

**iGlobalization: Kodak, Apple, and the Evolution
of U.S. Employment from 1960 to 2012**

BY

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Introduction

Among the key features of the new global economy is the increasing outsourcing and offshoring¹ of U.S. jobs. As such, the downward pressure on wages and unemployment increases have led to a decrease in the quality of life for many United States workers in today's economy. A recent survey showed that 40 percent of Americans expected the next generation would have a lower standard of living than themselves. Additionally, 62 percent indicated that they thought job security had declined, while approximately 75 percent stated, "outsourcing overseas hurts American workers" (Bacchetta and Jansen, 2011, 181).

Over the last 50 years the United States has largely shifted from creating goods to providing services. At present, approximately 12 million U.S. workers (or 9 percent of the workforce) are employed directly in manufacturing (*National Association of Manufacturers*, 2012), while service providers and retailers employ about six in seven of the nation's workers (Cox et al., 2012). The concentration of service jobs in this country, with 86 percent of U.S. workers employed in the service sector and a paltry 14 percent in the goods-producing (including manufacturing) sector, is in direct contrast to the landscape of the United States economy of the 1960s (Cox et al., 2012). At that time in U.S. economic history, the largest employers in the United States were companies like General Electric, General Motors, and Ford, who employed hundreds of thousands of

¹ Thomas Friedman's provides the following definition and example of both offshoring and outsourcing in his book *The World Is Flat 3.0* (2007): "Outsourcing means taking some specific, but limited, function that your company was in doing in-house—such as research, call centers, or accounts receivable—and having another firm company perform that exact same function for you and then reintegrating their work back into your overall operation. Offshoring, by contrast, is when a company takes one of its factories that is operating in Canton, Ohio, and moves the whole factory offshore to Canton, China. There it produces the very same product in the very same way, only with cheaper labor, lower taxes, subsidized energy, and lower health-care cost" (Friedman, 2007, 137).

Americans with manufacturing jobs (Cox et al., 2012). Not only was the type of employment different, but also the wage structure that accompanied manufacturing positions was vastly different than the hourly low-paying service positions that dominate the job market today. This transition from goods-producing to service providing, coupled with increased outsourcing and offshoring practices, indicate U.S. firms' efforts to keep up with the tides of globalization.

Hypothesis

This thesis examines how globalization, through the promotion of offshoring and outsourcing of US jobs, has affected the employment and wage structure of US workers. This will be shown through a case study approach that looks at two highly innovative, quintessentially U.S., technology companies: Eastman Kodak and Apple Inc. As much of the data on the United States' goods-producing peak is from the 1960s, the Kodak case study will focus on that period. In contrast, the Apple case study will primarily examine the company today, as it presently dominates the technology market.

Employees often referred to Kodak as "Big Yellow" or the "Great Yellow Father" due to its generous benefits and employee welfare programs. Well known for innovative products and high domestic employment, Kodak serves as the embodiment of Fordism in the tech world. Fordism defined as "the eponymous manufacturing system designed to spew out standardized, low-cost goods and afford its workers decent enough wages to buy them" (De Grazia, 2005, 4). Apple currently dominates the tech industry in innovation and has been assessed as the world's most valuable company (Goldman, 2012). Contrastingly, this incredibly large and successful firm employs few workers

domestically. With the majority of production work sub-contracted overseas, Apple demonstrates how globalization has affected U.S. jobs and subsequent wage structures.

Through an examination of two leading tech companies at two different points in United States' history, this thesis will show that globalization and the neoliberal policies from the 1970s onward² have created a new employment market with different jobs and corresponding wage levels associated with them. As such, this thesis will demonstrate how the economic fortunes of large U.S. firms increasingly have diverged from the economic welfare of U.S. workers. In other words, "U.S. companies" have won and the United States has lost.

Methodology

The primary method employed for this thesis will be a comparison of various employment data for both Apple Inc. and Eastman Kodak. Quantitative data such as employment figures will be used as a starting point of assessment for these two companies. Qualitative data will be a key component, as this paper will discuss quality of life for employees, management philosophies, and the economic and social impact on surrounding communities.

The bulk of information on Eastman Kodak will be found in books on the company's history and model as a welfare capitalist firm. Apple statistics and information will largely be sourced from *New York Times* articles, recent working papers on Apple's employment statistics, and other contemporary reports on the company. The

² Paul Treanor in *Neoliberalism: Origins, Theory, Definition* defines neoliberalism as "a philosophy in which the existence and operation of a market are valued in themselves, separately from any previous relationship with the production of goods and services . . . and where the operation of a market or market-like structure is seen as an ethic in itself, capable of acting as a guide for all human action, and substituting for all previously existing ethical beliefs" (Fish, 2009)

comparison will be supplemented with an economic historical framework from the late 1940s to the present, largely citing texts by economists like Robert Reich and Paul Krugman. Discussions of Apple and Kodak's lasting impact on the communities in the California Bay Area and Rochester, New York will primarily be sourced from newspaper articles and Alecia Swasy's book, *Changing Focus: Kodak and the Battle to Save a Great American Company* (1997). Two interviews were also conducted with Apple employees to supplement qualitative data on working at the firm.

Structure

This paper will start with a discussion of the economic framework in which the thesis is placed. As such, it briefly examines four economists' views on the economic policy shift in the 1970s from Keynesianism to neoliberalism in the United States. With advancements in technology resulting in increasing time-space compression, U.S. firms could more easily capitalize on neoliberal policies promoting free trade, economic liberalization, and open markets. This process resulted in a shift towards a service sector dominated U.S. economy, and a loss in U.S. goods-producing jobs as they continue to be outsourced and offshored.

The presentation of the two case studies will begin with Eastman Kodak, the origins of the company, and how George Eastman's work philosophy evolved into the welfare capitalist model the company employed throughout its history. The growth of the company and how this growth translated into the expansion of the Kodak's domestic work force, particularly in Rochester, will also be examined. Not only will the expansion in numbers of jobs be highlighted, but also the quality of life Kodak workers could expect

through programs like the company's dividend-linked profit-sharing plan and its civic engagement in the city of Rochester will also be discussed.

The paper will then focus on the repercussions of the downfall of Kodak on Rochester. Stories of former Kodak employees will be discussed in combination with employment and welfare statistics on the Rochester area to chronicle the decline of the company in the mid 1980s into the 1990s.

The thesis will then shift to the second case study, Apple Inc, showing how Apple transitioned from a company who formerly prided itself on its U.S.A.-made products in the early 1980s, to one who presently has almost all of its products manufactured overseas. Due to the growth of globalization and emerging markets, particularly in Asia, have made production at these facilities so appealing that top Apple executives believe "Made in the U.S.A." is no longer a viable option for most Apple products" (Duhigg and Bradsher, 2012). This section will also discuss the effects offshoring has had on the United States' trade deficit and the implications of Apple as a global rather than a U.S. company.

Economic Framework

As the focus of this thesis is the U.S. economy and globalization's affect on U.S. employment structures, the following economic framework will largely center around the impact of globalization on U.S. workers. Further, the perspective is clearly on the national impact of global capitalism, rather than the effect that globalization has on workers internationally. This is really one of the unresolved economic dilemmas when studying globalization; that economic and impacts are simultaneously local and global.

Tomlinson, in his book, *Globalization and Culture* (1999), tries to resolve this dilemma in on a cultural plain by introducing the notion of cosmopolitanism,

Being a ‘citizen of the world’ for our purposes means having a cultural disposition which is not limited to the concerns of the immediate locality, but which recognizes global belonging, involvement and responsibility and can integrate these broader concerns into everyday life practices (Tomlinson, 1999, 185).

While this may be true within an intellectual and moral dimension, it does not show why or how a worker at the local level “need[s] to have a sense of wider cultural commitment – of belonging to the world as a whole...a world in which, particularly in terms of common environmental threats requiring lifestyle adaptation, there are no others (Tomlinson, 1999, 186). While U.S. workers are part of a globalized world and global economy, their employment status is still on the local level. In fact, the problem is that most workers cannot escape the reality that they are still geographically tied to place in a way that firms no longer are. This tie is demonstrated in the case studies that show how Kodak was invested in place (Rochester) and the welfare of its workers in a way that Apple is not. Tomlinson’s approach does not negate the argument that former U.S. employment models were more beneficial for U.S. workers in the past than they are at present, as employment is locally, not globally based. As such, the assertion of this domestic focus does not in anyway invalidate the moral dilemma that Tomlinson raises, nor refute the notion that an effective response to global capitalism may necessitate the cooperation of workers across national boundaries.

In his book, *After-Shock: The Next Economy and America’s Future* (2010), Robert Reich examines the current economic state of this country using the past 140 years of U.S. economic history as his case study. Breaking up this time period into three

different sections: 1870-1929, 1947-1975 (*"The Great Prosperity"*), and 1980-2010, Reich largely focuses on Keynesian policies of what he calls *"The Great Prosperity,"* a time when "the nation provided its workers enough money to buy what they produced. Mass production and mass consumption proved perfect complements... everyone's wages grew—not just those in the top 1 percent, or the top 10 percent" (Reich, 2010, 43). His larger critique of the current U.S. economic situation is therefore focused on the United States' economic policy shift starting in the 1970s from Keynesianism to neoliberalism. Reich's primary concern with this shift is characterized by what he considers to be the "breaking of the basic bargain," or the loss of Fordism (Reich, 2010, 28). Following Reich's model, this thesis examines the 1970s to discuss globalization and its effect on the United States' economy.

Reich is not the only economist who recognizes the drastic difference in the U.S. economy from the time of *"The Great Prosperity"* to that which has evolved since the 1970s. Paul Krugman, in his book, *Conscience of a Liberal* (2007), writes:

let me suggest dividing postwar U.S. economic history into three eras: the postwar boom, from 1947 to 1973; the time of troubles when oil crises and stagflation wracked the U.S. economy, from 1973 to 1980; and the modern era of reasonable growth with rising inequality, from 1980 until the present...during the postwar boom the real income of the typical family roughly doubled, from about \$22,000 in today's prices to \$44,000. That is a growth rate of about 2.7 percent per year...incomes all through the income distribution grew at about the same rate, preserving the relatively equal distribution created by the Great Compression. The time of troubles temporarily brought growth in median income to a halt...since the 1980s median family income has risen only about 0.7 percent a year, even during the best of times (Krugman, 55, 2007).

Jacob S. Hacker and Paul Pierson have come to a similar conclusion as Reich and Krugman in their book, *Winner-Take All Politics: How Washington Made the Rich Richer--and Turned Its Back on the Middle Class* (2010), in which they attribute the

current economic crisis to the fault of the oligarchic restructuring of the economy to only benefit a small but powerful section of the population, the rich:

The mystery, further, is not just why the have-it-alls have more and more. It is also how they have managed to restructure the economy to shift the risks of their new economic playground downward, saddling Americans with greater debt, tearing new holes in the safety net, and imposing broad financial risks on Americans as workers, investors, and taxpayers (Hacker and Pierson, 15, 2010).

Hacker and Pierson discuss this idea further by creating a fictitious country called *Broadland*, where “the rich get richer at the same rate as everyone else, so the share of the national income earned by the rich stays constant” (Hacker and Pierson, 15, 2010). In contrast to *Broadland*, is *Richistan*, a world “of runaway gains at the top” (Hacker and Pierson, 15, 2010). However, all four of these economists show how *Broadland* and *Richistan* are not two imaginative alternative realities, but embody two very different times of U.S. economic history: “*The Great Prosperity*,” and now. To address how the U.S. economy changed so drastically, one must examine the 1970s, how the U.S. economy is linked to that of the greater global economy, and the rise in technology and automation.

Part of the picture is the loss of a large number of manufacturing jobs, starting with offshoring in the late 1970s to Mexico, and later to Asia, particularly to China. Not long after that, well-trained professional jobs started being outsourced as well. The evolution of the production of semiconductors is a good example of this shift, as they are fundamental to any electronic device. Manufacturing of semiconductors occurs in three stages, design, wafer fabrication, and assembly (Cox et al., 2012). Beginning in the 1960s, U.S. companies started sending some of the low-skilled aspects of assembly to Asia, with skilled wafer fabrication following in the 1980s, and within the last decade,

complex design work has also been outsourced (Cox et al., 2012). This progressive shift can in part, be attributed to the relationships required to create innovative products between the creative design teams and the factory workers generating and assembling the final products. As explained in a *New York Times* video entitled, *The iPhone Economy* (2012),

When low skilled jobs go overseas, it creates a vacuum that increasingly pulls higher waged jobs abroad as well... Losing manufacturing jobs has other consequences too. As American manufacturing has declined, our economy has lost what is known as a job multiplier (Cox et al., 2012).

This was largely a result of the rise of neoliberalism in the 1970s and the opening of markets worldwide. Judith Stein, in her book, *Pivotal Decade: How the U.S. Trades Factories for Finance in the Seventies* (2010), discusses economic and political change during the tumultuous 1970s on both the domestic and international level. At an economic level, this period witnessed the change from the gold standard to a floating currency in 1971, the two major oil crises, rapid inflation and erosion of wages, and protectionist economic measures by the European Economic Community and Japan against U.S. imports. At a domestic political level, the scandal surrounding Watergate and U.S. government behavior in the wars in South-East Asia eroded the U.S. people's trust in government as a source for positive change.

Accordingly, when in the early 1980s President Ronald Reagan became the poster-boy for neoliberalism and promised a new type of minimalist government that would lead to a booming economy, the majority of U.S. citizens jumped on board. As promised, Reagan began a crusade against government intervention, resulting in private trumping public, massive deregulation, cutting of public expenditures, and market forces driving the new U.S. economy. With these changes however, the focus went from

communal interests to that of the individual, particularly the interests of the rich individual.

As seen in Figure 1, since the 1960s, “the total federal tax rate has fallen for low earners, risen for relatively high earners, and fallen significantly for very high earners” (*The New York Times*, 2007). Particularly as a result of the Reagan tax cuts in 1981 and 1986, one can see a dramatic decrease in the total federal tax rate for the highest earning 0.01 percent and 1 percent of taxpayers, as the other 99 percent of taxpayers’ tax rate remains relatively consistent. These major tax breaks from the 1980s have largely continued up to present day.

As seen in Figure 2, the five largest kinds of tax breaks in 2011 cost the United States Treasury upwards of \$939 billion. Of these five tax breaks, all but one resulted in more than 66.6 percent of all exclusions received, concentrated in the top 20 percent of taxpayers. In other words, in four of the five types of tax breaks, 66.6 percent or more of those who saved money, made at least \$106,552 per year. Adding insult to injury, Figure 3 demonstrates just how progressive our tax system really is. From 1960 to 2004, the top 0.01 percent of taxpayers received a 37.2 percent *tax decrease*, while the bottom 20 percent received only a 3.6 percent tax decrease, and the middle 20 percent received a 0.2 percent *tax increase*. These three figures demonstrate how the neoliberal policies of the 1970s and the subsequent tax system of the 1980s resulted in the destruction of *Broadland* and the establishment of *Richistan*. The basic bargain between government and citizens, as well as firms, and workers was broken; inequality began to rise, as did the speculative investments that characterize the markets of today.

Figure 1: Lower Taxes for the Highest Earners

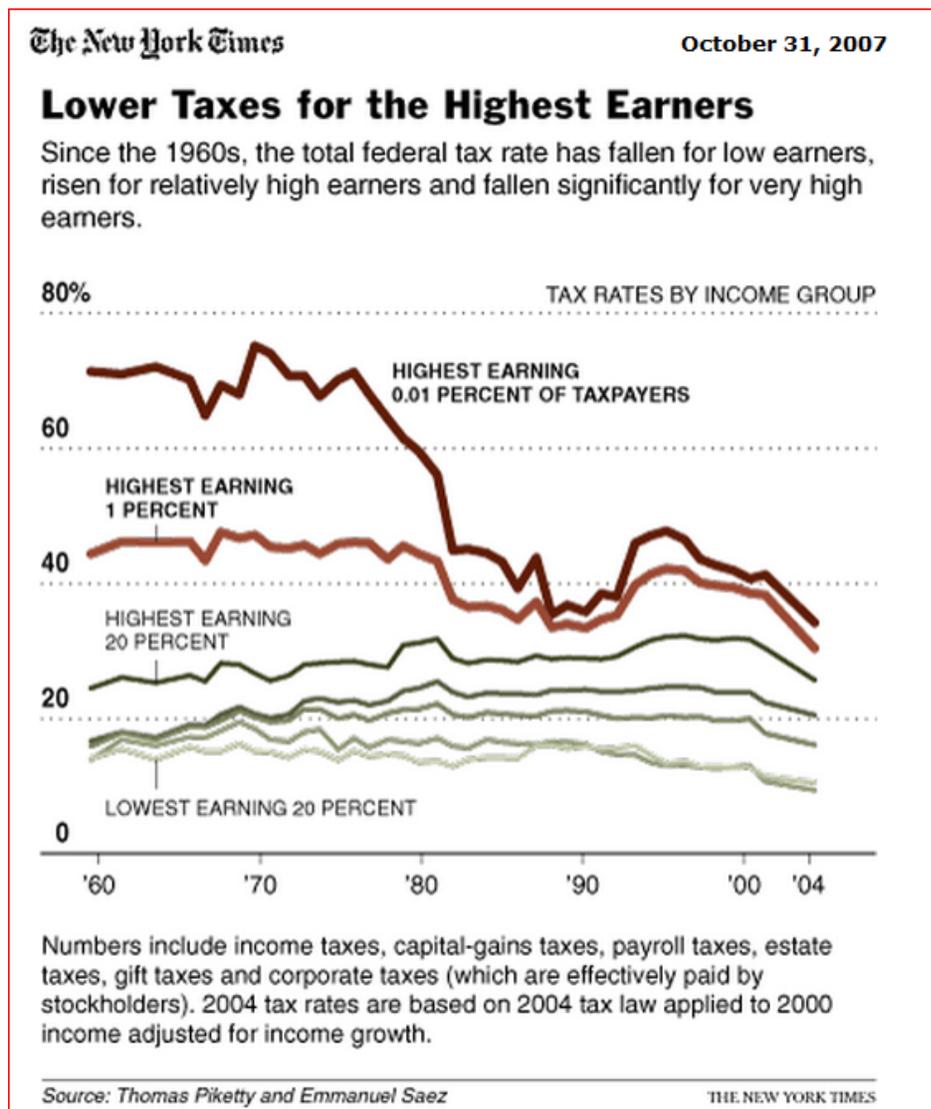


Figure 1 (The New York Times, 2007)

Figure 2: Who Gains Most from Tax Breaks

Who Gains Most From Tax Breaks

The five largest kinds of tax breaks in 2011, broken down by the the distribution of benefits to various income groups:

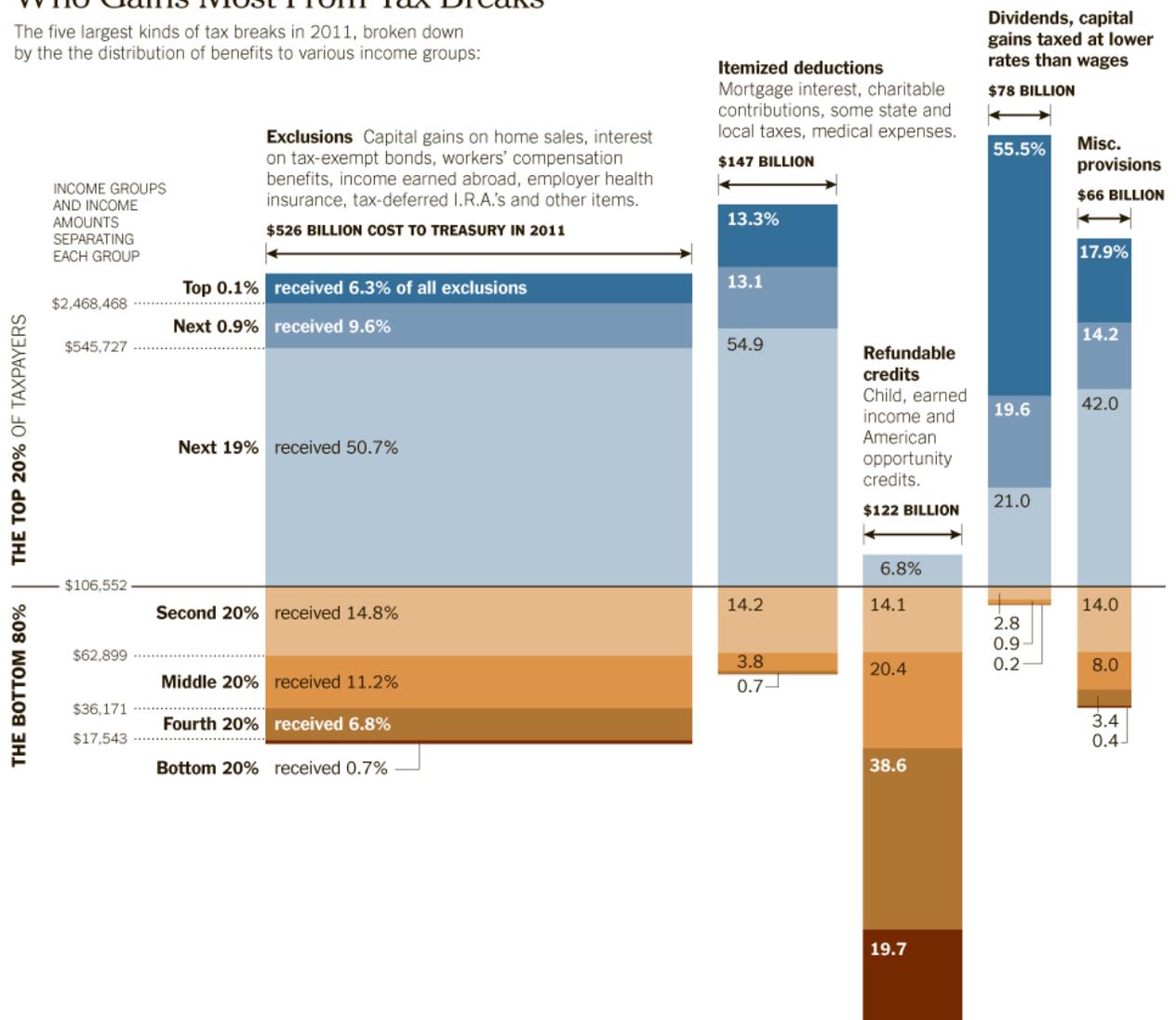


Figure 2 (Marsh, 2012)

Figure 3: Whose Tax Rates Rose or Fell

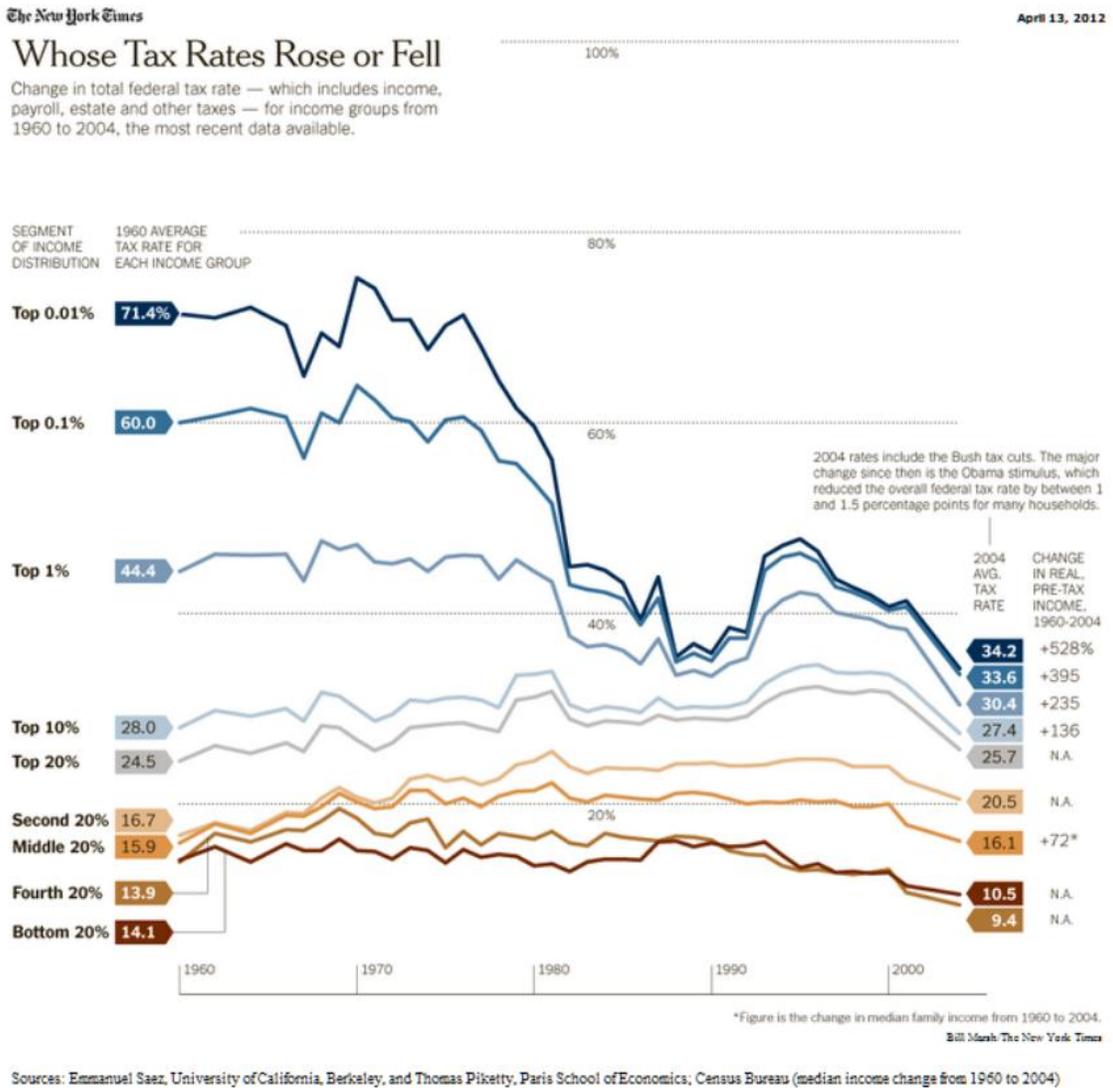


Figure 3 (Marsh, 2012)

In addition to jobs moving overseas and a vast increase in deregulation, automation was also a culprit in major losses of good jobs for U.S. workers. Reich explains:

New technologies such as computerized machine tools could do the same work people did for a fraction of the cost. Even factories in the United States shed workers as they automated...Remember bank tellers? Telephone operators? The fleets of airline workers behind counters who issued tickets? Service-station attendants? These and millions of other jobs weren't lost to globalization; they were lost in automation (Reich, 2010, 53).

Despite the massive amounts of jobs lost due to outsourcing, offshoring, and automation, the actual total number of jobs in the United States increased; the rise and fall of unemployment in accordance with the business cycles shows this. What did change were the types of jobs and the wages that average workers could expect to receive.

In 1960, General Motors, Ford Motors, and General Electric were three of the top employers in the United States, providing 595,200, 260,000, and 260,600 positions to U.S. workers respectively (Cox et al., 2010). Contrastingly, Walmart, Kelly Services, and McDonald's are three of the top employers in the United States today. These service-providing firms employed 2,100,000, 538,000, and 400,000 U.S. workers respectively, in 2010. This shift from goods-producing to service-providing has resulted in "about a tenth of Americans work[ing] in manufacturing, while service providers and retailers...employ about six in seven of the nation's workers" at present (Cox et al., 2012). Notwithstanding of the increase in the total number of jobs in the United States, for the purposes of this thesis, the focus must be on the quality of these jobs; "the real problem was that the new ones they got often didn't pay as well as the ones they lost...over the longer term, the problem is pay, not jobs" (Reich, 2010, 54).

The entire country is not suffering from this good job deficit though, “as the pay for most workers has flattened or dropped, the pay of well-connected graduates of prestigious colleges and MBA programs—the so called talent who reach the pinnacle of power in executive suites and on Wall Street—has soared” (Reich, 2010, 54). While entire neighborhoods are being foreclosed on throughout the country, and “Wal-Mart is selling smaller packages because some shoppers do not have enough cash on hand to afford multipacks of toilet paper,” the sales of luxury goods are increasingly strong with a “dramatic decline in the amount of promotions in the luxury sector — we’re seeing higher levels of full-priced selling than we saw pre-recession” (Clifford, 2011). Due to the major policy shifts of the late 1970s and onward discussed above, gains that could have...

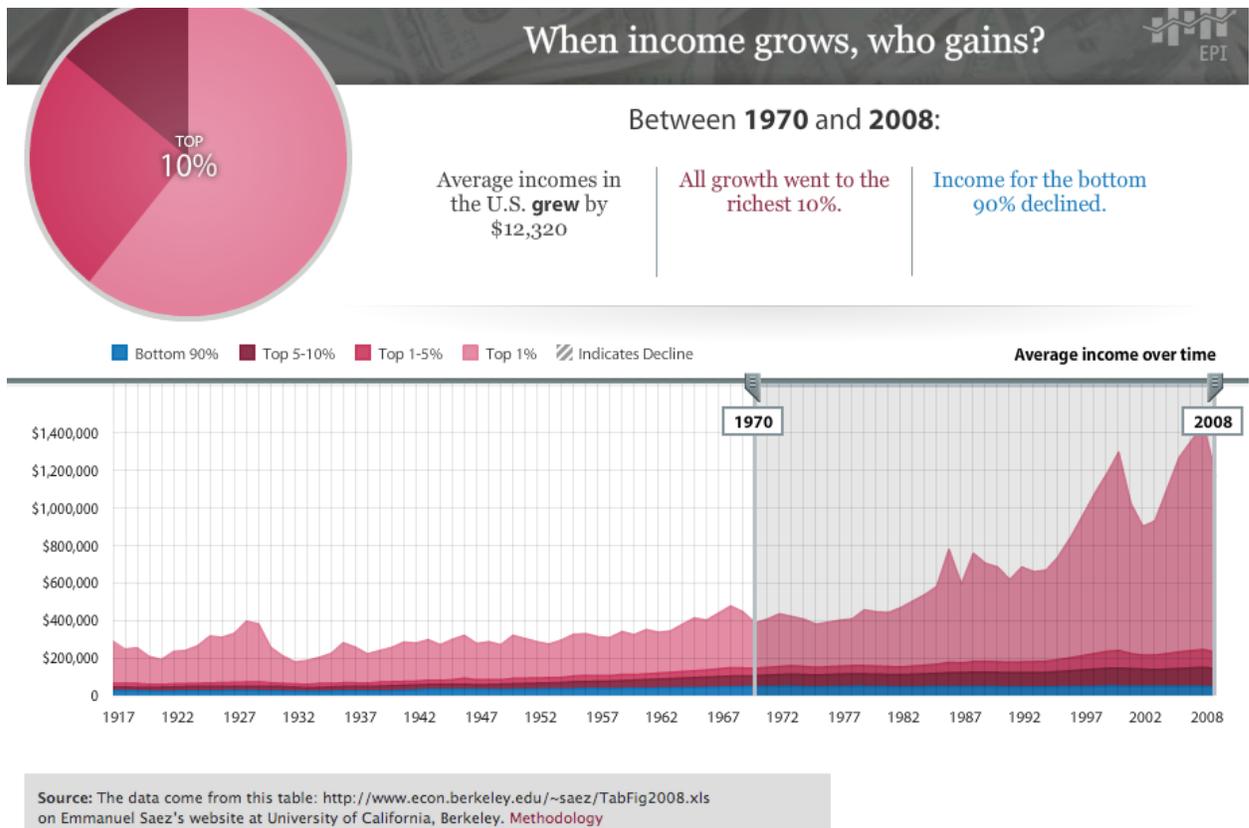
expanded our educational system to encompass early childhood education...more support to affordable public universities...created more job retraining and better and more extensive public transportation...given employees more bargaining power to get higher wages...enlarged safety nets to compensate for increasing anxieties about job loss...financed Medicare for all (Reich, 54, 2010).

Instead they become concentrated in a few hands able to afford a \$10,000 coat and \$2,000 jars of face cream. This vast inequality, characterizing both *Richistan* and present day United States, is the product of three decades of the shift to a globalized market and neoliberal policies resulting in massive privatization and deregulation in the U.S. As Reich notes, through power and wealth concentration,

with hefty campaign contributions, and platoons of lobbyists and public relations flacks, the rich helped push through legal changes that enables them to accumulate even more income and wealth—including tacit permission to bust unions, slash corporate payrolls, and reduce benefits; lower taxes for themselves and deregulate Wall Street (Reich, 58).

As seen in Figure 4, between 1970 and 2008, average incomes in the United States grew by \$12,320, but all growth went to the richest 10 percent, with the income of the bottom 90 percent declining. It can also be assessed from examination of the chart, that the majority of gains from the late 1970s and early 1980s to present have largely been concentrated in the top 1 percent, as the bottom 90 percent has remained stagnant since the early 1970s.

Figure 4: When Income Grows, Who Gains?



(Economic Policy Institute)

The Birth of the Big Yellow: Eastman Kodak

George Eastman, the founder of Eastman Kodak, first became interested in photography in the 1870s while planning a vacation to Santo Domingo from his job as a bank clerk in Rochester, New York. Upon the suggestion of a coworker to take pictures on his trip, Eastman purchased a variety of necessary, bulky, and expensive equipment. After his purchases however, he became so enthralled in the study of how to make photography more convenient, that he never even left for Santo Domingo. After tinkering in his mother's sink for three years, Eastman produced a dry glass plate and secured a U.S. patent in 1880 for both the plate and a machine for preparing many plates at one time (Kepos, 1993, 160). He soon began manufacturing these plates for sale to photographers, and in 1881, Eastman left his work as a bank clerk to found Eastman Dry Plate Company, with Henry A. Strong as President of the new firm (Kepos, 1993, 160).

Eastman's innovative spirit drove the company forward as he continued to work towards making the camera "as convenient as a pencil" (Kepos, 1993, 160). In 1884, he introduced a lighter more flexible substitute to glass plates and reorganized the company as Eastman Dry Plate and Film Company. Four years later the firm introduced its first portable camera extensively advertising it with the slogan, "You push the button, we do the rest" (Kepos, 1993, 160). The camera sold for 25 dollars and included film for 100 pictures. The owner could then send the entire camera back to the company for \$10, and Eastman would send the loaded camera and developed pictures back. The next year Eastman trademarked the word "Kodak" and Eastman Company became Eastman Kodak Company (Kepos, 1993, 161). As Eastman was "committed to bringing photography to the greatest number of people at the lowest price...his company grew and production of

both the camera and film increased, [as] manufacturing costs decreased significantly” (Kepos, 1993, 161). This growth allowed Kodak to introduce several new cameras, including its first complete line of easy to use Brownie cameras in 1900. The profit margin was in film for Kodak, selling each Brownie for only 1 dollar per model with 15-cent film.

During the 1890s and 1900s, Kodak became a highly integrated company—vertically, horizontally, and spatially. To gain control over quality and costs, Eastman opened up a small chemical plant in 1898, later followed by a box factory, printing facility, gelatin plant, lens factory, and distillation-chemicals factory (Jacoby, 1997, 57). To protect the company’s patents, Eastman also expanded Kodak horizontally, acquiring several firms in the paper, film, and camera industries. In addition, between 1900 and 1930, the firm became quite spatially integrated with over 80 percent of Kodak’s domestic workers employed in Rochester, New York (Jacoby, 1997, 58).

In 1891, Kodak Park was opened. Covering 230 acres and employing approximately 7,000 workers, “the plant was a behemoth of capital-intensive mass production...[making] all of Kodak’s photosensitive products, including film and paper” (Jacoby, 1997, 59). Kodak’s Camera Works, employer of more than 2,000 workers, and the smaller Hawk-Eye lens factory were also located in Rochester. The company had made its hundredth thousandth Kodak camera by 1896 and “was churning out miles of film and paper each month. Thus, Kodak had perfected the techniques of mass production well before Henry Ford brought them to the automobile industry” (Jacoby, 1997, 59).

At this time in Kodak's history, the company had a centralized management structure. Eastman "kept a tight hand on his firm...[he] had little patience with directors' meetings and made most decisions himself" (Jacoby, 1997, 59). Much of his work philosophy was derived from his upbringing, past work experience, and political ideology.

When Eastman was young, his father passed and the family was hit with hard financial times. He later attributed his fear of poverty to witnessing his mother's struggle as he grew up. Known for keeping meticulous records of his finances, Eastman was quite adamant about not running up debts, believing "debt is connected with eventual poverty" (Swasy, 1997, 13). He took his first job in 1868 when he was thirteen and eventually worked his way up to a position as a junior bookkeeper at Rochester Savings Bank (Swasy, 1997, 11). While working as a bank clerk Eastman was passed over for a promotion in favor of a superior's relative, and was forever committed to the importance of "making employees feel that the fair thing was being done" (Jacoby, 1997, 61).

Although he did not involve himself with partisan politics, Eastman was a conservative, a Republican, and "saw socialism as an alien and un-American philosophy" (Jacoby, 1997, 61). He was staunchly opposed to allowing unions inside his own plants because he believed "unionism—particularly the AFL's craft-based form of it—would interfere with Kodak's technologically advanced manufacturing system" (Jacoby, 1997, 63). As such, Eastman worked hard to foster a working environment that did not motivate workers to unionize by instituting his company's welfare capitalist structure.

Starting in 1897, Eastman set up an employee suggestion system and awarded monthly prizes to the best proposals. The company later introduced several welfare

facilities including reading rooms, smoking rooms, dining rooms, and an assembly hall for concerts and dances. At one point, Kodak even provided “indoor golf courses, bowling alleys, movie theatres, and a pistol range...employees could do their banking at Kodak and buy pies at the in-house bakery” (Swasy, 1997, 20). In 1910, the Athletic Association was established for Kodak employees to join for only one dollar per year. With membership, employees were granted access to additional company recreational accommodations including tennis courts, baseball fields, and a basketball gymnasium. As all recreational activities were hierarchically inclusive, managers and production workers played, ate, and danced side by side.

While the lavish facilities were a key component of the firm’s welfare capitalist model, Kodak was even more famous for its bounteous employee financial benefits. In 1899, Eastman made a fortune on the London stock market after launching Kodak Ltd., the company’s British subsidiary, and gave a large portion of this wealth to Kodak employees. To make sure that employees felt invested in the success of the company, Eastman made sure to remind them that this was not a gift but “extra pay for extra work” (Jacoby, 1997, 64). In 1911 he endowed an employee welfare fund by donating stock worth more than \$1 million, an incredible sum at the time. The fund was created to compensate injured and sick workers, as well as workers who were in need of an emergency loan.

Just one year later, Kodak started the *Wage Dividend Plan*, a profit-sharing plan that covered all employees. The link to dividends was a reminder “to employees that they had a stake in the company similar to the shareholders” (Jacoby, 1997, 62). The annual payments were quite substantial. As the amount a worker received was based on

earnings and tenure; the maximum was reached after only five years. Once the five-year mark was reached, employees could expect a dividend worth approximately a month's worth of wages. Most workers treated their dividends as cash and waited for dividend payment day to make major purchases. This behavior became so widespread among Kodak employees that "auto dealers lined the streets in front of Kodak Park selling cars for cash" on the day dividends were paid out (Jacoby, 1997, 62). One manager explained that workers treated these dividends as regular income due to the simple "fact that [the plan] has paid cash since 1912 without interruption" (Jacoby, 1997, 62). Then in 1919, Eastman sold a substantial amount of stock priced drastically below market to employees. He believed that those who helped to build his business should share in its successes and also become owners of the company:

Our employees are content and loyal and we desire above all things to keep them so. We are running a very complicated and difficult business. I know none more dependent on the good feeling and faithfulness of its employees (Swasy, 1997, 15).

By the early 1920s, "the Kodak Employees' Association (KEA) ran one of the nation's most comprehensive private welfare programs, including retirement bonuses in the amount of one week's pay per year of service; disability and accident insurance; and sickness benefits" (Jacoby, 1997, 62).

Through the company's generosity, Kodak was able to deter disloyalty and indiscipline. This strategy proved to be incredibly lucrative for the firm in the long run because of the nature of work Kodak dealt with. Due to Kodak's production technology, much of the work at Kodak Park was performed in "dark rooms where there could be no supervision. An employee could spoil in a day, materials worth what was paid him in salary over an entire year. There was no way to inspect the results of the individual

employee's work" (Jacoby, 1997, 64). As such, the company went to great lengths to foster a working environment conducive to securing workers' loyalties. The philosophy was boiled down by one manager as "having workers 'keep off lawns' without posting signs telling them to do so" (Jacoby, 1997, 64). Eastman explained this approach when he said:

You can talk about cooperation and good feeling and friendliness from morn to midnight...but the thing the worker appreciates is the same thing the man at the helm appreciates—dollars and cents...[profit sharing] makes the worker feel that he belongs to the success of the plant. When the dividend on stock is high, his wage dividend is high; when the stock dividends are low, his wage dividends slumps. Ergo, what do we get? High production and fine quality of output (Jacoby, 1997, 65).

While the Big Yellow was quite supportive of its employees, the larger focus on cash benefits over in-kind services made Kodak's "welfare programs less manipulative and moralistic than those at other companies" (Jacoby, 1997, 64). In addition, Kodak's program also did not necessitate as an aggressively paternalistic structure as other companies in the area. This was because Kodak employed few immigrants due in part to Eastman's discomfort with foreigners who could not speak English (Jacoby, 1997, 64). The majority of Kodak employees were either native white Protestants from farm villages near Rochester or German-Americans from Rochester's substantial German population. The small number of Italian, Jewish, and Polish employees at Kodak Park was largely due to Kodak's policy of only hiring high school graduates (Jacoby, 1997, 64). A manager described this occurrence favorably when he wrote that "the high average intelligence of [Kodak] workers. Their native-born tastes and conservative habits of thought have been highly favorable to economic experiment and to the development of the company's ideals" (Jacoby, 1997, 65).

Kodak's family hiring system strengthened this tradition, as it was quite common for two or sometimes even three generations to work for the company. Lane Riland, Kodak's in house psychologist for over forty years, described a Kodaker:

A Kodaker was often a firstborn child who left a farm family to attend a state university and seek lifetime employment at a large manufacturing company. Or he came from generations of blue-collar workers who left high school straight for Kodak factories (Swasy, 1997, 19).

The firm's hiring practices corresponded with Eastman's larger vision of the company as an industrial community, contributing to the establishment of the Kodak company culture. The company's "ideals"... harked back to nineteenth century republicanism, marked by small-town virtues, communal solidarity, and ethnic homogeneity" (Jacoby, 1997, 65). A 1924 article observed that Kodak's location in a "moderate-sized, homogenous community, whose social and community life it shares and from which it largely draws its personnel, is a factor in developing that close community of interest which is generally recognized as the family spirit" (Jacoby, 1997, 60).

Not only was Eastman interested in the Kodak community, but he became largely invested in the greater Rochester community as well. By the early 1920s, Kodak was by far the largest employer of Rochester residents, with 20 percent of the entire city on its payroll. As such, Eastman felt a strong motivation to become involved in local affairs as a result of both self-interest and civic duty. He gave generously, believing that what he gave to the community would eventually benefit Kodak as well. When discussing his gifts to the University of Rochester, Eastman said, "From the Kodak point of view, I consider it a very highly desirable thing to have a good college here, not only to help train good men but also to make Rochester an attractive place for Kodak men to live and bring up their families" (Jacoby, 1997, 60). Eastman's efforts and work in the community

“spurred other businessmen to become involved in local activities, including the Chamber of Commerce and the Industrial Management Council” (Jacoby, 1997, 60). The majority of Eastman’s fortune, aside from a few very generous donations to the Massachusetts Institute of Technology, went to the University of Rochester, the Mechanics Institute (now, the Rochester Institute of Technology), the Eastman Theater, Rochester City Hospital, and the Children’s Dental Clinic. On one occasion he even said, “money spent in the care of children’s teeth is one of the wisest expenditures that can be made” (Swasy, 1997, 142).

Eastman also founded the Community Chest, which later became the local United Way. Henry W. Clune, a newspaper reporter for fifty years in Rochester, described Eastman’s investment in Rochester, and told a story about his fund-raising for the Community Chest: “He was always interested in the city...A socialite sent him a generous check of five thousand dollars. But Eastman sent it back, which was pretty nery. He told her it wasn’t enough” (Swasy, 1997, 142). His biographers estimate that Eastman gave away approximately \$1 billion (in 1996 dollars) in his lifetime. "George Eastman wanted to nourish a vital community," explained Peggy Hubbard, development director at Rochester's Memorial Art Gallery (Cary and Hedges, 1996).

Kodak’s commitment to the ideals of Fordism and its maintenance of the basic bargain at this time in the company’s history serve to embody one model of capitalism. At this time in both U.S. economic history, as well as Kodak history, high domestic employment was coupled with well-paid positions for U.S. workers. This time period was characterized by a focus on communal interests and resulted in a strong middle class in the United States. What will be discussed in the following section are the

consequences of the abandonment of this version of capitalism in pursuit of another more globalized form.

Rochester, New York: Kodak City?

By 1980, Kodak accounted for 21 percent of the city of Rochester's payroll, peaking in 1982 at 60,200 Kodak workers (Rochester Business Journal, 2012). However, by 1993, those figures had dropped down to only 12 percent of the local payroll with 36,800 workers (Quint, 1993). By 2002, however, only 4.2 percent worked at Kodak (Hagenbaugh, 2002). Mary Frances Winter, a local consultant who headed United Way's 1994 Rochester campaign spoke of the changes in the city after Kodak's series of layoffs: "Rochester used to be fat city. There was a polite arrogance...That's not the case anymore. We don't perceive Kodak to be our savior anymore" (Swasy, 1997, 138). In 2012, in response to Kodak's filing of Chapter 11 bankruptcy, House Representative Kathy Hochul said,

In the weeks and months ahead, I will stand with Eastman Kodak's current and past employees as they work through this difficult process...I sent a letter to Kodak Chairman and CEO Antonio Perez urging him to keep the promises made to his approximately 7,100 employees currently working at Kodak and the nearly 25,000 retirees in the Rochester region. These employees planned their futures around the understanding that if they worked hard and kept their commitments to Kodak, Kodak would keep its commitments to them (Fien, 2012).

These changes created a harsh reality for a place once dubbed "Kodak City."

While not the focus of this thesis, it is worth recounting the various rounds of layoffs that Kodak embarked on in order to remain competitive from the 1980s onward, as they demonstrate the severity of Kodak's impact on the social and economic lives of Rochester and its residents. It must be emphasized however, that the problems at Kodak

were due to a combination of factors. These include a large highly paid workforce that made Kodak less globally competitive in the face of Asian competitors (primarily Fujifilm) and a bureaucratic and sluggish management structure that was unable and unwilling to quickly respond to new technological shifts in their core business (particularly the shift to digital photography, a process which Kodak had initially invented). As will be demonstrated below, the firm's failures were also due to some extremely poor management decisions that saw unplanned and uncoordinated layoffs as the answer to every crisis that Kodak was facing.

In 1984, a reorganization of the company resulted in Kodak's first layoffs, as the company let 800 employees go. In 1986, managers were ordered to cut spending by 5 percent and employment by 10 percent, laying off 12,900 employees worldwide, with 5,000 from Rochester alone (Cary and Hedges, 1996).

The layoffs were just the beginning of changes at the company. In addition to a cut in cafeteria hours and the elimination of free medical check-ups, the atmosphere completely changed, as did the attitudes of management. Phil Samper, Kodak's Vice Chairman from 1986 to 1989, once stood on a cafeteria table and told those eating that they must not be working hard enough if they were sitting around in the lunchroom (Swasy, 1997, 33). For the first time in the company's history, some employees met with union organizers (Swasy, 1997, 34). It was clear Kodak had fallen a long way since the days of Eastman as President. In addition to the ordered 5 percent cut in spending and 10 percent cut in employment, the Board of Directors also voted themselves a \$1,000-per-year raise, higher meeting fees (\$900 per session), a retainer of \$20,000 per year, and a

\$100,000 life insurance policy that continued at a rate of \$50,000 after they retired from the board (Swasy, 1997, 34).

In response to criticism, Kodak's CEO, Colby Chandler, tried to reassure his employees that the layoffs were behind them, and "in an August 1986 interview, he assured Rochester residents that Kodak wouldn't use any more company-wide job cutting programs" (Swasy, 1997, 34). In 1989 however, despite his assurances, the company was forced to downsize again. This time Kodak tried a different, much more expensive approach to the layoffs. In hopes of enticing employees to voluntarily leave, Kodak offered a benefit package with up to seventy-eight weeks of pay included (Swasy, 1997, 35). Approximately 5,000 people left, many voluntarily, but fear had taken over at Kodak. One employee was so afraid that he would lose his job that he did not miss work despite having a broken back. He stood at his post at the Elmgrove equipment manufacturing plant in a back brace. He explained, "You didn't want to take any chances at all. I was scared" (Swasy, 1997, 38).

A spoof of a management memo accurately portrayed employee anger and resentment towards senior management:

Its author predicted that by 1996 headquarters would be a rented mobile home. Kodak Park would be called "Kodak-Fuji Park." Worldwide employment would be thirty-seven, and research and development spending would be \$27.55. Mocking the reshuffling that was going on instead of real change, the satire said that personnel at headquarters would simply "move over one desk"...The spoof noted senior staff would still get raises (Swasy, 1997, 39).

By 1990, buyouts and layoffs had shed about 18,000 workers from Kodak's payroll in Rochester (Cary and Hedges, 1996).

In 1991, Kodak's CEO, Kay Whitmore, ordered another 3,000 cuts with the implementation of a new strategic plan. With regard to the cuts, Edwin Przybylowicz, one of the senior officers said, "Several of us tried to dissuade him from that position...our argument for that was, if we implement the strategic plan first, it will become a lot more obvious where to target reductions" (Swasy, 1997, 46).

The past major workforce reductions had been unstructured. The firm irresponsibly laid off managers and factory workers who were specialists on various product lines, and cut too many people in particular departments, forcing them to hire temporary workers to meet demands. "They left us decimated in certain areas and skill bases...and many cases we had to offer them a contract to come back to cover the transition period," said Przybylowicz (Swasy, 1997, 47). Lawrence Matteson, another Kodak executive agreed, "We downsized first...we thought about how to reorganize second (Cary and Hedges, 1996). Przybylowicz continued, "They were devastating...in what they did to us in terms of talent and also in terms of morale (Cary and Hedges, 1996).

In August 1991, Kodak released its *Resource Redeployment and Retirement Plan* (Triple R), a voluntary plan open to anyone in the company, offering a \$5,000 retraining allowance, a "bridge" payment equal to the Social Security payments the employee would receive at age 62, full pension, and one year's pay. Triple R was "one of the most generous buyouts in the history of corporate America. Even insiders were astonished that Whitmore would agree to such a lavish package" (Swasy, 1997, 47). Some senior management, like Przybylowicz, took the package fearing where Kodak was headed as they struggled with their own future: "Could I live through another one? You get into a

credibility problem with your own people” (Swasy, 1997, 47). Others, equally frustrated, complained: “You can’t shrink your way to success, but basically, that’s the way we’ve managed many of our operations” said Ziggy Switkowski, another senior manager (Swasy, 1997, 47).

The lack of structure with this volunteer payroll reduction resulted in Kodak losing people it wanted to keep. “The baby went out with the bathwater,” said Van Graafeiland, Kodak’s general counsel. The company was forced to hire some people back as consultants, and others were promoted too early and were thus unprepared for their new positions, all to simply fill in the gaps. Craig Erickson, a retired quality-control manager explained, “There were people who knew the nuts and bolts of the operation and had been there 25 years, and they all left...Waste levels and inefficiency and customer complaints ran out of control for a year and a half” (Cary and Hedges, 1996). While Kodak expected to only lose 3,000 employees, 8,321 took the Triple R package, 4,000 in Rochester alone. This set the company back approximately \$900 million and made it nearly impossible to implement the new strategic plan. Kodak deducted \$1.6 billion in restructuring costs from its earnings in 1991. The head of strategic resources, Al Sieg, noted the irony of the downsizing, as it “didn't seem to do a lot to help the company; '92 and '93 were not great years” (Cary and Hedges, 1996).

After more attempts at restructuring, an additional 2,000 people were laid off in Rochester in 1993. A *New York Times* article from August 1993 demonstrated Rochester’s struggle at the time, but also showcased the optimism some people in the area still felt for the company’s future. Thomas P. Ryan Jr, Mayor of Rochester, commented on the situation: “People here have to be reminded that the real question is

whether Kodak remains a strong company... If the pain of job losses is needed to keep the company viable and successful, then we have to be prepared for that” (Quint, 1993). But then in 1995, Kodak announced that it would eliminate 10,000 more jobs by the end of the year. “This time, there weren’t any special buyout packages...once again, Kodak was slicing jobs but not addressing the fundamental problems” (Swasy, 1997, 57).

Employees expressed their rage in the employee newsletter, “They get rid of workers. They have to get ride of some managers” (Swasy, 1997, 58). A local newspaper published a cartoon of Whitmore’s head resting on a platter with the label “Only 9,999 to go” (Swasy, 1997, 58). Rochester was hurting and scared, “in just eight years, [Kodak] halved its Rochester work force to 34,000 people, cutting the payroll by \$1 billion” (Cary and Hedges, 1996). From the early 1980s to the early 2000s, the Rochester area lost one-third of its manufacturing jobs, with approximately 101,000 jobs lost in the manufacturing sector alone by 2002 (Hagenbaugh, 2002). In 1982, Kodak employed 13.7 percent of Rochester area workers. In 2002 4.2 percent worked at Kodak (Hagenbaugh, 2002).

Employees not only were devastated by the loss of their jobs, but they felt let down by the “Big Yellow.” Al Waugh, another veteran at Kodak who lost his job explained,

If somebody had known how I felt about my line of work, I think things would’ve turned out differently. It was done very impersonally. I felt let down by the company. I would’ve done that job for whatever they would pay me, wherever they want to put me...That’s what’s really bothering me. One of my beliefs has been dashed to pieces. People worked hard, got a decent living, and made a good enough wage to raise a family. The whole thing came tumbling down. In my lifetime, I haven’t seen that. People were always hired back. But there’s no doubt in my mind that I’ll never work for Eastman Kodak again. Having that work ethic chopped out and the fact that I won’t work where I put in twenty years, those are the tough things to take (Swasy, 1997, 68).

Patty Minisce shared Waugh's disbelief after being laid off while on maternity leave in January of 1993. Minisce began working for Kodak as a factory worker earning just \$7 an hour. After earning a college degree in music education and unable to find work in her field, she entered into the company's *Special Opportunities Undergraduate Program* (SOUP) in the early 1980s. SOUP allowed her to work twenty-four hours a week and attend classes, while still being paid for a forty-hour workweek. After earning a bachelor's degree in computer science in 1991, she advanced from factory work to data entry to assistant programmer to systems analyst. Ironically, her success at the company ended up becoming her demise due to Kodak's review structure. "That was my downfall...I was promoted to a new status and moved to the bottom of the stack," explained Minisce (Swasy, 1997, 69). It was difficult for her to understand why Kodak would "spend thousands on my education and then lay me off" (Swasy, 1997, 69).

In addition to the company's firing practices, many senior management decisions became subject to great scrutiny as Kodak began its decline. After Eastman's death in 1932, and as early as the 1940s, Kodak had lost some of its innovative spirit. Edwin Land, an inventor who developed a type of photography that did not require any chemicals or processing for film tried to sell his idea to Kodak in the 1940s (Pederson, 2006, 162). When senior management did not go for the pitch, the company missed out on an incredible opportunity; Land later founded Polaroid Camera. In December 1975, when Kodak engineer, Steven Sasson completed "his 8-pound, toaster-size contraption, which captured a black-and-white image on a digital cassette tape at a resolution of .01 megapixels," he knew he had created something that "was a little bit revolutionary" (Dobbin, 2005). But it took the company a quarter of a century to capitalize of Sasson's

invention. This paralysis in action contributed greatly to the firm's decline, as Kodak's slogan, "You press the button, we do the rest," largely explains why it did not move forward.

"Doing the rest" had always been where Kodak's real business was—supplying and processing film:

During Kodak's decades of dominance, the company built a vast and specialized infrastructure of machines, equipment, and skills in manufacturing, R&D, and distribution for film and photographic paper. With huge economies of scale and skills that were hard to replicate, barriers to entering the film business were very high. Competitor Fujifilm began to increase its global presence in the 1950s, but it took several more decades before the Japanese company became a serious threat to Kodak (Sandström, 2011).

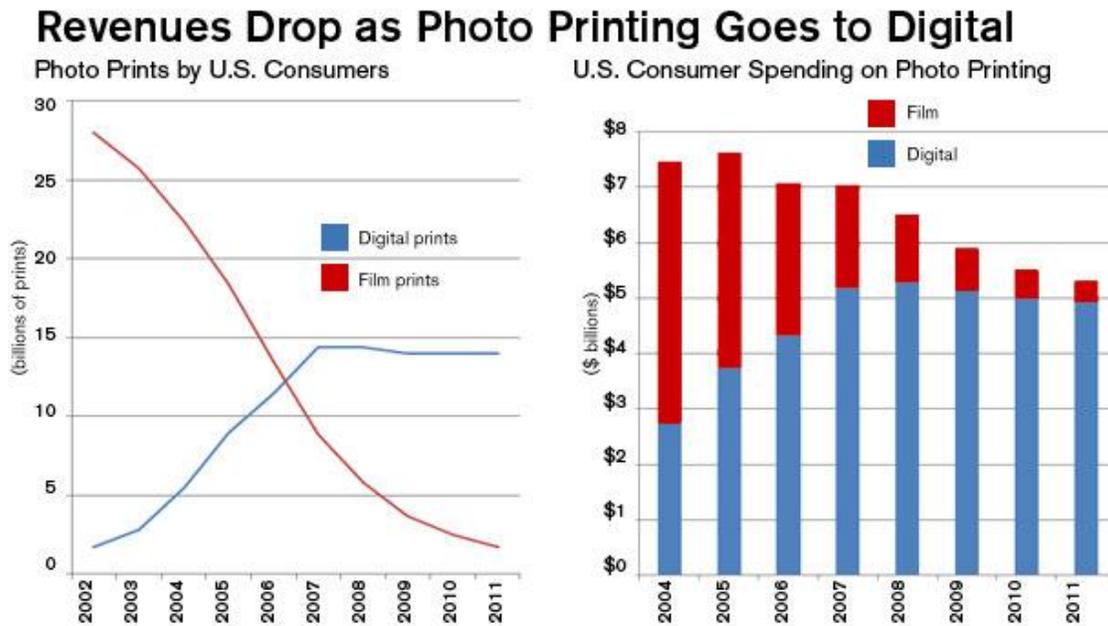
The high level of vertical integration Kodak had achieved early on in the company's history was essential to its success for a large portion of the firm's history. Owning most parts of the supply chain, Kodak had low production costs and few competitors, and as such had an incredible monopoly on the film industry, "each 'Kodak moment' was money in the bank" (Sandström, 2011).

However, as the Japanese firm, Fujifilm, continued to gain market share, a price war broke out in the mid-1990s between the two in the United States. For the first time, Kodak moments were could now be captured on Fujifilm at a cheaper rate than the Big Yellow could provide. "Fuji also had the advantage of competing against a strong U.S. dollar, a factor that conversely reduced Kodak's profits significantly in foreign markets," and Kodak responded with price reductions of its own (Pederson, 2006, 162). Suffering lower earnings and a decreasing level of investor confidence, Kodak even lost the title of official film of 1984 Summer Olympics to Fuji (Pederson, 2006, 162).

In addition to Fujifilm’s competition, the technological advances also demolished Kodak’s core film production business. Paralyzed to move forward,

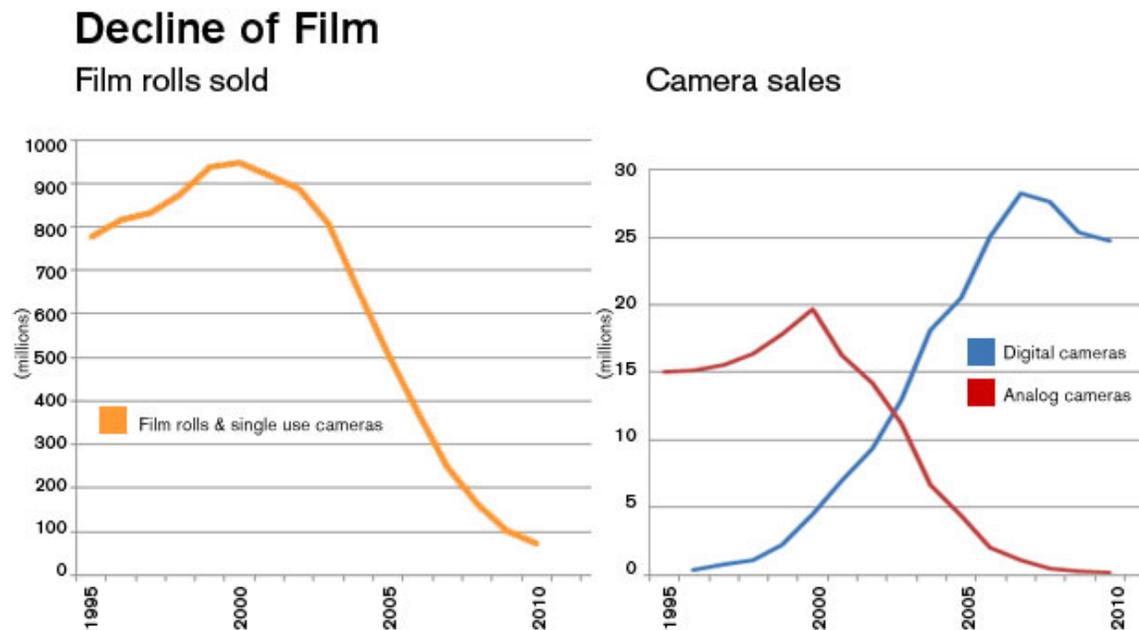
Kodak [was] reluctant to fully embrace the digital future out of fear of undermining its chemical photography business, it also had been slow to recognize huge opportunities in that chemical core, such as the explosive growth of 35-millimeter film sales following the debut of “point-and-shoot” 35-millimeter cameras (Pederson, 2006, 165).

Figure 5: Revenues Drop as Photo Printing Goes Digital



(Sandström, 2011)

Figure 6: Decline of Film



(Sandström, 2011)

As seen in Figures 5 and 6, with the growing popularity in digital cameras, film sales fell at a rapid rate, cutting severely into Kodak's bread and butter. As Sandström argues, large portions of,

Kodak's competence base related to chemistry and film manufacturing were rendered obsolete. The vertical integration that had previously been a core asset to Kodak lost its value. Digital cameras became a commodity business with low margins. The problem facing Kodak wasn't just that film profits had died but that those revenues could not be replaced (Sandström, 2011).

After the digital age came to fruition, Kodak's business model of "doing the rest" had effectively shattered. "Doing the rest used to entail a large and complex process that only a couple of companies in the world could master. Today, it is done by the click of a button" (Sandström, 2011). Ironically, George Eastman's dream of making photography

“as convenient as a pencil” coming true had effectively contributed to the downfall of Eastman Kodak. Unable to fully cope with both of these factors, Kodak was forced to continue slashing employment figures.

The cutbacks did not just affect individuals’ lives; they affected the entire community of Rochester. St. Andrew’s Area Food Cupboard in Rochester saw longer lines and fewer contributions in the early 1990s. “People used to think that those who go to a food bank are in another class...I see that is not true. We are all a part of this,” explained Mary Ellen Heyman, a board member of St. Andrew’s (Swasy, 1997, 137). She noticed how people began to donate less. “People would buy an extra can and give it to the food cupboard. Now they buy an extra one and save it for themselves” (Swasy, 1997, 137). As Heyman and her husband both worked at a local Catholic school, they also feared for their jobs, as others’ frugality often meant enrollment was cut back as people can no longer afford to send their children to private school.

Not only had the company employed tens of thousands in the city, but George Eastman had personally bankrolled considerable philanthropy in Rochester, instilling a tradition of generosity in the company’s ethos. But accompanied by the layoffs was a decline in investments Kodak could and would make in Rochester. Eastman had established the Community Chest, the forerunner to United Way back in 1918, and Kodak had continued to contribute greatly to the organization for years after. However, accompanied by the major layoffs, the local campaign results began to slip in 1992, when the total raised fell from the previous year for the first time since the 1940s, from \$37.4 million to \$35.4 million (Swasy, 1997, 143). In 1991, Kodak employees had donated \$1.2 to the United Way; in 1992 the same group contributed only \$100,000. Individuals

who previously were contributors to the United Way were now recipients of the services the organization provided as times in Rochester changed.

Those who moved into lower-paying jobs, earned less, gave less if anything at all, and required more free services. Carolyn Micklem, the director of the Rochester Family Resource Network spoke of how the layoffs had trickled down to layoffs in her own non-profit organization due to a lack of funding. Since 1980, “the rich have gotten richer and the poor have gotten poorer. The middle class is stuck. Those who have lost jobs—and some who retain them—are falling down dramatically,” she explained (Swasy, 1997, 145). The President of Genesee Settlement House, an agency that provides tutoring and other after-school programs for youths in Rochester, said

Layoffs show up in our numbers, especially in the number of people who need emergency assistance...Traditionally we saw the poor people who had been poor for years. They would come through over and over again. Now we're seeing more and more people who have never used our service before. Because of Kodak layoffs, people find themselves in the same line. They thought they were self-sufficient. But nothing is sacred anymore, not even Kodak (Swasy, 1997, 145).

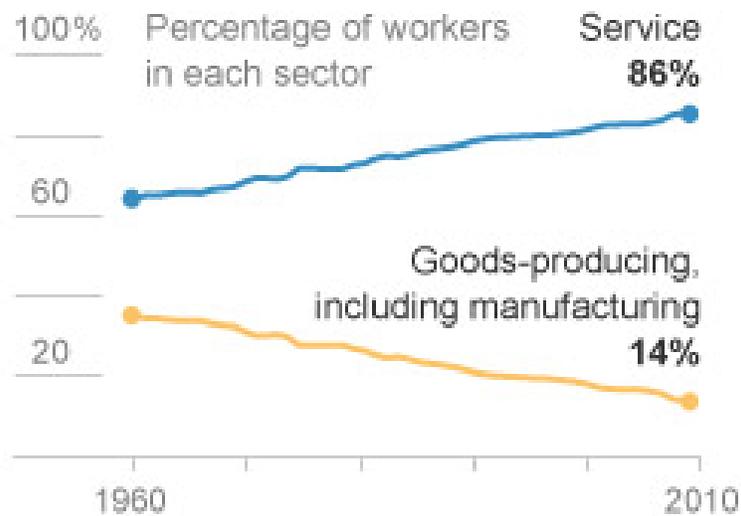
Non-profit organizations were not the only ones feeling the cuts. As of October 1993, projections indicated that Rochester's 1994-1995 fiscal year would have more than a \$30 million deficit, and if nothing changed, the deficit would grow to more than \$85 million by 1998-1999 (Swasy, 1997, 148). Despite the rampant growth in Rochester's crime levels, Mayor William Johnson was forced to make cuts at the police department in 1994, his first year in office. Finding jobs for his residents was a top item on his agenda: “It doesn't take a wizard to predict what is likely to happen if we can't accommodate them. A lot of our violence is attributable to folks who feel they don't really have a stake. It's survival of the fittest. We have got to understand all of the ramifications” (Swasy,

1997, 148). Johnson was disappointed with corporate America and did not believe these major companies remembered the community in decisions about cost cutting. “Companies have been more concerned about their shareholders and their bottom line...they made it clear that they weren’t concerned about the impact they would have on the local community,” said Johnson (Swasy, 1997, 149). George Fisher, Kodak’s CEO at the time, “told local leaders that he wasn’t going to become a ‘Yellow Father’ like his predecessors. Noting that his first priority was fixing Kodak, he didn’t get involved with local activities” (Swasy, 1997, 149). It became very clear for everyone in Rochester that things had changed dramatically from the golden days of Kodak, when senior management felt the company’s future was unequivocally tied to the future of city and acted as such.

What was happening at Kodak was not exclusive to the greater Rochester area. “Rochester was a microcosm of New York State’s problems and, to varying degrees, of the rest of the country. The same impact can be seen in IBM neighborhoods, where dry-cleaners see business falling off because fewer suits are going to work” (Swasy, 1997, 139). In 1994, service jobs accounted for 27 percent of local employment in Rochester, and manufacturing jobs were down to just twenty-five percent of local employment from 40 percent in 1981 (Cary, and Hedges, 1996). Between July 1990 and July 1994, New York state lost 384,000 jobs, many of which were in manufacturing (Swasy, 1997, 139). In addition, the U.S. Census Bureau found that “workers who left a full-time job or were laid off between 1990 and 1992 saw their wages drop an average of 23 percent when they found another full-time position...Wages for manufacturing jobs in the United States that were \$8.97 an hour twenty years ago, were \$8.10 an hour in 1995” (Swasy, 1997, 140).

Rochester echoed “the entire country’s struggle to deal with a new economy. Unemployment figures looked great, hitting seven-year lows in the fall of 1996. But the new jobs were lower-paying and lacked the career advancement opportunities and security once offered by a paternalistic corporate America” (Swasy, 1997, 140). As Figure 7 demonstrates, employment growth in goods-producing jobs, including manufacturing, has steadily decreased since the 1960s, whereas the service sector has steadily increased.

Figure 7: A Shift from Manufacturing



(Cox et al., 2012)

As manufacturing has declined in this country, the United States has lost job multipliers. The United States Bureau of Labor Statistics estimates that for every 1,000 auto-manufacturing jobs, 2,410 other manufacturing jobs, 260 new management jobs, 244 transportation and warehouse jobs, 271 scientific and technical service jobs, as well as 1,527 various other jobs are created (Cox et al., 2012). More simply put, for every

1,000 auto-manufacturing jobs generated, a total of 5,712 jobs are added to the total economy (Cox et al., 2012). Contrastingly, for every 1,000 new hospital jobs, only 20 new health care positions, 83 new scientific and technical service jobs, and 569 various other jobs are created for a total of about 1,700 jobs (Cox et al., 2012).

At Monroe County Social Services, the office responsible for Rochester and the nearby area, Richard Schauseil “said that in his 20 years with the county, things had never been this bad” (Swasy, 1997, 150). Schauseil explained:

The loss of manufacturing jobs here over the last ten years has had an effect. The creation of a manufacturing job has a multiplier of about 2.7 or three to one... Many of our clients today, ten years ago might have been able to get a job as a factory helper in an unskilled labor job that would've paid him eight-fifty or nine bucks an hour. Today, that's not possible. Most of the jobs being created are in the health care industry, services information systems. You have to work much longer to get that nine bucks. And many of our people are coming out of school not reading or writing and doing mathematics at the level they're supposed to be at (Swasy, 1997, 151).

In 1996, local companies had spent up to \$200 million on “flexible staffing,” as Rochester saw a boom in temporary, or contract, employment. However, despite the numbers not looking too bleak, Mary Kate Driscoll, director of the Rochester region for New York State’s Department of Labor explained, “the kinds of jobs being created are not the same as the ones eliminated” (Cary and Hedges, 1996). Firms like Kodak support hundreds of smaller suppliers. "Easily one fourth of the total economic activity in the metro area can be attributed to Kodak's presence," says economist Kent Gardner (Cary and Hedges, 1996). With the addition of temporary service positions, Rochester no longer saw the multiplier effect that Kodak positions had once provided. Conversely it had to deal with the repercussions of the inverse, now dealing with the ripple effect of layoffs instead.

Economy.com estimates that as of 2002 that, “1.3 million manufacturing jobs have been moved abroad since the beginning of 1992 — the bulk coming in the last three years...most of those jobs have gone to Mexico and East Asia” (Hagenbaugh, 2002). When Kodak closed an area plant in November 2002 and laid off 500 employees, the manufacturing of the single-use cameras was moved to the company’s facilities in Mexico and China (Hagenbaugh, 2002). No longer the embodiment of Fordism in the United States, even Big Yellow has been pushed abroad by the tides of globalization.

Apple: Designed in California, Assembled in China

Apple Inc. has dominated the tech industry in innovation and was recently assessed as the world’s most valuable company (Goldman, 2012). Many analysts have even predicted that Apple will soon become the world’s first trillion-dollar company, as it continues to win over mobile buyers with the iPad and iPhone (Guglielmo, 2012). But despite the tremendous success of this U.S. company, Apple only employs 47,000 workers domestically, as it subcontracts the manufacturing of almost all of the 70 million iPhones, 30 million iPads, and 59 million other Apple products sold last year to approximately 700,000 foreign laborers (Duhigg and Bradsher, 2012). On the back of every product, Apple consumers can expect to see the words “Designed by Apple in California Assembled in China,” but this was not always the case.

In 1984, when Apple opened a new plant in Fremont, California, Steve Jobs made it clear that “this is a machine that is made in America” (Sanger, 1984). This was “a theme he repeated time and again as he took a promotional Macintosh road show around the country a few months ago,” reported David Sanger of the *New York Times*, in an article that prophesized that the opening of the factory “could be a flagship for high-

technology manufacturing in this country” (Sanger, 1984). But by 2011, when President Obama asked Steve Jobs what it would take to make iPhones in the United States he was told quite simply, “Those jobs aren’t coming back” (Duhigg and Bradsher, 2012). Times had clearly changed since 1976 when the first Apple was made in Jobs’ home.

It all started when Steve Wozniak began constructing boxes that allowed him to make long-distance phone calls for free, later joined by Jobs. The pair sold several hundred, and in 1976, Wozniak began working on another box for a computer hobbyist club, the Apple I computer. After selling their most valuable possessions, the two raised \$1,300 and founded Apple in April 1976 (Hast et al., 1991, 48). With an order of 50 computers from a local retailer, the two built the machines in Jobs’ garage, eventually selling 200 to computer hobbyists in the San Francisco Bay area for \$666 each (et al., 1991, 40). Later that summer they began work on a newer model that would attract a wider market, the Apple II, and “Jobs hired local computer enthusiasts, many of them still in high school, who assembled circuit boards or designed software” (Hast et al., 1991, 40).

After expanding the company, Apple IIs hit retail stores, and by June 1977, annual sales reached \$1 million. The Apple II was the “first microcomputer to use color graphics, with a television set as a screen... and by 1978 Wozniak had invented the Apple Disk II...the fastest and cheapest disk offered by any computer manufacturer” (Hast et al., 1991, 42). Apple was one of the fastest growing companies by the end of 1978, with its products carried by over 300 dealers less than two years after founding. By the end of 1979, sales were up 400 percent from 1978 figures and in December 1980, Apple went public (Pederson, 2001, 41). The company continued to grow,

tripling its 1981 research and development budget to \$21 million, releasing 40 new software programs, opening European offices, and putting out its first hard disk...in December 1982, Apple became the first personal computer company to reach \$1 billion in annual sales (Pederson, 2001, 41).

As the company continued to flourish and innovate, Apple set up a manufacturing facility in Fremont, California in 1984 and was proud of its U.S.A-made products. According to *The New York Times*, the Fremont plant was producing 1,500 MacIntosh computers a day in 1984, and manufactured approximately 1 million Macs in 1985 (Joseph, 2012). Then in 1992, the company moved manufacturing to a new plant in Elk Grove, California, away from the earthquake prone area near the Hayward Fault and Fremont. By 1995, the Elk Grove facility employed more than 1,500 workers and was churning out thousands of Macs each week.

Despite the rapid growth, “the electronics industry was changing, and Apple — with products that were declining in popularity — was struggling to remake itself. One focus was improving manufacturing” (Duhigg and Bradsher, 2012). By the late 1990s, the cost of building a \$1,500 computer in Elk Grove, excluding the materials, was \$22 a machine. In Singapore, it was \$6 and in Taiwan, \$4.85 (Duhigg and Bradsher, 2012). Costs associated with inventory and how long it took workers to finish a task were in large part the reason for the disparities, and Apple acted in accordance with the changing times (Duhigg and Bradsher, 2012). Employees were expected to work longer days, including Saturdays, and routine tasks were outsourced overseas at first. Soon robotics began to replace workers and some diagnostic engineering went to Singapore. Technological advances allowed for the elimination of middle managers that oversaw the plant’s inventory because, all of a sudden, only a few people with Internet connections were needed to complete the tasks necessary (Duhigg and Bradsher, 2012).

In 1999, Apple moved final assembly of certain products to original equipment manufacturers, attributing “an increase in its gross-profit margins partly to its outsourcing efforts, which include a deal with NatSteel Electronic Ltd. based in Singapore” (Baljko, 1999). “We continue with our ongoing efforts to become the most efficient operating company in our industry... We will continue to outsource various components, which includes subassembly and, in some cases, final assembly,” explained an Apple spokeswoman (Baljko, 1999). By 2004, Apple had largely turned to foreign production and shut down its Elk Grove computer manufacturing plant, laying off 235 fulltime workers (Sacramento Business Journal, 2004). Largely responsible for this decision was Apple’s operations expert, Timothy D. Cook, who replaced Jobs as CEO in August 2011. Following the growing trend of U.S. electronics companies offshoring their manufacturing practices,

Apple, which at the time was struggling, felt it had to grasp every advantage... For technology companies, the cost of labor is minimal compared with the expense of buying parts and managing supply chains that bring together components and services from hundreds of companies. For Mr. Cook, the focus on Asia “came down to two things,” said one former high-ranking Apple executive. Factories in Asia “can scale up and down faster” and “Asian supply chains have surpassed what’s in the U.S.” The result is that “we can’t compete at this point,” the executive said (Duhigg and Bradsher, 2012).

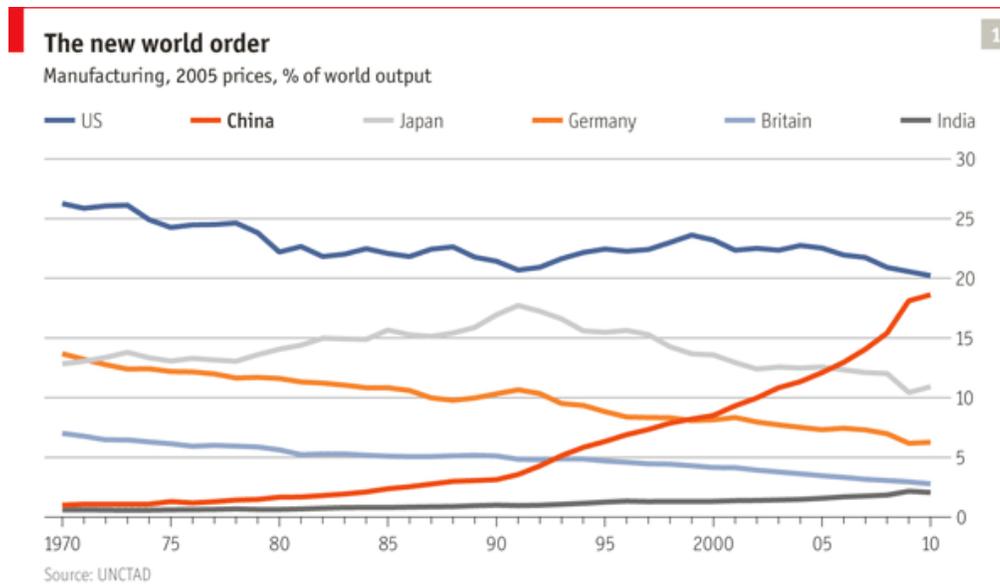
A little more than a month before the iPhone was released in 2007, Jobs demanded unscratchable glass screens and expected a perfect product in just six weeks. Apple had chosen Corning Inc., a U.S. company, to manufacture large panes of strengthened glass, but still needed to figure out how to cut said panes into millions of iPhone screens. This required an empty cutting plant, lots of glass to experiment with, a band of midlevel engineers, and a lot of money to prepare. A Chinese factory soon

placed a bid for the work. When Apple executives visited, the plant's owners were already in the process of building a new wing. "This is in case you give us the contract," the manager said, according to a former Apple executive (Duhigg and Bradsher, 2012).

The Chinese government had agreed to underwrite costs for numerous industries, and those subsidies had trickled down to the glass-cutting factory. It had a warehouse filled with glass samples available to Apple, free of charge. The owners made engineers available at almost no cost. They had built on-site dormitories so employees would be available 24 hours a day. The Chinese plant got the job (Duhigg and Bradsher, 2012).

"The entire supply chain is in China now," said another former high-ranking Apple executive. "You need a thousand rubber gaskets? That's the factory next door. You need a million screws? That factory is a block away. You need that screw made a little bit different? It will take three hours" (Duhigg and Bradsher, 2012). As seen in Figure 8, "in the decade to 2010 the number of manufacturing jobs in America fell by about a third," while the manufacturing output of China has dramatically increased since the mid 1980s (The Economist, 2012).

Figure 8: Manufacturing Percentage of World Output



(The Economist, 2012)

Just as Kodak had spatially integrated a century earlier by consolidating production in Rochester, manufacturing firms began doing the same thing again. But this time, it was happening in Asia. Other companies that work with Apple, like Corning, say they must also go abroad. While the iPhone contract revived a Corning factory in Kentucky, the firm also received new orders from other companies hoping to imitate Apple’s designs, and has since shifted the bulk of its strengthened glass manufacturing to plants in Japan and Taiwan. “Our customers are in Taiwan, Korea, Japan and China,” said James B. Flaws, Corning’s Vice Chairman and Chief Financial Officer. “We could make the glass here, and then ship it by boat, but that takes 35 days. Or, we could ship it by air, but that’s 10 times as expensive. So we build our glass factories next door to assembly factories, and those are overseas” (Duhigg and Bradsher, 2012).

With its headquarters in upstate New York, Corning is still considered an U.S. company, but it would “require a total overhaul in how the industry is structured,” to manufacture all of the glass domestically, according to Mr. Flaws. “The consumer

electronics business has become an Asian business. As an American, I worry about that, but there's nothing I can do to stop it. Asia has become what the U.S. was for the last 40 years" (Duhigg and Bradsher, 2012).

But this fear does not seem to be shared with those working at Apple. "We sell iPhones in over a hundred countries," a current Apple executive said. "We don't have an obligation to solve America's problems. Our only obligation is making the best product possible" (Duhigg and Bradsher, 2012). Betsey Stevenson, the former chief economist at the Labor Department does not appear to share this Apple executive's sentiments. "Companies once felt an obligation to support American workers, even when it wasn't the best financial choice...That's disappeared. Profits and efficiency have trumped generosity," she explained (Duhigg and Bradsher, 2012).

While there is still much debate on what, if anything, a U.S. company owes U.S. workers, it is clear there has been a shift in this country from the heyday of companies like Eastman Kodak to now. It is worth noting however, that the debate alone signifies that this change has had a substantial effect on the lives of U.S. workers and on our economy as a whole.

Apple recently commissioned *Analysis Group*, a consulting firm, to conduct a study to analyze its impact on the U.S. job market and economy by using information on the total amount the company spent on goods and services in the U.S. in 2011 and applying that information to standard Type 1 employment multipliers developed by the U.S. Bureau of Economic Analysis (*Apple-Job Creation*, 2012). Apple has since published the results of the study on its website in the "about" section, making it easy for anyone at all to learn that Apple has "created or supported more than 500,000 jobs for

U.S. workers: from the engineer who helped invent the iPad to the delivery person who brings it to your door” (*Apple-Job Creation*, 2012). However, despite the commissioning of the study and the subsequent publishing of the results in such a prominent location on the website, Apple refuses to comment on why it published or commissioned the study in the first place. One can only speculate as to why Apple chose to do so without its input, but it seems probable that the company felt pressure from the public as it has received much scrutiny and criticism as of late for its employment practices.

In spite of, or perhaps additionally spurred by the publication, the company is still criticized for these practices, as experts debate the accuracy of the study as a whole. Gary P. Pisano, a professor of business administration at Harvard Business School commented on the results: “Apple has a big effect, and big is about as precise as I can make it...It’s hard to say the exact size (Wingfield, 2012).” Whereas David Autor, an economics professor at the Massachusetts Institute of Technology, said the “entire business of claiming direct and indirect’ job creation is disreputable...But of course, they might not have been as well paid or gratified with their work... We’ll never know” (Wingfield, 2012). This is largely because most of the workers Apple is taking credit for most probably would have been employed elsewhere in the company’s absence. Mr. Autor continues however, to say that Apple should not be held accountable for U.S. employment problems, “Generating the conditions that give rise to high rates of employment and wage growth is the domain of policy makers, not individual companies” (Wingfield, 2012).

Analysis Group concluded that 257,000 jobs of the 514,000 Apple claims to have created or support were from companies that work directly with Apple, including the

employees in Kentucky and New York at Corning. What the study did not examine is how many jobs were created in Asia when Corning began expanding there, instead of here, after its success from the iPhone contract.

Several economists and employment experts can agree that Apple has an economic impact that goes beyond the people it directly employs, but the presentation of the study and its findings are far too simplified for the complex way the company has affected the overall jobs market. “They certainly have a big economic impact, as does every other firm,” Peter Cappelli, a professor of management at the Wharton School at the University of Pennsylvania said. “If you say, ‘If there had been no Apple, those people would not have jobs,’ that’s not true” (Wingfield, 2012).

Mr. Capelli demonstrated this by explaining that if there was no iPad, the \$500 an Apple customer would have spent on the device most likely would not have been put into savings. Instead, it would probably have been spent on another service or product, and that impact could have been more or less than Apple’s. As such, it becomes much more difficult to evaluate Apple’s impact on employment creation when the company credits itself with the creation of jobs at companies that deliver its products, if the consumer could have, and according to Capelli, most probably would have, spent that money purchasing another good or service that could also have been delivered by the same delivery person. Norman Black, a spokesman for United Parcel Service, said the company estimated that for every 40 new packages a day transported through its system, the company hired one more person. He declined, however, to say how many packages Apple shipped through U.P.S. and, therefore, how many jobs could be credited to the company (Wingfield, 2012).

Aside from the controversy surrounding *Analysis Group*'s study, a recent working paper released by a research group at The University of Manchester's Center for Research on Socio-Cultural Change argues that Apple is capable of returning its manufacturing operations to the United States. In its introduction, the paper claims:

In an earlier generation, 'what was good for GM in Detroit was good for America' but now Apple's success from California is mostly good for the stock price in a sterile way because (like other insecure tech giants) Apple hoards cash and does little for US economy and society because its products add to the US payment deficit and the company does not employ well paid blue collar workers in the US (Froud et al., 2012, 4).

The paper discusses the changing business models since the 1970s, and uses "literatures on financialization and on global supply chains to present an alternative view of the dual pressures and its outcomes" (Froud et al., 2012, 2). Adding the use of macro evidence on cost ratios and labor share of value added in low wage Asia, it further compares new entrants into the industrial world since the 1970s. Finally, it presents Apple as a case study to deconstruct the company's financial success and its trans-Pacific relations with its handset supplier Foxconn International Holdings (FIH). In its presentation of the case study the paper states:

But the verdict on Apple's record has to be much more negative if we take a broader social perspective on distributive outcomes and ask what the trans-Pacific chain implies for the US national economy. Because, put simply, the trans-Pacific chain and the financialized Apple business model imply the large scale import of goods which adds to the US trade deficit and the significant export of US blue collar jobs which the US economy needs (Froud et al., 2012, 22).

The Asian Development Bank Institute working paper, *How the iPhone Widens the United States Deficit with the People's Republic of China* (2010), by Yuqing Xing and Neil Detert shows how the Apple business model increases the US trade deficit and decreases US employment using the iPhone 3G sales from 2009. Xing and Detert

calculate that this one product, which in 2009 sold 11.3 million units in the US market and 25.7 million units worldwide, contributed \$1.9 billion towards the US trade deficit with China (Xing and Detert, 2010, 4). They also found that “most of the export value and the deficit due to the iPhone are attributed to imported parts and components from third countries and have nothing to do with the PRC” (Xing and Detert, 5). Chinese workers simply assemble all of these parts and in the process add just \$6.50 to each iPhone 3, which is approximately 3.6% of the shipping price of an iPhone (Xing and Detert, 2010, 5). As such, they conclude that the iPhone could be profitably assembled in the United States or any other high wage country:

It is the profit maximization behavior of Apple rather than competition that pushes Apple to have all iPhones assembled in the PRC. The unprecedented globalization and well developed production networks make it possible for Apple to utilize a much cheaper location outside the US to maximize its profits on iPhones” (Xing and Detert, 2010, 6).

Xing and Detert then propose a hypothetical scenario in which Apple assembles all iPhones in the United States. If Apple is paying U.S. workers ten times the wages paid to their Chinese counterparts, and assuming their productivity would be equal in 2009, the total assembly cost would rise to \$65 and total manufacturing cost would increase to roughly \$240. As such, Apple could still sell iPhones assembled in the United States by U.S. workers for \$500 per unit and still have a 50 percent profit margin. As iPhones sales increase worldwide, the profit margin would subsequently increase. In this hypothetical scenario, iPhones, a high-tech product invented and innovated in the United States by a U.S. firm,

would contribute to US exports and the reduction of the US trade deficit, not only with the PRC, but also with the rest of world. More importantly, Apple created jobs for US low skilled workers; those who could not be the software engineers

needed by Apple. Giving up a small portion of profits and sharing them with low skilled US workers by Apple would be a more effective way to reduce the US trade deficit and create jobs in the US (Xing and Detert, 2010, 8).

Xing and Detert make it clear that in a market economy, “there is nothing wrong with a firm pursuing profit maximization,” and go further to say that “governments should not restrict such behavior in any way” (Xing and Detert, 2010, 9). However, they do reference the growing trend of multinational corporations adopting corporate social responsibility (CSR) practices, including Apple, and as such, suggest that “it may be an effective policy option to practice CSR by creating jobs for low skilled workers, such as using US workers to assemble iPhones” (Xing and Detert, 2010, 9). In contrast, the research group from The University of Manchester's Center for Research on Socio-Cultural Change more boldly concluded in their paper “Certainly, Apple should not be an object of praise and emulation because its business model is not generalizable without harm to the US and limited benefit to China” (Froud et al., 2012, 25).

However, according to Mr. Autor and many other United States workers, the government bears the responsibility for fostering an environment conducive to business, believing it is not private corporations who should be held accountable for seeking higher profit margins elsewhere. A Business Specialist at Apple who asked to remain anonymous for the purposes of this paper, responded to the criticism his employer has received about not employing many U.S. workers and offshoring its manufacturing practices to countries like China by saying:

To be honest, most technology companies are outsourcing to China. It's a smart move from a business standpoint. There's a pretty clear reason why most of these companies, including Apple, aren't bringing jobs to the US: they want to save money. No US citizen would take up a job for \$2 dollars an hour. Whether its because of our sense of entitlement or because it's *extremely* difficult to live off

that kind of salary. In China, that kind of wage is desirable by the majority of citizens. Apple is actually one of the more better paying outsourcing channels.

Another Apple employee responded similarly to the same question:

Apple has to do this in order to remain competitive in today's market. As an employee I know that they treat all employees and contractual employees with the utmost respect. I feel that many socialists have a negative opinion on the outsourcing because they are looking to help the American economy flourish but without this outsourcing the price of Apple products would not be affordable to most consumers...Many companies and consumers are jealous of Apple's recent success...many people neglect to look at the overall success of the company starting from a garage and emerging into a multi-billion dollar enterprise.

The Foxconn facility where iPhones are assembled in Shenzhen, China, informally referred to as Foxconn city, is just that, a small city. By employing 230,000 laborers, many working six days a week, Foxconn is required to employ almost 300 guards to simply direct foot traffic so workers are not trampled in doorway bottlenecks (Duhigg and Bradsher, 2012). With most workers putting in 12 hours a day at the plant and earning less than \$17 a day, the previously interviewed Apple employee was not exaggerating when he claimed that US citizens would not work for the \$2 per hour Chinese salaries, as a 12 hour shift for \$17 is a meager \$1.40 per hour (Duhigg and Bradsher, 2012). Over a quarter of Foxconn's work force lives in the company barracks and the facility's central kitchen cooks an average of three tons of pork and 13 tons of rice a day. Jennifer Rigoni, Apple's former worldwide supply demand manager until 2010, commented on Foxconn's sheer hiring capacity: "They could hire 3,000 people overnight...What U.S. plant can find 3,000 people overnight and convince them to live in dorms?" (Duhigg and Bradsher, 2012).

When Apple redesigned the iPhone screen last minute, Foxconn was forced to act fittingly. According to an Apple executive, a foreman immediately woke up 8,000

workers inside the company's dormitories, and "each was given a biscuit and a cup of tea, guided to a workstation and within half an hour started a 12-hour shift fitting glass screens into beveled frames. Within 96 hours, the plant was producing over 10,000 iPhones a day" (Duhigg and Bradsher, 2012). Foxconn, while declining to comment on any specific clients, has disputed the executive's account. Claiming that a midnight shift, such as the one described, was impossible, Foxconn explained, "because we have strict regulations regarding the working hours of our employees based on their designated shifts, and every employee has computerized timecards that would bar them from working at any facility at a time outside of their approved shift" (Duhigg and Bradsher, 2012). The company went on to further assert that,

Any worker recruited by our firm is covered by a clear contract outlining terms and conditions and by Chinese government law that protects their rights... [Foxconn] takes our responsibility to our employees very seriously and we work hard to give our more than one million employees a safe and positive environment (Duhigg and Bradsher, 2012).

However, despite these assertions, interviews with Foxconn employees and reports from independent advocacy groups declare otherwise. Some employees say, "they stand so long that their legs swell until they can hardly walk" due to excessive overtime and seven day work weeks (Duhigg and Barboza, 2012). Within just seven months in 2011, two explosions at iPad factories killed four people and injured seventy-seven. To make matters even worse, "before those blasts, Apple had been alerted to hazardous conditions inside the Chengdu plant, according to a Chinese group that published that warning" (Duhigg and Barboza, 2012). One former Apple executive explained:

We've known about labor abuses in some factories for four years, and they're still going on...Why? Because the system works for us. Suppliers would change everything tomorrow if Apple told them they didn't have another choice. If half of

iPhones were malfunctioning, do you think Apple would let it go on for four years? (Duhigg and Barboza, 2012).

But the manufacturing laborers are not the only draw for Apple. China is also able to provide engineers at a scale the United States cannot match at this time. An estimated 8,700 industrial engineers were considered to be necessary for the oversight and guidance of the 200,000 assembly-line workers needed to manufacture iPhones by Apple executives. However, the company's analysts had calculated it would take as long as nine months to find that many qualified engineers in the United States. It took 15 days in China (Duhigg and Bradsher, 2012). Martin Schmidt, Associate Provost at the Massachusetts Institute of Technology explained that companies like Apple "say the challenge in setting up U.S. plants is finding a technical work force...They're good jobs, but the country doesn't have enough to feed the demand" (Duhigg and Bradsher, 2012). Schmidt is referring to the growing demand for engineers with more than a high school education, but not necessarily a bachelor's degree. In the United States, that skill level is not easy to find according to those seeking to fill these positions. When describing Foxconn's workforce an Apple executive said, "The speed and flexibility is breathtaking...There's no American plant that can match that" (Duhigg and Bradsher, 2012).

While Xing and Detert's work, coupled with that of the research group from the University of Manchester's Center for Research on Socio-Cultural Change, provide statistical information on the cost differential that would incur should wages increase if Apple's manufacturing work was brought to the United States, it does not address the bigger questions of why this work left in the first place. Some argue that it is not just that workers are cheaper outside of the United States. Instead, "Apple's executives believe the

vast scale of overseas factories as well as the flexibility, diligence and industrial skills of foreign workers have so outpaced their United States counterparts that ‘Made in the U.S.A.’ is no longer a viable option for most Apple products” (Duhigg and Bradsher, 2012). It seems clear from their data that Apple could most certainly afford to have their subcontracted workers earn more and in safer conditions, but it remains to be proven whether or not the United States can sufficiently provide the kind of workers Apple needs to produce its products. However, with inadequate education levels considered to be a large justification for Apple’s inability to hire U.S. workers, it seems counterintuitive that the company has sidestepped billions of dollars in taxes, which has a substantial impact on state budgets, like California, who is facing a \$9.2 billion budget deficit in this fiscal year alone (Duhigg and Kocieniewski, 2012). As a result, the state has substantially raised tuition at state universities and proposed a \$4.8 billion reduction in spending on kindergarten and other grades (Duhigg and Kocieniewski, 2012).

De Anza College, a community college just a mile and a half from Apple’s Cupertino headquarters, has cut more than a thousand courses and 8 percent of its faculty since 2008 due to budget cuts. Steve Wozniak, one of Apple’s founders, attended De Anza from 1969 to 1974, and the school’s president, Brian Murphy, postulates, “every person at Apple has a connection to De Anza. Their kids swim in our pool. Their cousins take classes here. They drive past it every day, for Pete’s sake” (Duhigg and Kocieniewski, 2012). While Apple’s tax evasions are clearly not the sole cause of the school’s “death spiral,” as described by Murphy, officials like Murphy do consider the company’s tax policies “as symptomatic of why the crisis exists.” (Duhigg and Kocieniewski, 2012). “I just don’t understand it,” he said in an interview as he described

the various connections Apple has to the school, “but then they do everything they can to pay as few taxes as possible” (Duhigg and Kocieniewski, 2012). He further states:

When it comes time for all these companies — Google and Apple and Facebook and the rest — to pay their fair share, there’s a knee-jerk resistance...They’re philosophically antitax, and it’s decimating the state...But I’m not complaining...We can’t afford to upset these guys. We need every dollar we can get (Duhigg and Kocieniewski, 2012).

Ironically, the same evening President Obama asked Steve Jobs how the U.S. could bring Apple manufacturing work back to this country, Jobs lectured Obama about what he needed to do to fix the economy. Jobs attributed the loss of manufacturing work to the dire need for education reform and the lack of great engineers in the United States, according to Walter Issacson, Jobs’ biographer. “He was pretty strong and brutal at telling Obama ‘You gotta’ shape up and focus on the economy,” said Issacson in an interview with *60 Minutes* (*60 Minutes*, 2012).

According to Wall Street analysts’ predictions, Apple could earn upwards of \$45.6 billion in its current fiscal year, a record for any United States business (Duhigg and Kocieniewski, 2012). It employs 47,000 U.S. workers with a job unlike any other. According to its website: “A job at Apple is unlike any other you’ve had. You’ll be challenged. You’ll be inspired. And you’ll be proud. Because whatever your job is here, you’ll be part of something big” (*Apple-Jobs*, 2012). One of the Apple employees interviewed for this thesis explained,

Apple is one of the most well-known and respected companies in the industry these days. I have seen the company grow and I have grown with it... Working for a company that has so much respect and care for its employees is great. I was able to receive great training and life skills that have helped me in pursuit of a [full time] position after graduation.

Another Apple employee stated, “I’m only 23 and I have a great fulltime job with benefits for a global company... It’s truly the coolest job I’ve ever had.” A recruiting video on its website shows Apple employees with varying backgrounds and experiences, speaking different languages, all uniting in their drive to work for this dynamic company and produce innovative products for a global market. Both the video and interviews paint the picture of a phenomenal work environment where you can grow and develop your skills through the production of great products. What they do not provide is a lifetime with Apple or any real foundation as being a part of a U.S. company.

Both of the Apple employees that were interviewed for this thesis considered Apple to be a stepping-stone of sorts for their future careers. In addition, towards the end of the promotional video one of the interviewees explained, “You will get more out of working here for two years than you will get out of working at any other company for five years, easily” (*Apple-Jobs-Corporate*, 2012). Apple is not unique in this sense. According to researchers at the Bureau of Labor Statistics, the typical U.S. worker’s tenure with his or her current employer was 3.8 years in 1996, 3.5 years in 2000 and 4.1 years in 2008 (Bialik, 2010). It is clear times have changed from the days of lifetime employment of the 1960s.

The video also made another important point in terms of its framework. The words “great” and “best” were stated five times each in all of the video’s interviews, as employees described their experiences working with Apple. Three different languages were spoken, and a variety of English accents were heard throughout the four and a half minute clip. But not once did anyone mention the words “American,” “U.S.,” or “United States of America.” Apple has portrayed itself not as a U.S. company, but an

international one. The Apple Business Analyst said, “I’m only 23 and I have a great fulltime job with benefits for a global company,” not “I’m only 23 and I have a great fulltime job with benefits for a U.S. company.” This identity matters because it shows that companies are no longer tied to countries. Headquarters must have zip codes tied to them, but this no longer means in the new globalized economy that corporations must, or even feel inclined to, invest in anything but their own profit margins. As Stevenson said, “Companies once felt an obligation to support American workers, even when it wasn’t the best financial choice...That’s disappeared” (Duhigg and Bradsher, 2012).

This shift at Apple demonstrates the greater shift that has occurred throughout the United States. Apple serves as a model for another form of capitalism that is in direct contrast to the Kodak model discussed in previous sections. This more globalized form is not bound to national boundaries, but instead focuses on the interests of a global company and private individual. As such, the Apple case study represents the breaking of the basic bargain and the United States shifting farther away from *Broadland* in pursuit of *Richistan*.

Conclusion: The American Dream

Eastman Kodak was an innovator, a technological titan, and a generous company. Employing tens of thousands of workers in Rochester alone, this firm not only shared its profits with its employees, but with the city as a whole. Committed to philanthropy, George Eastman led by example, donating an estimated \$1 billion (in 1996 dollars) in his lifetime, fully committed to his workers and their home of Rochester, New York. He even received a letter of thanks from President Warren Harding in 1922 for returning

\$20,000 (in 1922 dollars) to the Secretary of War in excess profits that Eastman Kodak had made on war contracts.

Apple is also an innovator and a technological titan, but it is not necessarily a generous company. Steve Jobs, in one of his last public appearances before his death, addressed Cupertino's City Council pursuing approval to build a new headquarters. However, when Councilwoman, Kris Wang, asked Jobs how residents would benefit from the new headquarters, suggesting that Apple could provide free wireless internet to Cupertino as Google had done with neighboring Mountain View, Jobs responded: "See, I'm a simpleton; I've always had this view that we pay taxes, and the city should do those things... That's why we pay taxes. Now, if we can get out of paying taxes, I'll be glad to put up Wi-Fi" (Duhigg and Kocieniewski, 2012). Ironically though, through a variety of domestic and international loopholes, Apple has actually evaded several billion dollars in both state and federal taxes just last year, with no indication of trading these savings for Wi-Fi access.

On January 19, 2012, Eastman Kodak Company filed for Chapter 11 bankruptcy, while Apple officially became the most valuable company in the world exactly one week later on January 25, 2012. The former "behemoth of capital intensive mass-production," Kodak Park, has now become "Eastman Business Park." An industrial campus with dozens of areas available for lease, Kodak simply does not need the space for manufacturing any longer. Contrastingly, Apple is predicted to break records with projected earnings upwards of \$45.6 billion this fiscal year and shows no sign of slowing down.

Bacchetta and Jansen reported that “75 percent of Americans said that ‘outsourcing work overseas hurts American workers’” because it has. The two case studies in this thesis have demonstrated that the loss of goods-producing jobs to workers overseas has negatively impacted U.S. workers. With a loss of these positions, the country has seen a downward pressure on wages, as many of these unemployed workers have obtained new positions in lower paying service jobs, and the U.S. economy has subsequently lost job multipliers. Not only has the United States lost these positions, but it seems to have also lost companies who feel tied to their U.S. roots.

This thesis has examined two leading tech companies at two different points in United States’ history, showing that globalization and the neoliberal policies from the 1970s onward have created a new employment market with different jobs and corresponding wage levels associated with them. As such, this thesis sought to demonstrate how the economic fortunes of large U.S. firms increasingly have diverged from the economic welfare of U.S. workers. In other words, it attempted to demonstrate that “U.S. companies” have won and the United States has lost in this newly globalized economy. We have recently witnessed the rise of national movements on both the right and left of the political spectrum, including both the Occupy Wall Street (OWS) and Tea Party, as well as an increasing dissatisfaction many people feel in the United States “with a government and institutions who are seen as overstepping their bounds, driven by self-interest and no longer serving the ‘American people” (Reyes, Chow, 2011). As unemployment hovers above 8 percent, not accounting for underemployment, it is understandable why millions of Americans have become dissatisfied with the current state of affairs.

But not everyone is dissatisfied. In the land of opportunity, the income gap between the rich and poor in the United States grew to its largest margin ever according to recent 2010 Census statistics:

The top-earning 20 percent of Americans – those making more than \$100,000 each year – received 49.4 percent of all income generated in the U.S., compared with the 3.4 percent made by the bottom 20 percent of earners, those who fell below the poverty line, according to the new figures. That ratio of 14.5-to-1 was an increase from 13.6 in 2008 and nearly double a low of 7.69 in 1968 (Rose, 2010).

Adding insult to injury,

The wealthiest 5 percent of Americans, who earn more than \$180,000, added slightly to their annual incomes last year... Families at the \$50,000 median level slipped lower... The poorest poor hit record highs. Twenty-eight states had increases in the share of people below \$10,977 in income, half the poverty line for a family of four (Rose, 2010).

As simply making ends meet continues to become harder and harder for U.S. workers, others are pocketing the difference. Since 1980, approximately 5 percent of the annual national income has shifted from the middle class to the nation's richest households. In other words, the wealthiest 5,934 households in 2010 enjoyed an additional \$650 billion (about \$109 million apiece) beyond what they would have had if the economic pie had been divided the way it was in 1980 (Lynch, 2011). According to the Gini coefficient, a measurement of income inequality, incomes in the United States have become steadily less equal since 1968, as "the U.S. Gini score rose from .39 in 1968 to .47 in 2010, meaning that incomes were becoming increasingly unequal" (Lynch, 2011).

According to Jonathan Ostry of the IMF, "increased inequality is likely to diminish the duration of expansions" (Lynch, 2011). Ostry further explained that future U.S. expansions could last only one-third as long as they did in the late 1960s due to the

widening income divide, as less equal societies are more vulnerable to both financial crises and political instability (Lynch, 2011).

“We are the 99 percent that will no longer tolerate the greed and corruption of the 1 percent,” says occupywallstreet.org. Millions of people throughout the country, young and old, employed and unemployed, rich and poor, have united in their dissatisfaction with the current economic state of affairs. Howard Buffett, the Berkshire Hathaway Inc. director, and son of Chairman Warren Buffett, the second richest man in the United States, defended OWS protesters in an interview with *Bloomberg News* explaining: “There has never been a larger gap between earnings in this country...There has never been a time in my lifetime when the government is going to cut an incredible amount of programs that support poor people and feed them” (Lynch, 2011). According to Michael Kumhof of the IMF, if things do not change, it may only get worse: “In the current climate, if nothing is done about income inequality there may be recurring crises...Leverage has not significantly improved. In terms of the danger of another crisis, we’re right back where we started” (Lynch, 2011).

With different solutions on the table, much of the debate on what to do next centers around who should be held accountable for solving the United States’ economic problems. While Xing and Detert suggest that corporations step up via corporate social responsibility campaigns, Reich concludes his book with recommendations that the federal government should enact to address these issues. Another approach puts the burden on the individual, demanding she or he hold both the government and corporations accountable through civic engagement and the use of purchasing power to influence companies’ decisions. Writing this thesis on a MacBook Pro adds an additional

level of complexity to the question of individual responsibility in how to best move forward, but it does not address the structural problems that have arisen as a result of the United States' neoliberal economic policies.

The most comprehensive approach would therefore be a combination of all three suggestions. For sustainable change to occur, all three actors must be involved, as all three are in part responsible. The U.S. government's predominant policies have clearly shifted from Keynesian to neoliberal approach (notwithstanding the stimulus that President Obama pushed in the face of the 2008 economic collapse), and as such, have allowed for companies to pursue cheaper methods of production in countries abroad. This has resulted in the loss of fundamental goods-producing job multipliers, and a saturation and expansion of the service sector. With a rise in neoliberalism, the United States has also seen a drastic shift in a new focus on private over public, allowing for the degradation of the country's infrastructure and welfare programs. This shift has also led to a less progressive tax system, creating thousands of loopholes for "the wealthiest, the largest corporations who can afford the best attorneys, the best accountants, [to] take advantage of these special tax treatments" explains David Plouffe, a senior White House advisor (Lynch, 2011). In addition, U.S. workers have continued to support the corporations that drive jobs overseas through their purchasing power, thus furthering the destruction of the United States' goods-producing sector, and have continued to elect neoliberal politicians who support and perpetuate the economic agenda of the wealthy.

This thesis suggests that U.S. workers should think more critically about the power that has been bestowed upon them in this democracy, not only with their voices,

but also with their dollars and votes. In James Truslow Adams' 1931 book, *The Epic of America*, he coined the term "American Dream" describing:

that dream of a land in which life should be better and richer and fuller for everyone, with opportunity for each according to ability or achievement...It is not a dream of motor cars and high wages merely, but a dream of social order in which each man and each woman shall be able to attain to the fullest stature of which they are innately capable, and be recognized by others for what they are, regardless of the fortuitous circumstances of birth or position (Adams, 1931, 20).

If the United States would like to reclaim the American Dream, "U.S. companies" must again become U.S. companies, and both the United States government, as well as United States workers, must hold firms accountable to this title and the responsibility that comes with it.

Every blue-collar worker, white-collar worker, employed worker, unemployed worker, student, teacher, politician, voter, every person in the United States, must take ownership for the situation we are in. We as a collective have come to this point, and we as a collective can move forward. For if we do not stand as a United States of America, demanding more from our corporations, our citizens, and our government, then the American Dream will forever remain just a dream.

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