More than two years after the “end” of the Great Recession, it’s clear that things are not working. GDP remains below its peak of 16 quarters ago while jobs are five percent below their January 2008 peak. As Laura Tyson of the Center for American Progress has calculated, even if job growth doubled from recent levels to the 208,000 per month rate before 2005, it would take until 2023 to get us back to pre-recession employment levels (given new entrants to the workforce). Understanding why job performance has been so poor is perhaps the single most important thing for Washington to do to get us on the road to robust recovery.

But what is the right diagnosis? There is anything but consensus on this for at least seven diagnoses have been offered. The dominant ones are well known, having been debated almost daily in the media. For some, this is a “Keynesian” recession, albeit of unusually severe proportions. With demand flat, what is required is for government to use significant and sustained countercyclical fiscal and monetary policies to get people and businesses spending again. Others argue that “this time it’s different.” They argue this is a financial crisis-induced recession and as such that conventional Keynesian tools are of limited use and that recovery will inherently take much longer. But following the logical prescriptions—fiscal stimulus for the first, and cleaning up balance sheets for the second—will provide some relief for the patient, but not the needed cure. Still others argue that regulatory uncertainty is the culprit, that companies worry about vast new regulatory burdens and increased taxes and are hoarding their capital until this threat has passed. But in fact, few businesses actually appear to be worried about this.
COMPETING DIAGNOSES OF U.S. ECONOMIC TRAVAILS

Economics prides itself on being a science, closer to physics than to sociology. As David Colander notes, the art of economics has been lost. Yet although supply and demand curves and other aspects of economics do approach being a science, much of economics is actually based on frameworks, paradigms, and doctrines. As noted tax economist Joel Slemrod observes, “It is a troubling fact for the aspirations of economics to be a hard science that our values about equity end up being so correlated with our beliefs about what kind of fiscal or tax policy works best for the economy.” Thus it’s no surprise that economists differ so markedly about the causes of and solutions to the current economic problems. As noted above, there are at least six major diagnoses being offered.

The failure of the United States to maintain its competitiveness in the world economy, particularly in manufacturing, means that the overall U.S. engine of growth is not running on all cylinders and that recovery is halting.
1. More Stimulus is Needed: This is a Severe Keynesian Contraction

Most business cycle contractions in the past benefited from countercyclical monetary policy and some also had the benefit of countercyclical fiscal policy. Indeed, virtually every macroeconomics textbook explains how economic policy should “lean into the wind” of recessions through looser monetary policy and expansionary fiscal policy (e.g., temporary tax cuts and/or spending increases). According to this view, high unemployment is the result of a shortfall of consumer demand (and sometimes business investment) and therefore it is up to government to restore some of this lost demand through temporary increases in spending or tax cuts. Once demand has been restored, government stimulus can be gradually withdrawn as private sector investment and consumer demand takes over.

So when the downturn began in 2008, the natural response from most economists was to propose a potent dose of fiscal and monetary tonic. But the Fed has pulled out virtually every tool in their tool box, including bringing interest rates down to near zero and engaging in two rounds of quantitative easing, while the American Recovery and Reinvestment Act injected approximately $787 billion into the economy, through tax cuts and government investment. And while these measures clearly helped—without them the recession would have been much worse—they have not been enough.

Some argue that the $787 billion was not enough given the magnitude of the contraction in consumer spending and private sector investment and that more money should have been appropriated. While this is likely true, the fact that the economy is still this anemic this far from the official ending date of the recession suggests that more than simply a larger stimulus package was needed. Yet this does not stop Keynesian advocates from calling for additional stimulus. President Obama, himself has been trying since Labor Day to get Congress to pass a $447 billion package of new stimulus, much of it focused on incentives to get employers to hire. Noted Keynesian Paul Krugman argues that “all the facts suggest that high unemployment in America is the result of inadequate demand—full stop.” He goes to note, “One of the things we can do, at least a partial answer, is in fact to have institutions that are able to issue debt—namely the government—do so and sustain spending and, among other things, by maintaining employment, by maintaining income, you make it easier for the private sector to work down that overhang of debt.”

In a similar vein, some focus on the loss of consumer spending and the need to revitalize housing. Economists Michael D. Bordo and Joseph G. Haubrich, argue that: “This recession is the only one in U.S. history associated with a big housing bust nationwide. We think that is a key reason why the economy is so slow—residential construction, consumer durables, that whole sector is moribund. This is what is making this recovery look different from any other recovery in U.S. history.” Their presumed solution is to revitalize housing so that consumer spending on housing and durable goods goes back up. Yet, oversupply of housing was a key source of the problem. Building even more just extends the Ponzi scheme even longer.

2. Face Facts: Financial Crises Just Take a Long Time to Recover From

While the Keynesian diagnosis was the one guiding our economic doctors from 2008 to 2010, more recently a new diagnosis has become in vogue: “financial crises are different.”
The economists who have most popularized this diagnosis are Carmen Reinhart and Kenneth Rogoff, authors of the book, *This Time Is Different: Eight Centuries of Financial Folly*. They argue that in contrast to typical recessions, which often are caused by contractions in some real part of the economy, recessions caused by financial crises affect the entire economy and hence are more like a serious flu, than the typical Keynesian cold. And because they are caused by an overhang of credit and illiquidity, the recovery only takes hold after progress is made on the long, arduous task of getting balance sheets straightened out. Rogoff has expressed dismay at seeing policymakers running to the Keynesian altar and cautioned, “I think this is a different animal.”6 He is right, but only to a point.

It’s not as if financial crises are not more difficult to recover from (in part because balance sheets are more tattered and banks are less willing to invest and consumers spend after their profligate ways); it’s that this is not the only factor. Why was the crisis much worse in some countries, such as the United States, and not in others? Why have some countries recovered more quickly? The financial crisis may be the flu, but if the body’s antibodies are already weakened by a disease, the flu will be much worse and take longer to recover from. What is missing from this school’s analysis is that the United States was already in a weakened state, its productive capacity more structurally fragile and its job-creating engine more vulnerable and less competitive than most people realized. Indeed, this time is different.

### 3. Why Invest With All This Regulatory Uncertainty?

In the last year in particular, a third explanation has emerged for why it’s taking so long for the economy to recover: businesses are sitting on piles of cash and not investing those piles because they worry that they will get socked with an array of new taxes and regulations. In the face of this uncertainty, the prudent thing to do is to just hold on to the cash. As conservative economists Gary Becker, Stephen Davis, and Kevin Murphy wrote:

> The second factor [in the anemic recovery] is less obvious, but possibly also of great importance. Liberal Democrats won a major victory in the 2008 elections, winning the presidency and large majorities in both the House and Senate. They interpreted this as evidence that a large majority of Americans want major reforms in the economy, health-care and many other areas. So in addition to continuing and extending the Bush-initiated bailout of banks, AIG, General Motors, Chrysler and other companies, Congress and President Obama signaled their intentions to introduce major changes in taxes, government spending and regulations—changes that could radically transform the American economy.7

The authors go on to complain: “Even though some of the proposed anti-business policies might never be implemented, they generate considerable uncertainty for businesses and households. Faced with a highly uncertain policy environment, the prudent course is to set aside or delay costly commitments that are hard to reverse. The result is reluctance by banks to increase lending—despite their huge excess reserves, reluctance by businesses to undertake new capital expenditures or expand work forces, and decisions by households to postpone major purchases.”
But there are two problems with this explanation. First, it’s not really uncertainty that holds back investment. If we were to pass a constitutional amendment that the corporate tax rate must be 50 percent (as opposed to its current rate of 35 percent) it would provide certainty, but less growth. Likewise, while many conservatives believe that the health care reform was ill advised, it provided more certainty, not less.

Moreover, given that we now have divided government with little chance that some of these regulations and tax increases could pass, such uncertainty should be all but gone. And yet, in the almost two years since the Republicans won the House and provided certainty that regulations like Cap and Trade would not pass, the recovery has not been robust.

Second, there is little evidence that uncertainty over onerous government action is really any more of a problem than it has been historically. According to a recent NFIB report Small Business Economic Trends, only 10 percent of small business respondents pointed to the political climate as the most important reason for their outlook regarding expansion. The majority (54 percent) pointed to economic conditions (e.g., a weak economy meant they were hesitant to invest). Yet, in September of 2008, before the last Presidential election, just 6 percent of respondents pointed to the political climate issue as the key factor.8

Still others argue that it’s the current government regulations that are the cause of anemic job growth. James Gattuso at the Heritage Foundation cites government regulation as the cause of joblessness, citing a recent Gallup-Wells Fargo poll of small business where 22 percent said that government regulation was the most important problem they faced.9 But 31 percent cited either lack of jobs, consumer confidence, or lack of consumer demand as the most important problem facing small business. Moreover, the same poll conducted in 2009 that asked small business owners for the factors causing their financial situation found that just one percent cited government policies, while 54 percent cited less business.10

4. There Are Lots of Jobs, But Few Workers With The Skills
While the Keynesian, “Rogoffian,” and “uncertainty” diagnoses currently prevail, another diagnosis that some cite is the supposed mismatch between the skills workers have and the skills employers need. The notion here is that even if fiscal and monetary policy could do their magic and raise demand, deficiencies in our education and training programs are producing workers who are ill-suited for today’s jobs. Narayana Kocherlakota, President of the Federal Reserve Board of Minneapolis, argues: “The bigger issue [of unemployment] is mismatch. Firms have jobs, but can’t find appropriate workers. The workers want to work, but can’t find appropriate jobs.”11 World Bank economists Marcello Estevão and Evidiki Tsounta assert that, “a 17 percent increase in skill mismatches (as experienced by the average of the U.S. states since the onset of the recession) is associated with a third of the overall estimated increase in the structural unemployment rate.”12

But while there are clearly skill mismatches in any economy that is changing as much as the United States economy is, the idea that skill mismatches are a major cause of unemployment clearly overstates the case. First, it doesn’t explain the significant increase in cyclical unemployment from five to nine percent. The idea that a near doubling of
unemployment occurred because of a sudden evaporation of skills for available jobs is farfetched. Whatever can be said about the need to improve education and training, this thesis ignores the structural causes of the mismatches: jobs vanished. Did unqualified workers lead to the decline in the number of jobs that workers with certain skill levels previously held? Why did we lose over 30 percent of manufacturing jobs in a decade? It isn’t as though employers are eager to hire, if only they could find the right people. Second, despite the clamor about the need for better-skilled workers, most new jobs simply don’t require advanced skills. According to the Bureau of Labor Statistics, among the 30 occupations with the largest projected growth, 21 typically do not require more than a high school degree and need only on-the-job training.13 It’s hard to conceive of skills mismatches for these jobs, unless they are where people with too much education don’t want to take a job that pays much less than the one they used to be in. But if that is the skills mismatch we are seeing, it is an ominous one. It suggests that we have too many skilled people and too few good jobs. Third, the growth in the number of workers who are underemployed—those with part-time jobs who want to work full-time—has been significant. Clearly, skill mismatches do not cause underemployment, lack of demand does. Fourth, data simply don’t square with the mismatch argument. As Miller and Wicks-Lim point out, today’s employers are filling their job openings with the same rate of success as employers were in the “full employment” year of 2003.14 Finally, when unemployment rates among college graduates are significantly higher than historical averages, it does not suggest that skill mismatches are the major problem of persistent high unemployment.

5. The Gas Tank of Innovation is Empty

One diagnosis that has recently gotten more attention is that the economy is suffering because it is no longer able to produce innovations at the pace that in the past have driven prosperity. The best spokesperson for this view is George Mason University economist Tyler Cowen. In his e-book, The Great Stagnation: How America Ate All The Low-Hanging Fruit of Modern History, Got Sick, and Will (Eventually) Feel Better, Cowen argues that America’s past robust growth was based on its ability to utilize easy-to-capture innovations and productivity gains. He argues that past growth was fueled by the utilization of vast quantities of unused land, the development of universal education, and most importantly technology innovation. Today, he argues these are gone and the result is the slow recovery. And like Rogoff, his prescription is patience: wait it out until the next wave of innovation happens.

But such technology Cassandras have a long history of proclaiming the end of innovation during economic downturns. At the turn of the last century, the American Physical Society worried that there would be a surplus of physicists because all the important scientific questions had been answered. Forty years later toward the end of the Great Depression when Alvin Hansen made his presidential address before the American Economics Association he argued that, unlike in the past when the railroad and electricity and the automobile had propelled growth, “we cannot take for granted the rapid emergence of new industries as rich in investment opportunities.”15

But such pessimists were wrong in the past and are wrong now. As Joseph Schumpeter stated, “There is no reason to expect slackening of the rate of output through exhaustion of
technological possibilities.” Today, the digital technology revolution continues to drive growth. Indeed, productivity growth from 1996 to 2010 was 3.2 percent per year according to U.S. Bureau of Labor Statistics, almost twice as high was the rate of growth from 1974 to 1995. This is evidence not of the great stagnation, but of robust growth.

More to the point, Cowen’s argument is based on a serious misreading of the nature of the IT revolution. It focused largely on the IT revolution as principally about social networking and communication, not on its vast benefits of driving efficiency. He argues, “The Internet is especially beneficial for those who are intellectually curious, those who wish to manage large networks of loose acquaintances, and those who wish to absorb lots of information fast.”16 In fact, the IT revolution is what economists call a “general purpose technology” that has transformed many sectors and economic functions and is not exhausted.17

This is not to say that there could not, and will not be, a temporary slowdown in the rate of innovation and hence productivity growth. According to Schumpeterian long-wave theory, economic growth comes in long cycles of approximately 50 years.18 These cycles are powered by the emergence of new and powerful technology systems. But when the major technology system of an era reaches the limits of its development and is fully adopted, there is an intervening period of stagnation until the next technology wave emerges and drives economic growth once again. The real question is where we are in the cycle. There is considerable evidence that there is still time left in the current ICT-based innovation wave and that it has not reached the top of the “S-curve” in terms of its limits. When we consider the significant inefficiencies in health care delivery, the absence of technology and integration of real-time data in our transportation systems, and the potential of IT to streamline government operations, it should be clear that we have a long way to go in pushing technology to new limits. We should be excited by possibilities of new ways of solving problems, not lamenting that we have run out of clever ways to use technology.

6. The Robots Are Taking Our Jobs

As people experience new efficiency-enabling technology more in their daily lives, it’s become a more common explanation of the jobless recovery: the machines are now doing humans’ work. As MIT professors Erik Brynjolfsson and Andrew McAfee assert in their book with the populist title Race Against the Machine, “When discussing jobs and unemployment, there was a great deal of attention paid to issues like weak demand, outsourcing and labor mobility but relatively little attention given to technology’s role. We wanted to correct that.”19 For them, workers are “losing the race against the machine, a fact reflected in today’s employment statistics.”20

Even President Obama seems to share this concern, though he generally touts the benefits of innovations. In an interview earlier this year, he said, “The other thing that happened though, this goes to the point you were just making, is there are some structural issues with our economy where a lot of businesses have learned to become much more efficient with a lot fewer workers… If you see it when you go to a bank you use the ATM, you don’t go to a bank teller. Or you go to the airport and you use a kiosk instead of checking in at the gate.”21
Such a story sounds convincing to many casual observers. But it’s a story that has long been trotted whenever there is a particularly severe downturn. In the late 1930s, Congress debated legislation to require the Secretary of Labor to create a list of all labor-saving devices and estimate how many people could be employed if these devices were eliminated.22 In the midst of the 1961 recession, John Kennedy created an Office of Automation and Manpower in the Department of Labor in 1961, identifying, “the major domestic challenge of the Sixties—to maintain full employment at a time when automation, of course, is replacing men.” Today is no different.

But this explanation was incorrect then and it’s incorrect now. If the job killing machines are the problem, why are they a problem now and not in 2007 when the unemployment rate was under 5 percent. How did “robots” cause the significant dip in consumption from the end of 2007 to the beginning of 2010, especially when productivity grew just 2 percent per year during this period, compared to 3.4 percent growth from 1997 to 2003.23 Plus how could productivity average 3.1 percent per year growth in the 1960s while unemployment averaged 4.9 percent, but during the 1980s productivity was a sluggish 1.5 percent but unemployment rates averaged 7.3 percent. The answer is that there is no negative relationship between productivity rates and unemployment. As the OECD states in a definitive review of the studies on productivity and employment, “Historically, the income generating effects of new technologies have proved more powerful than the labor-displacing effects: technological progress has been accompanied not only by higher output and productivity, but also by higher overall employment.”24 In short, too much technology is most definitely not the cause of the slow jobs recovery. As we will note next, if anything it’s too little technology that has caused the problem.

**7. U.S. Competitiveness Failure**

These six diagnoses are simply not sufficient to explain the timing of the crisis, its severity or the unprecedented weaknesses of the recovery. A more compelling diagnosis is that we are failing to achieve robust recovery because the overall U.S. economy has lost international competitiveness.

We see this most clearly in manufacturing. In the 1980s, U.S. employment expanded by 19 percent and in the 1990s by 20 percent. During the same periods, manufacturing employment fell 7 percent and 1 percent, respectively. But between 2000 and the peak of employment in January 2008, jobs grew just 5.4 percent, while manufacturing jobs fell 32 percent. Remarkably, few economists or pundits have made this connection between the anemic overall job performance in the last decade and largest percentage drop in manufacturing employment in American history, even greater than that of during the Great Depression. This is all the more troubling since manufacturing jobs have the highest employment multipliers of any sector, meaning that the loss of these manufacturing jobs led to significant job loss in the rest of the economy.25

Another way to look at this is by examining the changes in the contribution of manufacturing to changes in GDP. From 1980 to 1989 the sum of annual GDP changes was 30 percent of which manufacturing added 5.8 percentage points (about 20 percent of
the sum of annual GDP growth). From 1990 to 1999, it was 32 percent, of which manufacturing added 5.2 percentage points (about 17 percent). But in the last decade the annual sum of GDP changes (gains or losses) was just 18 percent, with manufacturing changes subtracting 4.7 percentage points. If manufacturing had contributed its same share to GDP growth as it did in the 1980s and 1990s, overall GDP growth would have been 28 percent in this last decade, rather than 18 percent.

![Figure 1: Trends in U.S. Overall and Manufacturing Job Growth, 1980-2008](image)

This loss of manufacturing turned the U.S. economy into a leaky boat with worn sails so it couldn't tack the headwinds that increased into a gale force in the last decade. For most of the 2000s, it meant slow growth. For 2008 to 2009, it helped make a recession “The Great Recession.” And now it is meaning painfully slow economic recovery. For example, annual new orders for manufacturers are down 11 percent from 2007 to 2010 in constant dollars while durable goods orders are down 21 percent, while real GDP is down one percent.

One reason for the slow return of manufacturing orders is evidenced by the increase in the trade deficit. In 2011, the deficit in non-petroleum products at an annualized basis is $440 billion, 11 percent higher than in 2010 and 40 percent higher than in 2009. As shown in Figure 2, the trade deficit was smallest in 2009 after the height of the recession, but it has grown since then, approaching 2007 levels.

Some will argue that, while we may be losing manufacturing, the United States is still strong in innovation and that this will power our growth in the future. But this ignores two key factors. First, much of manufacturing is high tech and powered by innovation—think computers, semiconductors, pharmaceuticals, medical devices, aviation, and instruments. Losing production in these areas means losing the upstream R&D and design jobs as well. Second, it’s not as if the United States leads in innovation anymore. As we found in *The Atlantic Century II*, the United States ranks 43rd of 44 nations or regions in the rate of progress on 16 innovation-based competitiveness indicators (such as the growth of
corporate and government R&D, venture capital, new businesses, productivity, etc.). Other nations are not standing still when it comes to the race for global innovation advantage.

Figure 2: Monthly Trade Balance in Non-Petroleum Goods and Services, 2005 dollars

This stiff headwind of robust foreign competition has two impacts on recovery. First, just as reductions in corporate investment or consumer spending will exert a negative influence on GDP growth, so too do net increases in the trade deficit. Recall your Macroeconomics 101 and the equation GDP = C+I+G+(X-M). When imports grow faster than exports in the short run, it exerts a contractionary effect on GDP and jobs. Conversely if exports were growing faster than imports, it would exert an expansionary effect on the economy and jobs, precisely why President Obama declared a goal of doubling exports.

But there is a second, more subtle, but ultimately more important impact on the economy of the loss of U.S. competitiveness: it erodes the confidence of businesses, workers and consumers. Ultimately, a strong and brisk recovery will depend on a faith that America will once again lead in the global innovation economy. Absent that faith—or in the presence of a sense of economic foreboding and decline—the rational exuberance needed to power investment and spending will be lacking, and recovery will continue to drag along. As Keynes noted, “Most, probably, of our decisions to do something positive, the full consequences of which will be drawn out over many days to come, can only be taken as the result of animal spirits—a spontaneous urge to action rather than inaction, and not as the outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities.”

Today, with America losing the race for global competitive advantage, the quantitative benefits and the quantitative probabilities of success are lower than before. And most Americans sense this. One survey of likely voters in 2012 found that 60 percent believe that the next generation of Americans will be worse off, with only ten percent saying better off. One reason for this is 62 percent said that the United States no longer has the strongest economy in the world, with 39 percent saying that China is the strongest. A Pew
Research Survey reports similar findings with almost half (47 percent) of Americans saying that China is the world’s leading economic power, while just 31 percent name the United States. Three years ago—prior to the global economic crisis—only 30 percent characterized China as the global economic leader, compared with 41 percent for the United States. A Gallup poll shows a 13-point surge in the past two years in the percentage of Americans who think that China will lead the world economy over the next two decades.30

Yet, it would be one thing if Americans were fatalistic to their current and impending decline. Little could be done. But of the 60 percent who thought the United States was not the strongest economy, 85 percent believed that it is possible for the United States to have the strongest economy in the world. And this gets to the real nub of it: America will recover in the short run and the long run when American businesses, workers, and consumers have faith that policymakers are taking the needed steps to restore America’s leadership. Therefore, restoring America’s competitive edge should be job number one for policymakers. They need to focus on both on short-term job creation and long-term economic growth. The two goals are inextricably linked.

As we’ve written before, this will require three big changes. First, it will require an understanding that letting our competitiveness wane is the key problem and that government action is urgently needed to fix it.31 What the government must do transcends tackling budget imbalances.32 Second, it will require a new bipartisan willingness to adopt ideas from both sides of aisle.33 Let’s be clear. Republicans will have to accept what have been seen as “Democratic” ideas, such as expending investment in innovation and skill development. But likewise, Democrats will need to accept what have been seen as “Republican” ideas like lower effective taxes on corporations. This is after all what virtually all U.S. states do that have “divided government.” Those in Washington who want to empower states should take a page from their playbooks on pragmatism. Third, neoclassical economists dominating government, think tanks, the media, and academia should sit this one out. While they may have expertise in monetary policy, labor markets, or financial markets, they know precious little about how to restore a nation’s innovation-based competitiveness. This task should be left up to those who do, such as technology policy experts, business administration experts and engineers. (Granted, the first and second recommendations have a better chance of being adopted than the third!)

Finally, even if those who dispute the premise that investments today will get short-run employment growth back on track, cannot deny that taking these steps will boost long term growth and raise standards of living. As such it’s a no regrets policy that we should be embracing immediately.

CONCLUSION

We are living through a dangerous and unprecedented time. However tempting it is to either turn to tried-and-true policies that pulled us out of previous recessions or to simply hunker down for the long cold winter with the belief in a balmy spring, we need to recognize that our problems will remain. Whatever the lure of new theories about skills and jobs mismatches, technological cycles that have become barren or the threat of machines, we need to turn away from them when the facts expose their weaknesses. Instead, we need
to embrace a confident pragmatism that rests on the idea that the resources and know-how for short-term economic activity and long-term competitiveness are at our disposal. We simply need to use our capital and talent more effectively. We need to recognize that this is a challenge to the nation’s economic future and not merely a test of the marketplace’s magic. To that end, a bipartisan, national strategy for reinvestment, retooling and restructuring is in order. This time is different so enough of the same old medicine.
ENDNOTES

14. Ibid.
26. Ibid.
27. In 2009, several economists wrote an article for National Bureau of Economic Research article which stated, "We argue that this pattern (the increase in the current account deficit by the United States matched by increase in current account surpluses in other nations, especially China) precipitated the housing bubble in the United States." Ravi Jagannathan, Mudit Kapoor and Ernst Schaumburg, "Why Are We in a Recession? The Financial Crisis Is a Symptom Not the Disease!" (working paper 15404, NBER, Cambridge, MA: October 2009), http://www.eclac.cl/noticias/paginas/3/35143/w15404.pdf.
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