

THE CASE FOR WAGE-LED GROWTH

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Introduction: Low Wages, The Crisis, and Unsustainable Growth

The share of wages and salaries in Gross Domestic Product (GDP) has declined in most rich nations over the past 20 to 30 years. Over the same period, income inequality has grown in most of these nations, and rapidly in some of the largest of them, resulting in slow wage growth for most consumers.

The result of wage growth that is persistently slower than the growth of GDP, and a simultaneous shift in distribution towards high-end earners who save more and consume less, has been an inadequate level of aggregate demand needed for rapid, job-creating GDP growth.

Stagnant or, at best, slow-growing standards of living are economic failures in themselves and may well lead to political instability. But they are also harbingers of a more serious crisis. The main theme of this paper is that low-wage policy regimes have resulted in an over-reliance on export-led growth models in nations like Germany and China and debt-led growth policies in countries like the U.S. In export-led economies, there has in turn been pressure to maintain low wages to keep exports price-competitive, especially as newer, even lower-wage economies became integrated into the international system.

Debt-led growth models, particularly in the U.S. and the southern periphery of Europe, are the mirror image of export-led growth in Asia and in the core of the Eurozone. Because wages did not rise sufficiently in the deficit economies, consumers in the U.S. and some European countries borrowed aggressively to maintain their standard of living, in the process purchasing the attractively priced products of countries like Germany and China. China's and Germany's surpluses were then recycled back to the U.S. and other debtor economies. Recycled dollars from China enabled Americans to borrow at low rates: similarly recycled euros from Germany to peripheral Eurozone nations enabled those countries to borrow cheaply.

Some European nations did restrain borrowing, but their economies grew relatively slowly in the 2000s as a consequence of inadequate demand in the system. But the U.S. in particular maintained growth by allowing household borrowing to rise rapidly and savings rates to decline to near zero levels.

The relationship between export-led growth and debt-led growth contained other negative feedback loops as well. Excessive manufacturing imports from export-led economies undermined the growth of higher-wage industries in deficit economies, eroding the productive capacity of those economies. This in turn placed further downward pressure on wages. Consumer access to credit at low interest rates tended to ameliorate political frustration over low wages – at least for a while.

Neither export-led growth models nor debt-led growth models are indefinitely sustainable. The debt taken on by importing deficit economies at some point becomes excessive, and when these economies reach their borrowing limits they are forced to pay down debt and curtail their demand for the goods of export-led economies. The result of the pursuit of these two models over the past decade or two has been two major financial crises and the Great Recession. The root of the problem is relatively low wages.

As the International Labor Organization wrote, “The counterpart to the export growth model is the debt-driven growth model of some major importing countries. Exports are an important part of the development dynamic, but equal focus needs to be paid to ensuring that markets grow sustainably, which in large measure is a question of ensuring that household incomes mainly derived from wages also grow.”¹

The financial crises we have experienced since 2007 are the culmination of a worldwide low-wage policy regime that has existed for a long time. In the U.S., conventional measures of wages and salaries for median full-time male workers have not risen since 1969 and, by more accurate measures that take into account part-time work, have fallen substantially since then. This long period of stagnation is unprecedented in American history. Women’s earnings have gone up since the 1960s, but despite some historically uninformed optimistic claims, they have not risen rapidly by historical standards.

In most of Europe and indeed across the world, average wages have not risen as rapidly as GDP since the 1990s and in many cases since the 1980s. According to data from the Extended Penn World Tables and the UN, the wage share of GDP has fallen in advanced countries since 1980 (see Figure 2, for example). Wage share has fallen markedly since the 1970s in China as well. Meanwhile, inequality has risen most sharply in Anglo-American economies like the U.S. and Britain, but also in countries like China. These trends have placed pressure on the standard of living of most workers in these nations.

The unsustainability of low-wage growth models came to a head with the financial crisis of 2007-2008 and the Great Recession. And rising current account imbalances borne in part of diverging wage and productivity growth among Eurozone economies was the primary cause of the crisis in Europe that began in 2010.

The financial crises and recessions that have ensued since have exacerbated the underlying problem of low wages. Real national income plummeted in most rich nations in the recession and unemployment rates reached record levels in OECD nations. As a result, real wages fell sharply in 2008 and have been unusually slow to recover. In most European nations, wages have grown slowly, and in some like Britain and Ireland, where severe austerity economics has been adopted, they continue to fall. In the U.S., real median wages have fallen since the end of the recession. Weak wage growth has therefore impeded economic recovery across most of the Western economies, and austerity policies in much of Europe have already led to a second recession in three years.

Prevailing economic theory has contributed to the policy mistakes that are responsible for these conditions. According to the dominant view of economists, low wages are thought of as a source of growth because there is less pressure on either inflation or profits. The influence of this neo-classical theory has been extended even after the Great Recession. Keynesianism, which emphasizes the importance of strong aggregate demand, made only a momentary comeback.

The long-term problems associated with slow wage growth were by and large ignored by orthodox economists and policymakers until the recent crises. The neglect persisted even in light of the rapidly growing current account imbalances within Europe and between the U.S. and Asia, notably China. These imbalances were the direct result of low-wage policy regimes in both rich and developing nations.

Yet rather than draw the correct lessons from the recent crisis, the rich world has now reinforced policies designed to restrain or reduce wages. Led by Germany, European officials have insisted on austerity programs aimed at reducing budget deficits and wage levels in periphery nations through government spending cutbacks and higher taxes. These programs have rested on two mistaken beliefs. First, policymakers assumed that direct reductions in government spending and higher taxes along with deregulatory reforms of labor and services would raise “confidence” and that restored fiscal probity and structural changes would produce efficient self-adjustment. Second, they believed that the induced slow growth and outright recession in fiscally troubled peripheral nations, along with labor reforms, would also result in the needed suppression of wages (what is known as internal devaluation), thus making peripheral nations more competitive.

The austerity approach is failing unambiguously, however. As one Eurozone nation after another has fallen into a second recession, the Eurozone rate of unemployment has reached a record level. Meanwhile, the goals that were set for deficit reduction remain unreachable or have slipped further away.

In the U.S., too, the Obama stimulus of 2009 has largely run its course, job creation may already be slowing down from its early 2012 pace stimulated by an unusually warm Winter, inequality remains very high as nearly all of the income gains since 2009 have gone to the wealthy, and median wages have declined despite recovery.²

Today, the lack of worldwide demand for goods and services is more than evident. Unemployment rates and unused capacity are high, as are vacancy rates in real estate and the inventory of unsold homes. GDP growth rates are slow. Debt-laden Americans can no longer borrow to compensate for low wages. To the contrary, they are now deleveraging. Indebted nations in Europe are having trouble accessing the debt market and rates have been shooting upward. To be able to borrow, peripheral economies have been forced to rely on Eurozone guarantees and programs that have been made contingent on the adoption of recession-inducing policies.

Ironically, the U.S. and European economies will not adequately recover in the short run or establish rapid growth in the long run unless the low-wage policy regime is reversed. In an era in which labor has been globalized, this will not be easy. For now, almost every rich nation in the world has forsworn Keynesian stimulus in practice, including the U.S., in favor of austerity programs involving government spending cutbacks in 2011 and 2012. To be sure, there is a lot more talk of growth in both Europe and the U.S., and even some discussion of some Keynesian-oriented ideas. But in spite of the rhetorical shift toward growth, Keynesian advocates are largely being ignored in a world still dominated by Say’s-Law-

thinking in which supply is assumed to create its own demand and an increase in savings through deficit cuts is assumed to create investment. With such theory still prevailing in major capitals, the dangers of fiscal deficits and inflation are routinely exaggerated, and the idea of wage increases remains anathema.

Since the crisis, some internationally influential economists are now discussing the contradictions of export-led and debt-led growth models, including Paul Krugman, Raghuram Rajan and Branko Milanovic. But the world has not yet come to terms with the failure of a low-wage policy regime, let alone embraced the policy reforms needed to make wage-led growth possible.

The Making of the Low-Wage Regime

There are a variety of causes of low wages. Some of the causes are related to an evolving economy subject to technological change and globalization, as orthodox economists often stress. But many of the causes are the result of politically motivated, theoretically dubious, and unnecessary choices made by policymakers in leading nations.

Mainstream economists largely emphasize the rise of skill-biased technologies as a cause of inequality and hence low wages for those who are less well-educated. Globalization and the offshoring of work have created low wage competition for rich nations and also reduced the power of already weak unions.

But another major factor in low-wage regimes has been, until recently, the relentless, single-minded war against inflationary expectations by central banks in Europe and the U.S., which has directly led to higher unemployment rates designed to create fear among workers about demanding raises.

The deregulation of work across Europe has also been a major factor, following the lead of America, which has relatively low unemployment benefits, lax implementation or outright reversals of labor laws, and a low minimum wage. These were political decisions, sometimes made under the influence of the orthodox economic fixation on government deficits and free markets, but often made at the behest of vested powerful business interests. They were not economically inevitable, as some continue to claim.

More ambiguous, but I will argue critical, has been the role of financialization – by which, I mean the adoption of stock market-driven criteria to manage business. Financialization rewarded lower wage costs and short-term profits with high stock prices, contributing to a growing cultural tolerance of lay-offs. Executives benefited directly as the issuance of stock options as part of executive pay packages grew dramatically over the past two decades.

The U.S. Road to Low Wages

The U.S. deliberately chose a low-wage economic policy in the early 1980s when Paul Volcker raised interest rates sharply – the Federal funds target rate reaching more than 18 percent – bringing on a harsh recession intended to stop what was then interpreted as runaway inflation.

Volcker's objective was two-fold. The first was to reduce the rapid rate of money growth, which Milton Friedman and his followers had claimed was the main source of inflation, along with federal budget deficits. The second was to break inflationary expectations, which he believed had become entrenched in the economy through persistent pressure to raise wages to compensate for rising prices.

In fact, the causes of inflation were mixed and complex. They included not merely budget deficits and money growth but also multiple oil prices hikes by OPEC, worldwide crop failures, the mismanaged unfreezing of U.S. prices, a sudden and unanticipated slowdown in productivity growth, and a systematic overestimate of housing inflation by the government.

The driving concern of many economists and policymakers in the 1970s and 1980s was that whatever set inflation off, it took on a life of its own through inflationary expectations. People bought sooner rather than later to beat rising prices, thus stoking rather than reducing demand. More important, inflationary expectations fed demands for higher wages, putting pressure on companies to raise prices. A favorite interpretation of many mainstream economists was that once inflationary "momentum" set in, as Jimmy Carter's chief economist, Charles Schultze put it, it fed on itself.

Unions in particular were blamed for the rising wages. Many union contracts were indexed to inflation and other companies followed suit. In turn, companies raised prices to maintain profit margins.

Volcker almost surely was a skeptic of Friedman's monetarism and used it instead as a cover story to justify the creation of a recession through higher interest rates. In any case, by the 1990s, Friedman's monetarism had been discarded as simplistic but it served Volcker's purpose. The harsh recession and collapse in aggregate demand that resulted from Volcker's interest rate policy did indeed crush inflationary expectations and begin the long, persistent deterioration of union power.

At the Fed under Greenspan, the battle against inflationary expectations prevailed until the late 1990s, even as inflation declined. One important theoretical justification for the policy was a more lasting contribution from Friedman, the natural rate of unemployment. Before this, Keynesian economists argued that higher inflation led to lower unemployment rates—a relationship defined by the famed Phillips curve. Friedman's counterattack was that higher inflation did not reduce the unemployment rate. Rather, using government policies, whether monetarist or Keynesian, to push the unemployment rate below the natural rate (the Non-Accelerating Inflation Rate of Unemployment or NAIRU) resulted in ever-higher inflation, he postulated. Friedman argued that workers were momentarily duped by resulting wage hikes to take jobs as the unemployment rate momentarily fell below its natural rate. But higher inflation then reduced their real wage and they then were no longer attracted to work. Therefore reducing the unemployment rate could lead to uncontrollable inflation and economic instability.

Republican and Democratic economists alike adopted NAIRU as a policy guide. It seemed to conform to the experience of the 1960s and 1970s, but the relationship was in fact superficial. It became clear over time that even if NAIRU existed, no one actually knew what the NAIRU was. Many economists claimed it was 6 to 6.5 percent in the 1980s; yet, in the late 1990s, the unemployment rate fell below 4 percent without causing inflation.

In reality, NAIRU was arguably overestimated well before the late 1990s, and therefore authorities kept the unemployment rate higher than was needed to suppress inflation. Higher unemployment rates in turn have been closely linked by academic research to slower growing wages.³

But there were other important political actions that helped reduce wage growth and undermine worker bargaining power. Volcker supported, for example, Reagan's influential decision to fire the air traffic controllers when they went on strike in 1981. As an indication of Volcker's interest in stopping the unions, William Greider noted:

[Volcker] carried in his pocket a little card on which he kept track of the latest wage settlements by major labor unions. From time to time, he called various people around the country and took soundings on the status of current contract negotiations. What is the UAW asking for? What does organized labor think? Volcker wanted wages to fall, the faster the better. In crude terms, the Fed was determined to break labor.⁴

Reagan also began to relax and reverse rules protecting organized labor and the enforcement of labor laws in general, including implementation of the minimum wage. Union coverage fell from about 30 percent of private labor markets to 7 to 8 percent in the 2000s.

The battle against labor had also become widely accepted as necessary among mainstream economists. Meantime, as *New York Times* reporter Steven Greenhouse documented in his book, *The Big Squeeze*, businesses became more aggressive about breaking unions and met less and less resistance from federal watchdogs.

In this period, the minimum wage was allowed to fall sharply after adjusting for inflation (see Figure 1).

Regarding the defeat of organized labor, Michael Mussa, former IMF chief economist, triumphantly described the government 'victory' in 1994: "To establish its credibility, the Federal Reserve had to demonstrate its willingness to spill blood, lots of blood, other people's blood."

Greenspan was unabashedly dedicated to creating worker insecurity in order to suppress wage gains. Greenspan proudly testified before Congress in 1997 that it was working. As growth quickened, he said, "The rate of pay increase still was markedly less than historical relationships which labor market conditions would have predicted. Atypical restraint on compensation increases has been evident for a few years helped still more and appears to be mainly the consequence of greater worker insecurity."

A couple of years later, Greenspan cited statistics that made him still more proud. In earlier years, with unemployment recently at 8 and 9 percent, International Survey Research reported that 12 percent of workers feared losing their jobs. In 1999, the same firm reported that 37 percent worried about losing their jobs even with unemployment under 4 percent.

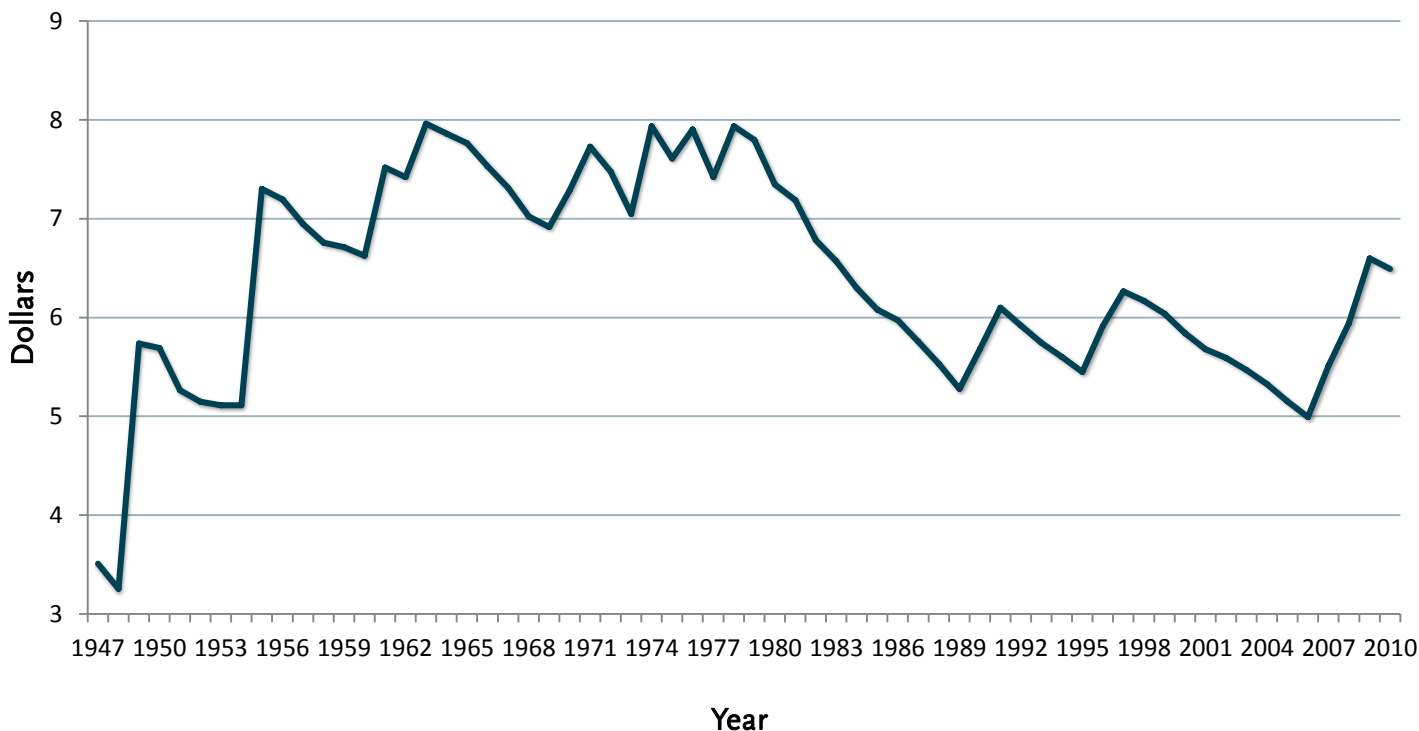
In sum, although the Fed's explicit target was to keep inflation low, the indirect target was to suppress wage growth through a high unemployment rate. Economist Michael Perelman has documented much of this; as he notes, the "traumatized" worker was a key factor in the Fed's thinking well into the 2000s. Even as the Fed lowered interest rates,

wage increases were small, to the delight of many on the Fed. The Fed governor, Edward Kelley, had put it this way at an earlier Open Market Committee meeting:

“I don't know how much has to do with the so-called traumatized worker. How long is the American workforce going to remain quiescent without the compensation increases that it thinks it should get? When employment is as strong as it is right now, I don't think we can depend on having permanently favorable results in that area. This has been a rather big key to the present happy macro situation where we have a high capacity utilization rate and a relatively low inflation rate. We all feel rather good about that.”

Beginning in the early 1980s, the growing influence of finance and the increasing financialization of American companies was another major factor in slow wage growth. As noted earlier, CEOs and other executives were increasingly given stock options, which focused them on maximizing short-term profits to raise the stock price. Also, corporate takeovers, LBOs and privatization generally required an increase in cash flow immediately to cover the debt service to finance the transactions, often at the expense of the payroll. Managers unthreatened by takeovers, like Jack Welch, who became CEO of GE in 1980, nevertheless adopted minimization of wage costs as a strategy to raise stock prices. Some researchers have found that public companies subject to stock market pressure and run by CEOs motivated by stock option compensation invested substantially less than private companies without such pressure.⁵

Figure 1: United States Real Federal Minimum Wage, 1947-2010



Source: Analysis of Bureau of Labor and Statistics and Department of Labor Data; CPI calculated with base year 2005

It is important to recognize that financialization was also a policy choice. Active advocacy of deregulation allowed excessive speculation and unregulated trading by banks. Fees for transactions such as LBOs or the issuance of absurdly priced IPOs were very high, unmediated by true competition among financial firms. The tax deduction for cash pay was limited but stock options were unregulated. Nor were corporations at first required to expense them. Washington either looked the other way or deliberately did finance's bidding. All the while, labor protections were cut and a culture in which labor was increasingly expendable was favored. Maybe most important, debt was the motor of financialization and enjoyed a significant tax advantage: interest expense was tax-deductible on many financial transactions, including takeovers and in general financial speculation.

In effect, the U.S. government subsidized the rise of finance, a fact about which the academic community rarely complained. By contrast, academic economists rose in near-unison against subsidizing manufacturing, arguing that it was a sunset industry seeking protection from international competition. Another problem was the strong dollar, which favored finance over domestic industry. The Clinton administration deliberately encouraged a high U.S. dollar, which also served as a subsidy to Wall Street by enabling it to import capital at low interest rates, much of it recycled from export economies that enjoyed trade surpluses with the U.S. Wall Street firms could thus borrow cheaply and also sell mortgage and other debt products at attractive rates to clients.

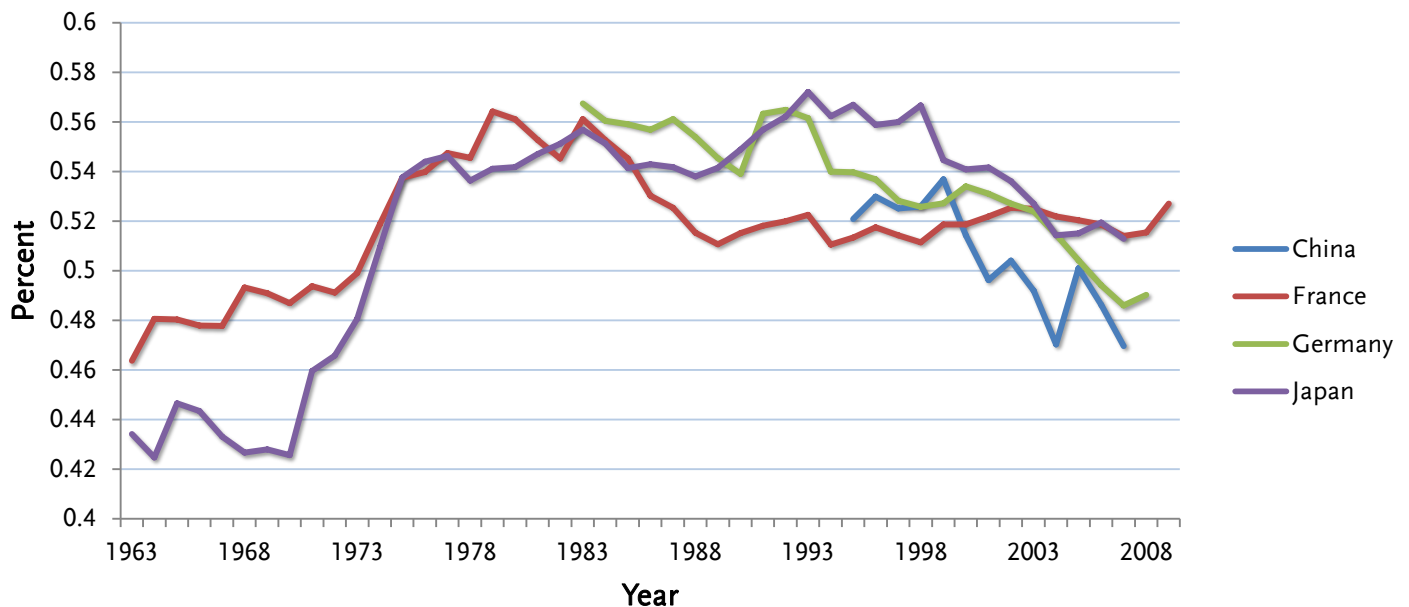
The general refusal to subsidize manufacturing, partly in deference to the support for free trade policy, also undermined wages. Yet manufacturing was subsidized by other nations around the world. There was also a decided anti-manufacturing policy in the U.S. as the high dollar policy placed exports at a significant disadvantage.

In the 2000s, other factors, including the offshoring of jobs, also kept wages down. Wages did not grow at all in the recovery and expansion of the 2000s under George W. Bush. Nor have they fared any better in the recent recovery under Barack Obama. Median weekly wages stood at \$747 (in current dollars) for all full-time workers in the first quarter of 2010, after the official end of the recession in June 2009, and were only \$763 in current dollars in the first quarter of 2012. In constant 1982-1984 dollars, median weekly wages declined from \$344 in the first quarter of 2010 to \$334 in the first quarter of 2012.⁶ Low union coverage and deep-seated worker insecurity were still among the core reasons for the stagnant wages.

Mainstream economists never conceded that faster economic growth could promote more equal wages. When confronting questions about growing inequality, Greenspan for example explicitly denied that looser monetary policy could affect it. Skill-biased technology served as an adequate explanation of inequality for him and others, and inequality therefore could not be influenced by traditional fiscal or monetary policies. As he told a Congressman in 1997, regarding inequality, "It is a development which I feel uncomfortable with. There is nothing monetary policy can do to address that, and it is outside the scope, so far as I am concerned, of the issues with which we deal."

The cumulative effect of these policies was the poor performance of wages for four decades. The Hamilton Project, housed at the Brookings Institution, found that median wages earnings (half earn more, half earn less) for all men 25-64 working full-time were in 2009 about what they were in 1969. But many fewer men as a proportion of the work force now worked full-time. When the Hamilton Project measured the median earnings of *all* men aged 25-64, it found that that their median earnings were \$13,000 lower than they were in 1969 (measured in 2009 dollars).⁷

Figure 2: Wage Share as Percent of GDP, Selected Industrialized Countries



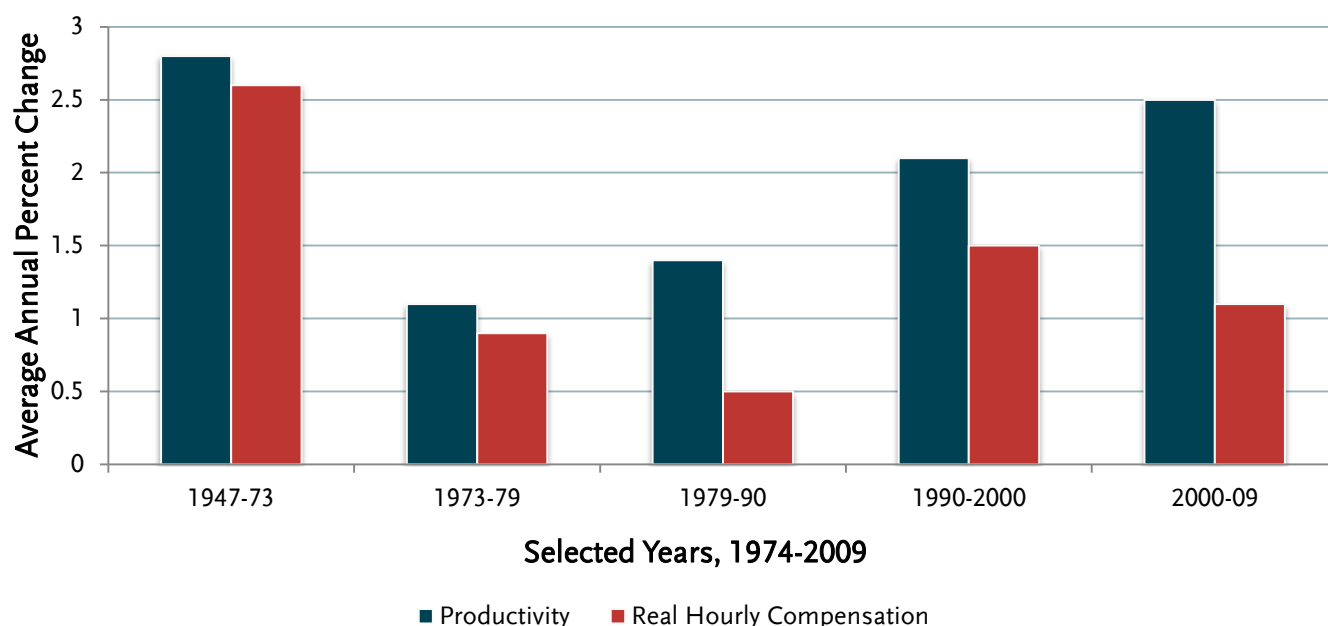
Source: Extended Penn World Tables, drawing from United Nations Data

Obviously, this decline long preceded the Great Recession. Indeed, median earnings for all men never again recovered their pre-1981 highs – not during Reagan’s two terms or even during the Clinton boom.

Women have done better, but not well by historical standards, despite some claims otherwise. Another Hamilton Project Report shows that since the early 1980s, median earnings for full-time working women have risen from around \$28,000 to \$35,000, an increase of about 25 percent. Still, over 30 years, this is an annual growth rate of less than 1 percent, a far lower annual rate than in the 1950s and 1960s when wages rose by 2 to 3 percent a year; through much of America’s industrial history since the 1800s, wages rose over long periods by 1 to 2 percent a year.⁸

Because many more women are working part-time and full-time than in earlier years, the median earnings for all women has risen faster than for full-time workers. But even that flattened out in the early 2000s. Today, full-time women workers earn no more at the median than in 2000. For a more detailed study of the poor performance of full-time male and female worker wages, we present our own findings in Appendix 1, broken down by age and education as well as gender. Of note, even median college-educated workers did not do especially well by historical standards since 1969, although their gains did exceed those of workers with only a high school diploma.

Figure 3: Productivity Growth and Real Hourly Compensation Growth



Source: Bureau of Labor and Statistics, “Productivity-Compensation Gap” http://www.bls.gov/opub/ted/2011/ted_20110224.htm

Had wages risen slowly because the economy grew slowly, no case could be made that workers bore more of the cost of a low-inflation strategy than others. But wages for most grew more slowly than the rest of the economy because of rising inequality and because wages were becoming a declining share of the economy. According to the BLS, the labor share of output declined in America since the 1970s.⁹

Due to reduced wage share and higher inequality, wages for typical workers have not kept pace with the growth of productivity, either, thus contradicting the “trickle down” notion that wages would share equally in productivity growth. Roughly since 1979, productivity has grown faster than real hourly earnings, as seen below. This is partly because much of wage share has gone to top earners, even as overall wage share fell. Because higher end workers save substantially more of their income than those in the middle and below, aggregate demand was reduced still more than a falling wage share would suggest, with retarding consequences for growth.

The European Path to Low Wages

The influence of the U.S. over the economic policies of other nations in these years was considerable. The U.S. model – which stressed low inflation, less regulated labor markets, and financial deregulation – was seen as exemplary. The European Central Bank, created in 1998 with the adoption of the euro, inherited a staunch anti-inflation tradition from the powerful Bundesbank of Germany. Moreover, unlike the Federal Reserve, which was also directed to focus on employment, the ECB’s only legal mission was to maintain low rates of inflation. Accordingly, it has adopted a tight monetary policy since its inception.

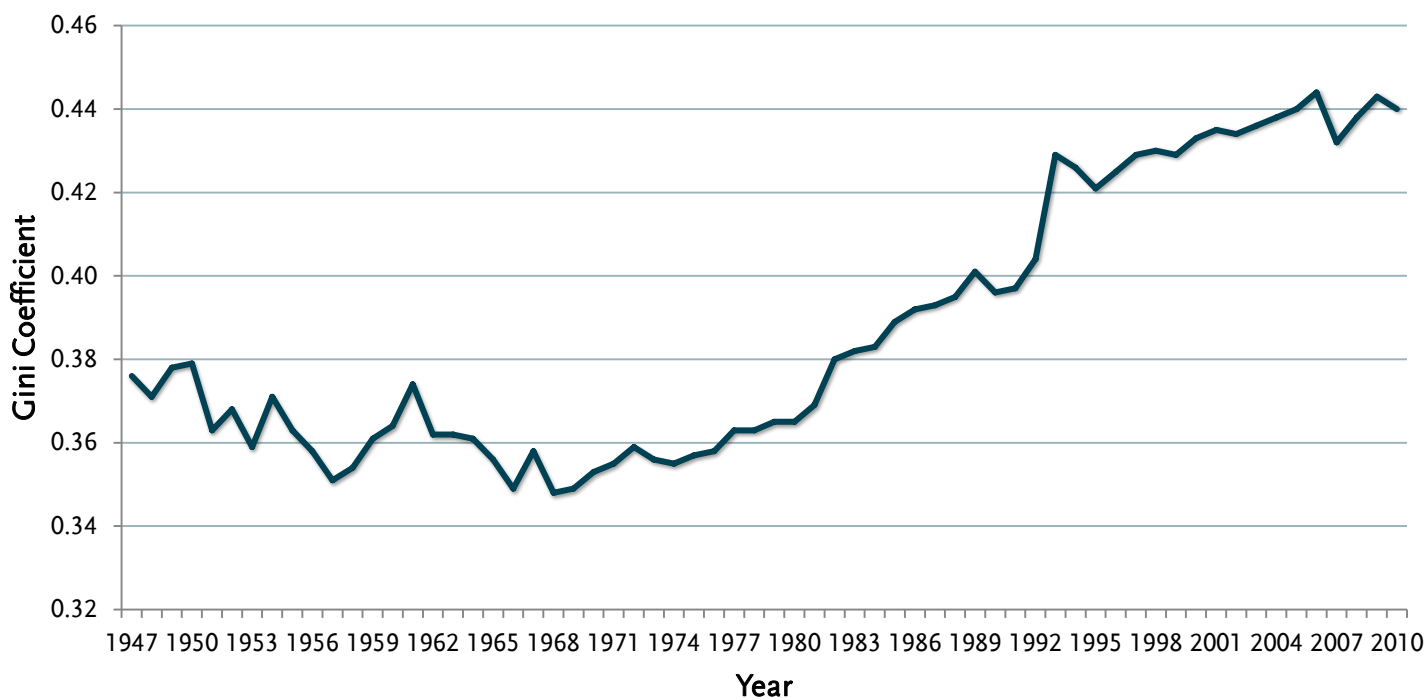
In addition, the U.S. model was noted for its less generous safety net and its flexible labor market. In an attempt to mimic America's 1990s "success," many nations across Europe reduced their safety net while they deregulated labor policies. Germany in particular adopted a set of policies, often in cooperation with unions, to suppress wage growth. Wage share started generally falling in the late 1980s and early 1990s, and more so into the 2000s.

While no Eurozone nation reduced its safety net to the modest American version, many countries in Europe did follow the U.S. in allowing wage growth to fall behind the rate of growth of productivity, and some did so as early as the 1980s and 1990s.¹⁰ In Germany, wages fell behind productivity growth beginning in the 2000s. The slower growth of wages in Germany is attributable to a variety of factors including job sharing incentives, acceptance by labor unions of lower wages, and reduced unemployment benefits.

Even if wage share had not fallen, inequality has risen in most of these same nations as well, and for Anglo-American nations quite sharply. For the U.S., wages began to grow significantly more unequal beginning around 1980. Most important, the level of aggregate demand that is generated by a pool of unequal wages is less than if they were equal because high-wage workers spend less.

As seen in Table 1 below, the incomes of the top quintile have grown much faster than those of the bottom quintiles in Germany, the U.S., and the OECD as a whole during the period from the mid-1980s to the mid-2000s.

Figure 4: Gini Coefficient for Families (United States)



Source: United States Census Bureau

Table 1: Income growth for top and bottom quintiles, mid-1980s to mid-1990s

Household Income	Average annual change mid-1980s to mid-1990s		Average annual change mid-1990s to mid-2000s	
	Bottom quintile	Top quintile	Bottom quintile	Top quintile
Germany	0.4	1.6	-0.3	1.3
United States	1.2	1.9	-0.2	1.1
OECD	1.2	2.1	1.5	1.9

Theories Supporting the Low-Wage Policy Regime

As noted earlier, most mainstream economists did not focus on the economic dangers of a low-wage regime, whether caused by inequality or a declining wage share of GDP – or both. They generally limited their concerns to the social effects of inequality, but even then there was inadequate attention paid to rising inequality until the Great Recession and, arguably, the rise of Occupy Wall Street.

Mainstream theory essentially supported the view that high inflation was the key danger to growth and stability and that low rates of unemployment could readily set inflation off again, as it was believed to have done in the 1970s. For two decades, as we discussed earlier, Friedman’s natural rate of inflation held sway until it foundered on the rocks of contradictory experience in the late 1990s when the unemployment rate fell without inducing inflation.

But other mainstream theories took its place to lend intellectual support to the low-wage regime across the world. First, based on theories of rational expectations, it had become more widely accepted that any government policy designed to increase the rate of economic growth and reduce the unemployment rate would be neutralized by consumers and businesses. In the more extreme version of rational expectations, known as Ricardian equivalence, if Keynesian fiscal stimulus were adopted, consumers would save an equivalent amount of the stimulus rather than spend it because they realized that the government would eventually have to raise taxes to compensate for the near-term deficit. Many if not most mainstream economists believe that consumers will save enough of a stimulus to offset most of its stimulative potential, although the view remains contentious. Keynesian policies, consumers supposedly would realize en masse, would not expand the economy sufficiently to relieve the need for higher taxes. Similarly, expansionary policies by a central bank were limited in their positive effects.

Second, there was widespread acceptance of the view that rising inequality was largely due to skill-biased technologies. Policymakers, therefore, argued that there was little they could do except to improve education. As we noted earlier, Greenspan adopted this view and it guided his approach to monetary policy.

Third, inflation targeting – that is, making low inflation rates the sole objective – also became widely accepted as an appropriate policy for central banks. It rested on the idea that the central bank would send a message to consumers, businesses and bond investors that inflation would remain low and stable. Therefore, interest costs would fall or at least not rise and, in general, confidence would stay high because future price instability, like the experience of the 1970s, would not recur.

Ben Bernanke, the current chairman of the Federal Reserve, had been a leading advocate of a version of this position. He heralded the period from the 1980s to the mid-2000s as a Great Moderation of less volatile growth, proof that a focus on low inflation was working. The Federal Reserve did not practice formal inflation targeting but pursued nevertheless a milder form.

There was no economic evidence that inflation rates above 2 or 3 percent a year would impede economic growth. Yet the great majority of economists and policymakers held this view – many of them out of a general concern that once inflation rose it could easily get out of hand – again, the fear of a replay of the 1970s, even though union representation was now low and the bargaining power of labor weak.

Fourth, it bears emphasizing that the central theoretical assumption underlying these widely accepted policies was that economies were self-adjusting as long as government did not interfere. Economists had returned to faith in the “general equilibrium model” that prevailed before the Great Depression, which argued that economies after recessions returned to optimal rates of growth on their own – or at best, with minimal stimulative help from the Fed or the Treasury.

Similarly, there was renewed faith in Say’s Law, which Keynes had struggled successfully to demonstrate with certainty did not prevail in recessions. The late-18th and early-19th century French economist J.B. Say argued that supply created its own demand. If we build cars, the process would create the income to enable people to buy them. If the nation saved enough, interest rates would be lowered sufficiently to raise business confidence and investment. In a Say’s Law world, deficits reduced national savings and therefore “crowded out” private investment. By contrast, Keynes argued, government budget deficits were usually necessary to restore demand and therefore business confidence.

In a Say’s Law world, rising profits, a contributor to savings, were also almost invariably considered a principal cause of investment and therefore growth. High wages undercut profits and therefore often impeded economic growth; high wages were not considered necessary to provide adequate income to buy products.

Finally, there was the widespread acceptance of the benefits of trade liberalization among economists and policymakers. But trade liberalization with low wage, export-led economies like China put downward pressure on wages. Indeed, lower wages were seen as the best way of helping make exports more competitive. With fewer policies to subsidize manufacturing or regulations to protect domestic markets, a lower wage became one of the few ways for U.S.-based companies to compete internationally. And the search for lower wages led to widespread offshoring and outsourcing, putting even more downward pressure on the domestic labor market. Higher American wages in non-tradable sectors could have offset the downward pressure on wages in the traded sector and could have helped maintain aggregate demand. But with the power of labor weakened by deregulation and other measures, along with the rise of low-wage sectors such as retail, wages also suffered in non-traded sectors as well.

As economists on the Right and Left lauded Bernanke’s Great Moderation, they did not bother to note that economic growth, adjusted for business cycles, did not speed up in these years. To the contrary, as seen in the table below, the rate of GDP growth slowed in every ensuing decade of the Great Moderation. The era was also accompanied by jobless recoveries in the early 1990s and the early 2000s compared to rates of job growth in recoveries from earlier recessions. In fact, according to the International Labor Organization (ILO), every dollar of increased GDP supported fewer jobs in this

era. In the 2000s, as noted, wage growth completely stalled in the U.S. even before the Great Recession. In addition, there were repeated serious financial crises since the early 1980s that took their toll on income, even before the tech bubble in the 1990s and the housing bubble in the 2000s.

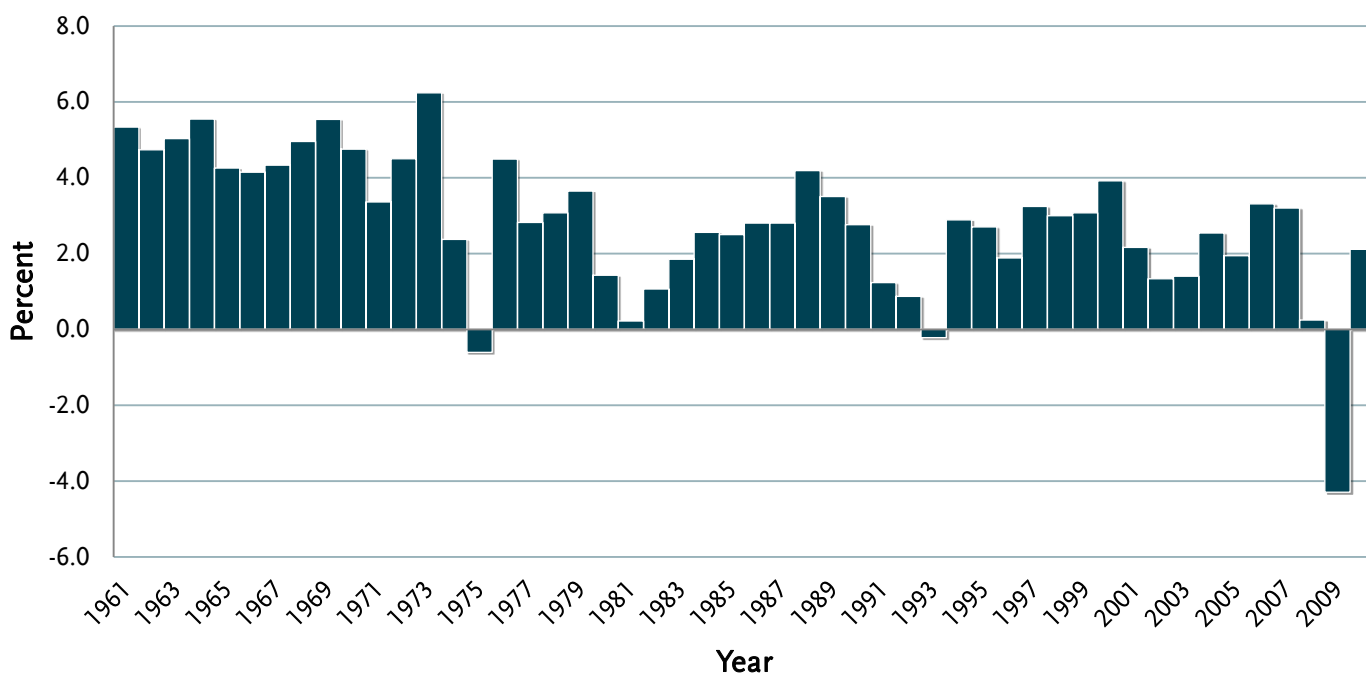
Table 2: Slower growth rates in each succeeding expansion since the 1980s in the U.S.

Time Period	Employment	GDP	Personal Income	Industrial Production
1949-53	4.4	7.5	6.5	11.5
1954-57	2.5	4.0	4.9	6.3
1958-60	3.6	5.7	4.7	10.8
1961-69	3.3	4.8	5.2	6.5
1970-73	3.4	5.2	5.8	8.1
1975-80	3.6	4.3	4.1	5.5
1980-81	2.0	4.4	4.7	6.4
1982-90	2.8	4.2	3.6	3.8
1991-2001	2.0	3.6	3.8	4.2
2001-07	0.9	2.7	2.7	2.4
2009-11	0.3	2.5	2.4	5.9

Source: Economic Cycle Research Institute

A similar pattern of weak economic growth was also evident in Europe, as illustrated by the following chart (Figure 5).

Figure 5: Annual GDP Growth Rate (European Union)



Source: World Bank Development Indicators

For most economists and policymakers, the control of wage growth was generally seen as an accomplishment as it reduced inflationary pressures and raised profits. Even if it were a function of inequality, more rapid growth was not seen as the answer to inequality; more education was. Whether higher wages were needed to support aggregate demand was rarely asked, even as major economies turned to exports and debt to support demand instead. The eventual result was financial catastrophe and the Great Recession.

The Low-Wage Regime: The Unforeseen Cause of the Crisis

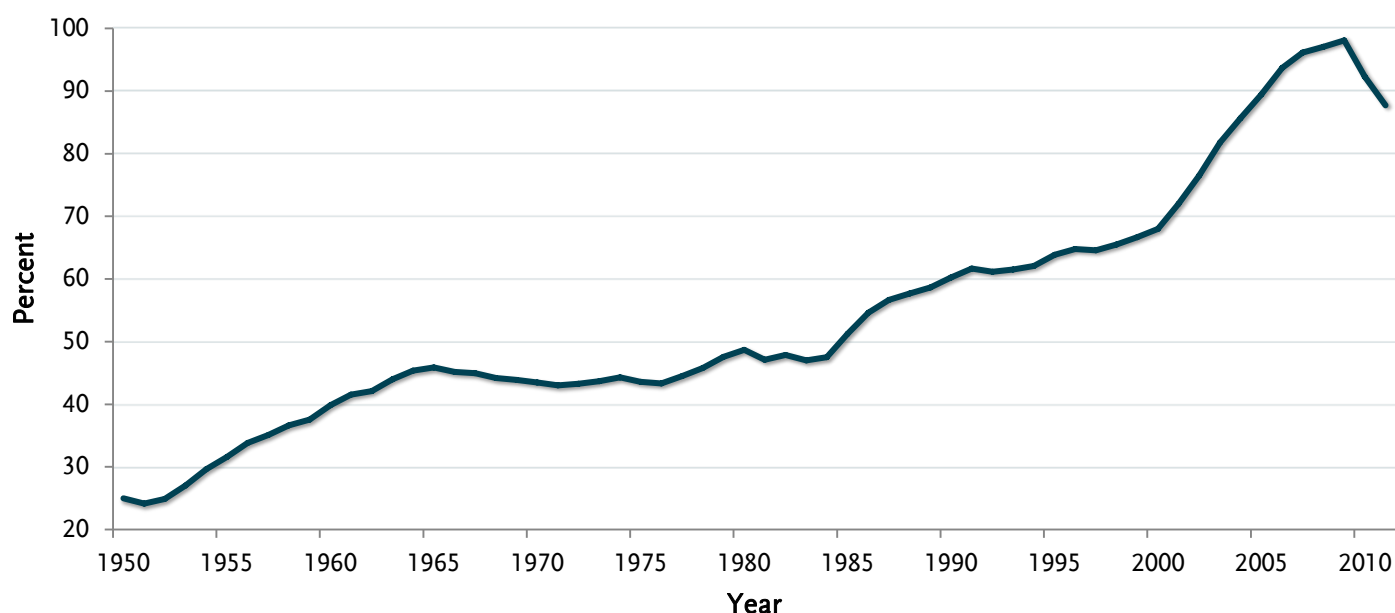
Neither debt-led nor export-led growth models were explicitly adopted as a way to supplement low wages in respective economies. In the U.S., the build-up of household debt was a consequence of stagnant wages and increased international competition with low-wage, export-led economies. Ever higher levels of household debt were required to create enough aggregate demand to support economic growth at moderate rates. Had wages been higher, mounting consumer credit would not have been as necessary.

Beginning in the 1980s, especially following the success of Japan, export-led models were widely accepted as a path to economic development. Export-led growth was an economic policy choice often made by nations in the take-off stage of their economic development to supplement their slowly developing domestic markets. Had their domestic markets been more robust or more mature, export growth would have been less necessary to support economic growth generally. But dependency on export-led growth continued even among rich nations with a substantial middle class, such as Japan and Germany. Such dependency created a vicious circle because export competitiveness in turn depended on restraining wages.

The U.S. is the leading example of a debt-led growth model. As discussed above, its evolution was long, although it gathered steam in the late 1990s and 2000s. The low-wage era in the U.S. began in the early 1980s, and it is not likely a coincidence that household debt as a proportion of GDP began to rise in this period (after the harsh recession ending in 1982). Household debt as a proportion of GDP had been basically flat during the rapid growth of the 1960s, after having risen in the 1950s as Americans started to spend again and buy homes on credit after the harsh war years.

Household debt, led by the mortgage boom, rose especially rapidly in the 2000s, when wage growth was flat, despite low rates of unemployment (see Figure 6). Because of low unemployment rates, the lack of wage growth received too little attention from policymakers.

Figure 6: Household Sector Debt as Percentage of GDP



Source: Federal Reserve. U.S. Household sector debt includes credit market debt outstanding and household sector liabilities but excludes corporate equities and mutual fund shares.

Raghuram Rajan of the University of Chicago Booth School of Business was among the earliest mainstream economists to warn of a frail financial system due to stagnating wages. In his book, *Fault Lines*, he notes “the everyday result [of inequality] for the middle class is a stagnant paycheck as well as growing insecurity.” The resulting borrowing, he says, allowed American consumers to “pay less attention to their stagnant monthly paychecks.”¹¹ A group led by Jean-Paul Fitoussi and Joseph Stiglitz attributed the crisis similarly to income inequality, resulting in reduced aggregate demand as more income channeled to higher-income workers was saved rather than spent.¹²

With their borrowing, American consumers also kept spending on imported goods that were no longer produced domestically because of the rise of low-wage competition. As a result, the U.S. current account – which is the trade balance plus the balance on investment and transfers (mostly, dividends and interest) – fell into a large and persistent deficit in the early 1980s. After a managed decline in the value of the dollar in the late 1980s, the deficit improved temporarily toward balance before it worsened again in the 1990s and 2000s, falling to a deficit of more than 6 percent of GDP in 2006 (Figure 7).

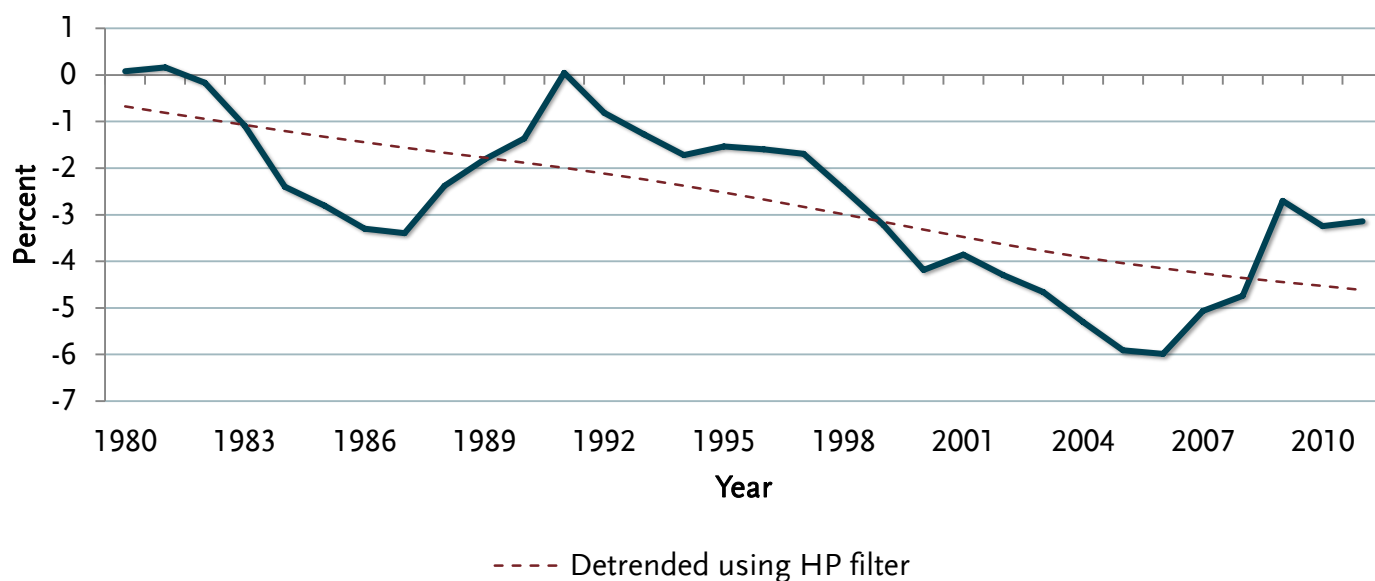
The large early deficits with Japan and later with other Asian nations accounted for most of the U.S. imbalances beginning in the 1980s. Following China’s entry into the World Trade Organization in 2001, the trade imbalance with China grew especially rapidly and became a larger and larger share of the U.S. current account deficit.

As part of its strategy to manage its currency, China deliberately built up reserves in U.S. dollars. China’s surpluses were recycled into the U.S. via purchases of U.S. Treasuries and government agency debt, including mortgage-backed

securities. That flow of funds enabled Americans to borrow aggressively to consume – and often to consume Chinese goods. The availability of this tide of funds for mortgage lending was one of the causes of the crisis. The level of borrowing was also seriously expanded by complex innovative and often deceptive Wall Street practices, as well as higher leverage by these firms, that for many years paid off handsomely in huge bonuses to Wall Street employees. In short, a dangerous feedback loop between borrowers in the U.S. and Chinese exports developed over 30 years, reaching a crescendo in the 2000s, aided by Wall Street lending practices.

Let us now turn from debt-led growth models to export led-growth models. Export-led growth models were widely thought of as an acceptable and even the optimal strategy for growth by developing nations or those devastated by World War II. As noted, Japan’s successful export growth strategy influenced other nations. For developing nations, export growth models also replaced what many believed were failed import-substitution models of the 1970s and 1980s. Under the import-substitution model, governments placed tariffs and quotas on imports in order to help build manufactures at home and a strong industrial and wage base.

Figure 7: Current Account Balance as Percent of GDP
(United States)



Source: International Monetary Fund

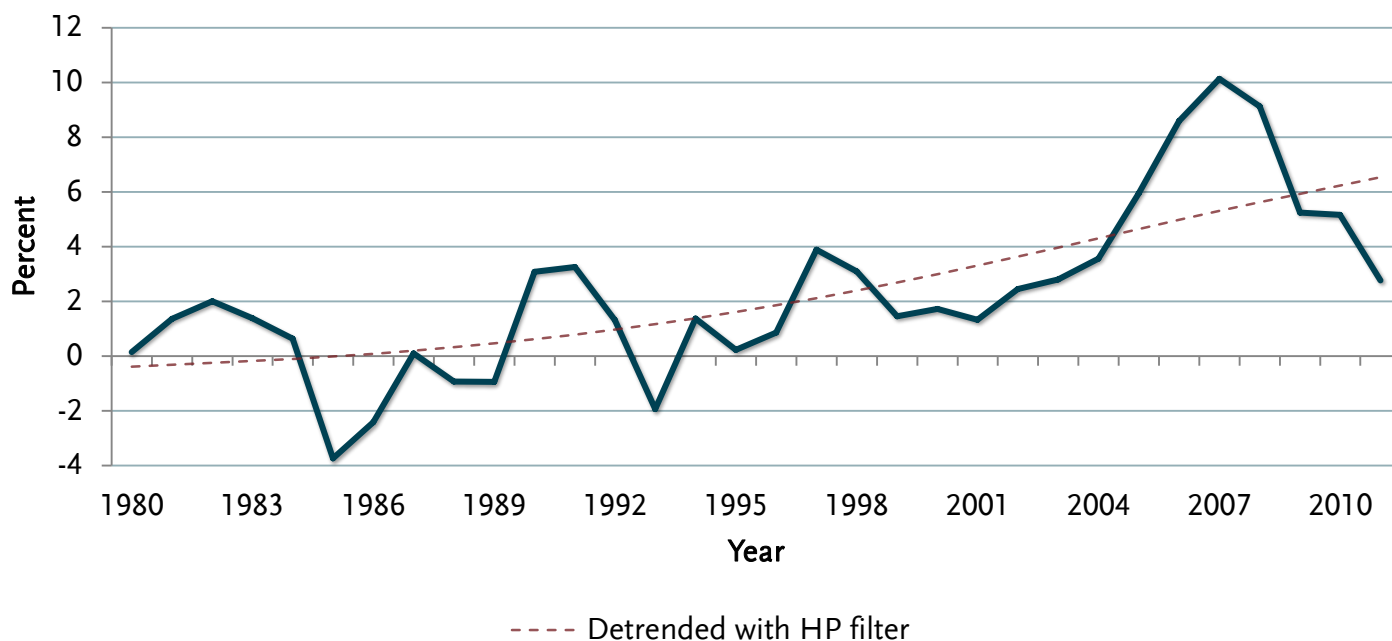
The Third World recession in the 1980s was widely blamed on import-substitution policies, but was in fact due to factors beyond those policies. Many developing nations borrowed heavily when their commodities exports rose in price due to the 1970s inflation, and the economies were hit with a shock when tight money plunged the world economy into recession, raising the rates they had to pay while reducing the prices their commodities fetched.

As a result of the perceived failure of import substitution, export-led growth became the economic model of choice among emerging economies. The export-led growth model experienced its own crisis in the 1990s with the 1997 Asian Financial Crisis. But the response to the crisis only reinforced the export-growth model. When Asian economies collapsed as the hot

money flow from the West was reversed and capital was withdrawn, many government leaders vowed to build a war chest of foreign exchange reserves to defend the value of their domestic currencies.

In order to prevent such future crises, many leading emerging economies decided to further subsidize and stimulate exports, moderate consumption, and build up savings of foreign reserves rather than spur domestic demand and growth in their own workers' wages. One policy tool was of course the manipulation of currencies, keeping them low enough against the dollar and other major trading partners to support exports. But they would also subsidize exports in other more subtle ways involving a complex web of measures that benefited export industries.

Figure 8: Current Account Balance as Percent of GDP (China)



Source: International Monetary Fund

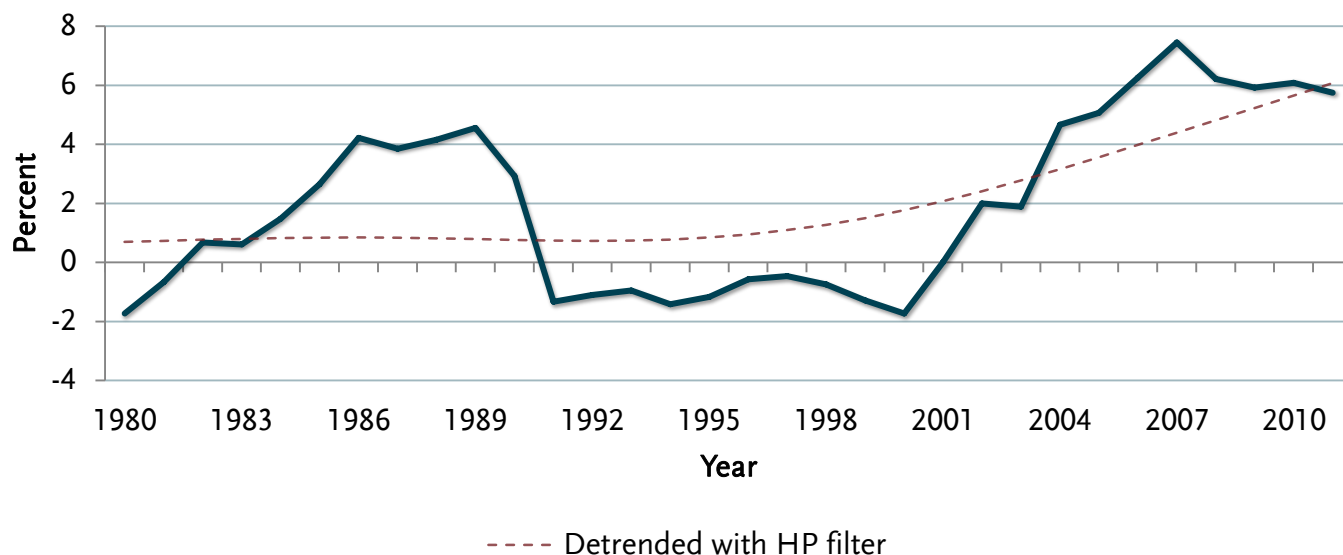
The U.S. had been the major market for the goods of export-led growth nations (the U.S. was even Germany's second biggest export market) since World War II. But the U.S. trade balance became negative only in the 1970s, and then began to accelerate as the number of export-led economies began to grow in the 1980s and 1990s. These trade deficits had to be financed by debt. China's surplus, the flip side of deficits elsewhere, rose at one point to 10 percent of its GDP (see figure 8, above). Rising demand in the U.S. for foreign-made goods created growing holdings of dollars overseas, which had to be lent back to the U.S. This kept interest rates low but it also resulted in even more borrowing and buying by consumers and still greater current account deficits.

What enabled this feedback loop to become extreme was a combination of the reserve currency status of the dollar and the mercantilist practices of Asian export economies. The currencies of most other deficit economies would have fallen as trade deficits increased, and that would have reduced imports and increased exports, restoring balance to the trade account. But the U.S. dollar was in constant demand no matter the U.S. trade position, because it was the principal

reserve currency in the world. Ever-greater trade deficits could be incurred, but the dollar largely held its value, reinforced further when other nations like China manipulated their currencies.

Germany, the world's other major export-led economy, had subsidized and focused on export manufacturing for years following World War II. But this export-led model ran into trouble in the 1990s when Germany's unit labor costs – the wage cost to make a product – had become much higher than its trading partners in Europe in part because of German unification. In the 1990s, Germany's current account was in fact in persistent deficit (Figure 9). With the adoption of the euro in the late 1990s, Germany began to restrain wage growth sharply and raise productivity levels in key manufacturing export industries.

Figure 9: Current Account Balance as Percent of GDP
(Germany)



Source: International Monetary Fund

By the early 2000s, it had succeeded and unit labor costs, a function of both wages and productivity, fell below levels in other major European trading nations. Similar to the relationship between China and the U.S., Germany's currency was essentially fixed against its trading partners according to the rate at which each adopted the euro. Even as Germany's trade balance with other nations rose to a substantial surplus of 7 percent of GDP, the fixed euro provided advantages. Had Germany been independent of the European Monetary Union, the Deutsche Mark would have risen sharply, undermining its export advantage. Instead, the European nations bought German products at their relatively attractive prices and increasingly borrowed to do so. A property boom in nations like Spain and Greece resulted as interest rates in those nations fell, converging with rates in larger less risky European nations. Many across Europe and the British isles gladly bought the public and private debt, as rates came down and currency risk was eliminated. Meanwhile, Germany exploited the weaker euro, improving its competitiveness both within and outside the Eurozone.

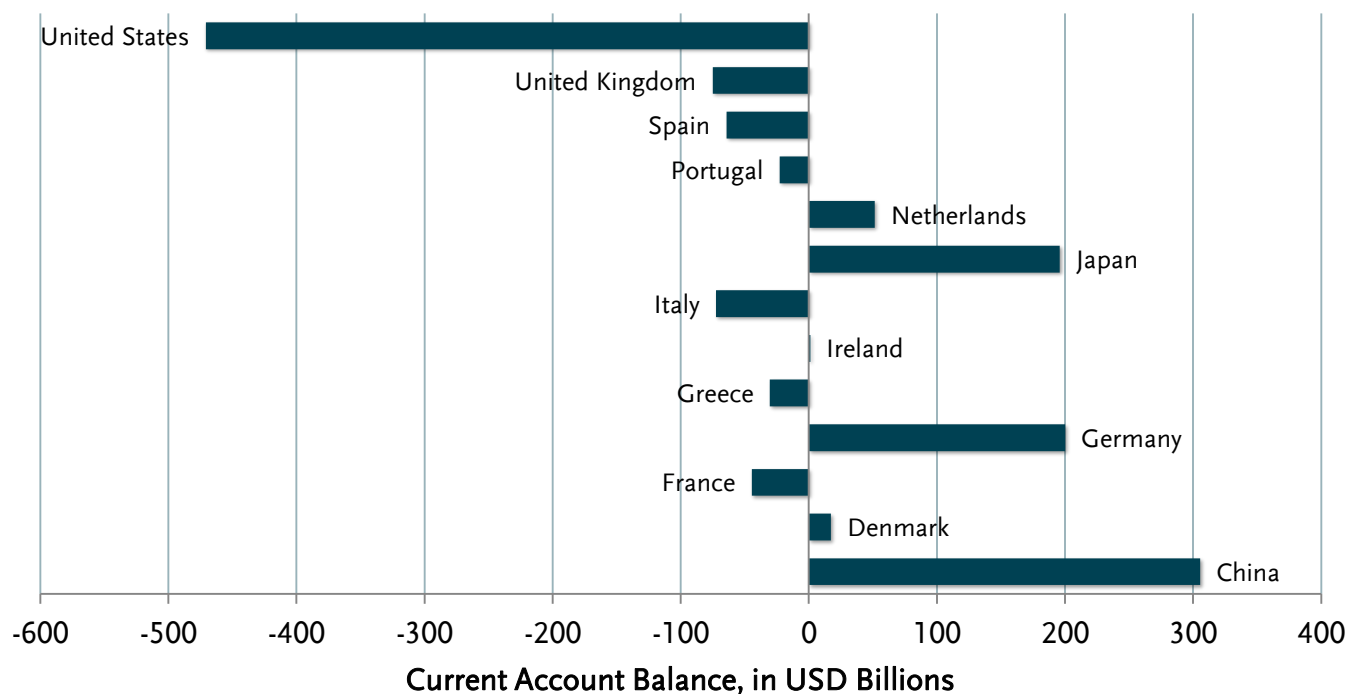
But as argued earlier, these export-led growth models cannot be sustained because they depend on deficit nations taking on too much debt. They are also classic beggar-thy-neighbor strategies that undermine the development of high-wage

exporting manufacturers in the importing nations, raising still more the need for the nations to take on debt as wages stay low. To repeat, dependence on exports also creates incentives to keep wages lower in exporting nations, thus reinforcing incentives for a weak domestic market. A principal condition for the success of the German and Chinese export models was also respectively the adoption of the euro and China's pursuit of a de facto currency union with the U.S. dollar. Japan's earlier success depended on its aggressive maintenance of a low value for the yen.

Note in the chart below (Figure 10) how the surpluses of Germany, China and Japan are offset by deficits in the U.S. and most other European nations.

The export-led growth model could only succeed until the debt bubbles in the deficit economies burst. In that sense, export-growth models were on a worldwide basis debt-led growth models.

**Figure 10: Current Account Balance in Billions of Dollars, 2010
(Leading Industrial Economies)**



Source: International Monetary Fund

A Low-Wage Policy Regime Cannot Support Long-Term Economic Growth

The best way to maintain sufficient aggregate demand, to create high employment, and stimulate investment without inducing insupportable levels of debt is through adequate wage levels. This concept, a simple version of which is known as Fordism (Henry Ford famously paid workers up to \$5 a day, saying he couldn't sell his cars if they couldn't afford to buy them),¹³ has largely been ignored over the last several decades by mainstream economists intent mostly on keeping

inflation low. Demand was rarely if ever considered inadequate until the time of the financial crisis and the consequences of having to borrow to support demand were given short shrift in both the academic and policy worlds.

Today, a shortage of consumer demand is evident in high unemployment rates, unused capacity, unbought homes, and a very slow economic recovery that has sunk into a new recession in Europe. In the near-term, fiscal stimulus is necessary to start the process towards growth. But over time, short-term Keynesian policies will not be adequate for political reasons, as they are likely to run up against the over-done fears in the bond markets about budget deficits. Furthermore, a principal headwind retarding recovery is the high level of household debt: in order to pay down debt, households must save more and consume less. This supports the case for a focus on wage policy. Higher wages would speed up the deleveraging process while raising aggregate demand. Coupled with Keynesian stimulus, more aggregate demand would stimulate faster GDP growth and create more jobs. It would, in turn, raise tax revenues sufficiently to stabilize budget deficits, given that in circumstances of idle capacity, the multiplier effect of public spending is high.

The resistance to a high-wage regime is and will remain substantial but is based on a narrow view of economic policy. In a world of global competition, high wages are thought to undermine competitiveness. But widespread internal devaluations, which are now being demanded across the Eurozone – depressing wages through austerity policies of higher taxes and reduced government spending – cannot work. They may be appropriate in moderation for an individual country or two, but if adopted simultaneously by a larger group of economies, they will undermine growth by driving down aggregate demand, leading to a downward spiral of lower taxes and higher deficits. And that in turn will only prompt renewed calls for more austerity, resulting in still higher deficits. This result is not a mere likelihood. Recession is now spreading across the Eurozone and causing social instability. To put it simply, not all countries can devalue at the same time; there will be no one left to buy exports.

A mutual set of policies to raise wages in surplus as well as deficit economies – or at the least stabilize them in deficit countries and then begin modest increases – can redress current account imbalances that were the proximate cause of the financial crisis in Europe and an underlying cause of the crisis in America. Such policies will facilitate the process of deleveraging, support the aggregate demand needed to re-stimulate growth, and raise tax revenues. Only then can debt be rolled over and deficits and long-term debt be managed over time.

Clearly, however, absent protectionist measures, higher wages in deficit nations must be accompanied by higher wages in surplus economies to redress current account imbalances. Without such coordination, higher wages in deficit nations would result in growing trade imbalances with wage-restrained exporters as unit labor costs rise. Germany and China, in particular, must begin to recognize their obligations.

Resistance to higher wages is based in part on fears that rising wages will stoke uncontrollable inflation. At this moment with enormous slack in the economy, this concern is far-fetched. Another concern is that higher wages will undermine profits, which many orthodox economists regard as the source of investment. But why then is investment not booming in the U.S. when corporate profits have soared and when interest rates are near historical lows? Or in the U.K., where wage levels are falling?

Below I sketch out the broad outlines of a program of recovery and reform. The sequencing of the proposed reforms is important. The program must begin with a new and significant fiscal stimulus coupled with further monetary measures by the ECB and the Federal Reserve in order to raise levels of economic growth. Ideally, the fiscal stimulus should concentrate on Keynesian measures that would create jobs and put upward pressure on wages. These measures must then be followed by a more explicit worldwide high-wage policy.

But even the mildest forms of short-term Keynesianism have been taken off the table. In the U.S., the prevailing conventional wisdom among Democrats is that the current economic model still will work once the mortgage overhang and the high federal budget deficit are somehow dealt with. When moderate growth returns, they say, income inequality can be rectified through tax and redistribution policies. To the extent that such policies are politically feasible, however, they will likely be inadequate. Growth will probably not be rapid enough to reduce unemployment sharply and thereby decrease inequality and raise wages substantially. Current account imbalances will not be corrected so easily.

Higher progressive taxes and an improved safety net are necessary in the longer run to compensate for inequality, and they will increase aggregate demand to some degree because of the higher propensity to spend among those receiving benefits. But these redistributive measures alone will not be enough to correct the underlying problem. For example, raising taxes by a substantial 10 to 15 percentage points on those in the top income tax bracket of 35 percent would yield perhaps \$80 billion a year in extra tax revenue.¹⁴ This is hardly adequate to stimulate growth through redistribution. It would take a much steeper tax increase to make a real difference. Thomas Piketty and Emmanuel Saez calculate that doubling the actual income tax rate paid by the top 1 percent from 22.5 percent to 45 percent could raise nearly 3 percent of GDP, perhaps \$450 billion.¹⁵

The likelihood of such an increase, however, is virtually nil. In any case, it would be unwise to rely on steep progressive taxation alone because the super-high incomes of the top 1 percent may well be diminished in the future. There simply may be less money there to tax. It is a progressive misconception that the top 1 percent got super-wealthy by directly taking money away from the rest the way Robber Barons of an older era took money away from workers by keeping wages low. Rather, the 1 percent generated enormous profits through Wall Street trading, excessive speculation, and arguably unethical practices that added little to sustainable GDP other than what the rich then made and spent. The true costs to the nation were misdirected investment and then crisis and recession.

Other popular solutions are also of questionable value. Because Rajan and others attribute inequality largely to skill-biased technology, they recommend few significant policy changes other than a more deliberate effort by government to improve and equalize educational opportunities. This focus on skill-biased technologies is hard to explain given that the income of other nations, if more unequal than they once were, are not nearly as unequal as they are in the U.S. Why hasn't the skill-biased technology pressure affected them as much? As important, typical wages for men even with a college education have risen only marginally since the late 1960s and early 1970s. To be sure, they may have bested wages for high school graduates, but they hardly assure a middle-class life to those who have four-year degrees.

Putting Wages at the Center of Domestic and International Economic Strategy in the Long Run

The main missing element in the Democratic reform agenda is higher wages. As noted earlier, coordinated rising wages worldwide can reverse the current account imbalances that have caused so much instability over the past decade or two.

But how do we get to a wage-led economic regime?

We must begin with the understanding that a lower share for wages in the economy is not the necessary result of self-adjusting economies as technology changes and markets globalize. They are instead the result of policy choices, including labor, monetary, tax, and fiscal policies that have worked to suppress wages and raise profits. Government has the power to change these.

A Virtuous Circle of Rising Wages: Full Employment

We now need a virtuous circle of rising wages leading to strong domestic markets and more balanced current accounts. To accomplish this, the world's major economies can no longer make low inflation their first priority. Full employment should be the first priority among rich nations today.

Two dominant mainstream ideas require rethinking. First is the fear of uncontrollable inflation. This fear is not based on empirical evidence or even well-developed theory but rather is a residue of the experience of the 1970s and 1980s. It is also of course indelible in the German memory. In the U.S., it has led to a strong-dollar policy, which suppresses inflation by keeping import prices low, but in turn places exports at a competitive disadvantage.

The second is what Joseph Stiglitz calls deficit fetishism, a fear that high public deficits will crowd out private investment and may someday result in financial crisis. Crowding out in times of stagnation and low interest rates, as in the U.S. today, is highly unlikely as is a return of unmanageable inflation. Long-term budget problems for the U.S. are largely related to rising healthcare costs and will not become damaging for another 15 to 20 years. Claims that Social Security will bankrupt America are absurd.

Even if these concerns were finally minimized, faster growth alone will not be adequate to raise wages sufficiently because labor markets do not work in textbook fashion. A higher minimum wage, laws to protect labor organizing, government job creation programs, and a reduction in financial influence are among the other policies needed to sustain growth.

International competition from low-wage nations has obviously also increased pressure on the American worker. Some of this has been inevitable, but not all. A reversal of the high U.S. dollar policy would help significantly. As we shall see below, government industrial policies and support for manufacturing should be considered especially in light of policies in other nations that subsidize or otherwise support their tradable goods sectors.

Some policymakers, of course, fear that higher wage policies will undermine US competitiveness. It is likely there is ample room for higher wages in especially high-productivity growth industries. But there is also ample room for higher wages through a raised minimum wage and collective bargaining in non-tradable goods and services, from retailing to home care to health care.

The greatest difficulty going forward will be that progress will require global cooperation, not beggar-thy-neighbor responses. It is equally important for China and Germany to raise wages and reduce dependence on exports. In China, wages are already rising, with measurable early benefits to U.S. manufacturing and job creation. The experiences of Brazil and Argentina in supporting wage-led growth can serve as a model. Agreements on currency levels are also critical. Even if Germany and China raise domestic wages to create wage-led growth, however, the U.S. and other deficit nations must also focus on improving their export capability.

The U.S. need not wait for China. There is a growing awareness that being close to the customer and supply chains can be important competitive advantages. The U.S. government can strategically subsidize investments in manufacturing, transportation, and R&D with the goal of creating higher-paying jobs.

Focus on Productive Investment

We are not arguing that wages, if supported by social policies, cannot someday rise to destructively high levels. But in many major rich nations, this is, as we have shown, not the case now – not nearly the case, in fact. Economic policy must be set in the context of its time. On balance, in the current economic environment, higher wages over time will encourage productive investment by business, which will raise the rate of productivity growth.

In the case of the U.S., a policy of strong domestic investment in infrastructure and manufacturing industries is also increasingly critical to sustainable growth. The inadequacy of transportation systems in the U.S. is widely known. Government infrastructure investment is a win-win situation, providing greater aggregate demand while increasing the efficiencies of doing business, including access of commuters to work. Thus, the boost to productivity is two-fold.

Regarding manufacturing, America has long had an anti-manufacturing bias in its economic policy. The high dollar, supported politically since the Clinton administration and in the early years of the Reagan administration, undermined manufacturing competitiveness. Meanwhile, other nations support their manufacturing base through a variety of subsidies, both subtle and explicit.

Wages in the manufacturing sector are generally higher than wages in the service sector. That gap has closed somewhat in recent years, but it is still substantial. Rebuilding American manufacturing therefore would have a positive effect on the overall wage structure in the U.S. Given the nature of international competition, a manufacturing policy that includes a range of subsidies is now appropriate as part of a productive investment program. But a lower dollar may be the key policy tool in both stimulating domestic investment and creating high-paying jobs.

Increasingly, mainstream economists support a return to manufacturing. As the Boston Consulting Group has noted, rising wages in China plus geographical advantages in manufacturing near customers and suppliers is creating a new if still moderate wave of re-shoring and in-sourcing. The consulting firm estimates the U.S. could add two to three millions manufacturing jobs within a few years.¹⁶ In his January State of the Union Speech, President Obama recognized at last the importance of creating more manufacturing jobs, making it the first point of his speech.

Reversing Financialization

Financialization has contributed significantly to a misallocation of resources away from productive investment and to stagnating wages in the U.S. Finance must be directed to its original purpose, which is to channel savings into productive uses.

A paper by economist Thomas Philippon suggests that finance, whose size in the economy has doubled since the 1970s, has not contributed to productivity growth and may have reduced it. More disturbing, the costs of finance for channeling resources to business have risen rapidly, suggesting that 2 percent of GDP is simply wasted. That would come to \$300 billion today. Where is the waste going? Most likely to trading, concludes Philippon, which he claims has no obvious economic value.¹⁷

Indeed, between 2001 and 2007, investment as a percentage of GDP in the U.S. was historically weak. The inefficiency and misdirection of an ever larger financial industry is probably a major reason.

Aside from the misallocation of resources, finance has also played an important role in the suppression of wage growth, as discussed earlier. CEOs of public traded companies increasingly are compensated with options that are based on stock prices. For a generation, public investors have rewarded an increase in short-term profits. One National Bureau of Economic Research study finds that private companies without such short-term pressure invest considerably more as a percent of their assets than do public companies.¹⁸ Economists Christian Weller and Luke Reidenbach also assess the dampening effects of such short-termism on wages and investment and find them highly influential.¹⁹

The reversal of financialization, therefore, is now required. The Dodd-Frank Act is largely dedicated to avoiding another crisis, not to the proper functioning of finance as an intermediary between savings and investment.

Two general reforms are needed to redirect finance. First, the size and conflicts of interest within large financial institutions must be controlled. A great deal of misdirection of investment is the consequence of speculation and excessive trading, supplemented by leverage. These can all be restrained by higher capital requirements, maximum leverage restrictions, and direct prohibition of proprietary trading, such as the Volcker Rule attempts to do. To the extent trading is encouraged by illegal or unethical investment behavior, such as front-running and trading on inside information, tougher rules and monitoring are required, as are civil and criminal penalties where appropriate.

Regarding the suppression of wages, executive compensation can be more closely regulated to reward the long-term health of the companies they manage. Tax policies can be employed to this end as well. Excessive risk-taking by managers can also be made more transparent and even restricted by appropriate regulatory bodies.

The role of finance in the suppression of wage growth and low levels of investment has not been adequately acknowledged by policymakers or discussed in the media. A return to wage-led growth and reduced worldwide imbalances requires a reversal of financialization, as suggested here.

Appendices

Appendix 1: Long-term Wage Growth

TABLE 1.1 Male median wage and salary income FT-YR round workers by age and educational attainment, 1969-2008 (2005 dollars).

High School
(12th grade/diploma)

Annual growth rate:

	25-34	35-44	45-54
1969-1979	0.6%	0.9%	1.6%
1979-1989	-1.4%	-0.5%	0.2%
1989-2000	-0.6%	-0.7%	-1.1%
2000-2008	0.5%	-0.5%	-0.6%
1969-2008	-0.5%	-0.2%	0.0%

Source: Authors' analysis of United States Census Bureau CPS data.

Note: Personal median wage and salary income is calculated for full-time workers, 35 plus hours per week, 50 plus weeks per year using CPI-U-RS index.

TABLE 1.2: Male median wage and salary income FT-YR round workers by age and educational attainment, 1969-2008 (2005 dollars).

College
(Four years/degree)

Annual growth rate:

	25-34	35-44	45-54
1969-1979	-1.2%	0.0%	2.1%
1979-1989	1.0%	0.0%	0.2%
1989-2000	0.1%	0.7%	-0.4%
2000-2008	-0.1%	0.3%	-0.1%
1969-2008	0.0%	0.2%	0.5%

Source: Authors' analysis of United States Census Bureau CPS data.

Note: Personal median wage and salary income is calculated for full-time workers, 35 plus hours per week, 50 plus weeks per year using CPI-U-RS index.

TABLE 1.3 Male median wage and salary income FT-YR round workers by age and educational attainment, 1969-2008 (2005 dollars).

College Plus
(Five years or more/includes professional degree)

Annual growth rate

	25-34	35-44	45-54
1969-1979	-0.5%	0.5%	0.9%
1979-1989	1.4%	1.1%	0.9%
1989-2000	1.5%	1.6%	1.4%
2000-2008	-0.3%	-0.7%	-0.7%
1969-2008	0.6%	0.7%	0.7%

Source: Authors' analysis of United States Census Bureau CPS data.

Note: Personal median wage and salary income is calculated for full-time workers, 35 plus hours per week, 50 plus weeks per year using CPI-U-RS index.

TABLE 2.1 Female median wage and salary income FT-YR round workers by age and educational attainment, 1969-2008 (2005 dollars).

High School
(12th grade/diploma)

Annual growth rate:

	25-34	35-44	45-54
1969-1979	0.6%	0.3%	0.6%
1979-1989	0.2%	0.8%	1.0%
1989-2000	-0.1%	0.2%	0.4%
2000-2008	-0.5%	0.1%	-0.8%
1969-2008	0.1%	0.4%	0.4%

Source: Authors' analysis of United States Census Bureau CPS data.

Note: Personal median wage and salary income is calculated for full-time workers, 35 plus hours per week, 50 plus weeks per year using CPI-U-RS index.

TABLE 2.2: Female median wage and salary income FT-YR round workers by age and educational attainment, 1969-2008 (2005 dollars).

College
(Four years/degree)

Annual growth rate:

	25-34	35-44	45-54
1969-1979	-0.9%	0.1%	0.8%
1979-1989	2.0%	2.2%	1.0%
1989-2000	1.0%	1.1%	1.3%
2000-2008	-0.5%	-0.4%	0.5%
1969-2008	0.5%	0.8%	1.0%

Source: Authors' analysis of United States Census Bureau CPS data.

Note: Personal median wage and salary income is calculated for full-time workers, 35 plus hours per week, 50 plus weeks per year using CPI-U-RS index.

TABLE 2.3: Female median wage and salary income FT-YR round workers by age and educational attainment, 1969-2008 (2005 dollars).

College Plus
(Five years or more/includes professional degree)

Annual growth rate:

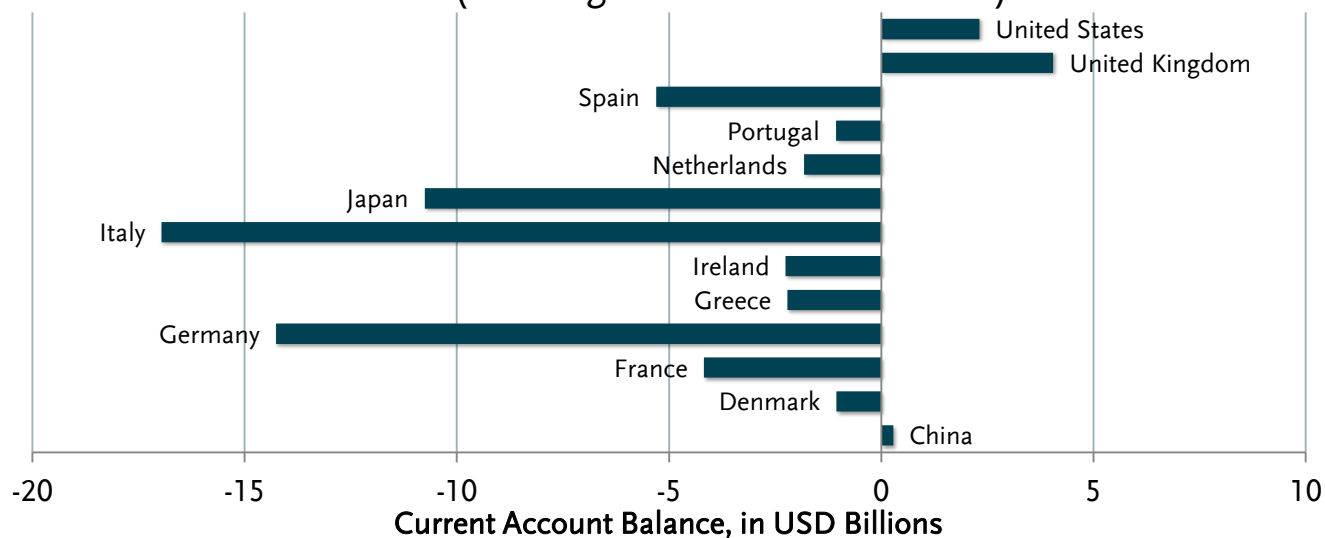
	25-34	35-44	45-54
1969-1979	0.1%	0.7%	0.3%
1979-1989	1.6%	1.4%	1.1%
1989-2000	1.6%	1.4%	1.8%
2000-2008	0.1%	-0.2%	-0.4%
1969-2008	0.9%	0.9%	0.8%

Source: Authors' analysis of United States Census Bureau CPS data.

Note: Personal median wage and salary income is calculated for full-time workers, 35 plus hours per week, 50 plus weeks per year using CPI-U-RS index.

Appendix 2: Changes in Current Balances in Europe over Time

Figure 2.1: Current Account Balance in Billions of Dollars, 1980 (Leading Industrial Economies)



It is worth making a more detailed summary of the changes in current accounts balances since 1990. We see in the chart above and the three below that as German and Chinese surpluses soared from the 1990s to 2010, while other nations' current account balances were in deficit. They supported the exports of the two nations, also typically increasing personal debt. (Sources: International Monetary Fund)

Figure 2.2: Current Account Balance in Billions of Dollars, 1990 (Leading Industrial Economies)

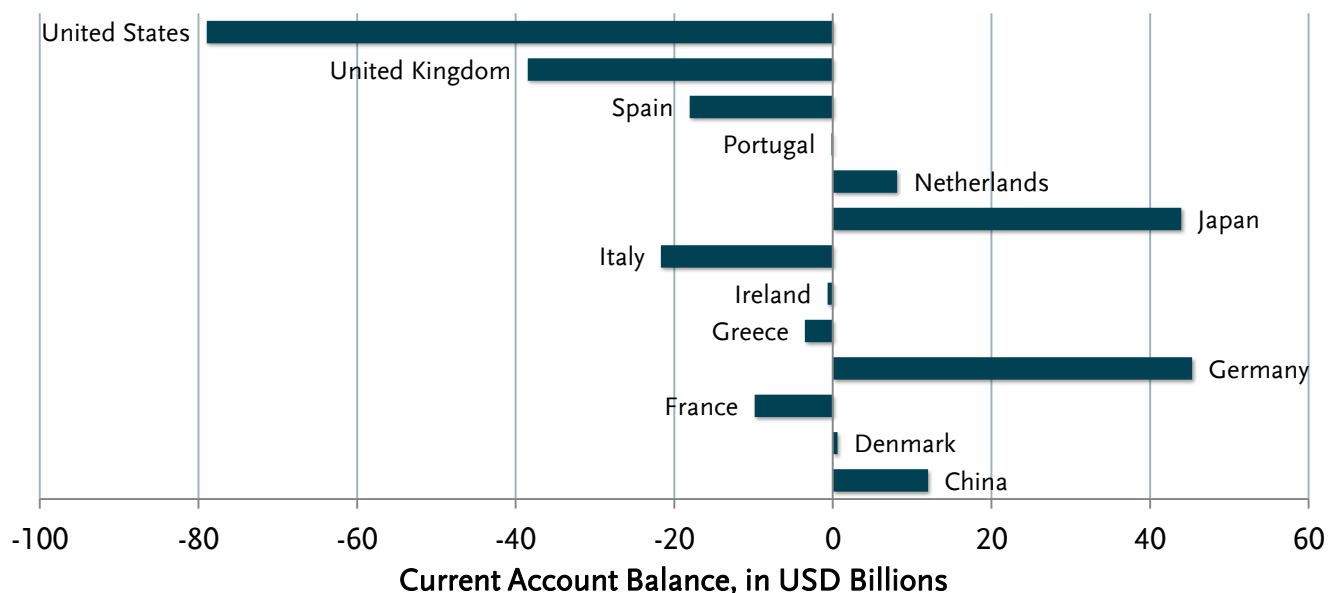


Figure 2.3: Current Account Balance in Billions of Dollars, 2000 (Leading Industrial Economies)

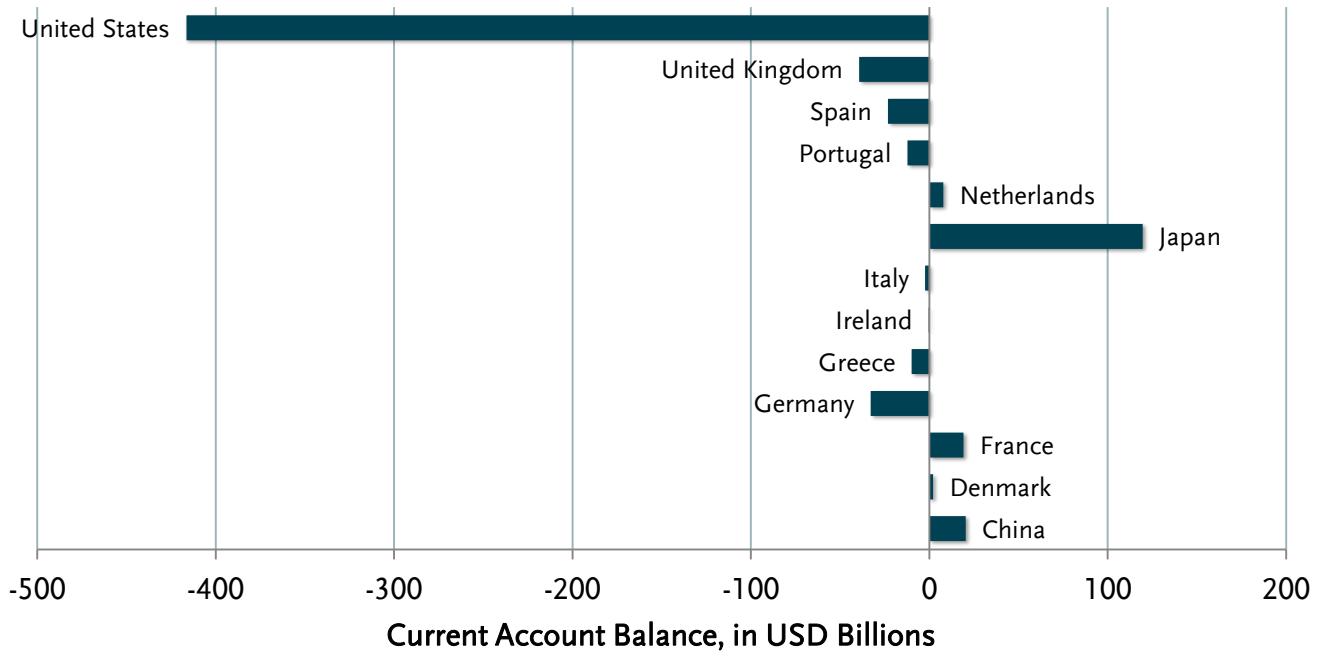
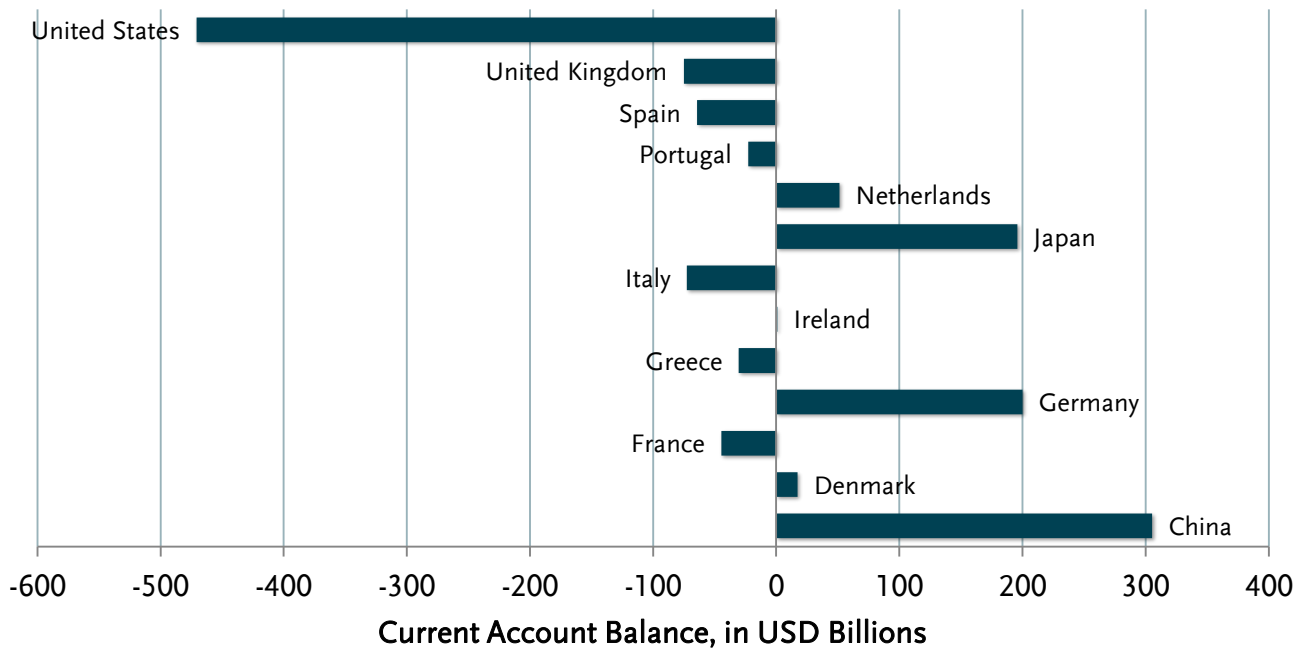
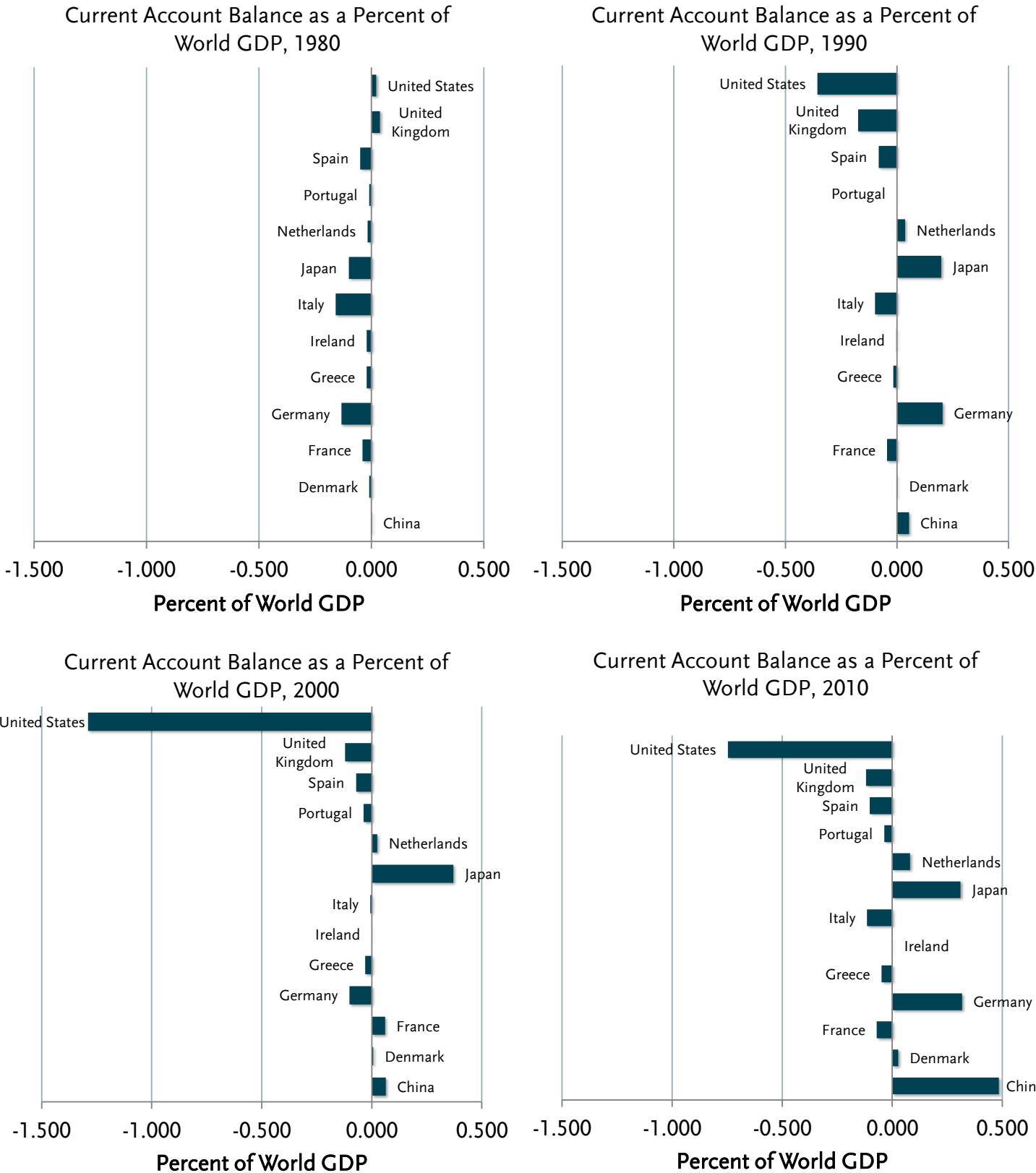


Figure 2.4: Current Account Balance in Billions of Dollars, 2010 (Leading Industrial Economies)



We can also look at current account balances as a percent of world GDP to look at how current account balances have changed as the world economy has grown. (Sources: Authors' analysis of International Monetary Fund data)



Endnotes

¹ “Building an employment-oriented framework for strong, sustainable and balanced growth,” International Labor Organization discussion document as part of “The Challenges of Growth, Employment and Social Cohesion,” a joint IMF-ILO conference in cooperation with the Prime Minister of Norway, 2010, p. 72: <http://www.osloconference2010.org/discussionpaper.pdf>.

² Emmanuel Saez, “Striking it Richer: The Evolution of Top Incomes in the United States (Updated with 2009 and 2010 estimates)” March 2, 2012, <http://elsa.berkeley.edu/~saez/saez-UStopincomes-2010.pdf>. Note: while Saez’s data only covers up through 2010, he writes, “Hence, the top 1% captured 93% of the income gains in the first year of recovery. Such an uneven recovery can help explain the recent public demonstrations against inequality. It is likely that this uneven recovery has continued in 2011 as the stock market has continued to recover. National Accounts statistics show that corporate profits and dividends distributed have grown strongly in 2011 while wage and salary accruals have only grown only modestly. Unemployment and non-employment have remained high in 2011.”

³ Kieran Healy and Bruce Western, “Explaining the OECD Wage Slowdown: Recession or Labour Decline?” *European Sociological Review* 15, No.3: 233-249, <http://www.kieranhealy.org/files/papers/western-healy99.pdf>.

⁴ William Greider. *The Secrets of the Temple*, Simon and Schuster: New York, 1987, p. 429.

⁵ John Asker, Joan Farre-Mensa, and Alexander Ljungqvist, “Comparing the Investment Behavior of Public and Private Firms,” NBER Working Paper, National Bureau of Economic Research, September 2011.

⁶ Bureau of Labor and Statistics, “Usual Weekly Earnings of Wage and Salary Workers, First Quarter 2012.” Figures are seasonally adjusted. <http://www.bls.gov/news.release/pdf/wkyeng.pdf>.

⁷ Michael Greenstone and Adam Looney, “Have Earnings Actually Declined?” March 2011, http://www.hamiltonproject.org/files/downloads_and_links/02_jobs_earnings.pdf.

⁸ Michael Greenstone and Adam Looney, “Women in the Workforce: Is Wage Stagnation Catching Up to Them Too?” April 2011, http://www.hamiltonproject.org/files/downloads_and_links/03_jobs_women.pdf.

⁹ BLS computation of labor share of output for nonfarm business shows a decline since 1970. With data indexed to 2005 (2005 = 100), labor share has dropped from 108.5 in 1970 to 95.8 in 2011. Data from the Bureau of Economic Analysis (BEA) that calculates compensation share of gross national income shows a similar stagnation and decline, albeit to a lesser extent (from nearly 59.8% of income in 1970 to 54.9% in 2010).

¹⁰ Bureau of Labor and Statistics, “International Labor Comparisons” <http://www.bls.gov/fls/images/chartbook3.12.png>. Further data available from BLS here: <ftp://ftp.bls.gov/pub/suppl/prod4.prodsuppt.xls>.

¹¹ Rajan blamed much of the consumer borrowing binge to come on U.S. government encouragement regarding home ownership, a process he misleadingly oversimplified. He claimed that it was government that enabled borrowing, partly through housing policies and Fannie Mae and Freddie Mac. A more careful reading of the evidence shows clearly that Wall Street coupled with aggressive mortgage brokers were the principal cause of the crisis, not Fannie and Freddie. They made hundreds of billions of dollars of bad loans to home buyers, upon which Wall Street firms sold trillions of dollars of securities that were more risky than even sophisticated buyers realized or than ratings agencies warned of. In the first half of the 2000s, when all the damage was done, a far higher proportion of Wall Street financed debt went bad than did Fannie and Freddie’s. It’s government laxity about regulations that was to blame, not direct encouragement for housing for low-income Americans.

¹² Jean-Paul Fitoussi and Joseph Stiglitz, “The Ways Out of the Crisis and the Building of a More Cohesive World,” OFCE Chair’s summary, July 2009, <http://www.ofce.sciences-po.fr/pdf/dtravail/WP2009-17.pdf>.

¹³ Not to be confused with the original meaning of Fordism, which was mass production based on the interchangeability of parts and economies of scale.

¹⁴ TaxVox, Tax Policy Center blog, <http://taxvox.taxpolicycenter.org/author/dan-baneman/>.

¹⁵ Thomas Piketty, Emmanuel Saez, and Stefanie Stantcheva, “Why the Tax Rate Could be Over 80%” cross-posted with VoxEU, <http://www.nakedcapitalism.com/2011/12/piketty-saez-and-stantcheva-taxing-the-1-%E2%80%93-why-the-top-tax-rate-could-be-over-80.html>.

¹⁶ Harold Sirkin, Michael Zinser, Douglas Hohner, and Justin Rose, “U.S. Manufacturing Nears the Tipping Point: Which Industries, Why, and How Much?” March 2012, <http://bit.ly/GMm1YW>.

¹⁷ Thomas Philippon, “Has the U.S. Finance Industry Become Less Efficient?” May 2012, http://pages.stern.nyu.edu/~tphilipp/papers/Finance_Efficiency.pdf.

¹⁸ Asker et al.

¹⁹ Christian Weller and Luke Reidenbach, “On Uneven Ground,” *Challenge Magazine*, January February, 2012.

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