation.

[23] Kantor (2015) proposes high-tech solutions to our transport problems, arguing implicitly that they will help the FTE sector as well as the low-wage sector. They will however require substantial expenditures, making them unlikely in the near future.

[24] Unemployment has fallen, but the participation rate remains low.

[25] The banks disputed the numbers in the report, but Morgenson (2015) supported the thrust of the report: "It appears that the program allowed big banks to run roughshod over borrowers again and again."

[26] Now banks are selling troubled mortgages to hedge funds, which often foreclose and either sell the houses or rent them out at high rents with little maintenance (Dreier and Sen, 2015; Goldstein, 2015).

[27] Alabama reacted particularly strongly to Selby v. Holder. The state first required voters to have an ID such as a driver's license. It then closed the offices that issue driver's licenses in counties that are mostly black—claiming it was only cutting costs. These actions are being contested in court, but the outcome is uncertain (Bennett, 2014; Cason, 2015; New York Times Editorial Board, 2015).