What Causes Recoveries?
How good policy and good luck can trigger the upward side of the business cycle

Jobless Recoveries: Causes and Consequences
Dear Educators,

It’s been roughly two years since the recession of 2007-2009 officially ended, and the American economy has yet to achieve a robust recovery. In the past, the economy typically has strengthened significantly following recessions. But this time, economic growth has been disappointing and unemployment has remained persistently high. Given this environment, there are two paths that the U.S. economy can take – one path features a pick-up in the pace of growth that puts us on a course consistent with historical norms, and the other path keeps us on our current pace with little chance of gaining ground lost during the recession.

In this edition of the 5E Educator, two articles shed light on the causes of – and possible impediments to – recoveries. These articles pose such critical questions as: What factors determine the strength of recoveries? Why has unemployment been so severe? We hope these articles and accompanying activities encourage students to consider the underlying causes and complexities of economic recoveries and generate meaningful discussion about what lies ahead.

Regards,

Jeffrey M. Lacker
President
Federal Reserve Bank of Richmond

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**MISSION**
The 5E Educator provides secondary teachers with content to enhance understanding of economics and personal finance. It also offers lesson plans and Federal Reserve resources to reinforce state and local curriculum. We seek to enrich the learning experience for students and highlight the importance of economics and financial literacy in the process of everyday decision-making.

To sign up to receive the online 5E Educator, visit: www.richmondfed.org/publications/education/5e_educator/

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What Causes Recoveries?
How good policy and good luck can trigger the upward side of the business cycle

This article excerpt is from the Richmond Fed’s Fourth Quarter 2010 issue of Region Focus, written by Senior Editor David A. Price.

The discipline of economics has come a long way in its ability to account for recessions. Macroeconomists today consider the interaction of variables such as inventories, wages, interest rates, investments, and, of course, profits. They also look at “exogenous” variables – factors hitting the system from outside – such as technological changes, fuel-price shocks, and changes in tax policy. The literature on recessions is voluminous; indeed, if all the articles about recessions in the EconLit database were laid end-to-end, they would reach all the way to well, they would reach awfully far.

Economists have had less to say about recoveries, however. “Most of macroeconomics presumes that the economy reverts [to growth] following a shock all by itself,” wrote University of Chicago economist John Cochrane in the 1994 edition of the NBER Macroeconomics Annual. “For this reason, we usually focus on the shocks that start recessions and their propagation mechanisms, but almost never on policies and shocks that end recessions.”

Cochrane’s observation a decade and a half ago still holds true today. When economists speak of recoveries, they typically characterize them simply as a resumption of the natural state of the economy: growth.

Monetary Policy
A leading paper on the subject by Christina and David Romer of the University of California at Berkeley – aptly titled “What Ends recessions?” – examined the eight recessions that had occurred in the United States between 1950 and the paper’s publication in 1994. The Romers looked at measures of fiscal policy and monetary policy and ran several regressions comparing the economy’s actual behavior with the GDP figures that would have resulted if policymakers had followed a hypothetical baseline policy. The results indicated that monetary policy had a potent, “crucial” effect on recoveries; for each one-percentage-point fall in the real federal funds rate, the researchers concluded, real GDP increased between 1.5 percent and 3.0 percent on average during the first year of recoveries. Conversely, the monetary tightening that typically occurred before the peak of the cycle had persistent effects that reduced growth during the recovery.

With regard to discretionary fiscal policy, in contrast, the results indicated slight effects on GDP except during the 1973-1975 recession. The Romers thus attributed to discretionary fiscal policy “at most a small role in recoveries.” They found a greater role for automatic fiscal stabilizers, such as the decreases that take place in tax collections during a recession as incomes fall, and the increases in payouts of welfare and unemployment benefits; these automatic changes in fiscal policy added an average of 0.6 to 0.9 percentage points to GDP growth during the first year of recoveries.

The researchers did not attempt to measure the effects of nonpolicy factors on recoveries. Instead, they lumped the effects of nonpolicy factors together as a residual value and found that such factors appeared to have “little effect on growth.”

Clean Balance Sheets
Other economists who have studied recoveries, however, believe that factors apart from monetary policy and automatic fiscal stabilizers – including both policy and non-policy factors – play important roles in determining the recovery process. High among these are balance sheets: those of companies, consumers, and the government. When it comes to igniting a recovery, clean balance sheets are like kindling: overburdened ones are like asbestos blankets.

George Perry and Charles Schultz of the Brookings Institution, in a 1993 article in the Brookings Papers on Economic Activity, looked at the recovery following the recession of 1990-1991 and concluded that recovery was being inhibited in part by the balance-sheet problems of highly leveraged businesses. They noted that when interest payments become high in relation to cash flow, the firm tends to become less willing to invest. Even if the spirit is willing, moreover, the flesh becomes weak: On account of their balance sheets, highly leveraged firms that do seek to continue to expand must contend with impaired access to additional credit at attractive interest rates.

The balance sheets of consumers are even more significant, argues an unpublished 2010 paper by Steven Gjerstad and Vernon Smith of Chapman University. Gjerstad and Smith surveyed post-war recoveries and concluded that new residential construction is the primary transmission channel for monetary policy during both downturns and recoveries – and thus, if households’ balance sheets impair their ability to spend, monetary easing will have at most a minor effect. “When household balance sheets are damaged in the aftermath of a serious housing bubble and collapse,” Gjerstad and Smith conclude, “households remain unresponsive to accommodative monetary policy as their focus turns to deleveraging rather than borrowing for new housing assets or durable goods.”

Countries, of course, have their own balance sheets, which could hamper a recovery if national debt is excessive, according to macroeconomic forecaster and analyst Allen Sinai of Decision Economics. “You can have a credit crunch in terms of the ability of the government to finance its operations through Treasury issues and/or the ability of the private sector to obtain financing, because foreign investors don’t want to invest in a country where
the credit risk is high, the currency is going down, and there’s a big overhang of debt,” says Sinai. “It’s a risk of us tumbling back down into a downturn, as may happen to some of those countries that have had to impose fiscal austerity because of the nature of their sovereign problem.”

For the quickest and strongest recovery, Sinai says, “We need to be in a situation where we’re not financially compromised – either households, companies, financial intermediaries, or government.”

Confidence
A second factor with a major role in the recovery process is confidence – what John Maynard Keynes called “animal spirits.” When Lawrence Summers was director of President Obama’s National Economic Council, he argued in a speech that “panic and fear” are major obstacles to recovery. “Businesses, consumers and investors need to feel both that recovery can be sustained and that the economy is returning to a long-run sustainable path,” Summers maintained. “I cannot overstate the importance of confidence.”

For Summers, building confidence requires fiscal and monetary discipline. Federal policymakers, he argued, can contribute to confidence by eschewing any policy that might “call into question our national commitment to sound money, noninflationary growth, and sustainable devolution of government debt.” In addition, Summers suggested, policymakers can build confidence by resolving policy issues as quickly as possible to minimize periods of policy uncertainty.

Confidence can be built, but it can also be torn down. If political leaders can build confidence – and thus potentially spur investment – by expressing support for policies that businesses and investors perceive as helpful (and then consistently carrying those policies out), they can also destroy confidence with words that appear to be a prelude to adverse policy. The Panic of 1907 and its aftermath illustrate the role of language in building confidence – or undermining it. Robert Bruner, dean of the Darden School of Business at the University of Virginia and co-author of the 2007 book The Panic of 1907: Lessons Learned from the Market’s Perfect Storm, says that the panic led President Theodore Roosevelt to rein in his populist rhetoric and to seek instead to reassure the business community.

Consumer spending, like business spending, is influenced by confidence. Christopher Carroll of Johns Hopkins University found in a 1992 study that consumer pessimism about unemployment leads – not surprisingly – to less consumption. Using regressions that incorporated data from the U.S. Commerce Department National Income and Product Accounts and the University of Michigan’s Survey of Consumers, Carroll found that an expectation of rising unemployment rates leads consumers to prefer an increase in savings and to avoid an increase in debt. A level of indebtedness that consumers find acceptable during boom times may amount to recovery-killing “debt overhang” in recessionary times, Carroll found, if consumers lack confidence in the future.

When economists speak of recoveries, they typically characterize them simply as a resumption of the natural state of the economy: growth.

Good Shocks
A third factor with a significant role in recovery is positive exogenous shocks to the economy. Just as negative exogenous shocks, such as the sharp sudden increases in fuel prices of 1973, can push economic activity downward, good exogenous shocks can help GDP recover. Such shocks could include a surge in foreign investment or an increase in skilled immigration that fills critical needs. Peace, such as the end of the Cold War in the 1990s, can also constitute a good shock.

The fact that these shocks are commonly labeled “exogenous” doesn’t mean that policymakers must simply wait around for them to happen, however. When economists call such shocks “exogenous,” they are speaking a bit casually, since the applicability of the term depends on how one defines the system. These shocks may be outside the influence of fiscal and monetary policy (although even that is arguable), but they are not necessarily beyond the influence of policymakers in general. Foreign investment, for instance, is affected by, among other things, tax policy and currency-repatriation policy.

Moreover, where policy cannot influence whether an event happens, it may still influence the effects of the event. Even a natural disaster – the classic example of an exogenous event – might or might not be exogenous from the standpoint of a macroeconomic model since the effects of a natural disaster are influenced by policy factors such as building codes and investments in forecasting systems.

Perhaps the ultimate good shock is technological innovation. That was the thesis of Harvard University’s Joseph Schumpeter, who held, starting in a series of articles in the 1910s, that the growth phase of business cycles is brought about by entrepreneurial innovation; successful innovators spur economic activity not only through their own efforts, but also by inspiring imitators, all of which creates a surge of investment.

Schumpeter regarded the growth of railroads, and the investment and development they generated, as a clear case of this process during his lifetime. A modern-day example is the aftermath of
the 1990-1991 recession, which initially was followed by a weak recovery; in the years immediately following the trough, growth was at less than half the rate of the recoveries of the 1960s and 1980s.

Only with the Internet boom of the mid-1990s – driven by the commercialization of the World Wide Web – did the recovery catch up to historical norms.

For complete article and references: www.richmondfed.org/publications/research/region_focus/2010/q4/pdf/cover_story.pdf

A Recovery Mind Meld

Consider using the following activity to help students learn about the many factors that affect economic recoveries.

CEE Content Standards: 18, 19, 20
NCSS Content Strand: 7
Audience: High School

Materials:
- Overhead or PowerPoint copies of Mind Meld Quotations
- Clean overhead sheet, blackboard, whiteboard or wall adhesive pad for recording student brainstorming

Procedure:
1. Ask students: How would you define an economic recovery?
2. Provide students economists’ typical definition of an economic recovery highlighted in the article.
3. Identify student similarities or differences in class discussion.
4. Ask students: What are some factors or variables that contribute to economic recoveries?
5. Record student responses on an overhead projector, blackboard, whiteboard or 25” X 30” wall adhesive sheet.
6. Provide students a set of the quotations taken from the article. (Blue box below)
7. Tell students that these quotes identify some of the many factors involved in economic recoveries.
8. Have students work in pairs to analyze and interpret each quote.
9. Depending on students’ background knowledge, share vocabulary to assist them in their quote analysis.
10. After quote analysis, have students share their assessments with the class.
11. Discuss article findings that relate to quotes.
12. Discuss whether or not student initial recorded responses matched those recovery causes identified by quotes from the article.
13. Share with students that recoveries can be influenced by a number of factors, and that in recent American history economic recoveries have tended not to be as robust (strong) as in years past. Ask students to consider the reasons. As a follow up, have students read the next featured article.

Vocabulary for Quote Analysis

Monetary Policy
The management of the money supply and interest rates

Fiscal Policy
Policy that involves decisions about government spending and taxation

Good Exogenous Shock
Outside factor or event that has a positive effect, such as new technology


Mind Meld Quotations

“Monetary Policy has a potent, ‘crucial’ effect on recoveries; for each one percentage-point fall in the real federal funds rate...real GDP increased between 1.5 percent and 3.0 percent on average during the first year of recoveries.” Based on study by Christina and David Romer

“Automatic fiscal stabilizers, such as decreases that take place in tax collections during recessions as incomes fall, and the increases in payouts of welfare and unemployment benefits...added an average of 0.6 to 0.9 percentage points to GDP growth during the first year of recoveries.” Based on study by Christina and David Romer

“When it comes to igniting a recovery, clean balance sheets are like kindling; overburdened ones are like asbestos blankets.” David Price

“I cannot overstate the importance of confidence.” Lawrence Summers

“Money goes where it is wanted and stays where it is well-treated.” Walter Wriston

“Good exogenous shocks can help GDP recover.” David Price
Interested in more information about the Great Recession and the factors that may affect recovery? Check out the following article from the St. Louis Fed. This article may be shared directly with high school students, depending on students’ reading ability.

Jobless Recoveries: Causes and Consequences

This article excerpt is from the St. Louis Fed’s April 2011 issue of The Regional Economist, and is written by Natalia A. Kolesnikova and Yang Liu.

Although the Great Recession ended in June 2009 and overall economic activity has exhibited signs of recovery, labor market conditions remain disappointing. Payroll employment has been recovering slowly; the average duration of unemployment remains at a historical high; and the unemployment rate is projected to remain above 7.8 percent until 2013. Economists are concerned that the U.S. economy is mired in another jobless recovery – when economic activity experiences growth but the unemployment rate remains high.

To determine the severity of current joblessness, it is useful to compare the current state of the labor market with that during previous economic recoveries. The figure shows the U.S. unemployment rate during the past four recoveries alongside the current recovery. In the first two cases, shortly after the 1973-75 and 1981-82 recessions ended, the unemployment rate started to decline; 15 months after the end of these two recessions, the unemployment rate had dropped to significantly lower levels. These were not considered jobless recoveries. In contrast, in the wake of the two recessions in the 1990s and early 2000s, the unemployment rate continued to increase 15 months after the end of the recessions. These were jobless recoveries.

Current developments in the labor market are similar to the jobless recovery cases. Since the Great Recession ended in June 2009, the unemployment rate has remained high. It topped 10 percent in late 2009, remained above 9.4 percent in 2010 and was still at 8.9 percent in February 2011 – much higher than during any other recovery since the 1970s. Persistent and unusually high unemployment suggests that this jobless recovery might be more painful than the previous two.

Potential Causes of a Jobless Recovery

Many researchers have pointed to a labor market mismatch as one of the reasons for persistently high unemployment. Unemployed workers are forced to look for jobs in different occupations, industries and locations.

MIT Professor David Autor examined U.S. employment opportunities over the past three decades. He found that the U.S. employment growth has polarized into relatively high-skill, high-wage jobs and low-skill, low-wage jobs while middle-skill routine jobs have diminished. Some routine jobs, such as administrative and operative positions, have been replaced by computer automation. Other routine jobs, such as bill-processing and manufacturing positions, have been moved overseas to take advantage of lower wages. The Great Recession accelerated this trend: employment in middle-skill and middle-wage occupations declined 7 to 17 percent during the recession.

Job opportunities were also significantly reallocated between industries, suggests a study by economists Erica Groshen and Simon Potter. The 2007-09 financial.
Long periods of high unemployment are without a doubt detrimental to unemployed workers and to the health of the economy. However, there are other, less-known consequences.

Yale economist Lisa Khan found that college graduates entering the job market during economic downturns experience a large, negative and persistent effect to their lifetime opportunities. Young workers who enter the job market during a jobless recovery may experience temporary unemployment and are more likely to accept less-attractive and lower-skill jobs due to limited opportunities. On average, their initial wage is significantly lower than the initial wage of their counterparts who graduate when the job market is strong. This disadvantage persists; even 15 years after graduation, their wages and career attainment remain lower than those of their luckier counterparts.

A Long Road Ahead

Federal Reserve Chairman Ben Bernanke said last fall that job creation is probably the most important problem facing the U.S. economy. As of January 2011, the U.S. economy needed roughly 6.8 million jobs to return to a 5 percent natural unemployment rate. This estimate is more complicated if population growth, the discouraged worker effect and the extension of unemployment benefits are taken into account.

Unemployed individuals who stop looking for a job are called discouraged workers and are not considered part of the labor force. Discouraged workers may re-enter the labor market when the economic activity bounces back. A massive re-entry would temporarily raise the number of unemployed workers so that the unemployment rate could remain unchanged or rise even as payroll employment increases.

An extension of unemployment insurance would probably produce mixed effects on the job market. Such an extension could improve the efficiency of matching workers with appropriate jobs. On the other hand, extended benefits could discourage jobless workers from accepting unattractive jobs, thus keeping the unemployment rate relatively high.

Taking these additional factors into account, if the economy immediately generates 350,000 jobs a month – the pace of the late 1990s – four years would be needed to reach an unemployment rate of 5 percent, whereas at a rate of 210,000 jobs a month – the 2005 pace – 11 years would be needed to achieve a 5 percent unemployment rate. Regardless, the current recovery may be remembered as the third consecutive, and likely the most severe, jobless recovery.

For complete article and references: www.stlouisfed.org/publications/re/articles/?id=2091

**Snacks**

Have your students ever wondered how an economy could be in recovery with a persistently high unemployment rate? Address this question and many more by using the game The Amazing Race: Leading, Lagging and Coincident Indicators. These indicators are used by economists and analysts to assess economic conditions and to identify stages within the business cycle.

**Materials:**
- Create three 8” x 14” cards (min-posters) and outline the general definitions for leading, lagging, and coincident indicators on each card.
- On 3” x 5” index cards, write down at least 5 examples of leading, lagging and coincident indicators each; enough to disseminate to the class. (Limited to 21 Conference Board indicators so may have to have students work in pairs for larger class sizes.)

**Procedure:**
1. Choose three student leaders to represent each general economic indicator category: leading, lagging, and coincident indicators.
2. Hand cards to each of these 3 students (created ahead of time) that define each indicator category. Cards with the general definitions should be large enough for the entire class to read. General definitions for leading, lagging and coincidental indicators are linked at the conclusion of this activity.
3. Pass out the remaining indicator cards to the rest of the class. There are approximately 21 indicators so depending on the size of the class students can pair up in groups of 2.

4. Once the cards are dispersed, have each student review each indicator category description (2 minutes approximately). Descriptions of actual indicators can be found on the Conference Board’s website link under Game Resources.

5. Next, have each student select and stand behind the person holding the indicator category that they think best fits their indicator.

6. Have students individually defend their selections.

7. If there are students who are incorrectly aligned, have students PAUSE… and then realign. Stop-light analogy may be useful during this portion of the game.

8. Students may have up to three tries to correctly align before the game will end.

9. Upon conclusion of the game, share with students a list of leading, lagging, and coincident indicators based on Conference Board indexes.

10. Relate to students that leading, lagging, and coincident indicators are used to assess U.S. economic health and to help identify phases of the business cycle.

11. At this time, link back to the article Jobless Recoveries: Causes and Consequences to emphasize that unemployment is a lagging indicator. Discuss that even though this recovery in jobs may be slower than previous recoveries, it is normal for the unemployment rate to fall after the economy begins to recover. Why might that be the case?

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**Beyond the Textbook**

Consider using the following resources to introduce your students to economic concepts that relate to teaching about the U.S. business cycle.

**Lesson Plan Ideas:**

**High School and Middle School**

**Recession Lesson: Uncertainty**

**Grade level:** 7-12


**Focus on Economic Data: U.S. Employment and Unemployment Rate**

**Grade Level:** 9-12


**Where Are the Jobs?**

**Grade level:** 8-12

A PBS lesson that examines the relationship of employment and unemployment to the economy and features video clips that capture student concerns about employment. [www.pbs.org/teachers/access-analyze-act-economy/curriculum/labor-supply/where-are-the-jobs](http://www.pbs.org/teachers/access-analyze-act-economy/curriculum/labor-supply/where-are-the-jobs)

**Teaching with Documents: FDR’s Fireside Chat on the Purposes and Foundations of the Recovery Program**

**Grade level:** 9-12


**Game Resources:**

Conference Board’s composite list of leading, lagging and coincident indicators: [www.conference-board.org/data/bci/index.cfm?id=2160](http://www.conference-board.org/data/bci/index.cfm?id=2160)

General definitions of leading, lagging and coincident economic indicators, including a traffic light analogy: [www.ithacalibrary.com/sp/subjects/econind](http://www.ithacalibrary.com/sp/subjects/econind)

Calendar of economic data releases: [www.ny.frb.org/research/national_economy/nationalecon_cal.html](http://www.ny.frb.org/research/national_economy/nationalecon_cal.html)

Graphic depiction of the business cycle: [www.harpercollege.edu/mhealy/eco-gif/uein/0901.jpg](http://www.harpercollege.edu/mhealy/eco-gif/uein/0901.jpg)
Heard over the P.A.

The 5E Educator features information on upcoming workshops, competitions, and other events that may be of interest to secondary educators. To register or review these and other opportunities, please visit www.richmondfed.org/conferences_and_events/education/.

New at the Richmond Fed
A live action Fed Experience scavenger hunt!!
Join us this fall for Fed Quest: A Live Action Scavenger Hunt in The Fed Experience Saturday November 19, 2011 from 11am - 2pm as we launch our use of SCVNGR, a game-based software platform that can be played with an iPhone, iPod Touch, Android app, or SMS. Players earn points and unlock rewards by completing a series of challenges and objectives. We will launch the application with the Harvest Hunt trek, designed to test players’ knowledge of personal finance, economic concepts and the Federal Reserve. In addition, we will provide several other games and refreshments. A family friendly event sure to please your crowd!

The Fed Experience will continue to use the SCVNGR app to teach about the Federal Reserve, personal finance, economics, banking and the history of the Richmond region. Download the application at www.scvngr.com. Connect and play!

Fed Experience and Branch Tour Information
Interested in booking a tour at The Fed Experience or one of our branches? Visit our website for more details. www.richmondfed.org/about_us/visit_us/

We Want to Hear from You!
Your feedback is important to us. Tell us what you think about the 5E Educator by completing a brief online survey. https://www.surveymonkey.com/s/HC7MZ33

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