Whitman College
Econ 407
Final Exam
May 14, 2010

Write all answers in your blue book. Show **all** of your work. The exam ends at noon.

1. (a) (5pts) Define the federal funds rate.

Consider the information below, excerpted from the Wall Street Journal.

Experts See Europe Crisis Delaying Fed Rate Boost

Wall St Journal May 13, 2010 page A2 By SUDEEP REDDY And PHIL IZZO

Turmoil in Europe is leading investors and analysts to push back the moment at which they expect the Federal Reserve to raise interest rates even as the U.S. economy picks up and creates more jobs.

A new Wall Street Journal survey of economists finds 42% expect the Fed will hold off on tightening credit until 2011 or beyond. A month earlier, only 28% thought the U.S. central bank would wait so long.

"The crisis in Europe, risks of contagion and the deflationary pressures associated with those problems will keep the Fed on the sidelines even longer than we initially thought," said economist Diane Swonk of Mesirow Financial in Chicago.

To Fed officials… the European crisis underscores the fragility of the global financial system and the risk, however small, of outside shocks derailing the

recovery. "The crisis in Greece has escalated and spread, leading to volatility in world markets," James Bullard, president of the Federal Reserve Bank of St. Louis, said Tuesday. Atlanta Fed President Dennis Lockhart said Tuesday that "crises will re-occur" and events in Europe stemming from the Greek debt troubles "may have been a little bit of a reminder and wake-up call to that effect."

Low inflation is giving the Fed plenty of room to keep policy on hold. Economists in the latest Wall Street Journal survey expect the increases in the consumer price index to remain under 2% throughout 2010. …Due to the massive slack in the labor market built up during the recession, they expect the unemployment rate, which hit 9.9% in April, to fall only to 9.3% by December.

(25pts) Do the economists surveyed in this article think the Federal Reserve will be using the Taylor Rule this year to determine the federal funds rate target? If you answer yes, thoroughly explain your reasoning, with reference to the formula for the Taylor Rule. If you answer no, thoroughly explain your reasoning, with reference to the formula for the Taylor Rule, and, if applicable, to a variant of the Taylor Rule that you suspect these economists might be thinking that the Fed is using.

2. (a) (5pts) Define the Federal Reserve's discount rate.

(b) (20pts) Draw a supply and demand graph for the excess reserves that banks trade on the federal funds market. Label the horizontal axis the 'quantity of dollars lent short-term between banks.' Label the vertical axis the 'Federal Funds Fate.' Explain, and show on your Federal Funds Market graph, how the Fed's choice of the discount rate affects this market for short-term loans between banks.

Consider the information below, excerpted from the Wall Street Journal. Consider also the Federal Funds Rate Chart on the following page, which shows the target Federal Funds Rate and the daily high and low Federal Funds Rate since the year 2000. Use this information to answer part (c).

Senate Pushes Fed To Give Up Names

By SUDEEP REDDY
The Wall Street Journal, May 12, 2010, page A8

The Fed is continuing its fight to shield the names of the cash-strapped banks that borrow from it.

The Fed has released more details about its actions in the past three years, but is spending considerable political capital, despite the prevailing mood of the public and Congress, to keep some secrets to preserve its role as a lender of last resort for financial firms. Fed officials fear too much transparency could make banks reluctant to seek Fed loans in periods of turmoil, putting the economy at risk.

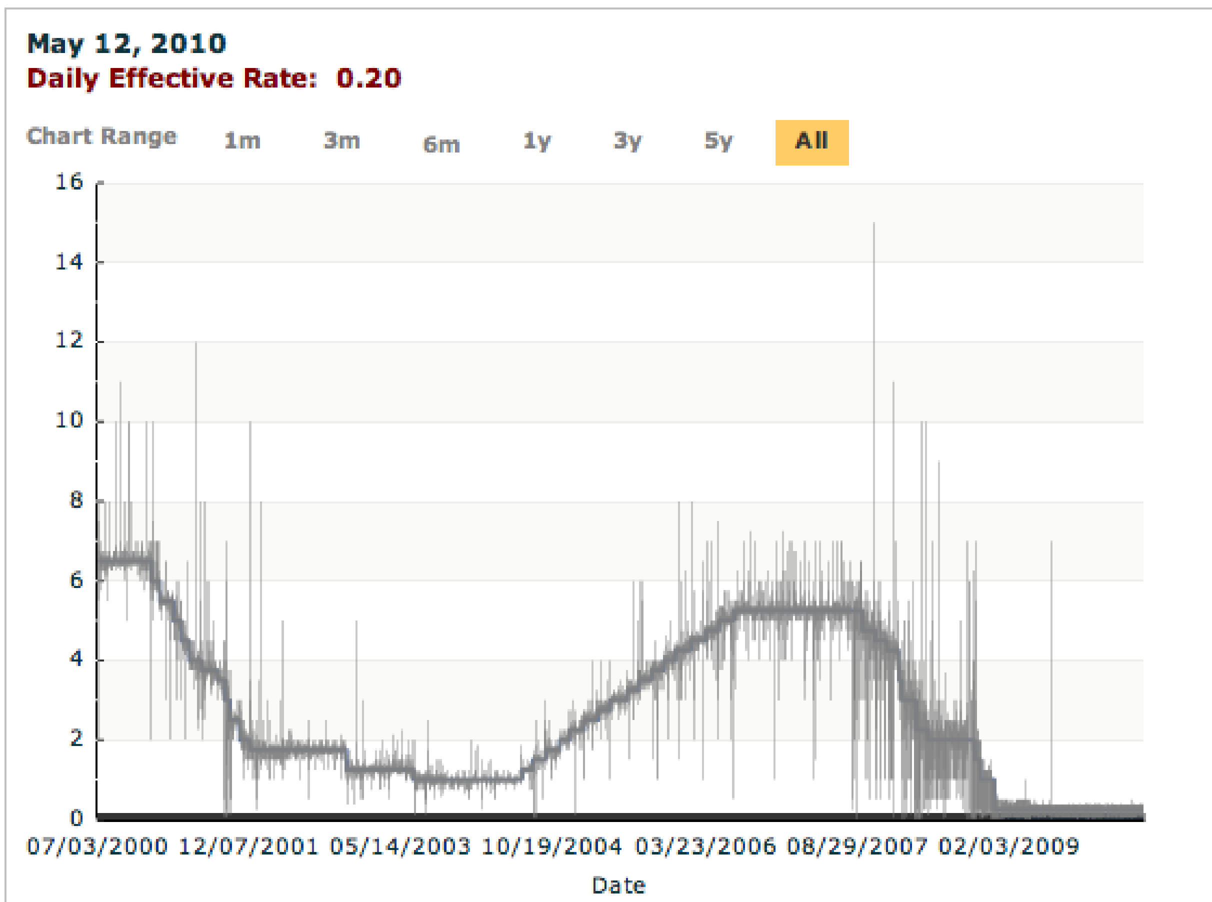
The Fed is appealing a federal-court ruling in a Freedom of Information Act suit brought by Bloomberg News, backed by other news organizations, that would force more disclosure of details of its lending …That dispute appears headed to the Supreme Court.

The Fed opposes prompt disclosure of the identities of banks that come to its discount window, citing the stigma that kept some banks from approaching the Fed early in the financial crisis in 2007. "Disclosure...will dramatically reduce the effectiveness of those facilities," the Fed argued in its appeal last week. "Borrowers will be deterred by the stigma associated with use of these facilities, and will avoid using them...." Fed officials warn that disclosing the names of banks that borrowed could pose problems, even after a lag. Some top lawmakers are talking about disclosure with a lag of several years. It is unclear how long of a lag, if any, the Fed would support.

"What the Fed wants to preserve is the ability to act discreetly in a crisis without having its actions further spook the market, either about an individual institution or a category of institutions," said Cornelius Hurley, director of Boston University's Morin Center for Banking and Financial Law and a former Fed lawyer. "The political reality is that there's a lot of anger on the streets. People on the street don't have the same sensitivity that the Fed does about the next crisis. They want retribution for what went on in the last crisis," he said.

(c) (20pts) Consider the early period of the current financial crisis. Specifically, consider 2007, when some banks were unwilling to approach the Fed's discount window, for fear of being stigmatized. The Fed's argument now to the Supreme Court is that in 2007 the effectiveness of the discount window was reduced by this fear of stigma, and so we should be careful to not reintroduce the stigma.

What evidence do you find in the Federal Funds Rate Chart to support the Fed's claim that having banks fear to use the discount window made the discount window not very effective in 2007? Explain what happened in the Federal Funds Market in 2007, with reference to a graph of the supply and demand for excess reserves that banks traded in the Federal Funds Market.



3. (20pts) Consider the information below, excerpted from the Wall Street Journal. Describe the time inconsistency problem that the ‘living wills’ described in the article are meant to overcome.

Proposal Calls for Banks to Draft 'Living Wills'

By MICHAEL R. CRITTENDEN
The Wall Street Journal, May 12, 2010, page A8

The Federal Deposit Insurance Corp. has proposed to require the U.S.'s largest banks to create a plan for their own liquidation in the case of financial stress.

By planning for the organized breakup of the country's top 40 banks, the government hopes to avoid some of the chaos and costly bailouts that marked the recent crisis. The plan reflects a broader effort by regulators around the world to be better prepared for emergency liquidations of big banks.

The plan would require large bank holding companies, such as Citigroup Inc., J.P. Morgan Chase & Co., and Bank of America Corp., to show how their bank could be cleanly separated from the parent firm, and then dissolved by regulators.

"It is an important step toward ending 'too big to fail,' " FDIC Chairman Sheila Bair said Tuesday at a public board meeting. "We do want plans in place."

The efforts by the Fed and FDIC are in early stages but complement a new regulatory system envisioned by many lawmakers that would give the government new powers to break up big financial firms.

The FDIC's proposal would require banks to disclose detailed information about their technology, payment systems, exposure to other banks and their capital structure.

The banks would also have to provide sufficient information to let regulators determine whether the banks pose a "systemic" risk to the economy.

These sorts of measures have come to be known in the industry as "living wills" or "funeral plans," and regulators say they plan to use them more often to help guide their oversight of the banking sector.

Regulators… say that the measures would give the government a complete list of banks' counterparties and operations, and thus ease efforts to safely and quickly break up a large failed bank. The measures would also signal to financial markets that contingency plans for dissolution are in place, and that a government bailout isn't an option.

4. (20pts) Consider the information below, excerpted from the Wall Street Journal.

Gold Shoots To a Record As Europeans Seek Safety

By CAROLYN CUI And LIAM PLEVEN
The Wall Street Journal, May 12, 2010, page C1

Alarmed at the plunging value of their currency, Europeans are leading an exodus out of the euro and into gold.

The euro has slumped 13% against the dollar in the past six months and five percentage points of that has come since the beginning of May. The sharp decline has pushed investors around the globe into safe havens—from the U.S. dollar to Treasurys—but among the most popular is gold.

The flight by Europeans into gold indicates that they still harbor serious concerns about the potential consequences of the bailout, such as rising inflation or slowing growth, both of which would harm the value of their relatively new currency. As long as Europe's problems persist, gold could still rise against the euro.

Gold is typically seen as a hedge against a fall in paper currencies, and the most watched of those is the greenback.

Many investors who piled into gold last year did so amid worries that the U.S. dollar would be the currency in trouble. But with Europe struggling and the U.S. looking relatively strong, the euro has become the target.

—Mark Gongloff
contributed to this article.

Senate Pushes Fed To Give Up Names

By SUDEEP REDDY
Printed in The Wall Street Journal, page A8 May 12, 2010

The Senate voted Tuesday to force the Federal Reserve to disclose, for the first time, key details of its loans to financial firms during the financial crisis. But elsewhere in Congress and the courts, the Fed is continuing its fight to shield the names of the cash-strapped banks that borrow from it.

"We are beginning to lift the veil of secrecy on what is perhaps the most important agency in the United States government," said the amendment's author, Sen. Bernie Sanders (I., Vt.).

The Senate voted 96-0 to approve the amendment to a pending bill overhauling financial regulations. The strong support came after Mr. Sanders last week, following intense pressure from the Fed and the Obama administration, agreed to alter his measure to maintain an exemption for the Fed's monetary policy deliberations from congressional audits.

The Fed doesn't object to Mr. Sanders's revised measure, which pertains to loan programs began during the financial crisis that now are mostly closed.

The Senate separately Tuesday voted 37-62 against the original version of that amendment that would have ended a 32-year bar on congressional audits of monetary policy. Last year, the House passed such a measure, which the Fed opposes.

The Fed has released more details about its actions in the past three years, but is spending considerable political capital, despite the prevailing mood of the public and Congress, to keep some secrets to preserve its role as a lender of last resort for financial firms. Fed officials fear too much transparency could make banks reluctant to seek Fed loans in periods of turmoil, putting the economy at risk.

The Fed is appealing a federal-court ruling in a Freedom of Information Act suit brought by Bloomberg News, backed by other news organizations, that would force more disclosure of details of its lending than the Sanders amendment would. That dispute appears headed to the Supreme Court.

The Fed opposes prompt disclosure of the identities of banks that come to its discount window, citing the stigma that kept some banks from approaching the Fed early in the financial crisis in 2007. "Disclosure...will dramatically reduce the effectiveness of those facilities," the Fed argued in its appeal last week. "Borrowers will be deterred by the stigma associated with use of these facilities, and will avoid using them...." Fed officials warn that disclosing the names of banks that borrowed could pose problems, even after a lag. Some top lawmakers are talking about disclosure with a lag of several years. It is unclear how long of a lag, if any, the Fed would support.

"What the Fed wants to preserve is the ability to act discreetly in a crisis without having its actions further spook the market, either about an individual institution or a category of institutions," said Cornelius Hurley, director of Boston University's Morin Center for Banking and Financial Law and a former Fed lawyer. "The political reality is that there's a lot of anger on the streets. People on the street don't have the same sensitivity that the Fed does about the next crisis. They want retribution for what went on in the last crisis," he said.

The Sanders amendment, if it becomes law, would force the Fed to disclose more than it has before—including the names of borrowers and amounts of loans—on emergency-loan programs that are mostly shut, as well as on its mortgage-backed securities program and arrangements to swap dollars for other currencies with foreign central banks. The measure would cover only loans from December 2007 through the date the law is enacted, and wouldn't apply to future lending. It wouldn't require disclosure of ongoing discount-window borrowing; the Fed opposes such disclosure.

The provision also would require the congressional Government Accountability Office to audit those emergency loan programs and review the Fed's governance with an eye toward potential conflicts of interest.

To head off complaints about the Fed's Sunday night decision to reopen swap lines with foreign central banks, Fed Chairman Ben Bernanke went to Capitol Hill Tuesday to explain them.

The Fed released the underlying contracts for the swap lines Tuesday and plans to report weekly on amounts borrowed by each foreign central bank.

Proposal Calls for Banks to Draft 'Living Wills'

By MICHAEL R. CRITTENDEN
Printed in The Wall Street Journal, page A8 May 12, 2010

The Federal Deposit Insurance Corp. has proposed to require the U.S.'s largest banks to create a plan for their own liquidation in the case of financial stress.

By planning for the organized breakup of the country's top 40 banks, the government hopes to avoid some of the chaos and costly bailouts that marked the recent crisis. The plan reflects a broader effort by regulators around the world to be better prepared for emergency liquidations of big banks.

The FDIC's proposal dovetails with similar efforts under way on Capitol Hill and in the Federal Reserve.

The FDIC proposal may lead to a clash with large banks, which are concerned that regulators are becoming overly prescriptive and might use information provided by the banks to take a more aggressive regulatory stance.

The plan would require large bank holding companies, such as Citigroup Inc., J.P. Morgan Chase & Co., and Bank of America Corp., to show how their bank could be cleanly separated from the parent firm, and then dissolved by regulators. The banks all declined to comment.

They will have several months to lobby to change the proposal before it becomes a regulation.

"It is an important step toward ending 'too big to fail,' " FDIC Chairman Sheila Bair said Tuesday at a public board meeting. "We do want plans in place."

The FDIC currently regulates thousands of state-chartered banks not overseen by the Fed, and manages the fund that protects consumers' deposits.

The Federal Reserve, which regulates bank holding companies, has begun a similar effort aimed at determining how best to set up contingency plans for dissolving the institutions it oversees.

The efforts by the Fed and FDIC are in early stages but complement a new regulatory system envisioned by many lawmakers that would give the government new powers to break up big financial firms.

The FDIC's proposal would require banks to disclose detailed information about their technology, payment systems, exposure to other banks and their capital structure.

The banks would also have to provide sufficient information to let regulators determine whether the banks pose a "systemic" risk to the economy.

These sorts of measures have come to be known in the industry as "living wills" or "funeral plans," and regulators say they plan to use them more often to help guide their oversight of the banking sector.

Lawmakers in the House and Senate have endorsed the approach for firms deemed large enough to affect the broader economy, and legislation passed by the House last year includes a requirement that those banks prepare liquidation plans in advance.

The Senate, too, is debating legislation that would require firms to "submit plans for their rapid and orderly shutdown should the company go under," according to a summary released by Sen. Christopher Dodd's (D., Conn.) office.

Some industry officials say the measures will be less valuable to regulators than they think. "The proposal is redundant because regulators and banks engage in contingency planning on a regular basis," said Scott Talbott, the chief lobbyist at the Financial Services Roundtable, a trade group. "The markets change constantly, and the shelf life of living wills is extremely limited."

Regulators, on the other hand, say that the measures would give the government a complete list of banks' counterparties and operations, and thus ease efforts to safely and quickly break up a large failed bank. The measures would also signal to financial markets that contingency plans for dissolution are in place, and that a government bailout isn't an option.

An FDIC official said the agency's proposal would complement the Senate bill's provisions. Banks with greater than $10 billion in assets, which are part of a holding company with assets of more than $100 billion, would be required to submit contingency plans.

Gold Shoots To a Record As Europeans Seek Safety

By CAROLYN CUI And LIAM PLEVEN
Printed in The Wall Street Journal, page C1 May 12, 2010

Alarmed at the plunging value of their currency, Europeans are leading an exodus out of the euro and into gold.

The burgeoning demand pushed gold for delivery this month up 1.6% to settle at an exchange-record $1,219.90 on the Comex division of the New York Mercantile Exchange. The gains continued in electronic trading after the close, where gold reached $1,233.50 an ounce.

The euro has slumped 13% against the dollar in the past six months and five percentage points of that has come since the beginning of May. The sharp decline has pushed investors around the globe into safe havens—from the U.S. dollar to Treasurys—but among the most popular is gold.

Anecdotal evidence shows Europeans are leading the charge.

ETF Securities, a London-based fund manager, had an inflow of $490 million into its gold-backed funds in the past two weeks. All of that came from European investors, said Nick Brooks, the firm's head of research and investment strategy.

The flight to gold "is not a short-term trend," Mr. Brooks said. "Sovereign debt problems are going to be with us for a longer term."

Gold has been hitting records in euro terms since February. On Tuesday, it reached €960.41 in London, a rise of more than 26% this year, more than twice the gains of gold in dollar terms.

Signs of renewed wariness about Europe's fate emerged across markets. The Dow Jones Industrial Average fell 36.88 to 10748.26.

In the credit markets, a closely watched measure of banks' reluctance to lend, the gap between the London interbank offered rate and overnight indexed swaps, called the Libor-OIS spread, rose to 0.2 percentage point, an eight-month high.

And Treasury debt, seen as among the safest investments, continued to thrive. The government had no trouble finding buyers at an auction of three-year Treasury notes. And the 10-year Treasury note gained, pushing its yield down to 3.53%.

Meanwhile, at the Austrian Mint in Vienna, demand for gold coins and bars has soared. Since April 26, the mint has sold 243,500 ounces of gold, compared to 205,300 ounces in the entire first quarter, said Kerry Tattersall, marketing director for the Vienna-based organization.

"It's been exclusively European," Mr. Tattersall said. "I've seen no orders from America, no orders from Japan," he said, a change from the first quarter.

The Mint sells Vienna Philharmonic gold coins weighing up to one ounce and gold bars weighing up to one kilo, mainly through banks in Austria and Germany and gold dealers around the world.

"We saw very strong flows of money coming from European customers," said Adrian Ash, head of research at BullionVault, an online gold trading service provider.

So far in May, 39% of BullionVault's new customers have been from the euro zone, compared to 21% on average since the start of 2009, Mr. Ash said. He attributed the demand to "anxiety over the euro."

The euro's fall was halted only briefly early this week, when European governments announced a $1 trillion bailout package aimed at supporting troubled nations.

The euro clawed back some ground, rising to about $1.30, but has since retraced much of its gains and was at $1.2683 in late U.S. trading.

The flight by Europeans into gold indicates that they still harbor serious concerns about the potential consequences of the bailout, such as rising inflation or slowing growth, both of which would harm the value of their relatively new currency. As long as Europe's problems persist, gold could still rise against the euro.

Gold is typically seen as a hedge against a fall in paper currencies, and the most watched of those is the greenback.

Many investors who piled into gold last year did so amid worries that the U.S. dollar would be the currency in trouble. But with Europe struggling and the U.S. looking relatively strong, the euro has become the target.

"You'll miss the whole picture by focusing only in the U.S.," said Juan Carlos Artigas, investment research manager for the World Gold Council.

Gold and the dollar have, in fact, been generally rising and falling together since April 16, said Walter Zimmermann, chief technical analyst of United-ICAP.

"Our understanding for this has to do with the whole debacle in the euro zone," Mr. Zimmermann said. "The U.S. dollar and gold are the two big beneficiaries of the flight of capital from euro-based investments."

For all the rising demand, gold remains well below its inflation-adjusted high: $2,309.18 hit in January 1980.
—Mark Gongloff
contributed to this article.

Experts See Europe Crisis Delaying Fed Rate Boost

Wall St Journal May 14, 2010 p. A2

By SUDEEP REDDY And PHIL IZZO

Turmoil in Europe is leading investors and analysts to push back the moment at which they expect the Federal Reserve to raise interest rates even as the U.S. economy picks up and creates more jobs.

A new Wall Street Journal survey of economists finds 42% expect the Fed will hold off on tightening credit until 2011 or beyond. A month earlier, only 28% thought the U.S. central bank would wait so long.

"The crisis in Europe, risks of contagion and the deflationary pressures associated with those problems will keep the Fed on the sidelines even longer than we initially thought," said economist Diane Swonk of Mesirow Financial in Chicago.

Unless the crisis intensifies, the doubts about the ability of Greece and other European governments to pay their debts is unlikely to shake the American economy, though it could reduce European demand for U.S. exports and lead European banks to keep access to credit tight.

To Fed officials, though, the European crisis underscores the fragility of the global financial system and the risk, however small, of outside shocks derailing the recovery.

The Fed's weekend action to reopen a program to supply dollars to overseas central banks highlighted its concerns. "The crisis in Greece has escalated and spread, leading to volatility in world markets," James Bullard, president of the Federal Reserve Bank of St. Louis, said Tuesday. Atlanta Fed President Dennis Lockhart said Tuesday that "crises will re-occur" and events in Europe stemming from the Greek debt troubles "may have been a little bit of a reminder and wake-up call to that effect."

In recent weeks, trading in futures markets have seen expectations for a Fed rate increase in November diminish to about 40%; in early April, the odds of a November boost were above 90%. Fed officials have done little to signal an eagerness in tightening this year, though some officials are pushing the Fed to reduce its massive portfolio of mortgages.

On average, forecasters in the The Wall Street Journal survey see the Fed moving in December; seven months ago, they were betting on a move in August.
About the Survey

The Wall Street Journal surveys a group of 57 economists throughout the year. Broad surveys on more than 10 major economic indicators are conducted every month. Once a year, economists are ranked on how well their forecasts have fared. For prior installments of the surveys, see: WSJ.com/Economist.

Morgan Stanley economists this week moved their forecast for Fed tightening from September to early 2011, even though they see a strengthening U.S. recovery. Stephen Stanley of Pierpont Securities, who also moved his forecast for Fed tightening from September to next year, said the Fed's attention to the European risks "really struck a nerve for me." Any significant feedback from Europe "would come through the financial markets, and that's what is much more unpredictable," he said.

Low inflation is giving the Fed plenty of room to keep policy on hold. Economists in the latest Wall Street Journal survey expect the increases in the consumer price index to remain under 2% throughout 2010.

On the jobs front, the 57 surveyed economists, not all of whom answer every question, estimate that the economy will add around 2.4 million positions over the next 12 months. But due to the

massive slack in the labor market built up during the recession, they expect the unemployment rate, which hit 9.9% in April, to fall only to 9.3% by December.

The forecasters anticipate economic growth to be steady, if not particularly booming, at around 3% through this year and into next. They expect business investment to play a major role in the recovery, getting stronger as 2010 progresses.

The housing market continue to be a question mark. On average, the economists expect strong growth in home construction and renovations, but the forecasts show a wide variation, with some economists predicting an annualized decline of 4.3% in the second quarter from the first quarter and others predicting a 25% increase.

Paul Ballew of Nationwide expects contraction in the market, noting that housing is "still very weak and one of the headwinds heading into 2011." But Stuart Hoffman of PNC Financial is more upbeat, expecting housing to climb out of "a black hole" in the months ahead. On average the respondents forecast house prices, as measured by the Federal Housing Finance Agency, will be flat for this year and rising just 2.8% in 2011.

Any turnaround in the market would be good for consumer spending, which is expected to post moderate gains over the course of the year, but the steady growth won't be enough to lead the recovery. "Consumer spending is rebounding from exceeding low levels, but deleveraging, tighter consumer credit conditions, losses in wealth and a slow recovery in the jobs market will leave it lagging the overall economy during the remainder of the year," said Ms. Swonk of Mesirow Financial.

—Michael Derby contributed to this article.