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THE FEDERAL RESERVE BANK OF ST. LOUIS
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The Recovery
Don't Read Too Much into "Soft Patches"

Emerging Markets
Not Just a Destination for Capital, but a Source of It

The Role of Financing in International Trade during Good Times and Bad

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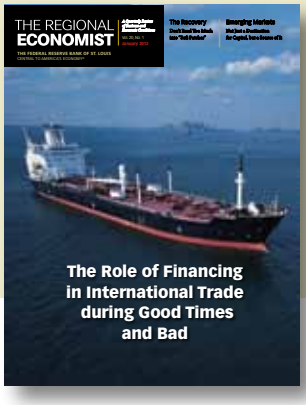

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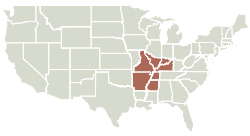

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James Bullard, President and CEO
Federal Reserve Bank of St. Louis

The Economic Recovery: America's Investment Problem

According to the National Bureau of Economic Research, the Great Recession officially began during the fourth quarter of 2007 (December 2007) and ended during the second quarter of 2009 (June 2009). Subsequently, the U.S. economy has recovered slowly, despite many policy actions aimed at stimulating economic activity. Given the financial crisis, as well as the apparent real estate bubble and its subsequent collapse during the 2000s, the pace of the recovery is not surprising, especially when one looks at investment data. This raises questions about how we should be evaluating the current economy's performance.

If we define recovery as real (i.e., inflation-adjusted) gross domestic product (GDP) having surpassed its previous peak level, which happened in the third quarter of 2011, then the economy has recovered from the recession. Most of the major components of real GDP have also recovered to their levels during the previous peak. On the consumption side, real personal consumption expenditures are actually higher now than they have ever been. In addition, real government expenditures are higher than their 2007:Q4 level, despite the fact that state and local government spending has been declining in recent years. Real exports are higher as well, while real imports are roughly the same as they were in 2007:Q4.

The glaring exception in the recovery, however, involves the path of investment spending. Real private investment remains roughly 16 percent below its level during the previous business cycle peak. If investment had recovered to the extent that consumption has, GDP would have been an estimated 4.4 percent (or nearly $670 billion in current dollars) higher in 2011:Q3 than the actual data show.[1]

Within investment, the components that have not recovered are those related to real estate. In 2011:Q3, real private residential investment (the housing side) was 38 percent lower and real private nonresidential investment in structures (the commercial side) was 28 percent lower than their 2007:Q4 levels. These two components declined during the 2007-09 recession and have simply remained low. Real investment in equipment and software, on the other hand, was 2 percent higher in 2011:Q3 than its previous peak level. Collectively, these data support the view that a real estate bubble collapsed.

The U.S. economy experienced overinvestment in housing that was driven to a significant degree by beliefs that housing prices would continue to rise. As a result, too many resources were allocated to the housing sector, creating a bubble that lasted from roughly 2001 to 2007. The effects were not limited to the housing sector, though; extra resources also went to businesses that support that sector, such as those in manufacturing, transportation and retail. Consequently, GDP temporarily grew more rapidly during this period than it otherwise would have. The rapid growth was ultimately unsustainable: The bubble burst and led to a large recession.

In the aftermath of the collapsed bubble, it is not reasonable to expect economic output and, in particular, the components of investment related to housing to return quickly to their previous business cycle peak levels. Because of the overinvestment during the 2000s, the U.S. economy now has high inventories of houses and commercial real estate. Given this overabundance, it will take time and economic growth before substantial amounts of new investment in houses and commercial real estate occur.

In general, 2007:Q4 should not be used as the benchmark for where the economy is supposed to be now, precisely because part of the economic activity during the previous decade was due to artificial growth driven by a bubble. A more appropriate assessment of today's economic performance would focus on underlying trend growth, thereby excluding growth caused by the bubble. To illustrate, real GDP grew at an annual rate of 2.7 percent per quarter, on average, during the 2002-07 expansion. The nonbubble trend growth rate during that period would have been lower—for instance, 2.4 percent. This is the average growth rate since the Great Recession ended; thus, it does not include a real estate bubble. Many analyses simply compare today's economy to where it would be had it continued to grow at the higher rate. It would be more appropriate, however, to compare today's economy to one that grew steadily at the lower, nonbubble trend rate.

The latter comparison may still indicate that economic output remains below its potential, but it would not be as far below as the former would suggest. Which comparison is used has important implications for monetary policy. Moreover, policymakers must be careful not to reinflate the bubble because, as we have seen, such growth is not sustainable and can lead to poor economic outcomes upon its collapse.[2,3] Ω

ENDNOTES

1. This estimate was based on my own calculation. The Bureau of Economic Analysis provides data on GDP and its components.
2. For more discussion, see my speeches on July 29, 2011, "Views on the U.S. Economy: A Four-Part Story," and Sept. 26, 2011, "America's Investment Problem and Monetary Policy." See http://research.stlouisfed.org/econ/bullard/pdf/Bullard3rdRockyMountainEconomicSummit29July2011Final.pdf and http://research.stlouisfed.org/econ/bullard/pdf/Bullard_MGA_September26_2011_Final.pdf
3. For related reading, see Peralta-Alva, Adrian. "Construction and the Great Recession," *Economic Synopses,* No. 35, 2011. Also, see Sánchez, Juan M.; and Thornton, Daniel L. "Why Is Employment Growth So Low?" *Economic Synopses,* No. 37, 2011. See http://research.stlouisfed.org/publications/es/11/ES1135.pdf and http://research.stlouisfed.org/publications/es/11/ES1137.pdf

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The Role of Financing in International Trade during Good Times and Bad

By Silvio Contessi and Francesca de Nicola

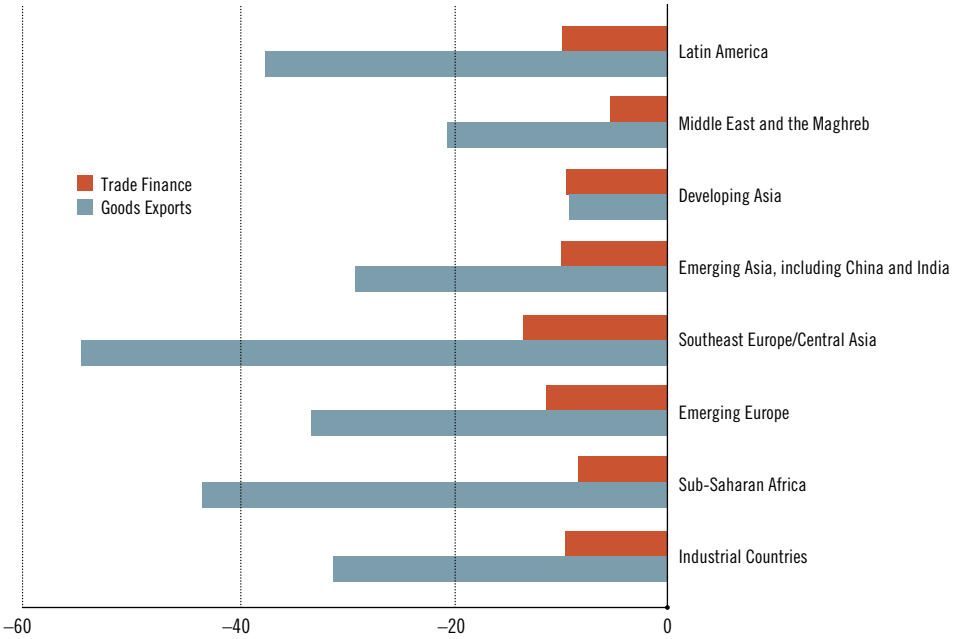
The peak of the global financial crisis and Great Recession witnessed the largest fall in international trade since the Great Depression, as imports and exports contracted by nearly 30 percent relative to GDP. The blue bars in Figure 1 show this drop for groups of countries during the peak of the crisis, between October 2008 and January 2009. The collapse of trade in those months is astonishing when compared with the decline during other recessions.

Several factors are responsible for the plunge; a 2010 article in *The Regional Economist* discussed the likely culprits but concluded at that time that there was no one smoking gun.[1] Today, there is some consensus among economists that demand for intermediate goods (such as machinery parts and food ingredients) and durable goods (such as cars and appliances) played a large role; purchases of these goods are relatively easy to postpone by households and firms during tough times. Research by economists Jonathan Eaton, Samuel Kortum, Brent Neiman and John Romalis attributes more than 70 percent of the decline in trade during the Great Recession to the large drop in demand and, particularly, to the collapse of expenditures on durable goods.[2] This leaves room for other factors to explain the remaining 30 percent, and many economists agree that this share is explained, at least in part, by the collapse of trade finance during the crisis.

FIGURE 1

Changes in Exports and Trade Finance between October 2008 and January 2009

BY GROUPS OF COUNTRIES (PERCENT DECLINE)



SOURCE: Asmondson et al.

Why Do Exporters Need Trade Finance? What Is It?

Most firms rely on external capital (as opposed to their own capital, internal cash flows and reinvested earnings) to finance fixed costs—such as research and development, advertising, fixed capital equipment—and also to finance intermediate input purchases, inventories, payments to workers and other frequent costs before sales and payments of their output take place.

As explained by economists Davin Chor and Kalina Manova, export activities entail extra upfront expenditures that may force firms to rely on external finance.[3] Extra money may be needed, for example, to research the profitability of new export markets; to make market-specific investments in capacity, product customization and regulatory compliance; and to set up and maintain foreign distribution networks.

Exporting activities may also generate additional variable trade costs due to shipping, duties and freight insurance, some of which are incurred before export revenue is realized. In addition, cross-border delivery can take longer to complete than domestic orders, increasing the need for working capital requirements relative to those of firms that sell only domestically. For example, ocean transit shipping times can be as long as several weeks, during which the exporting firm typically would be waiting for payment.[4]

Accordingly, financial institutions and governments have developed instruments to provide so-called trade finance, i.e., financial instruments that are used and sometimes tailored to satisfy exporters' needs. Most of these contracts require some form of collateral, e.g., tangible assets, including inventories. The role of trade finance in international trade is quantitatively important: Some estimates report that up to 90 percent of world trade relies on one or more trade finance instruments.[5]

Banks and other institutions provide trade finance for two purposes. First, trade finance serves as a source of working capital for individual traders and international companies in need of liquid assets. Second, trade finance provides credit insurance against the risks involved in international trade, such as price or currency fluctuations, or political risk. Each of these two functions is fulfilled by a certain set of credit instruments, provided mostly by financial institutions but sometimes also by government institutions.

There is a distinction between trade credit and trade finance. Trade credit is an agreement whereby a customer can purchase goods on account (without paying cash), paying the supplier at a later date. Usually when the goods are delivered, a trade credit is given for a specific number of days—30, 60 or 90—and it is recorded in the accounts receivable section of the firm's balance sheet. Several firms record trade credit but are not engaged in international trade. Trade finance generally refers to formal borrowing by firms from financial institutions and governments to facilitate international trade activities.

Different Types of Trade Finance Instruments

One of the most widely used ways exporters rely on trade finance is through **documentary credit,** which relies on commercial letters of credit. With this instrument, the issuing bank states its commitment to pay the beneficiary (exporter) a given amount of money on behalf of the buyer (importer) as long as the seller complies with the terms and conditions in the sale contract. The key steps in the use of letters of credit are represented in Figure 2. On the one hand, this instrument allows the importer to use his cash flow for alternative purposes rather than for paying the exporter for a certain period. On the other hand, the letter of credit ensures that the exporter will be paid in a timely manner. This instrument is particularly suitable for international contracts that are difficult to enforce and riskier than domestic contracts because the creditworthiness of the foreign counterparty is hard to evaluate.

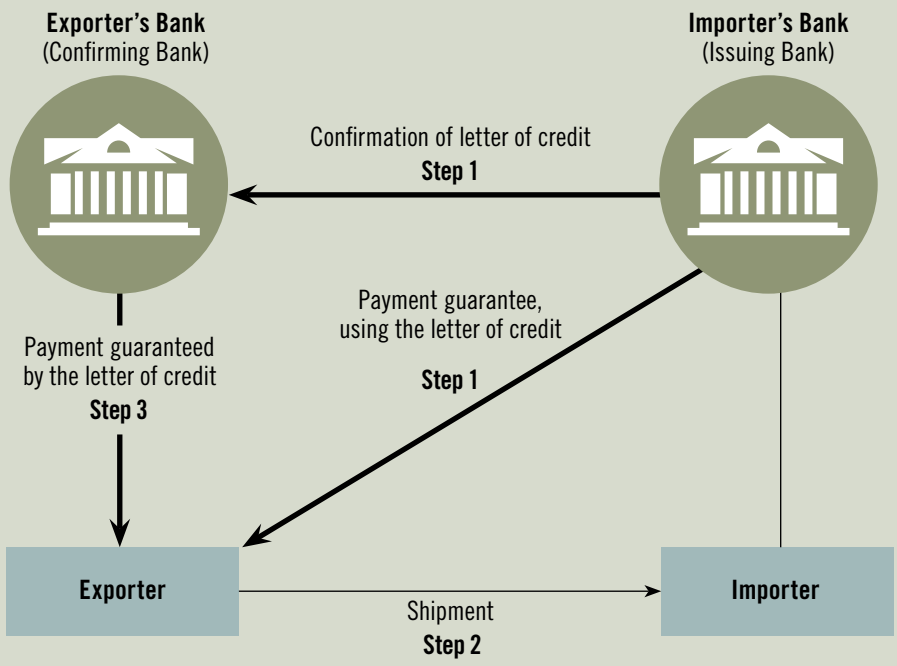
Some exporters also rely on **bill avalisation,** whereby the buyer's bank guarantees payment to the seller in case the buyer will not pay. Other examples of documentary credit are advance payment guarantees, customs bonds (which allow for the postponement of tax payments until the goods are sold) and customs bonds for temporary transit (which waive payment of duties if goods are imported with the intent of being exported).

In other cases, trade finance is part of generic **credit to buyer or supplier**. Credit counters the off-balance-sheet financing provided by documentary credit and represents the more traditional form of lending. It may happen in the form of providing working capital, overdraft facilities or term loan facilities.

Another group of instruments includes **countertrade** arrangements, which are used in situations and countries in which a shortage of foreign exchange reserves or liquid assets may prevent exchange of goods for money. Under such arrangements, buyer and seller agree that goods will be traded at a fixed value without involving the use of cash or credit terms; instead, barter-exchange, counterpurchase or buyback promises will be used. For example, countertrade emerged as an important instrument after the breakup of the USSR.

FIGURE 2

The Functioning of Letters of Credit



SOURCE: Adapted from Asmondson et al.

Letters of credit are probably the most widely used instrument in trade financing. On behalf of the buyer (importer), the issuing bank commits **(Step 1)** to pay the beneficiary (exporter) a given amount of money as long as the seller complies with the contract. A confirmation of this letter is sent to the exporter's bank **(also Step 1)**. The exporter then ships the product to the importer **(Step 2)**. Payment is then made by the exporter's bank to the exporter **(Step 3)**. Letters of credit are particularly suitable for international contracts that are risky because the creditworthiness of the foreign counterparty is hard to evaluate and contracts may be difficult to enforce.

With **forfeiting,** the exporter remits guaranteed debt from a sale on credit to a third party (financial firm) that pays the seller in cash upfront the face value of debt minus a discount. The seller is then no longer liable for default of the importer when debt comes to maturity. The discount is essentially the price the exporter is willing to pay in order to transfer the risk of default to the financial firm.

Other instruments carry out an insurance function against the risks involved in international and domestic trade, chiefly price or currency fluctuations. Examples of such contracts are options, forward contracts, futures, swaps and spot contracts. They offer the exporter and the importer the

possibility to insure against the risk of fluctuations in exchange rates or prices, which would cause them a loss.

Finally, there are many situations in which instruments are provided by governments and government-related institutions; these types of support should also be considered part of trade finance. One such institution is the **export credit insurance agency,** also known as an investment insurance agency. These organizations act as intermediaries between national governments and exporters, offering financial and insurance services to protect trade partners against various types of risks, ranging from currency fluctuations to riots and other political distress. These agencies may provide short (for up to 180 days) or long (for up to three years) term insurance to exporters, providing exporters with the necessary credit to cover production and transportation costs. Certain central banks provide **refinancing schemes** through which they discount the commercial bills of exporters at preferential rates; these refinancing schemes work in a way similar to forfeiting. Finally, **specialized financial** agencies, such as the Export-Import Bank in the U.S., specifically target exporters' and importers' needs.

These organizations act as intermediaries between national governments and exporters, offering financial and insurance services to protect trade partners against various types of risks, ranging from currency fluctuations to riots and other political distress.

Data on these instruments are hard to come by.[6] Nevertheless, a growing body of economic research has started to provide evidence on the collective impact of these instruments on export activities. Some of this evidence precedes the recent financial crisis. Some other evidence refers to large crises, such as the recent global recession.

What's the Evidence?

Trade economists are particularly interested in explaining why only a small percentage of firms in a country export (the economists call the number of exporters the *extensive margin*), in addition to explaining how much each firm exports (they call the size of individual exports the *intensive margin*). Trade finance influences firms' export status in two ways. First, it may affect the probability of a business becoming an exporter in the first place if that business needs financing to pay fixed and sunk costs in order to start exporting. Second, trade finance may affect the magnitude of foreign sales because financing variable export costs may also require external finance.

To understand how finance affects the number of exporters and the size of their sales, economist Kalina Manova exploits the fact that (i) different industries tend to rely with different intensity on external finance, and (ii) the cost and availability of credit vary across countries.[7] The researcher shows that countries in which credit is either more difficult or more expensive to obtain tend to export less, especially in industries that rely more heavily on external finance. Economists Nicolas Berman and Jérôme Héricourt study the relationship between trade and finance using firm-level survey data from nine emerging and developing countries from the World Bank.[8] They show that firms' financial health raises neither the probability of remaining an exporter once the firm has entered international markets nor the size of exports. However, access to finance affects the probability of becoming an exporter. They also show that the level of financial development of a country—not just an individual firm's access to credit—can affect the probability of starting to export.

In addition to these two studies, there are many recent contributions confirming the important role of trade finance in influencing the number of exporters and how much they export. One major challenge of these studies is to avoid confusing the role of finance with the role of changes in demand for exporters' products. This distinction is important: If banks reduce the supply of trade finance to exporters (for example, during a financial crisis), appropriate policy interventions can restore firms' access to credit and allow exporters to continue selling abroad.

A recent analysis by economists Mary Amiti and David Weinstein sheds light on the relationship between banks' health and firms' export performance in Japan. The Japanese banking system underwent a credit crunch in the 1990s and 2000s. Many banks

Related Reading on Trade Issues from the St. Louis Fed

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The Trade Collapse: Lining Up the Suspects
A two-page article co-authored by Silvio Contessi in the April 2010 issue of *The Regional Economist*., See **stlouisfed.org/tradecollapse**

U.S. Trade Springs Back
A two-page essay co-authored by Contessi in April 2011 as part of our *Economic Synopses* series. See **http://research.stlouisfed.org/publications/es/11/ES1109.pdf**

had a sizable amount of bad loans on their balance sheets and had a hard time extending new loans to their customers. Amiti and Weinstein matched Japanese exporters to the Japanese banks from which they borrowed and constructed a measure of market-to-book value for all large Japanese banks. In general, as the market value of a bank fell, it had a harder time extending new loans or rolling over existing loans. The researchers showed that there was a large disparity across Japanese banks in these measures and that such large differences can be exploited to estimate the effect of bank health on exports. In particular, Japanese firms that borrowed from distressed banks contracted their exports much more than businesses that were borrowing from healthy banks.

Trade Finance during the Crisis

The conjecture in the aftermath of the crisis was that the tightening of credit to firms had depressed the intensive margin of exports (how much each firm can export), especially in the sectors more exposed to financial shocks arising from the financial crisis because they tend to rely more on external finance. For example, several studies have shown that industries such as drugs and pharmaceuticals or plastic and computing tend to use much more external finance than industries such as tobacco or pottery.

There is consensus among economists that the financial crisis led to tightened financial conditions. How much of these tightened credit conditions is specifically reflected in trade finance is difficult to assess because of the absence of data. However, a survey jointly administered by the International Monetary Fund and the BAFT-IFSA provides some insight.[9] According to a recent IMF study of this survey's confidential data, changes in trade finance conditions were particularly pronounced among large banks that suffered most from the financial crisis and, consequently, were in greater need to quickly deleverage.[10] The survey also shows that, at the same time, banks increased the cost of borrowers. The IMF/BAFT-IFSA Trade Finance Survey provides evidence that, particularly in the case of letters of credit and trade-related lending, the terms of credit offered by large banks worsened.

The drop in trade at the peak of the crisis, between October 2008 and January 2009, is shown in Figure 1. The trade collapse was visibly much larger than the contraction in trade finance, seen in the red bars. At the onset of the crisis (2007:Q4-2008:Q4), trade finance actually increased; even during the peak of the crisis (2008:Q4-2009:Q1), trade finance fell by only one-third relative to the collapse in the export of goods. There was much geographic variation, but the largest drops occurred in Central Asia and Southeastern Europe. The situation remained negative but stable in the second quarter of 2009 and started to recover by the end of 2009 when Maghreb countries (in North Africa) and Middle Eastern countries (Emerging Asia) experienced the largest increase in goods exports worldwide.

When interviewed about the perceived causes of the contraction of trade finance, the surveyed banks returned answers surprisingly similar to the consensus emerging among economists. Respondents identified the fall in the demand for trade activities as the major source of decline in the value of trade finance but attributed about 30 percent of the fall to the reduced credit availability at either their own institutions or counterparty bank.

Conclusion

Two of the major difficulties regarding policymaking in the area of trade finance are the lack of reliable quantitative information and the limited evidence on the relationship between international trade and trade finance. Recent research and efforts in data collection, however, are fostering the understanding of this relationship and, ultimately, of the potential impact of different policies that may limit the negative effects of financial crises in the future. Ω

Silvio Contessi is an economist at the Federal Reserve Bank of St. Louis. See http://research.stlouisfed.org/econ/contessi/ for more of his work. Francesca de Nicola is a postdoctoral fellow in the Markets, Trade, and Institutions Division of the International Food Policy Research Institute in Washington, D.C.

ENDNOTES

1 See Contessi and El-Ghazaly.
2 See Eaton et al.
3 See Chor and Manova.
4 See Hummels and Schaur.
5 See Auboin.
6 Bank trade finance is based on idiosyncratic relationships with specific clients so that its availability and even its cost depend on a complicated relationship among client, counterparty and counterparty banks. As there is much proprietary information about bank-client relationships, this information is rarely disclosed.
7 See Manova.
8 See Berman and Héricourt.
9 BAFT-IFSA is the global financial services association formed by the merger of the Bankers' Association for Finance and Trade (BAFT) and the International Financial Services Association (IFSA).
10 See Asmondson et al.

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Emerging Markets: A Source of and Destination for Capital

By Bryan Noeth and Rajdeep Sengupta

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Emerging markets are increasingly becoming a source of growth in the complex global economy. Brazil, Russia, India, Indonesia, China and South Korea are projected to account for approximately 45 percent of the global output by the year 2025, up from 37 percent in 2011, according to a report from the International Monetary Fund.[1]

Although there are varying definitions of what precisely is an emerging market, in general, countries that experience significant growth in GDP and infrastructure are given this distinction.[2] Emerging markets typically have lower per capita GDP and have enacted structural economic reforms in an effort to grow rapidly and to catch up with more-developed nations. A natural consequence of this has been the growth of capital markets and the increasing capital flows to and from these countries.

In what follows, we make a very preliminary study of the trends in capital flows to and from emerging markets over the past couple of decades.

Half the World's People

The countries on our list of emerging markets make up a sizable portion of the world's population. They had roughly 3.6 billion inhabitants as of 2010, most of whom reside in China or India, according to population estimates from the U.N. Department of Economic and Social Affairs. This total represents about 52 percent of the global population and is expected to grow.

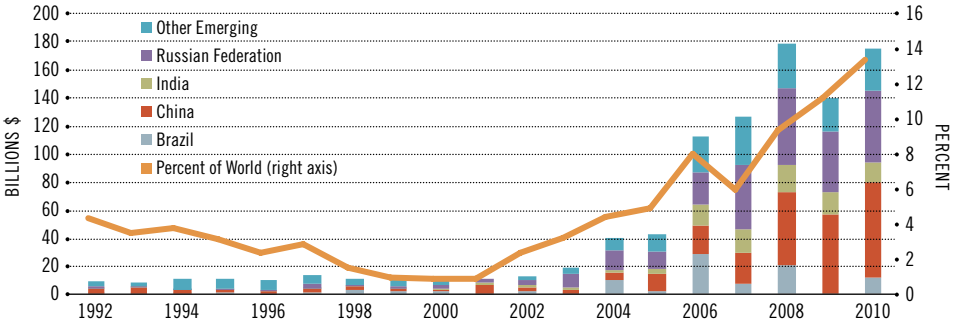
Before the financial crisis of 2007-2009, emerging markets had significantly higher growth rates compared with the rates in countries that belong to the Organisation for Economic Co-operation and Development (OECD), whose members are usually considered to be more developed. However, the financial crisis had a large impact on both OECD countries and emerging markets. Although emerging markets as a whole witnessed slower growth during the downturn, they did not see a wholesale contraction in economic activity as their OECD counterparts witnessed.

Types of Capital Flows

An engine of growth for emerging markets, capital flows are typically broken into two principal categories: foreign portfolio investment (FPI) and foreign direct investment (FDI). In spirit, FPI is investment that is made without gaining a controlling interest in the entity receiving the funds. It is an investment in an asset for the purpose of earning a return (e.g., the purchase of corporate or government securities or bonds). FDI entails some sort of ownership or controlling stake (e.g., investing in a factory or land). In general, the benchmark for FDI is if an investor takes at least a 10 percent controlling stake in the target entity. This essay focuses

FIGURE 1

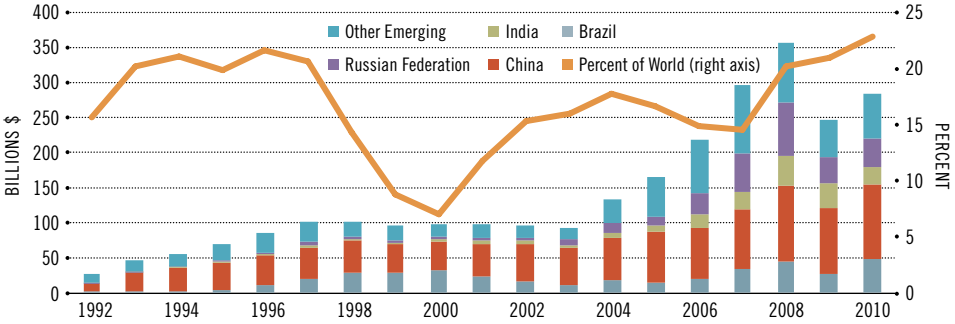
Emerging Markets' *Outward* Flows of Foreign Direct Investment



SOURCE: United Nations Conference on Trade and Development.

FIGURE 2

Emerging Markets' *Inward* Flows of Foreign Direct Investment



SOURCE: United Nations Conference on Trade and Development.

more attention on FDI because of its stronger links to growth and employment.

FDI cultivates development because, in addition to the resources that it provides developing economies, it gives them the opportunity to "learn by doing," which leads to growth-enhancing innovation and spillovers. Over the past couple of decades, the share of FDI in total foreign equity flows has been larger for developing countries than for developed countries.[3] Arguably, the causality runs both ways: Those engaging in FDI are more likely to target countries with greater growth potential.

Figures 1 and 2 highlight the important trends in emerging markets' inflows and outflows of FDI. First, the absolute values of FDI into and out of emerging markets have shown a phenomenal increase since 2000. This is just another piece of evidence of the importance of emerging markets in an increasingly globalized world. Second, within emerging markets, the relative shares of individual countries' FDI flows have remained fairly stable. China appears to play a prime role in both the inflow and outflow of FDI. Brazil appears to be a major destination for FDI inflows, whereas Russia appears to be a major source of FDI outflows. Third, during 1993-1997, emerging markets accounted for over 20 percent of the share of global FDI inflows. The financial crisis in East Asia and the Russian Federation in 1998 saw a collapse in this share. This has been followed by a steady recovery since 2000. The share of FDI inflows into emerging markets now stands near the precrisis peak of the mid-1990s.

Other trends of global FDI flows have gained significant attention in recent years. Historically, the direction of capital flows has been from the developed nations to emerging markets. In the mid-1990s, while the share of FDI into emerging markets was in excess of 20 percent of global FDI inflows, the share of FDI outflows from emerging markets was less than 5 percent. Moreover, this share witnessed a decline in the aftermath of the Asian crisis. In contrast, from 2001 through 2010, emerging markets increased their global outward investment share from about 1 percent to about 14 percent. Advanced economies were not the only recipients of these investments: Low-income countries saw increased capital flows due to the emerging economies' presence in global capital markets.[4] It is important to note that the increase in the global percentage metric is due, in part, to the significant decrease in the outward FDI from OECD countries after the financial crisis of 2007-2008.

Volatility

Because of their direct links to factors of production, FDI is generally presumed to be less volatile in comparison with FPI. By taking a direct and controlling stake, FDI allows the investor to overcome information and control problems between managers and owners. On the other hand, FPI is viewed at times as "ownership without control." Although this feature may not reduce the information and control problems of the FPI investor, it has important implications for the resale of the investment. Should the need arise to resell the investment, a well-informed FDI investor faces a classic lemons problem in attracting potential buyers. In contrast, the FPI stakes are relatively easier to sell—a rationale for their high volatility.[5]

As evidence of higher volatility, we look at the trends of inflows of FDI and FPI in four prominent emerging markets from 1992 through 2010. These are Brazil, Russia, India and China, popularly denoted by the acronym BRIC. (See Figure 3.) Noticeably, both FDI and FPI have witnessed strong growth since 2000 in BRIC countries. Clearly, flows of FDI slowed considerably after the U.S. financial crisis of 2007-2008, largely due to a reduction in growth projections. Importantly, a sharp reversal of FPI resulted in the aftermath of the global financial crisis. Although the FPI flows have returned once again to their precrisis levels, Figure 3 shows why it is not difficult to see why FPI is considered the more volatile segment of capital flows.

Capital flows both into and out of emerging markets are playing a larger role in the global marketplace. As these economies continue to grow at a rapid pace, it will be interesting to see the course charted by inflows and outflows of FDI and FPI as capital markets continue to evolve. Ω

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ENDNOTES

1 See IMF.
2 We distinguish the following countries as emerging markets: Brazil, China, Egypt, India, Indonesia, the Philippines, Russia, South Africa, Turkey, Thailand, Poland, Peru and Malaysia. Many vendors, such as S&P, Dow Jones and FTSE, keep country lists according to their definition of emerging markets. Our choice of countries is derived from such lists by including countries that are common to most lists. Details of this selection procedure are available on request.
3 See Goldstein and Razin.
4 See Dabla-Norris et al.
5 See Goldstein and Razin.

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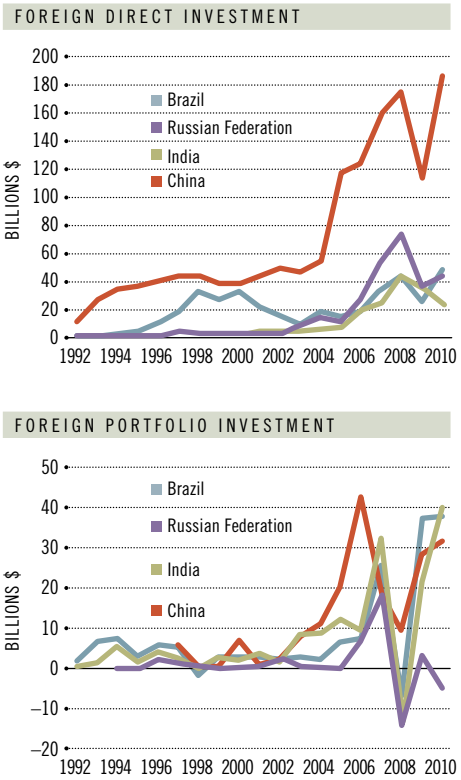
FIGURE 3

Capital Flows into BRIC Countries



SOURCE: World Bank.

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On the Road to Recovery, Soft Patches Turn Up Often

By Richard G. Anderson and Yang Liu

During mid-2009, the U.S. economy exited the economic contraction that began year-end 2007 and entered into an economic recovery phase.[1] Approximately two-and-a-half years later, both real GDP and consumer expenditures surpassed their prerecession peaks, although industrial production remained weak and the unemployment rate exceeded 8.5 percent.[2]

During the recovery, as in many previous recoveries, analysts spoke of "soft spots" or "soft patches," that is, periods when slower growth raised concern that economic activity might turn downward before reaching its previous peak, a so-called double-dip recession. The terms "soft spot" and "soft patch" are found in Federal Reserve publications as early as the Board of Governors' *Annual Report* for 1948 and, more recently, in publications as varied as the Board of Governors' semiannual *Monetary Policy Report to the Congress,* speeches by Federal Reserve officials and transcripts of Federal Open Market Committee meetings. The terms also frequently appear in the popular press. Unfortunately, despite widespread usage, there is no accepted definition of a soft patch.

A Look at Five Business Cycles

Rebounds in economic activity, when measured by growth of real GDP, are seldom smooth; temporary slowdowns are commonplace. These slowdowns, or soft patches, do not reliably foreshadow peaks in economic activity: During the past 60 years, there have been far more soft patches than business cycle peaks. Yet, fear is not baseless: All business cycle peaks since 1950 *have* been preceded by soft patches.

The paces of recovery following five recent business cycle troughs are shown in the figure. It shows the quarterly (that is, quarter-to-quarter) growth rate of real GDP, which is choppy in both business cycle expansions and contractions. Recoveries following cycle troughs in 1975, 1982 and 2007 (the current recovery) displayed initial strong growth, followed by slowing after five quarters. Recoveries following troughs in 1991 and 2001 were shallow, and subsequent recoveries were milder. During the first three years of the five recoveries, temporary slowdowns lasting two consecutive quarters occurred 22 times and slowdowns of three consecutive quarters happened 17 times. None of these slowdowns foreshadowed a business cycle peak in the near term (although, of course, peaks eventually *did* occur).

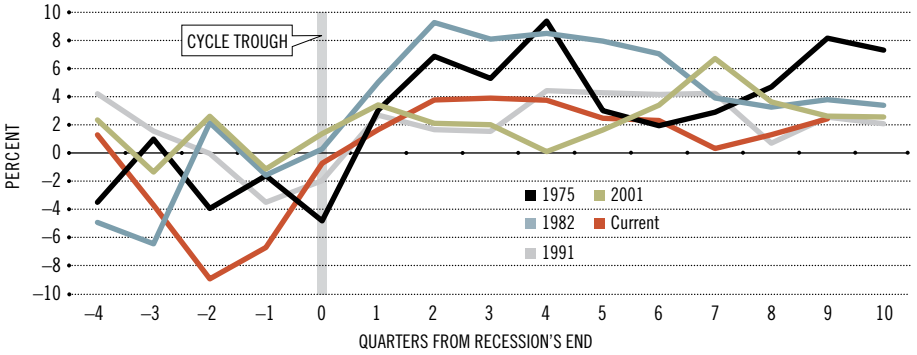
Absent a widely accepted definition of a soft patch, we examined two possibilities:

(1) A soft patch occurs when the GDP growth rate during the current quarter and the immediately prior quarter (that is, the two most recent quarters) is less than during the quarter that preceded these two quarters (a two-quarter soft patch); and

(2) A soft patch occurs when the GDP growth rate during the current quarter and the two immediately prior quarters is less than during the quarter that preceded these three quarters (a three-quarter soft patch).

FIGURE 1

Period-to-Period Real GDP Growth



SOURCES: Bureau of Economic Analysis and authors' calculation.

TABLE 1

NBER Business Cycles since 1950

Business Cycle Expansion Dates	Length (quarters)
1950 Q1 – 1953 Q2	14
1954 Q3 – 1957 Q3	13
1958 Q3 – 1960 Q2	8
1961 Q2 – 1969 Q4	35
1971 Q1 – 1973 Q4	12
1975 Q2 – 1980 Q1	20
1980 Q4 – 1981 Q3	4
1983 Q1 – 1990 Q3	31
1991 Q2 – 2001 Q1	40
2002 Q1 – 2007 Q4	24
2009 Q3 –	NA

SOURCE: National Bureau of Economic Research.

TABLE 2

Soft Patches and Business Cycle Peaks

Criterion	(1) Number of soft patches	(2) Business cycle peaks that occurred in final quarter of soft patch	(3) Business cycle peaks that occurred in the first quarter following a soft patch	(4) Business cycle peaks that occurred in the second quarter following a soft patch	(5) Business cycle peaks that occurred in the third quarter following a soft patch
Two-quarter soft patch: Growth in current and preceding quarter less than growth two quarters ago during an economic expansion	69	1953 Q2 1973 Q4 1980 Q1 1981 Q3 1990 Q3 2007 Q4	1957 Q3 1969 Q4 1973 Q4 2001 Q1	1960 Q2	1953 Q2 1980 Q1
Three-quarter soft patch: Growth in current and two preceding quarters less than growth three quarters ago during an economic expansion	52	1957 Q3 1969 Q4 1973 Q4 2001 Q1	1960 Q2	1980 Q1	1969 Q4 1990 Q3

NOTE: Calculations are based on economic expansions defined in Table 1 and quarterly growth rates of real GDP as published November 2011. Dates shown are business cycle peaks. Because the criteria for two- and three-quarter soft patches overlap, some peaks are preceded by both two- and three-quarter soft patches.

SOURCES: Bureau of Economic Analysis, National Bureau of Economic Research and authors' calculation.

We examined the 11 business cycle expansions that have occurred since 1950. (Dates of the expansions are shown in Table 1.) The 10 expansions prior to the current expansion averaged 20.1 quarters in duration; the briefest was four quarters, and the longest lasted 40 quarters.

Table 2 summarizes the analysis. Since 1950, during National Bureau of Economic Research (NBER) business cycle expansions, there have been 69 and 52 instances, respectively, of two- and three-quarter slowdowns (column 1). The frequency of soft patches overpredicts the frequency of business cycle peaks—there have been only 10 business cycle peaks.[3] Yet, since 1950, *every* business cycle peak has been closely preceded by a soft patch. With respect to two-quarter soft patches, six business cycle peaks occurred during the final quarter of two-quarter soft patches (column 2, first row), and four occurred during the following quarter (column 3, first row); note that the 1973:Q4 peak was preceded uniquely by both two- and three-quarter soft patches. With respect to three-quarter soft patches, four peaks occurred during the final quarter of a three-quarter soft patch (column 2, second row), and one occurred immediately after a three-quarter soft patch (column 3, second row). On average, two- and three-quarter soft patches have preceded the last 10 business cycle peaks by 12.5 and 12.7 quarters, respectively.

Nothing Hard and Fast about Soft Patches

In brief, we find that soft patches—that is, slowdowns of real GDP growth lasting two or three quarters—are commonplace during economic expansions. Such slowdowns, however, are not reliable predictors of subsequent business cycle peaks (the start of recessions) despite approximately half of peak quarters being immediately preceded by a soft patch. Soft patches are far more numerous than cycle peaks, and the timing between soft patches and cycle peaks is imprecise. Fluctuations in GDP growth are common during economic recoveries, and soft spots do not necessarily foreshadow further slowing. Ω

Richard G. Anderson is an economist and Yang Liu is a senior research associate, both at the Federal Reserve Bank of St. Louis. See http://research.stlouisfed.org/econ/anderson/ for more of Anderson's work.

ENDNOTES

1 Most economic analysts accept the monthly and quarterly business cycle peak and trough dates determined by the National Bureau of Economic Research's Business Cycle Dating Committee. The time interval from a peak to a trough typically is referred to as a recession or contraction, and the period from a trough to a peak as an expansion or recovery. See www.nber.org/cycles/main.html

2 According to data as of mid-December 2011, during 2011:Q3, real GDP regained (and slightly exceeded) its 2007:Q4 cycle peak, and during November 2010, real consumer expenditure regained its December 2007 peak. Yet, industrial production and nonfarm private employment during November 2011 were 5.9 percent and 5.1 percent, respectively, below their December 2007 levels.

3 Data revisions also erase soft patches. In July 1996 congressional testimony, Fed Chairman Alan Greenspan discussed 1995's soft patch. At that time, estimated GDP growth rates for 1995:Q1 to 1996:Q1 were 0.2, 0.1, 0.9, 0.1 and 0.5 percent, respectively. Current revised rates for the same period are 0.2, 0.2, 0.8, 0.7 and 0.7 percent. This article is based on published revised real GDP data as of mid-November 2011. An analysis of all soft patches based on the vintage data available at each historical date would be valuable but is beyond the scope of this analysis.

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Starting a Business During a Recovery: This Time, It's Different

By Constanza S. Liborio and Juan M. Sánchez

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The opening of new businesses is fundamental for U.S. employment growth. Businesses, small and large and of different ages, are constantly creating and destroying jobs. Profitable businesses stay in the market and expand, while the less-successful ones must consider downsizing or closing. These decisions, in turn, have a direct impact on the labor market. Amidst this job churn, it's important to remember that new businesses are the key to net job creation.

To illustrate the importance of startups, it is useful to consider a 2009 study that used data from the Business Dynamics Statistics (BDS), an annual series of data from the U.S. Census Bureau. The researchers found that, on average in 1980-2005, private-sector startup employment accounted for 3 percent of the overall employment every year.[1] This may seem like a small fraction, but it becomes substantial when compared with the 1.8 percent average annual net employment growth during the same period.[2] Similarly, researchers showed in another 2009 study that the youngest firms (less than 5 years old) accounted for almost the entire net job creation in 1980-2005.[3]

Examining the behavior of current business openings seems important to understanding the progress of employment recovery after the Great Recession. This will be the focus of this article.

Startups and the Business Cycle

Smaller firms—which are most likely younger as well[4]—are found to be less sensitive than large ones to business cycle conditions. A recent study found that in recessions prior to 2007, small businesses contracted slower during recessions and expanded faster during recoveries compared with large businesses, thus leading employment out of the recession. However, the same paper, using more-recent Business Employment Dynamics (BED) data, shows the opposite behaviors during the Great Recession. Small firms were more affected than large firms in terms of job creation and destruction.[5]

The last recession and the current recovery, thus, present special episodes to examine. Startup formation experienced a substantial decline up to the third quarter of 2009, according to BED data, which are published quarterly by the Bureau of Labor Statistics. By the beginning of 2010, the number of businesses exiting the market returned to prerecession levels, but the entry of new businesses still lagged behind.

The experience of business births and deaths varied across the U.S. Some regions faced little recovery, while other areas experienced growth in startups. The availability of state-level data on job creation and destruction allows for a regional examination of the current recovery.

Nation and District

BED data measure establishment births and deaths, as well as the subsequent creation and destruction of jobs.[6] Births and deaths of businesses do not include temporary shutdowns or seasonal reopenings. Thus, a business must be closed for a year to be considered as a death and not a temporary shutdown. This, in turn, restricts the availability of business death data up to the beginning of 2010. Historically, the level of business births has been greater than deaths during economic recoveries. After the Great Recession, however, this process has been delayed by the slower growth of startups.

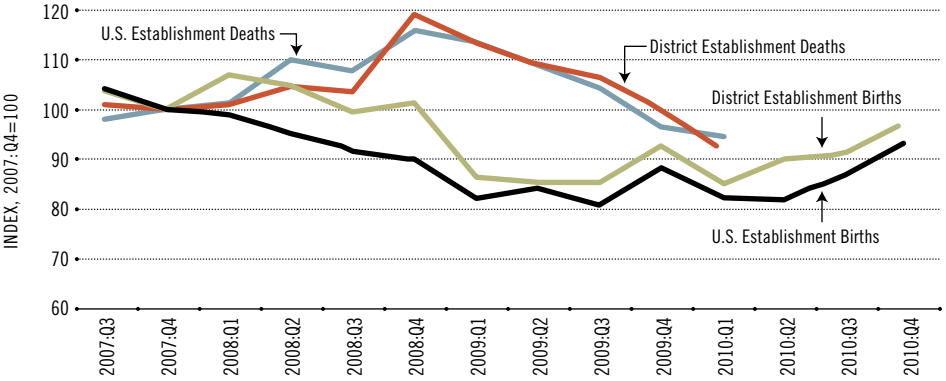
Figure 1 displays business births and deaths for the nation and the Eighth District.[7] They are normalized so that the peak previous to the Great Recession is equal to 100. The main message to take away is that the Eighth District behaves similarly to the nation, with startup growth in the District being slightly higher. This is reasonable since the District's states account for a substantial amount of national business births—about 11.6 percent—and deaths—11.9 percent.

By 2010:Q1, business deaths fell to prerecession levels for both the nation and the District. Slow business formation, however, has delayed the closing of the gap between establishments' exit and entry levels. In 2010:Q4, for the nation and the District, startup levels were still 6.2 percent and 2.4 percent below the prerecession peak, respectively.

Job creation and destruction have varied across states. Figure 2 displays the relative degrees of recovery of each state in the Eighth District as measured by establishment creation and destruction (represented by red circles), as well as job creation by new businesses and job destruction by businesses that have shut down (represented by blue squares). The horizontal axis shows the percent change from 2007:Q4 to 2010:Q1 of business formation and the employment generated by those startups. Thus, a state with positive business openings and positive employment creation will have recovered in startup creation activity. The vertical axis shows the percent change of business deaths and the subsequent employment destruction during the same period. With this structure in mind, states located in the lower-right quadrant experienced full recovery, while states in the upper-left quadrant displayed no signs of recovery. States in the other two quadrants

FIGURE 1

Business Deaths and Births



SOURCE: Business Employment Dynamics (BED), Bureau of Labor Statistics (BLS). Last Observation: 2010:Q4 for establishment births and 2010:Q1 for establishment deaths.

Figure 1 shows establishment births and deaths normalized so that 2007:Q4=100. The Eighth District data reflect totals for the entire seven states in the District, even though parts of some states are actually in other Federal Reserve districts.

exhibited partial recovery in either business births or deaths.

Based on these measures, the main finding is that the great majority of states in the District have been in a partial recovery stage. In these states, business deaths are back to prerecession levels, but there is still little startup growth. Similarly, jobs destroyed by shutdowns are back to prerecession levels, but there is still weak employment creation from startups. Among these states, Kentucky, Tennessee, Arkansas, Mississippi and Indiana are experiencing a slower recovery in terms of employment creation than in terms of startup creation.

Meanwhile, Missouri experienced a decrease of 18.4 percent in employment created by startup openings and an increase of 25.6 percent in employment destroyed by business deaths. This means that this state was actually worse off in 2010:Q1 than at the beginning of the recession in employment creation and destruction.

Illinois displays partial recovery for employment dynamics but no recovery in terms of business entry and exit. Although there was a decrease in employment destruction, there still was a slow recovery of business exit levels in this state. Up until 2010:Q1, no state in the Eighth District had reached full recovery.

Is the asymmetric behavior of entry and exit of businesses described above a symptom of credit frictions? Maybe. If credit were scarce, new businesses and potential entrants would suffer more than existing firms. While older establishments have had time to accumulate enough retained earnings, the startups rely more heavily on external finance (home equity lines, credit cards, etc.). Another factor that may be affecting business entry levels is uncertainty. Incumbent establishments facing uncertainty may stay in the market and reduce investment. Instead, potential entrepreneurs may decide to postpone their decision of starting new businesses. Whatever the reason for the slow recovery of establishments' births, the strong link between this variable and employment growth in previous recoveries suggests that the progress of startup entry must be closely followed to characterize the ongoing economic recovery of the District and the nation. Ω

Juan Sánchez is an economist and Constanza Liborio is a research associate, both at the Federal Reserve Bank of St. Louis. See http://research.stlouisfed.org/econ/sanchez/ for more on Sánchez's work.

FIGURE 2

Percent Change since Start of Recession

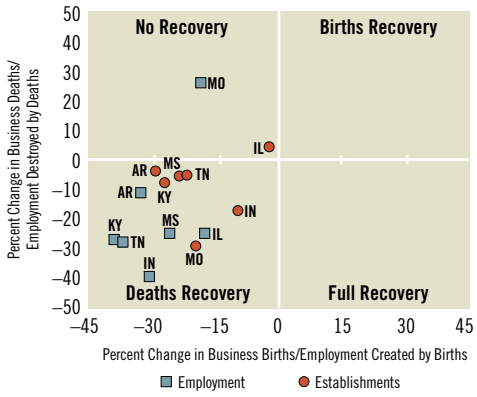


Figure 2 displays the relative recovery of Eighth District states in terms of establishment births and deaths (red circles) and their subsequent employment creation and destruction (blue squares). Percent change was calculated since the peak of the recession, 2007:Q4, to 2010:Q1.

SOURCES: Business Employment Dynamics, Bureau of Labor Statistics.

ENDNOTES

1 See Haltiwanger et al. 2009.
2 This analysis considers just the U.S. private sector.
3 See Stangler and Litan.
4 Evidence of this can be found in Business Dynamics Statistics data, U.S. Census Bureau.
5 The authors of the paper defined small firms as those with fewer than 50 employees and large firms as those with more than 1,000 employees.
6 Births are establishments either with positive employment for the first time in the current quarter and with no links to the previous quarter or with positive employment in the current quarter following zero employment in the previous four consecutive quarters. Deaths are defined as establishments with no employment or zero employment reported for four consecutive quarters following the last quarter with positive employment. Births are a subset of openings, and deaths are a subset of closings. They do not include reopenings of seasonal businesses or temporary shutdowns.
7 District is defined as the sum of the Eighth District states. Throughout this analysis, states are considered as a whole. Thus, some regions analyzed here are part of neighboring Federal Reserve districts since district borders don't always coincide with state borders. See District map on Page 16.

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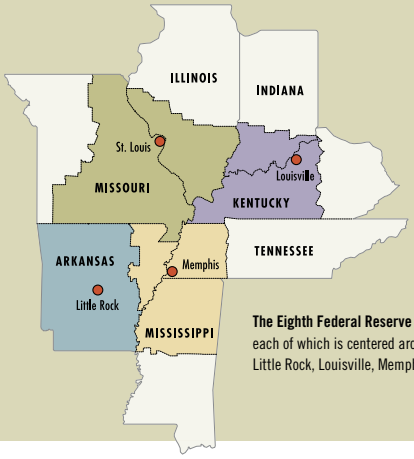
House Prices in the District and in the Nation Follow Similar Pattern

By Maria E. Canon and Mingyu Chen



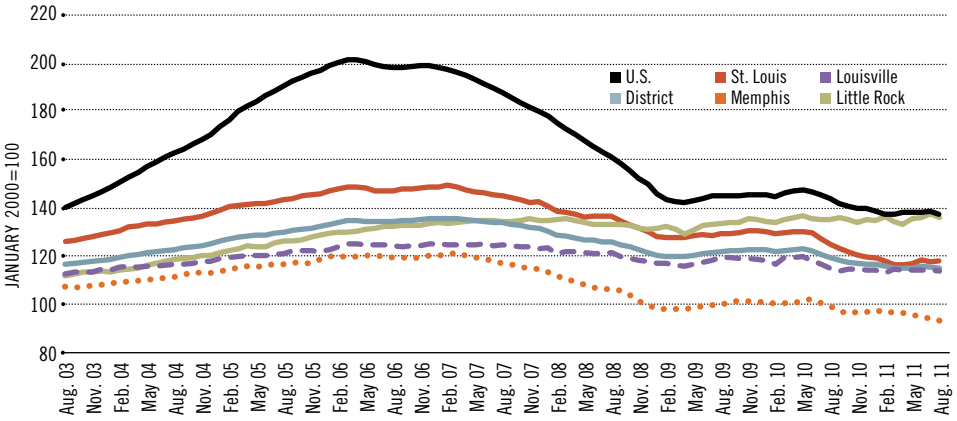
The Eighth Federal Reserve District is composed of four zones, each of which is centered around one of the four main cities: Little Rock, Louisville, Memphis and St. Louis.

The housing crisis has been milder in the Eighth District than in the nation, but since early 2009 house prices in the District and nation, as measured by the CoreLogic Home Price Index (HPI), have followed a similar pattern. As Figure 1 shows, the boom in house prices before 2007 and the bust afterward were milder in the District than in the nation. The house prices in the District had a modest upward trend and peaked in February 2007; in the nation, house prices increased at an accelerated rate and peaked in March 2006. Once the housing bubble burst, prices in the District decreased by 11.8 percent in the two years from peak to trough; nationwide, house prices started to drop in 2007 and reached their first trough 37 months after the peak, falling 29.4 percent along the way.

Starting in February 2010, both sets of prices rose for about six months but at a slower pace (about 2 percent year-over-year growth rates) than during the bubble days. This reversal in price change was short-lived; house prices soon decreased again. Since May 2011, both sets of house prices have declined at relatively lower rates, which indicates evidence of a possible recovery.

FIGURE 1

CoreLogic Home Price Index



SOURCE: Authors' calculations based on data provided by CoreLogic.

NOTE: Aggregate house price index for the Eighth District is calculated as the average of the house price indexes of all 18 MSAs covered in the District, weighted by population.

In the District's Four Major MSAs

Within the District, there have been notable variations in house prices. As shown in Figure 1, the house prices in Little Rock were much less volatile than those in the other major metropolitan statistical areas (MSAs)—Louisville, Memphis and St. Louis. Little Rock's growth rate remained positive until May 2008, which was 10 months after the District's house prices experienced negative growth rates. Moreover, the decline in Little Rock lasted only 14 months and the largest year-over-year decrease was 4.1 percent, compared with a decline of 28 months and biggest drop of 7.9 percent in the District. The house prices in Little Rock have generally stayed on a modest upward trend after June 2009. As of August 2011, Little Rock's average growth rate in 2011 was 0.1 percent.

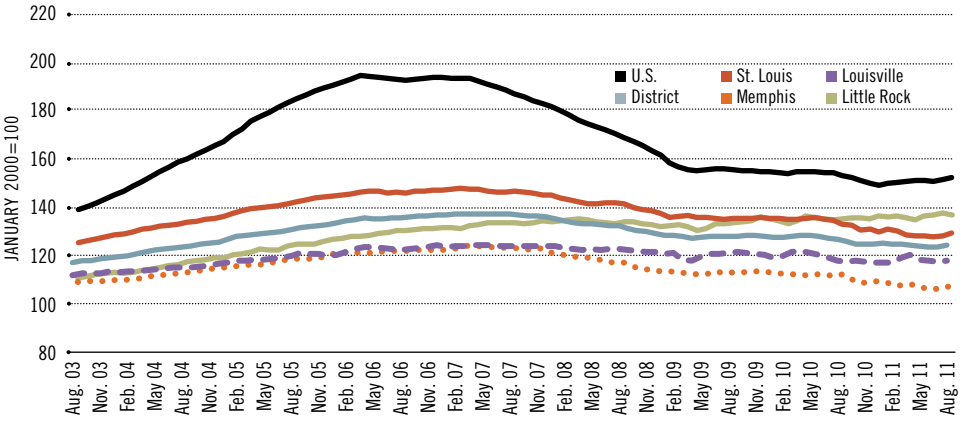
Although the house prices in the rest of the major MSAs have closely followed the trend of District prices since the last recession started, there have been exceptions. Memphis experienced the deepest decline. From their peak in March 2007 to their trough in February 2009, house prices in Memphis decreased by 19.6 percent, 7.7 percentage points greater than the District's rate of decline over the same period. Before the second downturn, which started in the second quarter of 2010, house prices in St. Louis had a similar pattern as prices for the District overall. But the St. Louis prices then experienced the deepest decline among the four major District MSAs, 10.3 percent, 3.9 percentage points worse than the District average over the same period.

What Might Have Driven House Prices?

One important factor in the housing crisis has been the increase in distressed sales (defined as real-estate-owned and short transactions by the CoreLogic HPI). Figure 2 shows house prices without distressed sales. To infer the impact of distressed sales on overall house prices, one can compare the change in the index that includes distressed sales with the change in the index that excludes those sales. For example, from March 2006 to April 2009, while the national house prices including distressed sales (as seen in Figure 1) declined 29.4

FIGURE 2

CoreLogic Home Price Index without Distressed Sales



SOURCE: Authors' calculations based on data provided by CoreLogic.

NOTE: Aggregate house price index for the Eighth District is calculated as the average of the house price indexes of all 18 MSAs covered in the District, weighted by population.

percent, house prices excluding distressed sales decreased 20.3 percent. The difference of 9.1 percentage points can be attributed to distressed sales.

Before 2007, the effect of distressed sales on house prices in both the nation and the District was moderate. Distressed sales added less than two percentage points to the growth rates of national house prices during the boom and even made a negative contribution to that of the District for most of this time (–0.2 percent on average). During the housing bust, however, prices in both the nation and the District were largely driven by distressed sales. By including distressed sales in the house prices, the peak of year-over-year decline rate in the nation increased from 11.9 percent to 18.1 percent during the first downturn of house prices; in the District, the decline rate peak increased 2.9 percentage points to 7.9 percent.

Surprisingly, during the short "recovery" in the first half of 2010, house prices in both the nation and the District declined after excluding distressed sales. The positive growth rates that appeared in 2010 were mainly driven by distressed sales. In July 2010, distressed sales once again drove the house prices in the other direction, leading to the second downturn.

The effect of distressed sales on house prices is similar across all four major MSAs in the District. However, the impact has been more severe in Memphis and St. Louis. Specifically, distressed sales reduced year-over-year growth in house prices between January 2007 and August 2011 by an average of 2 percent in these two MSAs, compared with 0.9 percent in Louisville and 0.4 percent in Little Rock.

Conclusion

Since July 2010, house prices have decreased in the District, including all of the major MSAs except for Little Rock. The average monthly year-over-year change in house prices between January 2011 and August 2011 was –5.2 percent in the District, –8.8 percent in St. Louis, –5.0 percent in Memphis, –3.4 percent in Louisville and 0.1 percent in Little Rock. If distressed sales were excluded, the decline rates would be less than half of the above numbers. One possible explanation for the persistent decrease of house prices is that the number of home sales has decreased. According to the Eighth District's *Beige Book* of Oct. 19, August 2011 year-to-date home sales continued to decline throughout the District compared with the same time period a year earlier. The number of home sales in the four District regions experienced an average decline of 9 percent in the first eighth months of 2011 compared with the same period in 2010. Ω

Maria E. Canon is an economist at the Federal Reserve Bank of St. Louis. See http://research.stlouisfed.org/econ/canon/ for more of her work. Mingyu Chen is a research associate at the Bank.

REFERENCE

The *Beige Book* (formally known as the Summary of Commentary on Current Economic Conditions by Federal Reserve District). Oct. 19, 2011. See www.federalreserve.gov/FOMC/BeigeBook/2011/20111019/default.htm

MORE DISTRICT DATA

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Pro-Business Mississippi Town Bucks Manufacturing Trend

Story and photos by Susan C. Thomson

At Luvata, a maker of commercial and industrial coils, James Jones brazes together an assembly to be installed on a coil. Luvata is Grenada's largest employer.

Pablo Diaz, executive director of the Grenada County Economic Development District in Grenada, Miss., proudly calculates that about 30 percent of local jobs are in manufacturing. That's astonishing at a time when that slumping sector accounts for less than 9 percent of jobs nationally, according to the Bureau of Labor Statistics.

Grenada's manufacturing prowess can be chalked up chiefly to the staying power of a single enterprise established in town in the mid-1950s. A Minnesota company, attracted by the South's relatively low production costs, hired a handful of employees to make coils for heating, ventilating and air-conditioning applications.

Coils consist of tubing (typically copper) sandwiched in metal (typically aluminum). Over the years, they have come in ever more sizes and shapes for ever more residential, commercial and industrial temperature-control uses. Grenada (pronounced gre-NAY-dah) is fortunate today in having landed an early piece of what became a growth industry.

"It just got bigger and bigger," recalls Buddy Harbin, interim director of the Grenada Area Chamber of Commerce.

As the original plant grew, it went through a number of out-of-town owners and resulting name changes. It eventually evolved into two companies—Advanced Distributor Products (ADP) and Luvata. The former, owned by Lennox International Inc., makes coils for residential applications. The latter, a unit of a private European investment firm, serves the commercial and industrial markets. Together, the two companies account for 20 percent of Grenada's jobs, Diaz says.

Where industrial development led, commercial development followed. Jimmy Brown, Grenada-based president of Regions Bank's North Mississippi area, describes the town today as a trading center, drawing customers from up to 50 miles away. Wal-Mart, a presence there since the early 1980s and now a 24-hour-a-day supercenter, is an obvious draw. Unusually for a town so small, Grenada also boasts seven auto dealers and a large farm-equipment dealer, Brown points out.

The 156-bed Grenada Lake Medical Center is yet another regional asset, serving patients from Grenada County plus eight surrounding ones, according to the chief executive, Charles "Chip" Denton. In early 2009, the county-owned facility completed $20 million worth of construction. That price tag covered the renovation of 20,000 square feet and the addition of 50,000.

The center takes its name from 36,000-acre Grenada Lake, three miles northeast of town. The U.S. Army Corps of Engineers created it in the mid-1950s to control flooding of the Yalobusha River and still manages it. Its amenities include a visitors center, tennis and basketball courts, boat launches, campsites, hiking trails, picnic pavilions, and beaches. A nearby state park boasts the award-winning 18-hole Dogwoods golf course.

The task of promoting all this falls to the Grenada Tourism Commission, financed by sales taxes of 1 percent on food at the town's more than 30 restaurants and 2 percent on its 718 motel rooms. Collections for the fiscal year ended Sept. 30 rose 7 percent from the year before, says the commission's executive director, Walter McCool.

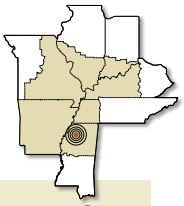
Grenada's city-owned general-aviation airport includes a wooden structure dating to World War II. One of the three runways is 7,000 feet long and capable of handling big jets. The Mississippi National Guard uses the airport for weekend training exercises, and the Grenada Tourism Commission sponsors aerobatic competitions there.

Those motel rooms are clustered around Grenada's exit on Interstate 55, a natural stopping point 100 miles south of Memphis, Tenn., and 115 miles north of Jackson, Miss. So, overnight visitors also add to the tourism budget.

The lake is by far the top generator of tourism dollars, logging 2 million visits a year, McCool says. Besides the locals making day trips, there are many out-of-towners coming to commission-sponsored fishing tournaments and fox hunts. For hospital chief Denton, the proximity of the lake is "a wonderful selling point" when the medical center recruits physicians, who are often reluctant to move to small towns.

But, as he acknowledges, "Grenada is surviving largely because of our manufacturing jobs." He notes, as well, that the town has been lucky in not losing "any big-time players." A major exception was a hosiery maker that dated back to the 1930s and went out of business a few years ago. The closing left vacant a 400,000-square-foot city-owned building, now a candidate for retail development.

Hosiery simply went out of style, as did automobile hubcaps, which a Michigan



Grenada/Grenada County, Miss.
by the numbers

	CITY	COUNTY
Population	13,092	22,971 *
Labor Force	NA	9,800
Unemployment Rate	NA	11.2% **
Per Capita Personal Income	NA	$24,172 ***

* U.S. Census Bureau, 2010 census
** BLS/HAVER, October 2011, seasonally adjusted
*** BEA/HAVER, 2009

LARGEST EMPLOYERS

Luvata	1,150
Advanced Distributor Products	750 †
Grenada Public Schools	698
Grenada Lake Medical Center	485
Wal-Mart Supercenter	385 ††
Grenada Stamping and Assembly	200

SOURCES: Self-reported, except Wal-Mart

† In peak season, April through September
†† SOURCE: referenceusa.com

Luvata employee Helen Tharpe works on tubing for a coil assembly.

Employees of Grenada Stamping and Assembly make housings for air compressor tanks, one of several new products that have revived the company, which used to specialize in automobile wheel covers, or hubcaps.

Tameka Black brazes distributor tubes onto a coil at Advanced Distributor Products, which makes coils for residential applications.

company started making in Grenada in 1961. As many automakers stopped using hubcaps in favor of one-piece metal alloy wheels in the late 1980s, the plant that had become known as Grenada Stamping and Assembly almost went under as well. Then, in 2005, Ice Industries of Sylvania, Ohio, bought and revived the operation, which today makes a diverse line of stamped metal products, including housings for air compressors and frames for solar panels.

In the past two years, Ice has committed to investing $2.8 million in the plant and has won $775,000 in grants from the Mississippi Development Authority (MDA), contingent on the creation of 115 jobs. Grenada County and the city of Grenada have granted $25,000 and $15,000, respectively, to what is now Grenada's fastest-growing employer.

Diaz praises the MDA as exceptionally efficient. Its grants, available to communities to help companies that are investing in their businesses and adding or retaining jobs, are the incentives of choice for the Economic Development District (EDD).

In 2010, the local agency was instrumental in securing a $135,000 MDA grant for ADP in connection with a $1.5 million expansion. The money went toward a new building, renovations to the company's existing one and its promise of 26 more jobs. "They are very open to our needs and very responsive to our needs," ADP's human resources director, Joe Trevino, says of the EDD's intermediary role.

In 2011, the EDD served as go-between for Luvata and the MDA, which granted the company $221,250. The grant is linked to the company's pledge to keep 25 jobs and invest more than $1.5 million in one of its three Grenada plants.

Grenada's manufacturing base boosts local incomes and living standards, Harbin says. It doesn't, however, buffer the area from economic headwinds. Unemployment in Grenada County—where the city is the seat and only incorporated area—has lately been running a percentage point or two above the national average. That's down from a spread of more than four points two years ago. Says Brown, "We feel like we're weathering the storm."

The EDD, meanwhile, is aggressively prospecting for new business. "We are actively recruiting in other parts of the country," Diaz says. In doing so, he promotes a state that is "really pro-business," with well-maintained highways and a cost of labor that remains "a great competitive advantage."

Brown describes Grenada's workforce as high-quality, too, drawn from an area with a tradition of farming and the work ethic that goes with it.

"Industrial leaders say (new hires) may not be skilled, but they're easily trained," Brown says. "They grew up working on cars

Fishing is one of the many recreational activities and amenities that attract 2 million visitors a year to 36,000-acre Grenada Lake, three miles out of town and Grenada's big tourist attraction.

and tractors. They have a great attitude and desire to work."

Two of the brightest prospects these days are in industries unimaginable half a century and more ago, when Grenada began its rise to manufacturing standout.

A biofuels startup, HCL CleanTech of North Carolina, has announced plans to build a small "demonstration-scale" plant in Grenada and larger commercial plants in Natchez, Booneville and Hattiesburg, Miss. Details have yet to be worked out. Says Diaz, "If everything goes well, (the Grenada plant) could have a big impact."

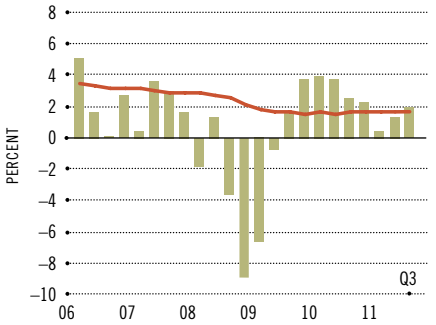
So would a data center—one of a new generation of huge, off-site computer installations now favored by big-city banks and retailers. A 2010 study by Deloitte Consulting of Chicago, commissioned by the Tennessee Valley Authority, identified a site in Grenada among 13 in the TVA's service area as particularly suited for one of these setups. Grenada's candidate property is development-ready, complete with all utilities and fiber optics, Diaz says.

Data centers require precise temperature control. In the competition to attract one of them, Grenada can offer its expertise in making coils for that very purpose. Ω

Susan C. Thomson is a freelance writer and photographer.

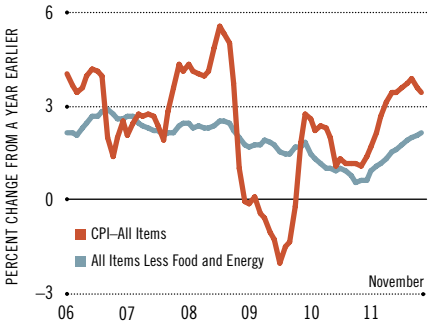
Eleven more charts are available on the web version of this issue. Among the areas they cover are agriculture, commercial banking, housing permits, income and jobs. Much of the data is specific to the Eighth District. To see these charts, go to stlouisfed.org/economyataglance

REAL GDP GROWTH

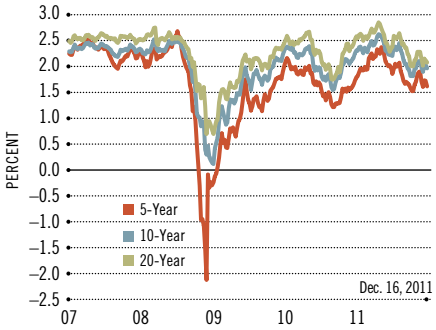


NOTE: Each bar is a one-quarter growth rate (annualized); the red line is the 10-year growth rate.

CONSUMER PRICE INDEX

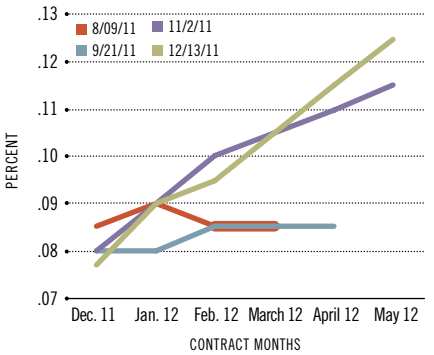


INFLATION-INDEXED TREASURY YIELD SPREADS

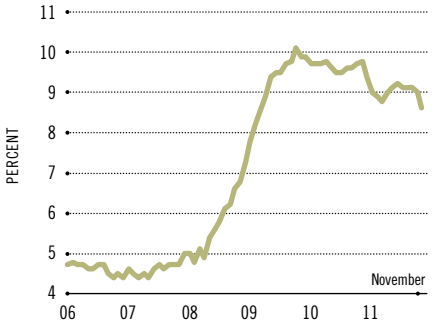


NOTE: Weekly data.

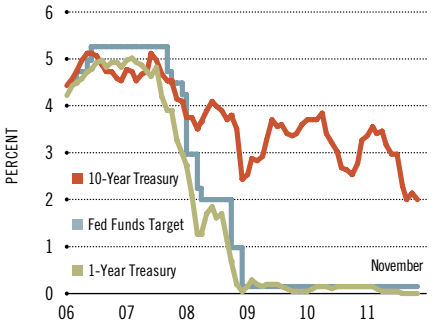
RATES ON FEDERAL FUNDS FUTURES ON SELECTED DATES



CIVILIAN UNEMPLOYMENT RATE

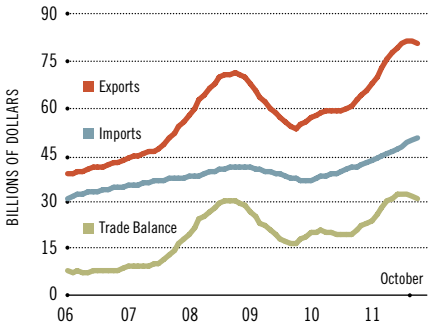


INTEREST RATES



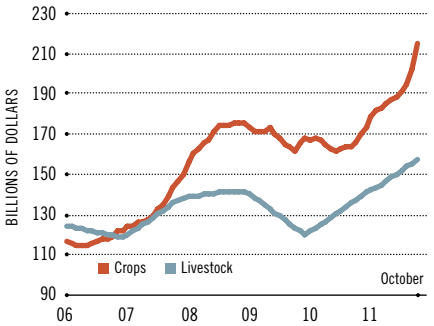
NOTE: On Dec. 16, 2008, the FOMC set a target range for the federal funds rate of 0 to 0.25 percent. The observations plotted since then are the midpoint of the range (0.125 percent).

U.S. AGRICULTURAL TRADE



NOTE: Data are aggregated over the past 12 months.

FARMING CASH RECEIPTS



NOTE: Data are aggregated over the past 12 months.

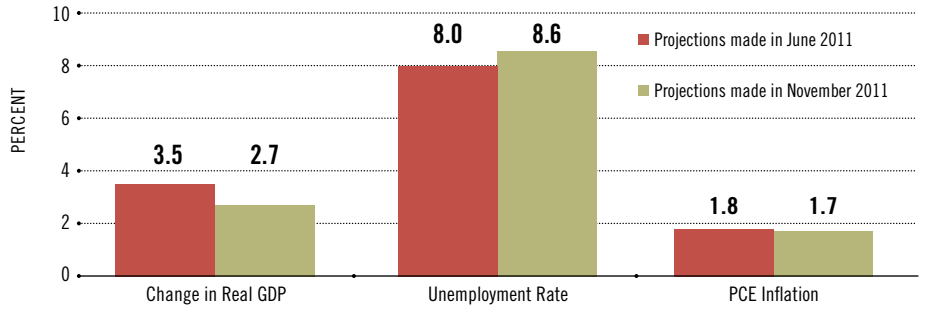
The Economy Should Be Able To Avoid a Recession in 2012

By Kevin L. Kliesen

Despite some persistent headwinds, the U.S. economy has strengthened modestly over the past three months and looks increasingly likely to strengthen further in 2012. Key developments in this regard have been a healthy rebound in business capital spending, strong corporate earnings, robust exports and a steady increase in private-sector employment. But the economy still faces some significant challenges. These include an unexpected increase in inflation over the first half of 2011, strains in global financial markets stemming from developments in Europe, a stubbornly high unemployment rate, and a housing market strained by high foreclosures and a large volume of unsold homes.

In short, while the late-summer recession scare appears to have been a false alarm, it may take awhile before the economy returns to full employment.

FOMC Economic Projections for 2012



NOTE: Projections are the midpoints of the central tendencies. The forecast for the unemployment rate is for the average of the three months in the fourth quarter of 2012. The other variables are the forecasted change from the fourth quarter of 2011 to the fourth quarter of 2012. PCE is personal consumption expenditures.

SOURCE: Federal Open Market Committee.

Better Data but Skittish Markets

The U.S. economy was extraordinarily weak over the first half of 2011. Part of this weakness stemmed from the lingering effects of the financial crisis and housing bust. However, some unexpected disturbances exacerbated the economy's lackluster growth and further eroded business and consumer confidence. These included higher oil and commodity prices and disruptions in the global automotive supply chain triggered by the Japanese earthquake in March. Just as these effects were beginning to wane, Europe's sovereign debt and banking crisis reignited in July. In response, stock prices fell sharply, and financial market volatility and stresses began to rise. By September, many economists were predicting a double-dip recession.

Despite the building storm clouds, key data were beginning to indicate a noticeable improvement in economic conditions over the second half of 2011. This improvement was confirmed when the Bureau of Economic Analysis reported that real GDP increased by 2.5 percent in the third quarter; this estimate was a little more than forecasters had expected. Although revised data subsequently lowered this estimate to 2 percent, the available data in October and November suggested that real GDP growth in the fourth quarter could exceed 3 percent. Importantly, first-time claims for unemployment insurance benefits continued to trend lower in early December, and nonfarm employment continued to rise. Through November 2011, private payrolls rose by about 160,000 per month, the largest average gain since 2006.

The expenditure and output data have also been solid, as retail sales, new automotive sales and industrial production were relatively strong in October. Bank lending is also picking up, as commercial and industrial loans have risen by 9.5 percent over the past year (through November). Overall, as suggested by robust gains in the Index of Leading Economic Indicators, the economy was exhibiting a healthy degree of forward momentum in the fourth quarter of 2011. According to the November projections of FOMC participants, most expect GDP to increase by about 2.7 percent in 2012, about one percentage point more than what the FOMC projected for 2011.

But there remain some areas of concern. First, growth of real after-tax income has weakened measurably over the past year. Consumers have reduced their saving to maintain their desired level of spending. At some point, though, real incomes will need to rebound or consumer spending will weaken. Second, financial stresses remain elevated and market volatility has increased. Such an environment tends to breed uncertainty, causing firms and investors to become extra cautious about making longer-term commitments. Finally, house prices remain under downward pressure. Until house prices stabilize, buyers and builders will remain exceedingly cautious, even though key measures of housing affordability remain near record-high levels. For these reasons and more, the FOMC projects that the unemployment rate will remain about 8.5 percent at the end of 2012.

Some Good Inflation News

After measuring about 5.25 percent in the first quarter of 2011, the inflation rate (as measured by the annual rate of change in the consumer price index, or CPI) has steadily retreated. By the third quarter, the CPI inflation rate had declined to about 3 percent. Price pressures eased further in October because of falling energy prices and a sharply slower rate of increase in food prices.

As yet, neither forecasters nor financial markets seem too worried about inflation getting out of hand. At the end of November, market-based measures of inflation expectations over the next five and 10 years remained below 2 percent—roughly the same levels as a year earlier. For 2012, the FOMC expects that inflation, as measured by the change in the personal consumption expenditures (PCE) price index, will be between 1.5 percent and 2 percent. Ω

Kevin L. Kliesen is an economist at the Federal Reserve Bank of St. Louis. See http://research.stlouisfed.org/econ/kliesen/ for more on his work.

ASK AN ECONOMIST

Fernando Martin is an economist in the Research division. He joined the St. Louis Fed in August after teaching at Simon Fraser University in Canada for six years. He is a graduate of the Universidad Torcuato di Tella in Argentina and the University of Pennsylvania, from which he received his Ph.D. in economics. His research interests are macroeconomics, monetary economics and dynamic contracts. He is married and, in his spare time, plays guitar and other instruments, sings, and records his music in his home studio. He is a fan of science fiction, Japanese anime and anything computer-related. To read more of his work, see http://research.stlouisfed.org/econ/martin/

Q. Are fiscal and monetary policies interdependent?

Yes, indeed they are. Some of the key insights in our understanding of the link between fiscal and monetary policies were articulated in an influential 1981 paper by Thomas Sargent, an economist at NYU and 2011 Nobel laureate, and by Neil Wallace, an economist at Penn State.

Arguably, one of the main roles of any central bank (e.g., the Federal Reserve) is to manage the inflation rate. Inflation erodes the real value of nominal assets and is, therefore, costly to society. However, when a government issues bonds in its own currency, inflation alleviates the financial burden of inherited debt. Thus, central banks have a natural incentive to finance past deficits by using inflation to reduce the real value of government debt.

When a fiscal authority (e.g., the Treasury Department) evaluates how to finance its obligations with taxes and debt, it takes into account its expectations about future monetary policy. In particular, issuing more debt today may induce the central bank to increase inflation tomorrow, which would make the new debt less financially burdensome. This bias toward deficit financing is mitigated (and even overcome) by the fact that higher expected inflation translates into lower demand for bonds and, thus, higher interest rates.

There are episodes that highlight this interaction. During World War II, the U.S. federal debt climbed to about 100 percent of output. What followed was a period (1946-1948) of significant inflation. Lee Ohanian, an economist at UCLA, estimates that the reduction of the real value of debt due to the increase in prices was equivalent to a repudiation of debt worth 40 percent of GNP.

Various institutions have been developed in order to mitigate the incentives to use inflation as a means to finance current and/or past deficits. More and more central banks are endowed with explicit low-inflation objectives and are sheltered from political influence. In addition, central banks are usually prohibited from directly financing deficits—a lesson learned from numerous hyperinflation episodes. Fiscal authorities can also help in disciplining monetary policy. For example, starting in 1997, the U.S. Treasury has been issuing Treasury Inflation-Protected Securities (TIPS). As of October 2011, these inflation-indexed bonds accounted for about 7 percent of the total federal debt held by the public.

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Sargent, Thomas J.; and Wallace, Neil. "Some Unpleasant Monetarist Arithmetic," *Quarterly Review*, Federal Reserve Bank of Minneapolis, Fall 1981.

Submit your question in a letter to the editor. (See instructions at right.) One question will be answered by the appropriate economist in each issue.

LETTERS TO THE EDITOR

This is in response to an article headlined "Is Shadow Banking Really Banking?" This article appeared in the October 2011 issue.

Dear Editor:
Excellent survey of securitization. However, if you didn't know that there had been a major financial and economic crisis, you'd never find out from this article. Will there be a sequel that picks up where this one leaves off and explains the severity of the crisis and offers remedies? Last, maybe this isn't a contradiction, just a difference of opinion that isn't reconciled. 1. "Economist Gary Gorton argued in a book last year that deregulation and increased competition in banking rendered the traditional model of banking unprofitable." 2. "In summary, the shadow banking system can be viewed as a parallel system—one that is a complement to and not a substitute for traditional banking."

Richard Cohen, assistant professor of finance at the University of Alaska at Anchorage

This is in response to an article that appeared more than 11 years ago in *The Regional Economist*. The article was headlined "Is Federal Home Loan Bank Funding a Risky Business for the FDIC?" and was published in the October 2000 issue. The letter writer said he had come across this article while researching a related topic. He was prompted to comment on the article because he believes it contains food for thought for today's policymakers.

Dear Editor:
"In short, access to FHLB funding enables community banks to take risk without paying a price. And an increase in risk today makes it more likely that the FDIC will have to close the bank tomorrow." The price they are paying whether they are relatively a greater or smaller risk is that they have to pledge collateral that cannot be used in other ways. Albeit, I liked the points about the disconnect between risk and reward that have become integrated into the financial system due to the FHLB. It's an unintended consequence of trying to lend to good credit when there's no money left. Perhaps, we need to pare down the leverage some more. Almost 12 years later and this article still has serious value for policy discussion.

Aaron Freed, risk analyst in the banking industry in Cincinnati, Ohio

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The three sessions were:

Lessons Learned from the Financial Crisis
Julie Stackhouse, senior vice president of Banking Supervision and Regulation

Bringing the Federal Deficit under Control
William R. Emmons, economist and assistant vice president

Understanding the Unemployment Picture
Christopher Waller, senior vice president and director of Research

Videos of these presentations are available on our web site. PowerPoints are available, too. Go to **www.stlouisfed.org/dialogue** to get started.

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