THE REGIONAL ECONOMIST

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THE FEDERAL RESERVE BANK OF ST. LOUIS

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Collapse in Trade

Tariffs, Quotas and the Like Aren't To Blame This Time

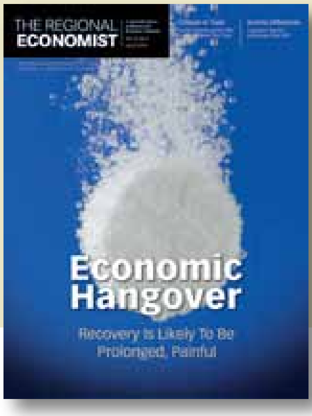
Income Differences

Countries' Barriers to Business Take Toll

Economic Hangover

Recovery Is Likely To Be Prolonged, Painful

C O N T E N T S



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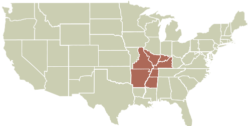

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James Bullard, President and CEO
Federal Reserve Bank of St. Louis

The Fed: A Central Bank with a Regional Structure

Urban vs. rural. East Coast vs. the rest of the country. Big bankers and big business vs. everyone else. More vs. less government control.

Familiar as these controversies may seem, they aren't references to the battles of today but to the forces that were at play a century ago in the years immediately preceding the founding of the Federal Reserve System.

By the time the Banking Panic of 1907 struck, the country had been without a central bank for 70 years. The first two central banks (the First and Second Banks of the United States, 1791-1811 and 1817-1837) were each shut down after two decades, in part because most of the country was hostile toward a centralization and concentration of banking power. But after a succession of bank runs, credit shortages and financial crises, by the early 20th century most people recognized that an overhaul of the banking and monetary system was needed. Wall Street bankers wanted a more efficient system—a private central bank that they controlled. Those outside the power centers of New York and Washington wanted a structure that would meet the needs of all regions of the country; many of these people felt that bankers—especially big city bankers—served primarily the wealthy. This group also wanted at least some public oversight in the system.

The need for reform was basic: The supplies of currency and bank loans were inflexible, tied more to the nation's gold reserves and supply of government debt than to the needs of business and agriculture. This "inelastic currency" led to high interest rates and tight credit when demand for money was high and couldn't be met—for example, at harvest time. Although banks held reserves in about 50 cities, the largest volume was kept in New York. Hence, sharp increases in the demand for money around the country created major liquidity problems for banks in New York, at the nation's financial center. Financial crises provoked suspension of payments and significant recessions.

In the wake of the 1907 Panic and resulting recession, Congress set up the National Monetary Commission to study central banks and banking in other countries and propose a structure for the United States. Three years later, the commission presented the Aldrich Plan, named for its chairman, Sen. Nelson Aldrich, R-R.I. The most powerful senator of his day, he was viewed as a stand-in for the banking and business elite of the East. His plan called for one central institution with branches across the country. Control would rest with a board dominated by bankers. Unlike the First Bank and Second Bank of the United States, the government would have no financial stake in this proposed structure.

Aldrich's timing couldn't have been worse. His party had just lost control of Congress, thanks to the growing popularity of the Progressive movement. Like the populists of the previous century, the progressives were wary of the concentration of economic and political power. They fought the monopolization of key industries, which usually was assisted by powerful bankers. Although progressives supported banking reform, they advocated some controls by the government to protect society at large, and they insisted on a structure that allowed the varying credit needs of the different parts of the country to be met.

The election of Democrat Woodrow Wilson to the presidency in 1912 killed Aldrich's plan. Wilson opposed the creation of a central bank and had railed in his campaign against "the money monopoly." Wilson's advisers presented an alternative plan: about 20 private, locally controlled regional reserve banks. They would not only hold the reserves of their member banks so that the money was close at hand when needed locally, but would meet member banks' other currency and credit needs. Eventually, the plan also called for the reserve banks to supervise those member banks, issue currency against commercial assets and gold, and perform other central banking functions. Wilson approved of the plan but, reflecting the progressives' desire for some government oversight, proposed a central board of government appointees in Washington to control and coordinate the work of the regional banks. (At its inception, this board was relatively weak—and certainly not as powerful as it exists today.) In a nod to bankers, Wilson proposed the Federal Advisory Council; each regional bank would elect one banker to serve on this council and meet occasionally with the central board.

Though wrangling continued over the number of regional reserve banks (the final number was 12) and their locations, Wilson's plan was, for the most part, what was passed by Congress in 1913. Although the structure took many turns in subsequent years, the Federal Reserve System was born—and still stands—as a central bank with a decentralized structure, one with regional representation, but public oversight—a classic example of checks and balances in U.S. democracy.

Economic Hangover

Recovery Is Likely To Be Prolonged, Painful

By Bill Emmons

The global financial crisis and the Great Recession of 2008-09 marked the end of a decade that seemed too good to be true for many Americans. After escaping the Asian financial crisis of 1997-98 relatively unscathed, the U.S. economy experienced historic booms in stock markets, housing markets and credit markets. Huge increases in households' wealth and borrowing, in turn, supported robust consumer-spending growth and housing investment despite moderate growth of income for most. To be sure, many Americans were excluded from the good times, but many broad-based measures of economic welfare—such as the unemployment rate, consumer-spending growth, access to credit and the homeownership rate—rivaled or attained their best levels ever.

This "dream world" of rising wealth and material well-being became a nightmare in 2008. The value of stocks, nonfederal bonds and houses plunged; credit became unavailable to many, while mortgage foreclosures soared; and the global economy sank into a deep recession. Meanwhile, most of an enormous increase in household debt accumulated during the free-spending decade remained in place, and government borrowing exploded.

Were the recent financial crisis and the ensuing severe recession merely "bad luck" that we might have avoided if we had, for example, cracked down on subprime mortgage lending much earlier? Or was the bursting of stock-market, housing and credit bubbles inevitable, sooner or later? The answers to these questions are important for gauging the future of the U.S. economy. If we simply were sidetracked by the financial crisis and recession, then we can expect eventually to resume many of the trends and features of the pre-2007 economy. If, on the other hand, the 1998-2007 decade itself was an anomaly, the crisis may, in fact, signal a necessary transition—albeit a painful one—to a less free-spending but more sustainable trajectory for the U.S. economy.

This article is divided into two main parts. The first takes a look back at the decade preceding the financial crisis to understand why the downturn was so severe. In retrospect, it appears that some sort of "course correction" was inevitable. The U.S. economy had become dangerously dependent on consumer borrowing and spending, which, in turn, depended to a large degree on rapidly rising house prices. At the same time, many other countries had developed their own dependence on exporting to the United States. To keep export growth high, these nations increasingly relied on a type of vendor financing—that is, they lent us the money to buy their exports. The financial crisis marked the end of this uneasy equilibrium. When house prices stopped rising, millions of American households no longer could support the debt they had taken on that allowed them to spend more than their incomes on housing, services and durable goods—a large portion of which came from overseas. The second part of the article looks forward. While it's always difficult to forecast the future, three possible scenarios for the economy are examined. Nothing about the future economy is certain, but we are likely to face a prolonged and painful period of adjustment.

ILLUSTRATION BY NIGEL BUCHANAN

Part I: The Past

A Decade of Credit-Fueled Growth in Household Spending

U.S. household spending grew considerably faster during the 1997-2007 decade than personal income. Figure 1 shows that per-person expenditures on goods and services grew about 29 percent in inflation-adjusted terms between 1997 and 2007, while per-person after-tax income grew only about 25 percent. Per-person inflation-adjusted gross domestic product (GDP) grew only about 22 percent.[1]

The result of spending growth exceeding income growth is a falling saving rate, whether for an individual family or for the nation as a whole. Figure 2 shows that the U.S. household saving rate fell from about 5 percent during 1997-98 (already a historically low level) to about 2 percent during

continued on Page 6

Part II: The Future

The Uncertain Outlook

Given the large role of household spending on goods, services and housing in the American and, indeed, the global economy during recent years, newly frugal consumers are likely to keep economic growth rates subdued for some time. In view of American households' historically high debt burden and the potential for negative feedback effects on income growth itself, a protracted, years-long period of painful adjustment appears likely.

Is there any escape from this scenario of growth-inhibiting household deleveraging? Perhaps, but it will require significant changes in consumer behavior and national economic policies. In broad outline, American consumers must durably raise their saving rates and the federal government must come much closer to balancing its budget on a consistent basis even in the face of looming deficits of unprecedented size. Other countries must stimulate domestic spending and reduce their large trade surpluses, which result in large capital exports to the United States and other countries.

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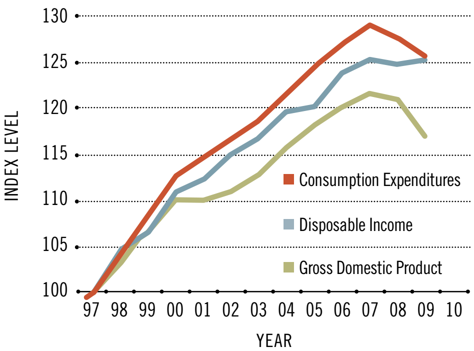
FIGURE 1

Spending Outpaces Income

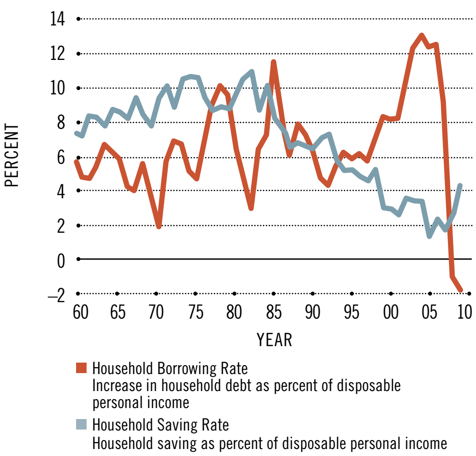
INFLATION-ADJUSTED, PER PERSON



NOTE: The average value of each series during 1997 is set equal to 100. Data are annual through 2009.
SOURCE: Bureau of Economic Analysis

FIGURE 2

Borrowing and Saving



NOTE: Data are annual through 2009.
SOURCES: Federal Reserve Board and Bureau of Economic Analysis

Part I: The Past
continued from Page 5

2005-07. The figure also shows that the U.S. household borrowing rate—defined as the annual increase in the amount of household debt outstanding as a percent of disposable income—was very high during the decade.

The period 1997-2007, thus, was a decade of rising household debt. Figure 3 shows the increase in household indebtedness after 1997 relative to the increase in household income. Inflation-adjusted per-person debt increased more than 80 percent between 1997 and 2007, the largest increase over a 10-year span since the 1960s. The lion's share of household borrowing during the decade was secured against owner-occupied housing—that is, in the form of mortgage debt. The amount of inflation-adjusted mortgage debt outstanding per person nearly doubled between 1997 and 2007, while the value of household real estate grew a bit less than 90 percent through 2007.

Aggressive mortgage borrowing might have seemed like a good idea as long as housing and other asset values were rising. Now that housing values have declined sharply in many parts of the country, the inherent risk of leverage has been exposed. Debt magnifies both the gains and losses on the asset being financed. The 65 percent of U.S. home-owning households that have any mortgage debt together appear to have lost virtually all of their homeowners' equity between early 2006 and early 2009, almost $6 trillion (Figure 4). Compounded by rising unemployment, the loss of homeowners' equity has been a major factor driving mortgage-foreclosure rates to historic highs.[2]

A Growing but Unbalanced U.S. Economy

Although overall U.S. economic growth during the decade through 2007 averaged about 3 percent annually, just as it had during the previous 10 years, the composition and financing of U.S. growth were quite different across the two decades. The economy after 1997 became dominated by consumer and government spending at the expense of business investment and exports, while the domestic investment that took place was skewed toward residential building and increasingly relied on funds provided by foreign investors in the U.S.

The Composition of U.S. GDP Growth

While consumer spending accounted for about 65 percent of economic growth during the 1988-1997 decade, it constituted 82.5 percent of growth during the 1998-2007 decade (Table 1). Government spending on goods and services contributed a further 14 percent to economic growth during the later decade, compared with only 7 percent during the earlier decade. Thus, consumer and government spending together accounted for 72 percent of GDP growth during the 1988-97 decade, but 96 percent during the 1998-2007 decade.

Compared with the longer U.S. post-World War II history, the composition of GDP growth during 1998-2007 also was unusual. Consumer and government spending together constituted about 81 percent of GDP growth during the 1950-87 period, while business investment and net exports together accounted for about 11 percent. The corresponding figures of 96 and 3 percent, respectively, for the 1998-2007 period betray a significant shift toward consumer and government spending at the expense of business investment and net exports.

The Financing of U.S. Investment

Another way to look at the economy is to see how its investment is financed. Any nation has two sources of funds for investment—domestic saving and borrowing from abroad. Because the household sector is such a large part of the U.S. economy, it should come as no surprise that the declining household saving rate during the 1997-2007 decade was echoed by a shift toward foreign borrowing by the nation as a whole. As shown in Table 1, the U.S. trade deficit increased sharply after 1997. This implies, as a matter of accounting, that the U.S. greatly increased its borrowing from foreigners. U.S. net borrowing from abroad exceeded 4 percent of GDP each year from 2000 through 2008 (with the exception of 2001, at 3.9 percent), a level not previously exceeded since the early part of the 20th century.

TABLE 1

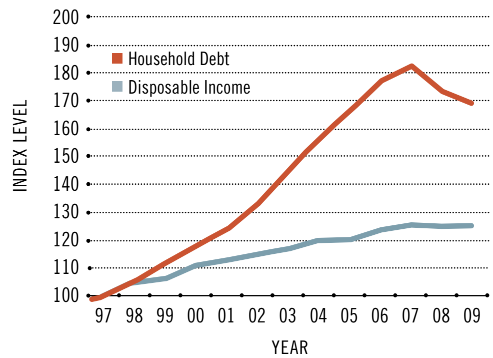
COMPOSITION OF U.S. GDP GROWTH							
	Average annual real GDP growth (% change from previous year)	Contribution of personal consumption expenditures (PCE; % of GDP growth)	Contribution of government spending (G; % of GDP growth)	Sum of contributions of PCE and G (% of GDP growth)	Contribution of business investment (I; % of GDP growth)	Contribution of net exports (NX; % of GDP growth	Sum of contributions of I and NX (% of GDP growth)
1950-1987	3.72	63.4	18.8	81.2	13.0	–2.1	10.9
1988-1997	3.05	64.9	7.4	72.3	20.1	3.3	23.4
1998-2007	3.02	82.5	13.9	96.4	18.1	–15.5	2.6

SOURCE: Bureau of Economic Analysis

FIGURE 3

Debt and Income

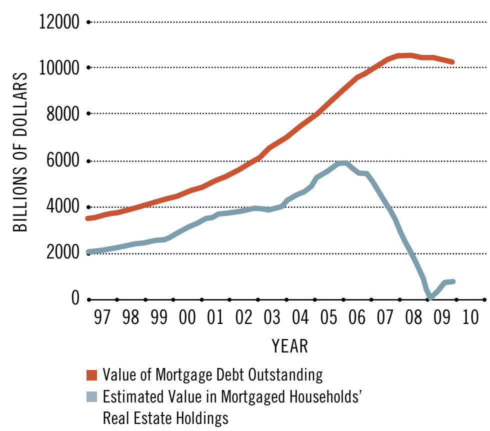
INFLATION-ADJUSTED, PER PERSON



NOTE: Data are annual through 2009.
Average level in 1997 equals 100.
SOURCES: Federal Reserve Board and Bureau of Economic Analysis

FIGURE 4

Mortgage Debt and Homeowners' Equity



NOTE: Data are quarterly through Q4.2009.
SOURCES: Federal Reserve Board and author's estimates.

Is Unbalanced Growth Better than No Growth at All?

While the trends just described were visible at the time, many commentators dismissed them as harmless or, indeed, beneficial aspects of an increasingly globalized world economy. Their argument was seductively simple: Just as individuals and nations specialize in activities they do best and trade with others to increase the welfare of all, perhaps the globalization of goods, services and capital markets would allow the United States to concentrate on what it did best and then trade with others that specialized differently.

The obvious flaw in this argument is that what the U.S. appeared to do best on a large scale—consumer spending, homebuilding, borrowing and the provision of sophisticated financial services, such as mortgage securitization—did not result in a stable, let alone balanced, international trade position or a stable saving rate. In fact, the U.S. trade deficit—more precisely, the current-account deficit—doubled as a percent of GDP between 1997 and 1999, then nearly doubled again by 2006. Had this trend continued, financing our burgeoning trade deficit would have become increasingly difficult. At the same time, the household (and national) saving rate was falling persistently—which it could not do forever. It now appears that, by 1997 or 1998 at the latest, the U.S. economy had embarked on a path of unbalanced growth. Sooner or later, a major course correction was inevitable.

As it turned out, some of the rebalancing had begun before the financial crisis and recession hit. In particular, house prices stopped rising in about 2006. Increasing numbers of households defaulted on their unsupportable debts, a fate merely postponed by rising house prices during the preceding years. As mortgage defaults and market-value losses on mortgage-backed securities rippled through the financial system, the economy itself began to slow sharply. The severe financial and economic shocks of 2008 and 2009 were the ultimate result and have accelerated the reversal of the trends in place for a decade.

Global Imbalances—Part of the Solution or the Problem?

Just as the U.S. economy evolved in an unbalanced and historically unusual way after the Asian crisis of 1997-98, unusual international developments were taking place. Average rates of U.S. and world economic growth were healthy during the 1997-2007 decade, but individual economies diverged markedly in how they grew. Consumer spending, housing investment and government spending took on increasing importance in the United States and in some other high-income countries like the United Kingdom, while business investment and exports lagged. At the same time, many other countries—including both high-income and developing countries—were virtual mirror images of the U.S., increasing business investment and exports faster than consumer or government spending. The U.S. personal and national saving rates declined to historic lows, while these "mirror-image" countries experienced sharply higher saving rates.

To secure a more even pattern of investment around the world, the countries with a surplus of savings together lent hundreds of billions of dollars each year to the countries generating insufficient domestic savings to fund desired investment. By accounting necessity, these growing international capital flows were associated with offsetting imbalances in the trade accounts of the respective countries.

Countries in the first group incurred increasing deficits on their international current accounts, while countries in the second group accumulated large surpluses. The deficit countries—including the U.S., the U.K., Spain and a few others—had in common relatively sophisticated financial systems and relaxed attitudes toward borrowing. Surplus countries—including China, a number of other emerging-market countries, Japan, Germany and several oil-exporting countries—typically had less well-developed financial sectors and a less borrower-friendly climate. Some surplus countries also appeared to follow an "export-led growth strategy," defined by the International Monetary Fund (IMF) to include an undervalued exchange rate together with measures to compress domestic spending.[3] The result of these policies was to increase the country's trade surplus and, at the same time, increase its financial-account deficit (lending abroad). The emergence of large global imbalances during the decade after the Asian crisis has been studied in great detail, while their interpretation remains open to debate.[4]

Part II: The Future
continued from Page 5

The IMF and other analysts have outlined a number of scenarios for the world economy during the next few years.[5] The possibilities range from very good—an internationally coordinated restructuring of key economies—to very bad—a retreat into short-sighted, protectionist policies leading to a renewed global economic slump. Which outcome ultimately occurs depends on how private and public actors behave during the next few, critical months and years. Here are three broad scenarios, together with the policy actions that would make them possible.

The possibilities range from very good—an internationally coordinated restructuring of key economies—to very bad—a retreat into short-sighted, protectionist policies leading to a renewed global economic slump.

Scenario 1: Global Cooperation To Rebalance World Output and Demand

The most optimistic scenario entails wide-spread, simultaneous efforts by the leaders and ordinary citizens of many countries to refocus their economies on sustainable domestic production and consumption. In this context, sustainability refers to patterns of work, investment and spending that do not rely on persistent, large international transfers of economic and financial resources. Drawing an analogy to an individual household, the basic idea is that "profligate" consumers should plan to spend within their means without frequent recourse to borrowing, while "miserly" households should avoid accumulating excessive savings that are lent to others. At the national level, it implies that international trade and financial balances should not be far from zero in either direction over long periods of time.

Unfortunately, the U.S. has incurred very large trade deficits and corresponding financial surpluses (capital imports) for decades. Moreover, the imbalances grew sharply during the 1997-2007 decade. This pattern of increasingly unsustainable economic growth was an important contributor to the global economic and financial crisis that occurred because, ultimately, millions of American households buckled under excessive burdens of unsupported debt when house prices declined.

At the same time that many American households were digging themselves deeper into debt, there were offsetting imbalances building up in other countries. Given the interdependent nature of international trade and capital flows, it clearly would be best if coordinated behavior and policy changes could be undertaken in many or all of the affected countries.

A benign global rebalancing would see deficit countries, such as the United States, increase saving by households and the federal government, while increasing business investment and exports. At the same time, surplus countries such as China would expand social safety nets (to decrease households' need to save), improve corporate governance (to decrease hoarding of cash and wasteful overinvestment), and encourage consumer spending and imports. Other groups of surplus countries also could contribute meaningfully to global rebalancing. For example, oil-exporting countries could delink oil prices from the dollar, and the aging economies of Europe and Japan could take actions to raise their domestic growth potential.[6]

This benign-rebalancing scenario probably would be associated with weaker currency values in deficit countries and stronger currencies in surplus countries. Orderly exchange-rate changes can moderate the domestic adjustments needed in wages and prices to support changing trade patterns.

Scenario 2: Lack of Coordinated Policy Adjustments—Global Imbalances Return

Less-benign outcomes are possible, of course. Continued reliance on export-led growth strategies in major emerging markets and some large, advanced countries could frustrate attempts by the U.S. to shift its economy away from excessive consumer and government borrowing and spending and toward business investment and exports. Conversely, our trading partners could take positive steps that our own indifference or policy gridlock negated.

Suppose the U.S. unilaterally made a number of politically difficult policy choices that would support economic restructuring and global rebalancing. These might include reducing tax incentives that favor excessive housing investment, mortgage borrowing and health-care expenditures, as well as implementing a broad-based consumption tax designed to encourage saving over consumer spending. But if our trading partners did not simultaneously increase their willingness and ability to buy our exports, the result could be disastrous. A very weak U.S. economy could be crippled by an even more depressed housing market and a shrinking health-care sector, while export sectors showed negligible improvement over their growth baselines. The political response likely would be to reverse the reforms and expand bailout efforts. A return to low household and national saving, unbalanced domestic growth and global imbalances probably would follow.

Scenario 3: No Policy Adjustments and Premature Withdrawal of Macroeconomic Support—Global Slump Returns

A third possibility is that no progress toward economic restructuring of any kind is made, while policymakers in the United States and elsewhere misjudge the strength of economic recovery. If government policies that have resulted in large budget deficits and near-zero short-term interest rates—which probably kept the global economy out of a depression—are reversed abruptly and if private-sector spending slows unexpectedly, economies around the world could fall back into a slump as bad as or worse than the downturn experienced during 2008 and 2009. Under these circumstances of a "double-dip" global recession, renewed policy interventions might need to be even more drastic than during the first downturn. Further long-lasting economic damage in the form of long-term unemployment and financial defaults would occur.

Conclusion

Paying the Piper

With the benefit of hindsight, one can say we should have seen the financial crisis coming. Although some analysts pointed to unbalanced U.S. economic growth and growing global financial imbalances, few anticipated how rapid, severe and global the downturn would turn out to be.

Americans almost certainly will save more, spend in closer proportion to their income and increase their borrowing more slowly, or decrease it outright in the coming years. Said differently, a protracted period of household "deleveraging" appears likely. This will translate into relatively slow consumer spending and overall economic growth unless other sources of demand materialize. If economic growth remains weak, it will mean that house prices remain subdued, mortgage defaults remain high due to frequent instances of negative homeowners' equity and the average American household's financial situation improves only slowly.

One bitter lesson we have learned is that unbalanced growth, whether in one country or around the world, brings risks in its wake. Unless we are able to rebalance our own economy and, in cooperation with other major countries, do the same at the global level, we are likely to face a long period of slow and volatile economic recovery. Ω

Bill Emmons is an economist at the Federal Reserve Bank of St. Louis. For more on his work, see http://www.stlouisfed.org/banking/pdf/SPA/Emmons_vitae.pdf

ENDNOTES

1. Data from Bureau of Economic Analysis. An important reason why household after-tax income grew faster than GDP was that tax rates were reduced in the early 2000s. Thus, part of the growth in disposable household income during the decade represented a redistribution of national income, rather than genuine increases in output.
2. See Emmons. The aggregate value of homeowners' equity conceals a wide variety of individual situations. Many homeowners with mortgage debt have positive equity, while many others have negative equity. It is those with negative equity who are at greatest risk of default.
3. See Blanchard and Milesi-Ferretti.
4. See Bernanke and Blanchard and Milesi-Ferretti.
5. See Blanchard and Milesi-Ferretti.
6. Delinking oil prices from the dollar might divert some capital exports from oil exporting-nations into non-U.S. markets, resulting in less upward pressure on the dollar. Meanwhile, deregulating labor markets and service sectors in the aging nations of Europe and Japan could raise domestic growth potential and reduce trade surpluses.

REFERENCES

Bernanke. Ben S. "The Global Saving Glut and the Current Account Deficit." Homer Jones Lecture at the Federal Reserve Bank of St. Louis, April 14, 2005. See www.federalreserve.gov/boarddocs/speeches/2005/20050414/default.htm

Blanchard, Olivier; and Milesi-Ferretti, Gian-Maria. "Global Imbalances: In Midstream?" IMF Staff Position Note, Dec. 22, 2009, SPN/09/29.

Bucks, Brian K.; Kennickell, Arthur B.; Mach, Traci L.; and Moore, Kevin B. "Changes in U.S. Family Finances From 2004 to 2007: Evidence From the Survey of Consumer Finances." *Federal Reserve Bulletin*, February 2009, Vol. 95, No. 1, pp. A1-A55.

Emmons, William R. "Housing's Great Fall: Putting Household Balance Sheets Together Again." Federal Reserve Bank of St. Louis' *The Regional Economist*, October 2009, Vol. 17, No. 4, pp. 14-15.

The Trade Collapse: Lining Up the Suspects

By Silvio Contessi and Hoda El-Ghazaly

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Along with the spread of the financial crisis that began in 2007, the world experienced the largest recession since the Great Depression. According to the International Monetary Fund, world GDP fell by 0.8 percent in 2009, while advanced economies experienced a contraction of 3.2 percent, the largest decline in the past 50 years. Exports from the advanced economies fell even more, by a staggering 12.3 percent, about four times as much as the drop in GDP and approximately as much as exports to the advanced economies.

The figure shows the rate of growth of U.S. GDP, imports and exports, as well as a pattern that was common to many other countries during the crisis: The imports and exports of advanced, emerging and developing economies fell by similar percentages, ranging from a minimum of 11.7 percent to a maximum of 13.5 percent. Similarly, the rebound of U.S. trade flows that appears in the figure at the end of 2009 was observed in other countries.

The larger-than-expected drop in trade has puzzled economists and commentators throughout the current recession. A number of trade scholars are looking into potential culprits.

The suspect that can be easily discarded is trade restrictions. Unlike during other recessions and the Great Depression, countries have not used trade measures—such as tariffs, quotas or anti-dumping measures—during this recession to restrict imports. One reason is the World Trade Organization forbids these measures; another reason is we now understand that trade restrictions worsened the Great Depression.

The remaining causes for the plummet in exports are more difficult to discard: the collapse of trade finance, the increase in vertical specialization and the composition of trade flows. Traditional textbook analysis of trade dynamics during recessions attributes trade decline to lower demand for final good imports in the country experiencing a contraction. However, the changes in the way trade is financed and organized, along with a better understanding of the international economy, induced economists to focus on the three elements we discuss here.

First Suspect: Finance

Various studies have documented the importance of finance for international trade transactions, as financial institutions are key suppliers of services such as the evaluation of counterparty default risk and the provision of payment insurance and guarantees to exporters. Economist Marc Auboin estimated that about 90 percent of international trade transactions rely on one form or another of trade finance.

Therefore, the conjecture is that the credit crunch may have caused the large decline in world trade by reducing firms' access to finance. A study by economists Mary Amiti and David Weinstein has shown that a similar mechanism was at work during the Japanese crisis of the late 1990s and early 2000s. They found that lack of financing accounted for nearly one-third of the plunge in Japanese exports during the 1990s.

Fresh evidence for the current recession is hard to come by and to date exists only for exports to the U.S. Economists Davin Chor and Kalina Manova found that countries with tighter credit availability during the crisis exported less to the U.S. Moreover, exports to the U.S. contracted more in sectors that other research has shown to be more heavily dependent on extensive external financing. This early evidence suggests that the trade finance nexus seems to be one of the explanations of the trade contraction during the current crisis, at least for the U.S.

Second Suspect: Vertical Fragmentation

The second suspect is vertical fragmentation, a form of international trade that has been growing exponentially with the spread of globalization in the past 20 years. We normally think of international trade as being dominated by final goods, those that do not need further processing. On the contrary, the data show that international trade in industrialized countries is dominated by capital goods (such as machinery) and other types of intermediate goods (such as steel) that are normally used for the production of consumer goods. In the case of the U.S., these intermediate goods account for nearly three-fourths of total imports and exports.

As massive freighters have minimized the cost of transport, international sharing of production has increased. Goods are increasingly manufactured in stages in different countries. Before a product is completed and shipped to its final destination, its components have often crossed borders several times.

Consider the example of the iPhone. Its CPU and video processing are made in Singapore. Its digital camera, circuit boards and metal casings are made in Taiwan. Its touch-screen controllers are made in the U.S. From these countries, all components are then shipped and assembled in Shenzhen, China, before being delivered to final consumers in various countries. Complete iPhones arrive to American consumers after the phones' components have crossed at least four borders, including the U.S. border twice.

If the demand for final goods declines, the first effect is that the demand for intermediate goods suffers in each of the countries in which production takes place. At the same time, international trade also appears to suffer more than GDP because at each border crossing the full value of the partly assembled good is recorded as trade, while GDP measures only value added. In order to understand the difference, consider a simple good like a pencil, made of two components, wood and graphite, assembled using labor. When the pencil is produced entirely in the U.S., its contribution to U.S. GDP is the final price to consumers (say $1) net of the cost of its components (80 cents); therefore, 20 cents of value has been added. When the pencil is only assembled in the U.S. but its components are imported from Canada, for example, and demand for pencils in the U.S. falls by one unit, U.S. GDP falls by 20 cents, but U.S. imports from Canada fall by 80 cents, four times as much! This happens because GDP is a value-added measure while trade is a gross measure.

Economist Caroline Freund estimates that when world income increases by 1 percent these days, trade increases, on average, by 3.5 percent. In the 1960s, the impact of an equivalent change in income on trade was only 2 percent. This is likely related to the increase in vertical specialization. Various other economists have provided evidence that the recent decline in trade is stronger in sectors that make intense use of intermediate inputs.

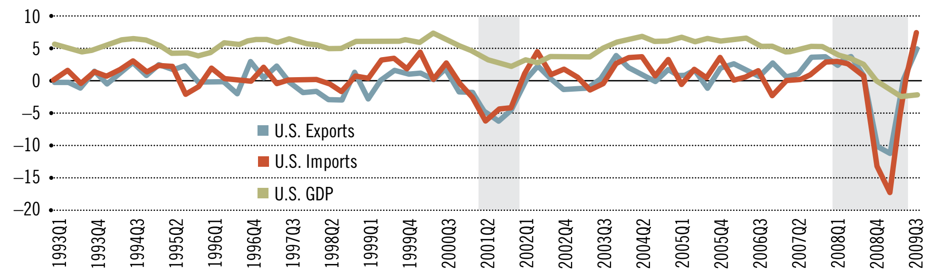
Third Suspect: Compositional Effect

During recessions, consumers and firms demand fewer goods; however, the decline in demand is less than equal across all industries because some sectors are more impacted than others. When households and firms adjust their spending downward, the demand for both domestic and imported goods falls. Now, if international trade is concentrated in the sectors that are most impacted by the negative economic shock, then overall trade should experience a greater fall than GDP. For example, consider the case in which overall U.S. GDP declines by 2 percent, but the agricultural component of GDP falls by, say, 7 percent. If trade is particularly concentrated in agriculture, then we would observe a drop in trade larger than the drop in overall GDP.

The composition of the decline in demand may affect the magnitude of the decline in trade simply because there may be more trade in the sectors that were hit the hardest. Economists Andrei Levchenko, Logan Lewis and Linda Tesar show that this is exactly what happened to the U.S. during the current recession; the largest declines in trade are recorded for those sectors that had the largest drops in output (industrial supplies and materials, computers, peripherals and parts, automotive vehicles, engines and parts). This may also explain why international trade in services other than finance, transport and tourism fell by much less than overall trade, as the service component of GDP fell much less than overall GDP during the crisis.

Growth Rates

PERCENT CHANGE YEAR-TO-YEAR



SOURCE: Authors' calculations based on data from the U.S. Census Bureau and the Bureau of Economic Analysis.

A One-Time Thing?

The international economy operates as a network in which the line between producer and consumer continues to zig-zag and blur. In such a world, it is key to recognize those factors that have the most influence on international trade. Economists have identified three main suspects as the leading causes of declining trade volumes during the current recession and, by lining up the suspects, they have been able to analyze the causes' individual contributions to the trade collapse, at least for the U.S. As new data from the current crisis become available, other countries will be studied in order to help us understand whether the large drop in trade is specific to this recession or will likely reappear in future recessions. In the meantime, most projections for this year indicate a recovery in world GDP (3.9 percent in the World Economic Outlook of the International Monetary Fund) and in world trade (a robust 5.8 percent increase). Ω

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REFERENCES

Auboin, Marc. "Boosting Trade Finance in Developing Countries: What Link with the WTO?" Working Paper ERSD-2007-04, World Trade Organization, November 2007.

Amiti, Mary; and Weinstein, David. "Exports and Financial Shocks." Working Paper 15556, National Bureau of Economic Research, December 2009.

Borchert, Ingo; and Mattoo, Aaditya. "The Crisis-Resilience of Services Trade." Working Paper 4917, the World Bank, April 2009.

Chor, Davin; and Manova, Kalina. "Off the Cliff and Back: Credit Conditions and International Trade during the Global Financial Crisis." Stanford University Manuscript, December 2009.

Coughlin, Cletus. "World Trade: Pirated by the Downturn." Federal Reserve Bank of St. Louis *International Economic Trends*, August 2009.

Economist, The. "The Collapse of Manufacturing." Feb. 21-27, 2009, p. 9.

Freund, Caroline. "Demystifying the Collapse in Trade." VoxEU.org, July 3, 2009. See www.voxeu.org/index.php?q=node/3731

Levchenko, Andrei; Lewis, Logan; and Tesar, Linda. "The Collapse of U.S. Trade: In Search of the Smoking Gun." *VoxEU.org*, November 27, 2009. See www.voxeu.org/index.php?q=node/4280

World Trade Organization. "WTO Sees 9% Global Trade Decline in 2009 as Recession Strikes." (Press release from March 24, 2009.) See www.wto.org/english/news_e/pres09_e/pr554_e.htm

Yi, Kei-Mu. "The Collapse of Global Trade: The Role of Vertical Specialisation," in Richard Baldwin and Simon Evenett, eds., *The Collapse of Global Trade, Murky Protectionism, and the Crisis: Recommendations for the G20*. Pp. 45-48. An e-book from VoxEU.org, March 2009. See www.voxeu.org/reports/Murky_Protectionism.pdf

ncome Differences around Globe Go Beyond Physical, Human Capital

By Riccardo DiCecio

Compared with income inequality in the United States, differences in living standards worldwide are staggering. In 2000, real gross state product (GSP) per worker for Connecticut was approximately $92,000; this is almost 90 percent larger than in Mississippi, where the total was nearly $49,000.[1] In contrast, while real gross domestic product (GDP) per worker totaled almost $1,000 in Burundi in 2000, it exceeded $100,000 in Luxembourg.[2] How such large differences in GDP per worker can persist in an increasingly global world is one of the key questions in economics.

Some factors behind the persistent disparity in income per worker are obvious. There are large differences across countries in the amount (and quality) of factories and equipment available for production (that is, physical capital) and in workers' stock of knowledge and ability (that is, human capital). Physical and human capital, however, do not completely determine output per worker. In fact, large portions of the differences in income per worker between nations cannot be explained by the accumulation of either kind of capital alone. For instance, output per worker in Mexico is seven times that of China even though concentrations of physical and human capital are quite similar.[3] Income differences that cannot be explained by differences in physical and human capital are attributed to *total factor productivity* (TFP).

Explaining Productivity

Productivity plays an important role in determining output. First, increases in productivity stimulate output for fixed levels of inputs by allowing for more efficient use of resources. Moreover, there is a strong relationship between productivity and human and physical capital. Higher productivity leads to more investment, further increasing output. Because of the key role of productivity in determining output, understanding why productivity differs across countries is important for understanding global income-per-worker disparities.

The most productive nations share characteristics such as strong property rights, government transparency, limited corruption and limited barriers to entry. These forms of *social infrastructure* ensure that private investment and innovation are properly rewarded and that productive inputs are effectively used.

The effect of barriers to entry on productivity has received much attention in the economics literature. Ease of entry for new business fosters competition and, thus, encourages productivity. Where it is easier for new businesses to develop, established firms must constantly consider the threat of new competition, which increases productivity. Furthermore, it is crucial that capital and labor are allocated to their most productive use. For example, a 2009 study finds that reallocating productive factors (capital and labor) across firms such that their marginal products[4] equal those in the United States would lead to TFP gains of 40-60 percent in India and 30-50 percent in China in the manufacturing sector.[5]

Recent research has focused on the causes of misallocation of productive factors across firms/sectors and on the causes of distortions in industry structure. Two causes—financial constraints and the costs associated with regulation compliance—are discussed in the following sections. While earlier studies used statistical techniques to analyze the determinants of TFP, the more recent studies summarized below rely on detailed economic models of firms' entry, operation and exit decisions.

Starting a New Business: Financial Constraints

A poorly developed financial sector may hinder the creation of new businesses in some nations. In the developed world, credit is a part of everyday life. New business owners gain use of equipment and floor space that they cannot afford with cash because banks reasonably assume that people are willing and able to pay off debt. Elsewhere, however, microfinance loans totaling mere hundreds of dollars are viewed as rare and exciting business opportunities.

A 2009 study presents a model where borrowing constraints distort the number of firms, the allocation of entrepreneurial talent and the allocation of capital across firms.[6] The ability to pay for fixed operating costs depends on an individual's wealth and not on her entrepreneurial ability: Talented-but-poor individuals are inefficiently excluded from starting a business. Consistent with the data, the model predicts that high fixed costs result in sectors with fewer entrepreneurs (and establishments) than desired. Moreover, the establishments tend to be larger than the optimal establishment size. As a result, the least financially developed countries have TFP that is more than 40 percent lower than in the United States. Differences in financial development can explain 80 percent of the differences in income per capita between Mexico and the United States.

Starting a New Business: Regulations and Entry Costs

Some barriers to entry are the direct result of government policy. From nation to nation, there are great differences in the obstacles entrepreneurs must endure before starting a new business. The World Bank's *Doing Business* survey finds it hardest to establish a new business in Guinea-Bissau, where entrepreneurs face 16 procedures, 213 days of waiting and fees totaling 323 percent of income per capita. In contrast, New Zealand's entrepreneurs can open shop after completing one procedure, waiting one day and paying fees totaling less than 1 percent of income per capita. Policy in the United States is also fairly encouraging. New businesses can begin after an average of six procedures, a six-day wait and paying fees less than 1 percent of income per capita. Although some barriers to entry will be present everywhere, regulatory barriers specifically differ between nations and play an important role in determining nations' productivity and output.

One convenient measure of entry barriers is the legal fees associated with starting a new business. The influence of these entry costs, measured as a percent of GDP per capita, has been proven to be substantial in the literature. A recent study finds that an 80 percent (of per capita GDP) increase in these entry costs causes a 22 percent reduction in TFP and a 29 percent reduction in GDP per worker.[7]

Current research finds further support for the importance of entry barriers, by focusing on a broader measure of entry costs which includes nonregulatory costs—for example, sunk investment, technology acquisition and advertising.[8] A higher entry cost implies that fewer entrants are willing to pay it, scaring away entrepreneurs who could potentially be highly productive. What's left is a pool of producers sullied by low-productivity firms. As a result, firms' average productivity and TFP are low.

The total effect of entry barriers on productivity is profound. For example, TFP declines by 0.14 percent for each 1 percent increase in entry costs. This relationship—along with the large variation in entry costs—leads to large differences in economic outcomes across countries. In the model created by this author and fellow economist Levon Barseghyan, TFP is 35 percent higher and output per worker is 57 percent higher, on average, in countries with low entry costs than in countries with high entry costs.

Although high entry costs discourage the creation of legitimate businesses, they encourage the creation of illegitimate ones—that is, businesses concealed from public authorities to avoid paying taxes and complying with regulations. The creation of a separate "shadow economy" provides some relief to entrepreneurs, but it hurts the nation as a whole. Firms in the informal sector are smaller and less productive than small legally operating firms.[9] By discouraging new legitimate businesses and encouraging a larger shadow economy, high regulatory barriers to entry lead to an economy populated by a few inefficiently large legal firms and many inefficiently small firms in the informal economy. Ω

Although high entry costs discourage the creation of legitimate businesses, they encourage the creation of illegitimate ones—that is, businesses concealed from public authorities to avoid paying taxes and complying with regulations.

Riccardo DiCecio is an economist at the Federal Reserve Bank of St. Louis. See http://research.stlouisfed.org/econ/dicecio/index.html for more on his work.

ENDNOTES

1. These figures are calculated by dividing the 2000 real GSP (Bureau of Economic Analysis) by the labor force (Bureau of Labor Statistics).
2. See Heston, Summers and Aten. The figures reported are real GDP per worker (in international dollars, 1996 constant prices).
3. See Hall and Jones.
4. The marginal product of a productive factor is the extra quantity of output obtained by using one extra unit of that factor while keeping the other productive factors constant.
5. See Hsieh and Klenow.
6. See Buera, Kaboski and Shin.
7. See Barseghyan.
8. See Barseghyan and DiCecio.
9. See La Porta and Shleifer.

REFERENCES

Barseghyan, Levon. "Entry Costs and Cross-country Differences in Productivity and Output." *Journal of Economic Growth,* June 2008, Vol. 13, No. 2, pp. 145-67.

Barseghyan, Levon; and DiCecio, Riccardo. "Entry Costs, Industry Structure, and Cross-Country Income and TFP Differences." Federal Reserve Bank of St. Louis Working Paper 2009-005B, January 2010.

Buera, Francisco J.; Kaboski, Joseph; and Shin, Yongseok. "Finance and Development: A Tale of Two Sectors." National Bureau of Economic Research Working Paper 14914, April 2009.

Hall, Robert E.; and Jones, Charles I. "Why Do Some Countries Produce So Much More Output Per Worker Than Others?" *Quarterly Journal of Economics*, February 1999, Vol. 114, No. 1, pp. 83-116.

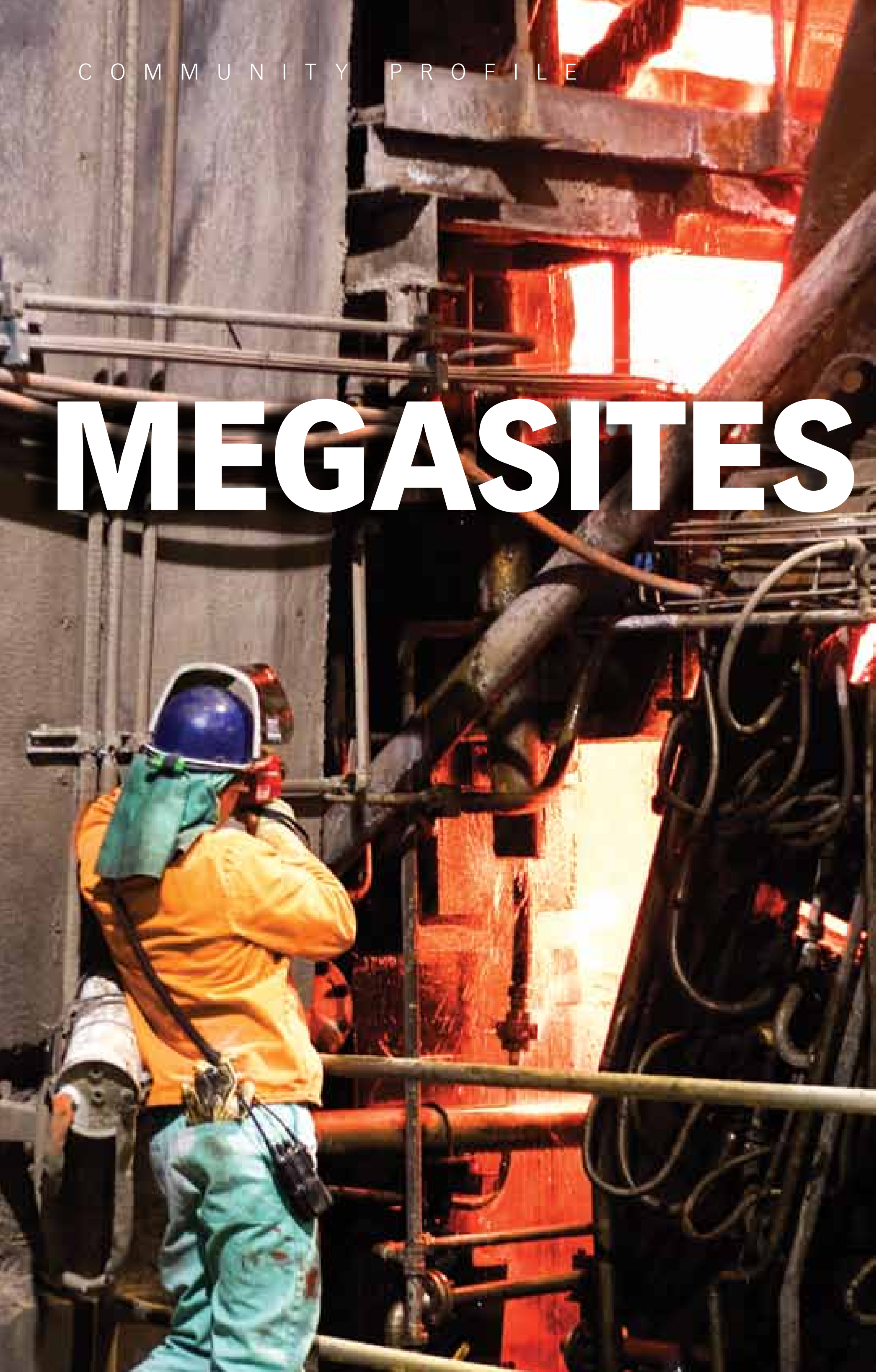
Heston, Alan; Summers, Robert; and Aten, Bettina. "Penn World Table Version 6.1." Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, October 2002.

Hsieh, Chang-Tai; and Klenow, Peter J. "Misallocation and Manufacturing TFP in China and India." *Quarterly Journal of Economics,* November 2009, Vol. 124, No. 4, pp. 1,403-48.

Klenow, Peter J.; and Rodríguez-Clare, Andrés. "Externalities and Growth," in Philippe Aghion and Steven N. Durlauf, eds., Handbook of Economic Growth, Volume 1A. Amsterdam: Elsevier Science, 2005.

La Porta, Rafael; and Shleifer, Andrei. "The Unofficial Economy and Economic Development." Brookings Papers on Economic Activity, Fall 2008, pp. 275-352.

World Bank. Doing Business 2010—Reforming through Difficult Times. Washington, D.C.: Palgrave Macmillan/World Bank, 2009.



MEGASITES Spur Big Turnaround for Mississippi Region

By Susan C. Thomson

Columbus, Miss., anchor of northeastern Mississippi's "golden triangle" area, has always turned heads, if only for its dozens of well-kept antebellum and Victorian homes. Now, the city's once rundown downtown also catches eyes, what with its colorfully refurbished facades on new shops, restaurants and upper-level apartments. Small wonder, then, that Columbus earned a Preserve America award from the federal government in 2005 and a place on the National Trust for Historic Preservation's annual Dozen Distinctive Destinations list in 2008.

Meantime, surrounding Lowndes County as a whole has been grabbing attention for a different kind of renaissance—industrial and grand-scale. The

The Russian-owned Severstal plant was one of the first tenants on the TVA-anointed megasite next to the airport. By the end of this year, the plant will have the capacity to make 3.4 million tons of rolled steel a year. The insert shows the exterior of the plant; when it was being built, it was the largest industrial project in the nation.

LARGE PHOTO BY SUSAN C. THOMSON

Columbus-Lowndes Development Link, a combination chamber of commerce and economic development agency, calculates that the county has gained $3.5 billion in new business investment and 3,734 new jobs since 2003. Most of this has happened around the Golden Triangle Regional Airport, its name taken from the way Columbus and nearby Starkville and West Point have together defined themselves for decades.

"The main thing that happened that changed this community was megasites," says Joe Max Higgins, the Link's hard-driving, plain-speaking chief executive.

The Tennessee Valley Authority coined the term in 2004 for sites in the TVA region that could be deemed worthy of large-scale development—1,000 acres in size, environmentally clean, and accessible to transportation and utilities, among other criteria.

Higgins and his staff hopped on the opportunity, hurrying together an application—a foot-high stack of papers—for a 1,400-acre plot aside the airport. It became one of the first two certified by the TVA's independent megasite consultant. Five months later, a new steel-making venture spoke for it.

At a proposed 1.2 million square feet and an initial investment of $625 million, the SeverCorr plant, a joint U.S.-Russian startup, was the largest industrial project under construction in the nation at the time, according to the Mississippi Development Authority. Lowndes County and the state of Mississippi went together—and to great lengths—to secure it.

From the state, the company got a $25 million grant and $10 million loan for infrastructure plus a bunch of tax credits and breaks on sales taxes and other state taxes. The county contributed the land, a $5 million infrastructure grant and a cut of about 40 percent on real estate taxes. Together, the incentives were worth about $100 million.

Of eight eventual megasites, Lowndes County won two, the second consisting of 1,800 acres on the airport's other side. Paccar, of Bellevue, Wash., asked for a piece of it, proposing a $400 million, 420,000-square-foot plant to make diesel engines for the company's Kenworth and Peterbilt trucks. Once again, the county and state teamed to cobble together a package of loans, grants and tax favors, with a total value this time of $40 million.

SeverCorr, which changed its name to Severstal after its Russian partner became sole owner, began production in 2007 and is now doubling its capacity to 3.4 million tons of rolled steel a year in a final construction phase. When the project is completed at the end of the year, the company projects it will have 650 employees—50 more than it promised the state in return for its concessions—and a total start-to-finish investment of $1.4 billion in the plant.

Paccar, after a year's delay due to the recession, is gearing up to open later this year with 250 employees and a commitment to the state for 250 more by 2013.

Severstal and Paccar have only been the biggest deals among many that together have transformed Lowndes County into what Allegra Brigham describes as the economic "hub county for the region." Brigham is the chief executive of the Lowndes-based 4-County Electric Power Association, which actually serves all or parts of eight counties. She says all of the counties have "tremendously benefited" from the new industry Lowndes has succeeded in landing.

It adds up to a stunning turnaround for a city and county that Higgins says tried but failed to attract any significant new employers for the previous 20 years. All that time, the area was hemorrhaging jobs—most of them low-pay—as a number of manufacturers closed shop or moved away, says Harry Sanders, member and former president of the Lowndes County Board of Supervisors and a lifelong Columbus resident.

The new jobs, by contrast, require more skills and pay above average, Higgins says. As is typical of Mississippi, all the jobs are nonunion.

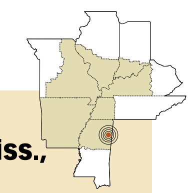
While "local people moving up" have taken most of the new slots, some have been filled by "a number of new people from all over the place," says Jim McAlexander, president of Cadence Bank in Columbus.

Some of the newcomers have bought and restored historic homes, producing a "great economic impact on the town," says Brenda Caradine, who moved to Columbus 15 years ago, bought one of those historic homes and turned it into a bed and breakfast.

She also organized the city's annual Tennessee Williams Tribute, a week or more of lectures, parties, house tours and professional performances that take their cue from the playwright's birth in Columbus in 1911. The Columbus Convention and Visitors Bureau has restored the 1875, two-story house where he was born and lived until he was nearly 4 and made it the town's welcome center.

The town's 70-year-old annual spring "pilgrimage"—two weeks of home and garden tours, concerts, carriage rides and

PHOTO BY SUSAN C. THOMSON



Lowndes County, Miss., by the numbers

Population	59,284 *
Labor Force	25,844 **
Unemployment Rate	11.6 percent **
Per Capita Personal Income	$29,124 ***

* U.S. Bureau of the Census, estimate July 1, 2008
** HAVER (BLS), December 2009
*** BEA/HAVER, 2007

TOP EMPLOYERS

Columbus Air Force Base	3,075
Baptist Memorial Hospital	1,095†
Lowndes County Public Schools	815†
Columbus Municipal School District	663†
Severstal	550
Weyerhaeuser	550

SOURCES: Self-reported
† Includes part-time

PHOTO BY U.S. AIR FORCE BASE, COLUMBUS, MISS.

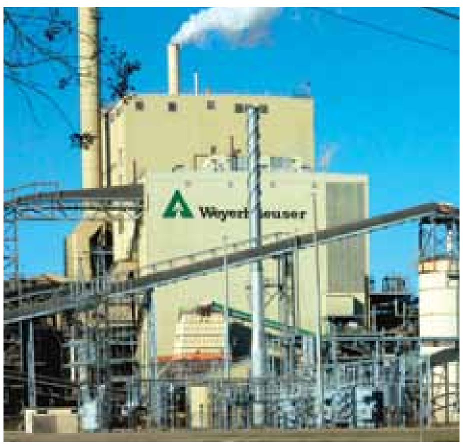


PHOTO BY SUSAN C. THOMSON

PHOTO BY CHRIS JENKINS

The Columbus Air Force Base (top left) has the largest payroll in the area; here, two colonels check out a C-130J. **The Golden Triangle Regional Airport** (top right) is surrounded by new industrial development. This **Weyerhaeuser** plant (bottom) makes specially treated, fluffy, absorbent fibers for use in diapers and other products.

historic re-enactments—is the centerpiece of the bureau's year-round menu of cultural, historical and recreational offerings.

The industrial boom has been a plus for tourism, resulting in "more people going to events, more people able to visit our attractions," says James Tsismanakis, the bureau's chief executive.

For all the new industry, the Columbus/Lowndes economy still rests on some old reliables. Paper maker Weyerhaeuser, a county presence for 30 years, operates two plants, one making pulp, the other turning it into an absorbent used in diapers and feminine hygiene products.

Baptist Memorial Hospital, formerly Lowndes County Hospital, not only generates jobs, but the county's profit on its sale in 2003 freed up funds for economic development, Sanders says.

But the area's No. 1 economic engine has long been, and remains, the Columbus Air Force Base, a pilot-training facility since World War II. Its payroll is by far the largest around, and about 55 percent of its employees are civilians, hired locally. Adding together its payroll, its annual expenditures and the estimated value of the jobs it creates indirectly, the base has calculated its annual economic impact on Columbus at $321 million.

"And it's a constant," says Sanders. "They don't have layoffs." An economic cushion in bad times past, the base has also proved a catalyst for the better times now following.

The base figured "in the dynamics" in 2002 when American Eurocopter, a subsidiary of a French-German helicopter maker, chose Lowndes County for its first U.S. plant, says Earl Walker, its general manager. Among the area's attractions, company officials at the time also mentioned Mississippi State University and the regional airport.

With daily passenger flights to Atlanta and Memphis, the airport is already Mississippi's third busiest. Its 6,500-foot runway is being lengthened to 8,000 feet to accommodate larger planes and has room to grow to 10,000 feet, while the airport itself has space for a second runway.

The university, in next-door Oktibbeha County, is known for its premier aerospace engineering programs and a flight research lab that helped give birth to Stark Aerospace and the Mississippi operations of Aurora Flight Sciences Corp., based in Manassas, Va. The companies took up residence near the airport in 2007 and 2006, respectively, Stark to make and Aurora to develop unmanned aircraft, commonly called drones.

The airport, the university, Eurocopter, Stark and Aurora have together provided the area with a critical—and marketable—mass of flight-related assets.

Seeking to capitalize on them, the Link late last year announced its most ambitious industrial development yet. The Golden Triangle Global Industrial Aerospace Park consists of 2,500 acres bordering the second megasite and offers the potential of 12 to 13 million square feet of buildable space.

"It will be created along the same lines as the megasites, although no more certifications are available," Higgins says. Only two other sites in the entire Southeastern U.S. will offer any competition, he adds.

McAlexander sees "tremendous potential" in a development targeting "one of the fastest growing industries in the future." And its creation is timely, he says, positioning Columbus/Lowndes County to be "far ahead of the game" when the economy takes off. Ω

Susan C. Thomson is a freelancer.

Signs Point toward Another Jobless Recovery

By Kevin L. Kliesen

The U.S. economy finished 2009 on a high note, as real GDP advanced at about a 6 percent annual rate over the last three months of the year. This was a sharp contrast to the year's dismal start, when the economy was struggling in the throes of a deep recession. Typically, deep recessions tend to be followed by exceptionally rapid growth (6 percent or more), which leads to sharp declines in the unemployment rate but also to worries about rising inflation. However, most forecasters expect only modest growth this year and a slow decline in the unemployment rate. On a brighter note, most forecasters and Federal Reserve policymakers generally expect inflation to remain subdued in 2010.

Modest Recovery Seems Likely

Although the National Bureau of Economic Research (NBER) Business Cycle Dating Committee has yet to make a determination, many economists believe that the recession ended in the summer of 2009. Typically, the rebound in economic activity that follows recessions stems from rising real incomes and improving financial market conditions. As the economy improves, often because of a rebound in interest-sensitive consumer expenditures and the sale of newly built houses, businesses begin ordering new goods from manufacturers and increase their expenditures on new equipment and structures. Since double-dip recessions are extremely rare, the rebound in activity is also a signal to firms to expand their payrolls. This is traditionally why the NBER looks at nonfarm payroll employment to help the committee date business cycle turning points.

Through the first two months of 2010, the data on production, incomes and expenditures suggested that the economy was continuing to expand. Importantly, consumer expenditures appeared to be growing modestly, and business capital spending began turning upward. In particular, manufacturing activity appeared to be advancing briskly. Part of manufacturing's strength was due to a healthy rebound in exports, which was largely a reflection of the global economic recovery. Although there were signs of stabilization in the housing sector, the level of home foreclosures and the inventory of previously sold homes on the market remained quite high. Another source of concern was the commercial real estate (CRE) sector, which saw sharply lower levels of construction and falling rents and, accordingly, rising loan defaults. Problems in the CRE sector hampered small- and medium-size banks, which appear to have more exposure to nonperforming CRE loans than larger banks do.

Overall, the Survey of Professional Forecasters (SPF) expects that real GDP will increase by 3 percent this year and next year, and that inflation, as measured by the CPI, will average about 1.75 percent this year and about 2 percent next. By and large, forecasters expect that the Federal Reserve will exit from its accommodative policy in a manner that neither exacerbates inflation expectations nor prematurely weakens the recovery.

Are Jobless Recoveries the New Norm?

Economists have been closely watching the contours of this recovery to see if the pattern of job growth—or lack, thereof—is similar to those that followed the previous two recessions. Recall that labor markets did not improve until well after these recessions ended. For example, the 2001 recession was deemed to have ended in November 2001, but the unemployment rate did not peak until June 2003 and payroll employment did not reach its trough until August 2003.

Although the current recovery is in its early stages, it nonetheless appears that a similar labor market pattern is developing. Despite rising real GDP in the third and fourth quarters of 2009, firms continued to shed jobs over the second half of 2009 and the first two months of 2010. Although the SPF expects job gains to average about 100,000 per month over the last nine months of 2010, these increases might be much less if not for the hiring associated with the 2010 decennial census.

While perhaps disconcerting to the public and economic policymakers, the lack of job growth in the face of rising real incomes and faster economic growth reflects continued strong gains in labor productivity. In 2009, productivity rose 5.8 percent—the largest annual increase since 1965. To most economists, strong productivity bodes well for the economy over the long run. Indeed, rising living standards depend on little else. In the short run, particularly in the early stages of the recovery, firms use their existing labor force and capital stock to fulfill orders and expand production. Eventually, though, the extremely rapid rate of productivity growth increases the growth of income and consumer spending. As the economy strengthens, firms once again begin to hire, forcing the unemployment rate down to its natural rate. Ω

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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.

Decline in House Prices Slows Down; District Still Faring Better than Nation

By Craig P. Aubuchon and Subhayu Bandyopadhyay

In the fourth quarter of 2009, Eighth District house prices, as measured by the Federal Housing Finance Agency (FHFA), fell by only 0.4 percent from the previous quarter, a much slower rate than the 1.7 percent decline between the second and third quarters. However, compared with prices from a year earlier, the decline was 2.3 percent, the largest year-over-year decline since the collapse of the housing bubble in late 2007.

Despite the fact that these declines were the largest of the current episode, the District housing market as a whole continued to outperform that of the nation. Aggregate house prices in the District did not increase as much as the nation's during the boom, and the subsequent decline has been milder. The District also reached its house price peak nearly a year after the nation and maintained prices near the peak for another year. This pattern held for the majority of major Metropolitan Statistical Areas (MSAs) within the District; they experienced an average decline from peak of less than 3 percent. In contrast, some of the largest MSAs in the country experienced price declines greater than 30 percent through the fourth quarter of 2009.

Eighth District Outperforms the Nation

Figure 1 shows the growth in house prices for the nation and the District since 2000.[1] The FHFA index tracks the repeat sales of homes that are financed with conforming mortgages from Fannie Mae or Freddie Mac.[2] By this measure, house prices for the United States peaked in the second quarter of 2007, with 70 percent growth since 2000. Since then, the largest two price declines have come in the third quarter of 2008 and 2009, and by the fourth quarter of 2009, prices were only 50 percent higher than they were in 2000.

In contrast, the aggregate prices for the District did not reach a peak until the first quarter of 2008 at a relative valuation much lower than that of the United States as a whole. Equally notable, District house prices declined by a much smaller percentage from their peak. Indeed, in the first quarter of 2009, house prices declined by less than a half percent. It was only in the last two quarters of 2009 that house prices began to move lower, albeit at a rate that was slower than that for the nation as a whole. It is no surprise, then, that since the first quarter of 2008, the large majority of District MSAs performed better than the nation as a whole with regard to price changes on a yearly level. The primary exception was Fayetteville, Ark., which saw similar price declines as the nation over this time period but exceeded the U.S. decline on several occasions.

Comparing the Rise and the Fall among Eighth District MSAs

Figure 2 tells a somewhat surprising story for the District. The regions with the largest house price increases were not necessarily the regions with the largest declines. Indeed, those regions with strong population growth or employment growth might expect natural increases in house prices, in line with fundamental valuations. Other regions experienced large price declines, despite below average increases in prices since 2000.

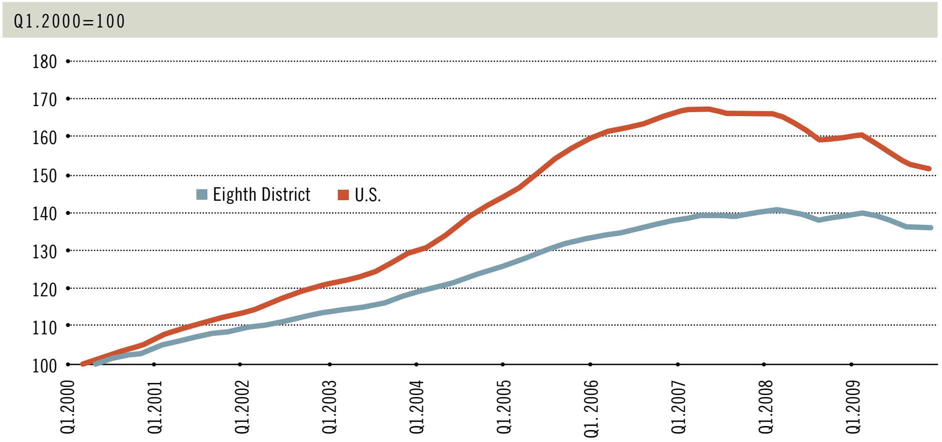
Fort Smith, Ark., experienced the largest increase in house prices between the fourth quarter of 2008 and the fourth quarter of 2009 (which was the peak for the Fort Smith area. Jefferson City, Mo., was the only other District MSA to experience a peak in the fourth quarter). During that period, prices increased 1.8 percent; as shown in Figure 2, prices rose 45 percent since 2000, slightly above the District average of 40 percent. Without a decline in house prices, the Fort Smith metro area easily outperformed the district average of a 3 percent decline from the peak to the fourth quarter of 2009. Other MSAs that fared better than the District average in terms of growth to peak (from Q1.2000) and decline since peak (to Q4.2009) include Little Rock, Ark., (43 percent increase, 1.3 percent decline) and Pine Bluff, Ark., (46.8 and –1.3 percent, respectively).

Conversely, Fayetteville, Ark., experienced the largest decline in house prices

continued on Page 20

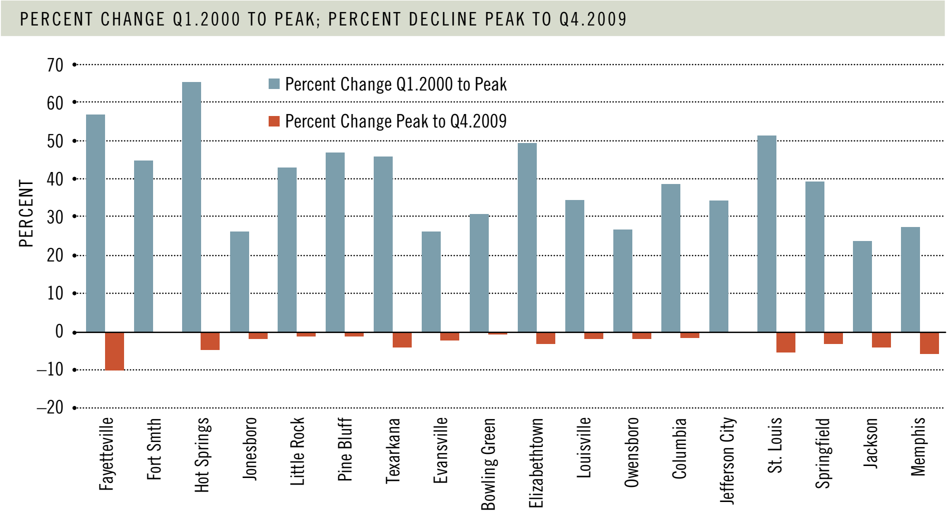
FIGURE 1

FHFA House Price Index



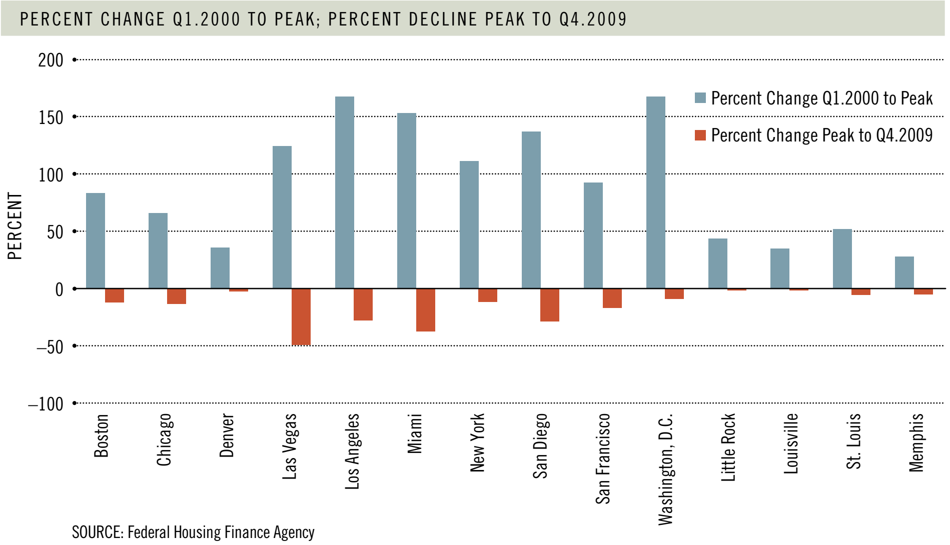
SOURCE: Federal Housing Finance Agency

FIGURE 2



SOURCE: Federal Housing Finance Agency

FIGURE 3



SOURCE: Federal Housing Finance Agency

ENDNOTES

[1] The Eighth District housing price index is calculated as the average of the 18 MSAs that report house price data, weighted by population in each MSA. The 18 MSAs are: Fayetteville, Ark.; Fort Smith, Ark.; Hot Springs, Ark.; Jonesboro, Ark.; Little Rock, Ark.; Pine Bluff, Ark.; Texarkana, Ark.; Evansville, Ind.; Bowling Green, Ky.; Elizabethtown, Ky.; Louisville, Ky.; Owensboro, Ky.; Columbia, Mo.; Jefferson City, Mo.; St. Louis, Mo.; Springfield, Mo.; Jackson, Tenn.; and Memphis, Tenn.

[2] In contrast, the S&P/Case-Shiller index tracks homes that are also financed using larger or more unconventional mortgages. Furthermore, the S&P/Case-Shiller index is value weighted, so that more expensive homes influence the index more heavily; the FHFA index is unit weighted, so that regions with more housing units are more influential in the index. For a more detailed description, see Aubuchon and Wheelock.

[3] The 10-City Composite index is considered a snapshot of U.S. house prices, particularly in larger regions. The Composite 10 index was used as a baseline in the Supervisory Capital Assessment Program (bank stress tests) conducted by the Federal Reserve in early 2009.

REFERENCE

Aubuchon, Craig P.; and Wheelock, David C. "How Much Have U.S. House Prices Fallen?" Federal Reserve Bank of St. Louis' *National Economic Trends*, August 2008, p. 1. See http://research.stlouisfed.org/publications/net/past/2008/

continued from Page 18

from the peak, at 10.1 percent. This price decline was on par with major metropolitan areas like Washington, D.C., (9.1 percent), New York (12.1 percent), Boston (13.1 percent) and Chicago (14.1 percent). Within the District, Fayetteville also experienced the second-largest price increase, of nearly 57 percent between the first quarter of 2000 and the local peak in the second quarter of 2007. Other cities that exceeded the average price increase and experienced greater than average price declines were St. Louis (51.4 and –5.3 percent); Texarkana, Ark., (46 and –4.2 percent); Hot Springs, Ark., (65.5 and –4.9 percent) and Elizabethtown, Ky., (49.3 and –3.2 percent).

In contrast, only Memphis, Tenn., lagged the District average in terms of house price growth and exceeded the District average for price declines. With price appreciation of only 27.7 percent, Memphis was the fifth-slowest growing MSA in the District; however, the relative price decline of 5 percent was the second-largest decline, behind only that of Fayetteville.

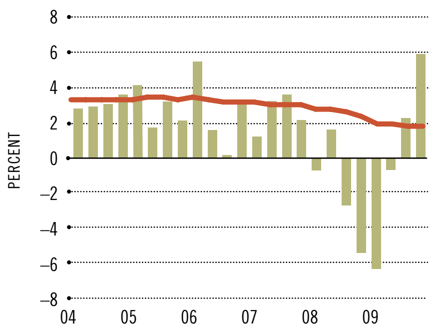
District Relative to Top 10 Metro Areas

Figure 3 presents the FHFA data for the four largest District MSAs alongside the 10 MSAs that define the S&P/Case-Shiller 10-City Composite HPI.[3] In this view, the District MSAs' price increases and decreases between 2000 and 2009 seem to match only those of Denver. Furthermore, this comparison reveals that the differences in performance among the District MSAs paled in comparison to the differences in performance among these 10 large non-District MSAs. Overall, the MSAs of the District exhibited lower price fluctuations compared with several non-District MSAs. This experience suggests that when considering the performance of Eighth District house prices, it is important to consider not just the differences between District MSAs, but also consider the performance as judged against the nation as a whole.

Subhayu Bandyopadhyay is an economist and Craig P. Aubuchon is a senior research associate at the Federal Reserve Bank of St. Louis. See http://research.stlouisfed.org/econ/bandyopadhyay/ for more on Bandyopadhyay's work.

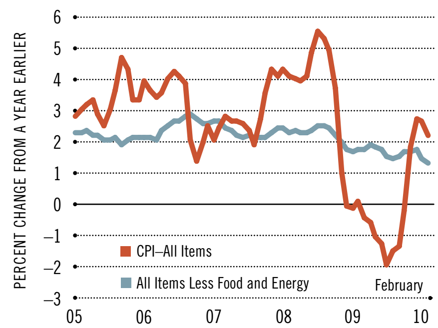
Eleven more charts are available on the web version of this issue. Among the areas they cover are agriculture, commercial banking, housing permits, income and jobs. Much of the data is specific to the Eighth District. To go directly to these charts, use this URL: www.stlouisfed.org/publications/re/2010/b/pdf/04-10data.pdf

REAL GDP GROWTH

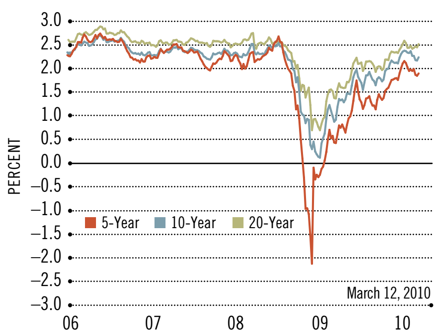


NOTE: Each bar is a one-quarter growth rate (annualized); the red line is the 10-year growth rate.

CONSUMER PRICE INDEX

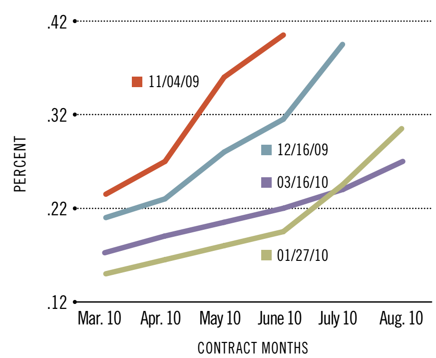


INFLATION-INDEXED TREASURY YIELD SPREADS

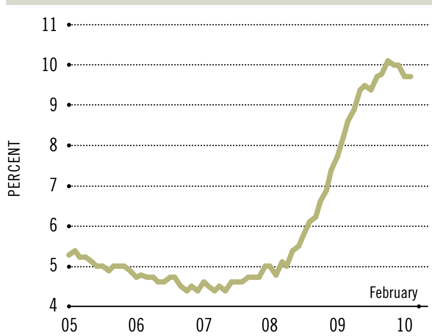


NOTE: Weekly data.

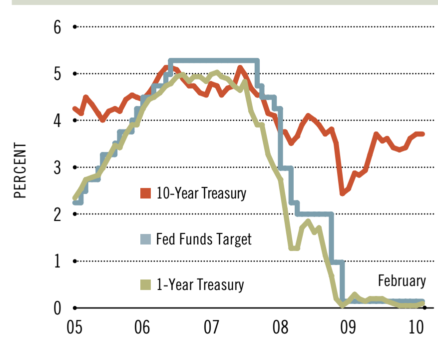
RATES ON FEDERAL FUNDS FUTURES ON SELECTED DATES



CIVILIAN UNEMPLOYMENT RATE

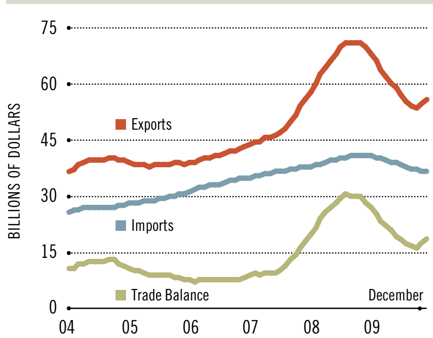


INTEREST RATES



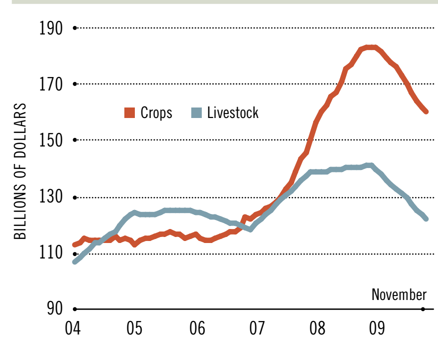
NOTE: On Dec. 16, 2008, the FOMC set a target range for the federal funds rate of 0 to 0.25 percent. The observations plotted since then are the midpoint of the range (0.125 percent).

U.S. AGRICULTURAL TRADE

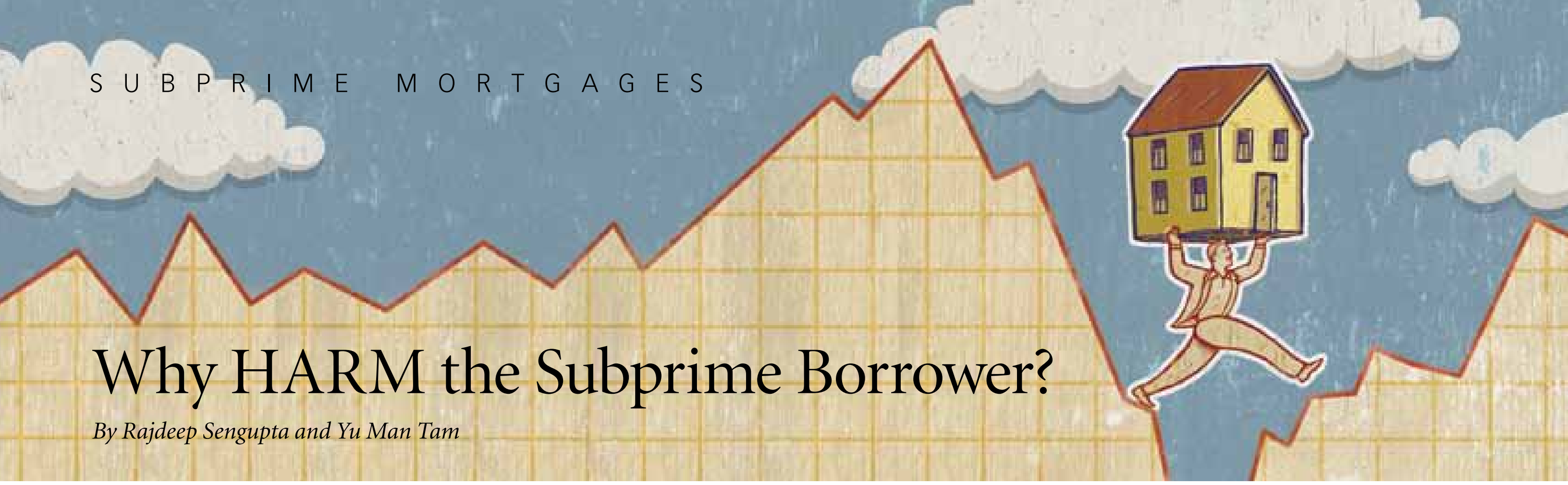


NOTE: Data are aggregated over the past 12 months.

FARMING CASH RECEIPTS



NOTE: Data are aggregated over the past 12 months.



Why HARM the Subprime Borrower?

By Rajdeep Sengupta and Yu Man Tam

The hybrid adjustable rate mortgage or hybrid ARM (prophetically, the acronym is HARM) was the most common subprime mortgage product. Hybrid-ARM products were specialized products that included an initial period over which the repayment schedule on the mortgage resembled that of a fixed rate mortgage (FRM) and a subsequent period over which the payment schedule resembled an ARM.[1] The temporary introductory teaser rate was kept lower, arguably, to make the product attractive to the subprime borrower. The date at which the payments reset into an indexed rate (for example, LIBOR plus 6 percent) was typically two or three years after the closing date on the mortgage.[2] What was the rationale behind such a unique design on subprime products? Did this unique design have a role to play in the subsequent collapse of this market?

Why Hybrid ARM?

First, subprime borrowers were typically those who had impaired or incomplete credit histories. Because of their higher risk of default, subprime borrowers were charged higher interest rates than conventional or prime borrowers on all kinds of loans. For example, the interest rates on subprime auto loans were about 25-30 percent on average, studies have shown.[3] If the interest rate on subprime mortgages had been set to price the risk as was done on subprime auto loans, it was unlikely that the mortgages could have been afforded by subprime borrowers. This is because mortgage obligations are significantly higher than payments on other forms of consumer debt, including auto loans. The hybrid-ARM product was conceived to enable subprime borrowers to obtain mortgages at affordable rates.[4]

It was believed that this could be achieved through the appreciation in house prices. Economist Gary Gorton argued in a paper in 2008 that the mortgage design sought to benefit from house price appreciation over short horizons. All else equal, borrowers could build up equity in their homes in a period of rising house prices and, in the eyes of the lender, become less of a risk on subsequent mortgages. This allowed them to refinance at a lower rate (on the subsequent mortgage), which also reduced their likelihood of default. In essence, house price appreciation was critical to the viability of the hybrid-ARM design. Therefore, the hybrid ARM product allowed payments at the teaser rate essentially to help the borrower build up equity, but once the loan reset into the indexed rate, payment obligations increased. This was done to reduce the lenders' exposure to a high-risk borrower over a long horizon and essentially force a refinancing of the mortgage. The borrower was prevented from refinancing early by including a penalty for prepayment on the mortgage.

In a recent paper, economists Geetesh Bhardwaj and Rajdeep Sengupta point to some lesser known facts about subprime mortgages in general.[5] First, over 70 percent of subprime originations for each year (2000-2007) were originated as refinances. Second, a significant majority of these originations were hybrid-ARM products designed to reset into a fully indexed rate after two or three years. Significantly, this reset was designed to be a step *up* (but hardly ever a step *down*), so as to increase the payment burden and essentially force a refinancing of the loan. Third, contrary to conventional wisdom, teaser rates on hybrid ARMs were not low and not significantly different from those on closing rates on subprime FRMs. Fourth, most subprime originations included prepayment penalties with the prepayment term expiring no sooner than the reset date on the ARM. This meant that for hybrid-ARM products, the contract ensured that the penalty would be in effect at least as long as the borrower was required to pay the teaser rate. In short, the mortgage was designed to ensure that subprime borrowers continued to make monthly payments at the closing rates before they could refinance into another mortgage.

Repayment Behavior on Subprime Mortgages

In terms of actual repayment behavior, the most important aspect of subprime loan performance was the high rates of early prepayments on the loan. A loan is said to be prepaid when it is either refinanced into another mortgage or the property is sold off. This is hardly surprising because refinancing was an integral part of the mortgage design.

A noteworthy observation here is that low interest rates were not always the motivation behind prepayments (refinances) in the subprime market. The notable examples here were hybrid-ARM products originated in 2003, a year of historically low interest rates. Interestingly, in all the years these products were in existence, subprime originations from 2003 showed the lowest default rates. However, the principal reason for the remarkable performance of 2003 originations was high and early refinances.[6] Indeed, almost 83 percent of hybrid-ARM subprime products originated in 2003 were refinanced by the end of 2006. The corresponding percentage for FRMs was 63 percent. Significantly, the fact that mortgages originated

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during the low-interest-rate environment around 2003-2004 and refinanced in a high-rate environment in subsequent years indicates that lower rates were hardly the motivation behind subprime refinances. While we don't know for sure what the motivation was, the most plausible explanation would be to extract home equity.

Why Did the Subprime Market Collapse?

The important thing to remember is that a borrower on the brink of default has an exit option: prepay the mortgage either by refinancing or selling the property. Interestingly, Bhardwaj and Sengupta found that the total proportion of loans that either went into default or were prepaid remained unchanged across all vintages. More important, there was a significantly high incidence of early prepayments on subprime originations of earlier vintages. However, this was followed by a sharp drop in prepayment rates after 2006, suggesting that fewer borrowers could use the prepayment exit option.

Why did prepayments decline for originations of later vintages? Herein lay the importance of the subprime mortgage design. Prepayments (either in the form of refinances or an outright sale of the property) were critical to the sustainability of subprime mortgages. In a regime of rising house prices, borrowers could avoid default by prepaying their loans (either through a refinance or a property sale). Moreover, if the house price appreciation was sufficiently large, a borrower could recover the costs of refinancing and even choose to extract equity. However, this option was no longer available when prices did not appreciate. Consequently, borrower defaults began to increase sharply in 2006, when house prices ceased to appreciate. Ω

Rajdeep Sengupta is an economist and Yu Man Tam is a senior research associate at the Federal Reserve Bank of St. Louis. See http://research.stlouisfed.org/econ/sengupta/ for more on Sengupta's work.

ENDNOTES

1 During the fixed leg of the hybrid ARM, the mortgagee pays a lower introductory closing rate called the teaser rate. The teaser rate remains in effect until the reset date, after which the repayment schedule on the hybrid ARM resembles an ARM. The reset date, market index rate used and the margin are decided at the closing date.
2 These mortgages are also called the 2/28 (two-year teaser rate followed by a 28-year ARM) and a 3/27 (three-year teaser rate followed by a 27-year ARM) respectively.
3 See Adams, Einav and Levin.
4 See Gorton.
5 See Bhardwaj and Sengupta.
6 See Bhardwaj and Sengupta.

REFERENCES

Adams, William; Einav, Liran; and Levin, Jonathan. "Liquidity Constraints and Imperfect Information in Subprime Lending." *American Economic Review*, 2009, Vol. 99, No. 1, pp. 49-84.

Bhardwaj, Geetesh; and Sengupta, Rajdeep. "Did Prepayments Sustain the Subprime Market?" Working Papers 2008-039, Federal Reserve Bank of St. Louis, 2008.

Gorton, Gary. "The Panic of 2007." National Bureau of Economic Research Working Paper 14358, 2008.

LETTER TO THE EDITOR

This is in response to "Inflation May Be the Next Dragon To Slay," an article that appeared in the January 2010 issue of *The Regional Economist.* To read more letters, go to http://stlouisfed.org/publications/re/letters/index.cfm

Feb. 2, 2010

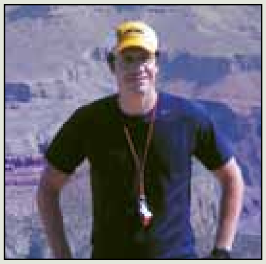
Dear Editor:

I would like to thank the researcher for clearly explaining the predicament that those in charge of the Fed will likely to be facing. There is so much currency in the system, and the Fed continues to debase the dollar by printing money by the trillion. Where will it end? Does the American public realize the government isn't a separate entity but an extension of themselves? YOU the Americans will have to pay all the trillions in debt that the government is taking on. And your standard of living, based on debt and spending, cannot go on forever. It appears as though the high-octane lifestyle is almost at an end. Unusually, I found this article through the St. Louis Fed Reserve web site, which is interesting in itself because usually those who let the cat out of the bag, as it were, are most likely to conceal it. On the same page, a poll is being carried out about inflation. Currently, 812 people have taken the poll and 61 percent believe that inflation is "dead in the water." The dangers of such massive injections into the currency supply are being aired with increased vigor by many except the popular press. Unfortunately, the masses will not read the said article or know how to insulate themselves from the pain associated with high levels of inflation. I hope the problems do not come to light, but I bought 7 kg of silver today because I am betting that they do. Does anyone have a time frame to said inflation? I am guessing 2-3 years, but would welcome comments. Search for Bob Chapman. He constantly talks about said problems.

John Kitcher, English teacher in elementary school in Seoul, South Korea

Go to http://stlouisfed.org/ExternalCFForms/EditorLetterEnt.cfm to submit a letter electronically. You may also submit a letter to the editor using the e-mail address or street address on Page 2.

ASK AN ECONOMIST



Carlos Garriga has been an economist in the Research division of the Federal Reserve Bank of St. Louis since 2007. His main expertise is in macro-economics and the effects of government policy. Recently, Garriga has studied the effects of mortgage innovations in the recent housing boom and the role of the housing market in the financial crises. In his free time, he enjoys spending time with his family and any outdoor activity. See http://research.stlouisfed.org/econ/garriga for more on his work.

How does the Fed make money for the Treasury, and are profits audited by Congress or any agency?

The Federal Reserve System is an independent entity within the government. The Federal Reserve's revenue is mainly derived from its regular operations, that is, from the interest on U.S. government securities and discount window lending.

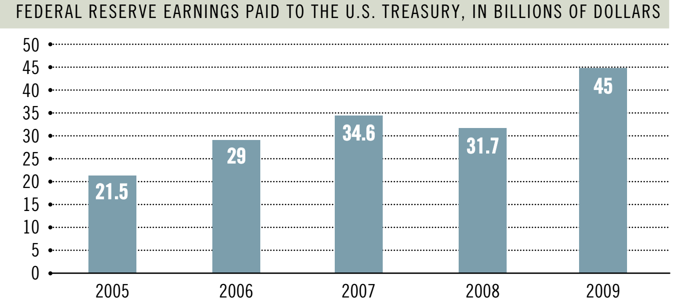
The open market operations are used to buy and sell U.S. Treasury and federal agency securities in the open market, whereas the discount window is used to lend to depository institutions directly from the Fed's lending facility. These operations are used to affect the demand for and supply of balances of depository institutions and affect the federal funds rate.

Other sources of income are the interest on foreign currency investments held by the System and fees received for services provided to depository institutions (for example, check clearing, funds transfers and automated clearinghouse operations). After paying its expenses, the Federal Reserve turns the rest of its earnings over to the U.S. Treasury.

For 2009, the Fed returned about $45 billion to the Treasury. This is the most in the 96-year history of the central bank. The record amount results from the programs the Fed initiated as a response to the largest crises since the Great Depression. These programs included the purchase of bonds and mortgage-backed securities to reduce the interest rate and, therefore, to stimulate the economy. The profit last year was 30 percent higher than the largest previous refund to the Treasury, which occurred in 2007. Despite its independence, the Federal Reserve System and the Reserve banks are audited and reviewed at different levels every year. The complete reports, audits and assessments by the Government Accountability Office (GAO) and the Board's Office of Inspector General (OIG) are available in the Board's annual report. Go to www.federalreserve.gov/boarddocs/rptcongress/ to read the repo t. Because the Fed is self-financed, it is not subject to the congressional budgetary process.

Fed Earnings

FEDERAL RESERVE EARNINGS PAID TO THE U.S. TREASURY, IN BILLIONS OF DOLLARS



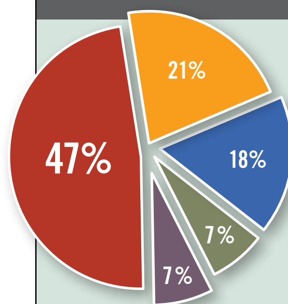
SOURCE: Federal Reserve Board of Governors

Submit your question in a letter to the editor. (See Page 2.) One question will be answered by the appropriate economist in each issue.

FED FLASH POLL RESULTS

When a new issue of *The Regional Economist* is published, a new poll is posted on our web site. The poll question is always pegged to an article in that quarter's issue. Here are the results of the poll that went with the January issue. The question stemmed from the article "Inflation May Be the Next Dragon To Slay."

WHICH DO YOU THINK IS THE TOP RISK FOR REIGNITING INFLATION OVER THE NEXT SEVERAL YEARS?



- There is no inflation risk—it's dead and buried.
- The federal budget deficit continues to mushroom.
- The Fed waits too long to return the monetary supply to a pre-crisis level.
- Commodity prices balloon again as investors tire of low-yielding Treasury securities and shift their money into higher-yielding commodity contracts and other assets.
- There turns out to be less slack (smaller output gap) in the economy than many experts believe.

1,114 RESPONSES AS OF 3/9/2010

THIS ISSUE'S POLL QUESTION:

Which scenario do you think is most likely for the world economy?

1. "Big spender" countries (especially U.S.) live within their means, and miserly countries (especially China) break open the piggy bank.
2. Countries don't coordinate policies. Trade imbalances return—in spades. Boom followed by bust (again).
3. Economic restructuring stalls. Stimuli end. Private spending slows. Economies tank.

After reading "Economic Hangover: The Recovery Is Likely To Be Prolonged, Painful," go to www.stlouisfed.org/publications/re to vote. (This is not a scientific poll.)

FED PROGRAM TO FOCUS ON COMMUNITY DEVELOPMENT

"Exploring Innovation in Community Development Week" will be April 19-23. The public is invited to partake in the events of the week, organized by the Federal Reserve Bank of St. Louis. Programs are being planned throughout the Eighth District.

The premiere event, "Restructuring and Retooling for the Future," will take place April 20. It is the first in a yearlong series of public policy dialogues on the essential elements of great community development. The program will be at the Fed in St. Louis and will be broadcast via videoconference to audiences at the Bank's branches in Little Rock, Louisville and Memphis. Confirmed national panelists include Ruth McCambridge of the *Nonprofit Quarterly* and Ray Boshara, vice president and senior research f ellow at the New America Foundation. Attendees will also hear about the St. Louis Fed's "10,000-Hour Challenge," a campaign to encourage community development professionals to become experts in innovation.

Other activities include an April 21 screening of the documentary "New Neighbors," the Greater Louisville Nonprofit Technology Summit on April 22 and the St. Louis Regional Housing Conference on April 23.

Go to www.stlouisfed.org/event/01ED for a complete schedule and registration information.

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N E X T   I S S U E

The Economic Progress of African-Americans

How significant has been the economic progress of African-Americans in the U.S. since 1970? The common perception is that inequality between races has decreased. Did these societal changes translate into economic changes, as well, for blacks? Did economic well-being of African-American children improve? Read about African-American economic progress in urban areas in the July issue of *The Regional Economist.*

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