SUMMER 2012

CENTRAL Banker

NEWS AND VIEWS FOR EIGHTH DISTRICT BANKERS

FEATURED IN THIS ISSUE: Earnings and Asset Quality Trending Up | Is the End Near for the Popular TAG Program?

The Sovereign Debt Crisis: A Modern Greek Tragedy

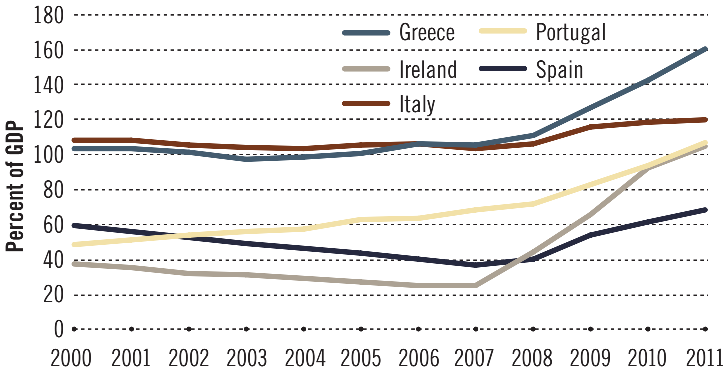
The dubious distinction of history's first recorded sovereign default belongs to Greece—the same nation at the forefront of the world's second major financial crisis in five years.

The debt woes that began in Greece and Ireland a few years ago have magnified into Europe's sovereign debt crisis, driven by fear that debt owed by entire countries will not be repaid. The St. Louis Fed explored this crisis in-depth during the first "Dialogue with the Fed" for 2012, "Sovereign Debt: A Modern Greek Tragedy." Held May 8, 2012, right when tensions picked up again after Greece's default, this discussion gave the general public insights into sovereign debt issues and provided answers to attendees' questions. Christopher Waller, senior vice president and director of Research, led the presentation and discussion, with assistance from economists Fernando Martin and Christopher Neely.

Martin also led the Spanish-language version of the sovereign debt Dialogue—"Deuda Soberana: Una Tragedia Griega Moderna"—on May 30 in St. Louis. He was joined by fellow St. Louis Fed economists Carlos Garriga and Adrian Peralta-Alva for the question-and-answer part of the program.

FIGURE 1

Gross Government Debt-to-GDP Ratios, 2000-2011



SOURCE: International Monetary Fund, World Economic Outlook database, April 2012. The Greek and Irish shocks in the late 2000s woke up markets to the specter of sovereign debt, with debt-to-GDP ratios becoming alarmingly high.

The Main Culprit: Excessive Government Debt

Why have sovereign debt woes become critical in Europe? After all, it's normal for governments to run a deficit by using debt to finance undertakings such as wars, civil projects and public services. Waller's short answer: palpable fear that excessive government debt will not be repaid.

As any banker knows, the rewards of borrowing are felt immediately and the pain is postponed to the future—often pushed back further by adding more debt. Consequently, undisciplined government borrowing can rise to unsustainable levels, leading to crisis, austerity and even default. This

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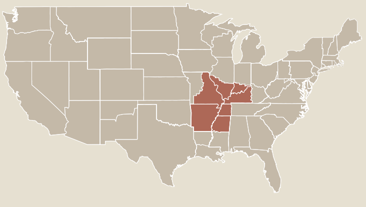
The Eighth Federal Reserve District includes all of Arkansas, eastern Missouri, southern Illinois and Indiana, western Kentucky and Tennessee, and northern Mississippi. The Eighth District offices are in Little Rock, Louisville, Memphis and St. Louis.



CENTRAL VIEW

European Sovereign Debt Crisis: A Wake-up Call for the U.S.

By James Bullard

James Bullard is president and CEO of the Federal Reserve Bank of St. Louis.

In recent years, many countries' deficit-to-GDP (gross domestic product) and debt-to-GDP ratios rose as governments increased their borrowing on international credit markets to finance spending. For some European countries in particular, the ratios reached far beyond those considered sustainable. Consequently, these countries—including Greece, Ireland and Portugal—saw their borrowing costs rise dramatically as markets began questioning the countries' ability and willingness to repay their debt.

Although the U.S. continues to have low borrowing costs, the U.S. deficit-to-GDP and debt-to-GDP ratios are nearly as high as those of some of the countries that have had difficulty borrowing. The current European sovereign debt crisis serves as a wake-up call for the U.S. fiscal situation.

Borrowing in international markets is a delicate matter. A country cannot accumulate unlimited amounts of debt; there is such a thing as too much debt, and it occurs at the point where the country is indifferent between the temporary benefit of defaulting and the cost of not having continued access to international credit markets. Markets understand that at some high level of debt a country has a disincentive to repay it, and, therefore, markets will not lend beyond this point.

Interest rates alone are not the best way to determine whether a nation is borrowing too much or to evaluate the probability of a debt crisis. Witness Greece and Portugal—two of the latest countries to face this borrowing limit: Interest rates tend to stay low until a crisis occurs, at which time they rise rapidly. Today the U.S. has low borrowing rates, but these low rates should not be comforting regarding the likelihood of hitting the debt limit.

A Drag on Economic Growth

So, what is the limit for debt accumulation? While it can be difficult to evaluate, research has found that once a country's gross debt-to-GDP ratio surpasses roughly 90 percent, the debt starts to be a drag on economic growth.[1] In general, the European countries that continue to have poor economic performances are the ones that borrowed too much and are beyond this ratio. Over the past couple of years, they have tended to have relatively high (and frequently increasing) unemployment rates and low or negative GDP growth. Of course, slower growth tends to exacerbate a country's debt problems. In contrast, countries that have not carried too much debt—in particular, Germany and some of its

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Earnings and Asset Quality Trending Up in District, Nation

By Michelle Neely

Bank earnings and asset quality measures continued to improve within District states and nationally in the first quarter of 2012. Return on average assets (ROA) averaged 0.95 percent in District states, up 36 basis points from year-end 2011 and 33 basis points from a year ago. This result virtually mirrors the 0.94 percent national average and the improvement from its quarter-ago and year-ago averages.

Within the District, banks in Arkansas, Indiana and Kentucky posted average ROA ratios above the District and national averages.[1] Illinois banks had the lowest average ROA at 0.74 percent, but that result is a huge turnaround from the -0.09 percent ROA recorded two years ago.

Lower loan loss provisions are primarily responsible for the earnings improvements, both nationally and in District states. Loan loss provisions as a percent of average assets fell 24 basis points to 0.36 percent between year-end 2011 and the end of the first quarter of 2012 for U.S. banks as a group; the ratio is also well below (down 26 basis points) its first-quarter 2011 level, meaning the improvement is not just the result of seasonally higher loan loss provisions in the fourth quarter of the year.

The average loan loss provision (LLP) ratio for banks in District states as a group was slightly higher than the national average in the first quarter at 0.40 percent but showed the same trend as far as large declines from year-end and year-ago levels.

The average loan loss provision ratios were below the all-District and national levels in Arkansas, Indiana, Mississippi and Tennessee. Illinois banks, still recovering from a larger-than-average asset quality problem, posted the highest average LLP ratio: 0.55 percent.

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TABLE 1

Earnings Performance[1]

	2011: 1Q	2011: 4Q	2012: 1Q
RETURN ON AVERAGE ASSETS[2]			
All U.S. Banks	0.61%	0.68%	0.94%
All Eighth District States	0.62	0.59	0.95
Arkansas Banks	1.00	1.08	1.16
Illinois Banks	0.46	0.39	0.74
Indiana Banks	0.41	0.90	1.06
Kentucky Banks	1.28	0.68	1.48
Mississippi Banks	0.56	0.73	0.91
Missouri Banks	0.64	0.66	0.90
Tennessee Banks	0.36	0.04	0.89
NET INTEREST MARGIN			
All U.S. Banks	3.87	3.93	3.89
All Eighth District States	3.83	3.91	3.86
Arkansas Banks	4.21	4.31	4.16
Illinois Banks	3.68	3.75	3.66
Indiana Banks	3.81	3.97	3.90
Kentucky Banks	4.36	4.08	4.27
Mississippi Banks	3.83	4.01	3.99
Missouri Banks	3.62	3.79	3.67
Tennessee Banks	3.83	3.89	3.92
LOAN LOSS PROVISION RATIO			
All U.S. Banks	0.62	0.60	0.36
All Eighth District States	0.69	0.71	0.40
Arkansas Banks	0.50	0.50	0.31
Illinois Banks	0.89	0.96	0.55
Indiana Banks	0.82	0.45	0.30
Kentucky Banks	0.52	0.56	0.37
Mississippi Banks	0.67	0.55	0.23
Missouri Banks	0.51	0.58	0.38
Tennessee Banks	0.63	0.95	0.34

Compiled by Daigo Gubo

SOURCE: Reports of Condition and Income for Insured Commercial Banks

NOTES: [1] Because all District banks except one have assets of less than $15 billion, banks larger than $15 billion have been excluded from the analysis.
[2] All earnings ratios are annualized and use year-to-date average assets or average earning assets in the denominator.

Quarterly Report

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Net Interest Margins Down

The drops in loan loss provisions were more than enough to offset declining net interest margins (NIMs). The average NIM fell 4 basis points for U.S. banks as a whole to 3.89 percent and 5 basis points for District state banks to 3.86 percent. Among District states, all states but Kentucky and Tennessee recorded declines in the average NIM. Arkansas and Missouri banks posted the largest declines in NIMs, 15 basis points and 12 basis points, respectively. Their rather large declines in NIMs were the result of much sharper declines in interest income than interest expense. Five of the seven District states reported higher average NIMs than the national average. (See Table 1 on Page 3.)

Falling net noninterest expenses also provided a boost to first-quarter profits. For the seven District states, the ratio of net noninterest expenses to average assets declined 16 basis points to 1.86 percent. Five of the seven states experienced drops in this ratio, with Arkansas banks showing just a 1-basis-point uptick and Mississippi banks recording a 5-basis-point increase. In most cases, the trends in the two components of the ratio—noninterest income and noninterest expense—were both favorable as noninterest income rose while noninterest expense fell.

Nonperforming Assets Ratios Continue Declining

Asset quality remained on the upswing, both nationally and in District states. The nonperforming assets ratio—nonperforming loans plus other real estate owned (OREO) to total loans plus OREO—continued its steady decline in the first quarter. For all U.S. banks, the nonperforming assets ratio declined 7 basis points between year-end 2011 and the first quarter of 2012 to 4.64 percent; the ratio is down 66 basis points from its year-ago level.

For District states as a group, the nonperforming assets ratio remains higher than the U.S. average at 5.02 percent but is showing similar trends, with a 15-basis-point decline from year-end 2011 and a 41-basis-point decline from a year ago. All three major categories of loans—consumer, commercial and real estate—experienced drops in the portions that were nonperforming at both the national and District state levels. Deterioration in portfolios occurred in Kentucky's commercial and real estate loans and Arkansas' and Tennessee's consumer loans. Illinois banks continue to lead the District in loan quality problems, especially in real estate, with a nonperforming assets ratio that still tops 6 percent.

Coverage Ratios Up a Little

Loan loss reserve coverage ratios continue to inch up, meaning bankers have set aside more funds to cover potential loan losses. At the end of the first quarter, U.S. banks had 62 cents reserved for every dollar of nonperforming loans, compared with 61 cents at year-end 2011 and 58 cents a year ago. District states had about

TABLE 2

Asset Quality Measures[1]

	2011: 1Q	2011: 4Q	2012: 1Q
NONPERFORMING ASSETS RATIO[2]			
All U.S. Banks	5.30%	4.71%	4.64%
All Eighth District States	5.43	5.17	5.02
Arkansas Banks	5.58	5.67	5.34
Illinois Banks	6.77	6.22	6.25
Indiana Banks	4.02	3.64	3.49
Kentucky Banks	3.72	3.65	3.83
Mississippi Banks	4.64	4.52	4.19
Missouri Banks	4.87	4.81	4.64
Tennessee Banks	5.76	5.66	5.18
LOAN LOSS COVERAGE RATIO[3]			
All U.S. Banks	57.92	61.02	62.40
All Eighth District States	56.18	58.71	61.12
Arkansas Banks	62.60	60.06	65.46
Illinois Banks	45.04	49.68	49.87
Indiana Banks	71.57	64.11	67.05
Kentucky Banks	68.71	70.61	68.98
Mississippi Banks	60.26	69.12	74.69
Missouri Banks	68.27	67.19	73.40
Tennessee Banks	57.92	61.10	66.50

Compiled by Daigo Gubo

SOURCE: Reports of Condition and Income for Insured Commercial Banks

NOTES: [1] Because all District banks except one have assets of less than $15 billion, banks larger than $15 billion have been excluded from the analysis.

[2] Loans 90 days or more past due or in nonaccrual status, plus other real estate owned (OREO), divided by total loans plus OREO.

[3] Loan loss reserves divded by nonperforming loans.

Quarterly Report

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61 cents reserved for every dollar of nonperforming loans, versus 59 cents at year-end 2011 and 56 cents a year ago. Within the District, Mississippi banks posted the highest coverage ratio at 74.69 percent, up more than 500 basis points from year-end 2011. Missouri banks have the second highest coverage ratio of 73.40 percent. Illinois banks, with higher levels of nonperforming assets, have an average coverage ratio of just under 50 percent. Although these ratios have improved, they remain low compared with their pre-financial-crisis levels.

Tier 1 leverage ratios are still increasing nationally and in District states. The national average rose 11 basis points to just under 10 percent at the end of the first quarter, while the District state average increased 17 basis points to 9.58 percent. Arkansas banks posted an average tier 1 leverage ratio of 10.09 percent. Indiana banks lagged their District state peers just a bit, with an average leverage ratio of 9.34 percent.

Michelle Neely is an economist at the Federal Reserve Bank of St. Louis.

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ENDNOTE

1 Kentucky's very high ROA of 1.48 percent can be attributed primarily to Republic Bank in Louisville, which is winding down a very lucrative income tax refund loan business.

Wake-up Call

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immediate neighbors—have tended to have relatively low (and frequently decreasing) unemployment rates and positive GDP growth.

The U.S. gross debt-to-GDP ratio is higher than 90 percent, and projections indicate that it will rise further. Now is the time for fiscal discipline in order to maintain the credibility in international financial markets that the U.S. built up over many years. Failure to create a credible deficit-reduction plan could be detrimental to economic prospects. Furthermore, as the European sovereign debt crisis has shown, by the time a country reaches the crisis situation, fiscal austerity might be the best of many unappealing alternatives. Returning to more normal debt levels will take many years, but the economy would likely benefit if the U.S. were to get on a sustainable fiscal path over the medium term.

Some people say that the U.S. cannot reduce the deficit and debt because the economy remains in dire straits, but the experience of the 1990s suggests otherwise. During the 1990s, the U.S. had substantial deficit reduction and the debt-to-GDP ratio declined. The economy boomed during the second half of the decade, which helped to reduce the debt more quickly. While reviving economic growth would also help now, temporary fiscal policies and monetary policy are not the best way to do that. Having a credible deficit- and debt-reduction plan in place would likely spur investment in the economy, as it did during the 1990s.

This essay originally appeared in the St. Louis Fed's 2011 Annual Report, published in May 2012.

ENDNOTE

1 For example, see Cecchetti, Stephen G.; Mohanty, M.S.; and Zampolli, Fabrizio. "The Real Effects of Debt," in *Achieving Maximum Long-Run Growth*. Presented at the 2011 Economic Policy Symposium, Jackson Hole, Wyo., Aug. 25-27, 2011.

Is the End Near for the Popular Transaction Account Guarantee Program?

By Michelle Neely

The Transaction Account Guarantee (TAG) program, launched during the financial crisis and extended by the Dodd-Frank Act to support liquidity and bank stability, is set to end at year-end 2012.[1] By design, money deposited in accounts covered by TAG earns no interest. Nonetheless, in the current low interest rate environment, TAG has been extremely popular; at year-end 2011, TAG-insured deposits totaled $1.6 trillion and accounted for 20 percent of total U.S. bank deposits.

Deposits in TAG-Insured Accounts as a Share of Total Deposits

Groups by Asset Size	Percent as of Dec. 31, 2010	Percent as of June 30, 2011	Percent as of Dec. 31, 2011
ALL EIGHTH DISTRICT BANKS	**5.2%**	**6.8%**	**7.1%**
District < $1 billion	3.4	3.8	4.6
District $1 billion - $15 billion	5.0	7.6	7.6
District > $15 billion*	18.1	21.4	19.7
ALL U.S. BANKS	**14.5**	**16.5**	**20.2**
U.S. < $1 billion	5.0	5.7	6.7
U.S. $1 billion - $15 billion	9.2	10.5	11.8
U.S. > $15 billion	14.5	19.7	24.0

SOURCE: Reports of Condition and Income

*NOTE: There is only one District bank with assets of more than $15 billion: First Tennessee, in Memphis.

TAG was originally designed as an opt-in program when the FDIC introduced it in October 2008. Participating banks paid premiums to help support the program, which was intended to provide liquidity support and stability for banks as well as to help protect the deposits of small businesses and municipal governments. As part of the Dodd-Frank legislative process, the program's termination date was extended and the program made mandatory for all banks; the program's estimated costs were folded into the risk-based deposit insurance premiums paid to the FDIC.

Banks of All Sizes Benefited from TAG

TAG has proved to be extremely popular with bankers and depositors. The combination of low interest rates and the benefits of full FDIC coverage has boosted the program. Between year-end 2010 and year-end 2011, TAG-insured deposits at U.S. banks increased almost 60 percent to $1.6 trillion. Banks of all sizes have benefited from TAG, and at year-end 2011, deposits in these accounts made up 16 percent of the liabilities on the books of U.S. banks.

The importance of deposits in TAG-insured accounts varies considerably by bank size, and large banks dominate. At year-end 2011, U.S. banks with assets of more than $15 billion held almost 90 percent of all TAG-insured deposits, compared with holding 74 percent of all U.S. bank deposits; the ratio of TAG-insured deposits to total deposits at these institutions averaged 24 percent. For smaller banks, especially community banks with assets of less than $1 billion, TAG-insured deposits make up a fairly minimal source of liquidity. At year-end 2011, TAG-insured deposits averaged 6.7 percent of total deposits at U.S. community banks and 4.6 percent at District community banks.

Many bankers, especially community bankers, favor the continuation of the TAG program through at least 2014 and perhaps permanently. They fear that these deposits—absent FDIC insurance—will migrate to larger institutions that are perceived to be too big to fail. The Independent Community Bankers of America is leading the charge to keep TAG permanent, with support from the Conference of State Bank Supervisors. These organizations argue that TAG levels the playing field by neutralizing, to a small degree, the perceived implicit government guarantee for large banks.

Arguments Against Continuation

Those who oppose extending TAG point to a number of reasons. First, they argue that liquidity is now plentiful and that it's very unlikely banks will experience any sort of huge runoff in deposits, even when interest rates start to rise. For clients who are concerned about losing deposit insurance coverage, banks can use sweep accounts and services that break up large deposits and distribute them among multiple cooperating banks to maintain FDIC insurance coverage at the normal $250,000 limit. Other options to maintain liquidity include using FHLB advances and increasing interest paid on other deposits and money market accounts. Banks also could potentially go to the private insurance market to maintain coverage on these accounts, although the availability and cost effectiveness of providers is by no means certain.

Other arguments against extending the program emphasize the political, reputational and regulatory risks that would come with it. Politically, it would be very difficult to get legislation extending the program to pass this election year. Even if Congress were to agree to take up the issue, banks would risk the reopening of proposals they have fought hard to defeat, such as expanded business lending powers for credit unions and an extension of the Durbin amendment in the Dodd-Frank Act to credit cards. Also troubling to some is the belief that the continuation of TAG sends a message that the banking industry is still struggling as it did during the financial crisis.

Looking Ahead

The TAG program has lost money because current premiums have not covered the losses the FDIC has incurred when a bank fails and the agency has to pay out deposits in excess of the $250,000 coverage limit. The FDIC says it will have to raise premiums to cover program losses if TAG is still in place in 2020 when the required reserve ratio jumps to 1.35 percent. The ABA estimates it would require an extra $15 billion in premiums to cover TAG-insured deposits to get to that ratio; premiums totaled just under $14 billion in 2011.

The FDIC was expected to formally weigh in on TAG by the end of June. U.S. Rep. Shelley Moore Capito, R-W. Va., had asked the agency to report to Congress the estimated costs of the program to date as well as the effects of TAG on the deposit insurance fund and overall liquidity in the banking system. She also wanted the FDIC's assessment of what the consequences would be for the economy and banking industry if TAG expires on Dec. 31.

>>MORE ONLINE

FDIC Final Rule on Section 343 of the Dodd-Frank Act
www.stlouisfed.org/CB/DFA343

Michelle Neely is an economist at the Federal Reserve Bank of St. Louis.

ENDNOTE

1 Technically, the program is no longer called TAG. Section 343 of the Dodd-Frank Act superseded TAG and extended its coverage, but it is still commonly referred to as the TAG program.

At year-end 2011, TAG-insured deposits totaled $1.6 trillion and accounted for 20 percent of all U.S. bank deposits.

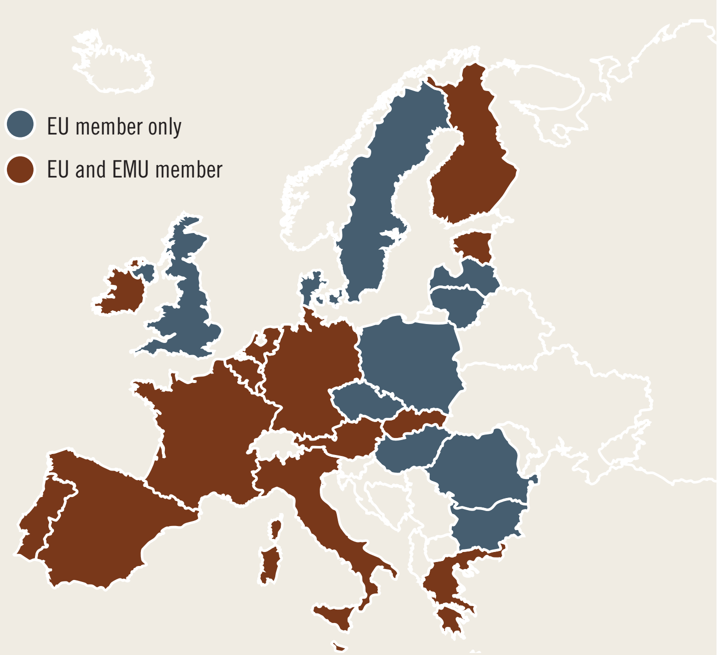
Greece and the Role of the EU

Greece has defaulted on its sovereign debt many times throughout history. But the current crisis is much different because Greece is a member of the European Union (EU), and the debt-to-GDP ratios of Greece, Ireland, Portugal, Spain and Italy have become serious concerns.

Even after forming the EU, Europe never seriously pursued a fiscal union, Waller said, because nations would have had to give up their sovereign authority to tax, spend and issue debt. Rather, EU nations created the Economic and Monetary Union (EMU, also commonly called the eurozone) in the 1990s to be a monetary union united under a single currency. Even though the EU had little say over sovereign matters, countries could not be admitted to the eurozone unless they were moving toward specific levels for long-term interest rates, inflation, exchange rates, deficit-to-GDP ratios and debt-to-GDP ratios.

Greece was denied membership to the EMU in 1998 because it met none of the five criteria. Yet two years later, Greece was admitted to the EMU even though the nation *still* met none of the five criteria—and was even moving in the wrong direction. Most notably, it was well-known that Greece's debt-to-GDP ratio in 2000 was 103 percent, far above the EMU's maximum level of 60 percent; it remained about 100 percent throughout the 2000s. Also, Greece's deficit-to-GDP ratio in 2000 was 3.7 percent, above the EMU's maximum of 3 percent. And in 2009, a new Greek government revealed that Greece's deficit-to-GDP ratio was not 4 percent as the previous government had claimed but actually near 16 percent.

However, the EU failed to create contingencies in case a member nation decided to leave or was kicked out of the EU or EMU. "For many political reasons, it was never discussed," Waller said. This glaring omission has become critical today, more than a decade after Greece's shaky eurozone entry.



Sovereign Debt

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possibility can occur in any nation, even the United States. (See the Central View on Page 2 of this issue, "A Wake-up Call for the U.S.," by St. Louis Fed President James Bullard.)

How High Is Too High?

When considering how deep in the hole a nation is, economists tend to look at the debt-to-GDP (gross domestic product) ratio instead of just the nation's budget deficit and the entire national debt, which is the sum of the current and all past deficits/surpluses. The debt-to-GDP ratio measures a country's ability to pay off the entire debt with one year's income, regardless of the nation's wealth or total debt outstanding. Many nations, including the U.S., have gross debt-to-GDP ratios well above 90 percent.

A high debt-to-GDP ratio does not automatically mean a nation is a default risk, however. "Many countries have defaulted with (relatively) little debt, and other countries have been doing fine with very high levels of debt," economist Fernando Martin said during the May 8 Q&A session. "I don't think there is anything magical about a *particular* debt-to-GDP number.

Ability Vs. Willingness To Pay

Rather, explained Waller, the critical point for lenders and investors comes when they are no longer confident of getting their money back. "It's not the *ability* to repay the debt but the *willingness* to repay the debt," he said. For example, Japan's current debt-to-GDP ratio is well above 200 percent, but few holders of Japanese debt see that nation as a default risk. However, Brazil and Mexico defaulted in the early 1980s with lower debt-to-GDP ratios of only about 50 percent.

In normal times, most nations roll over their debt when it's due. Nations often choose to get short-term debt because of lower interest rates rather than longer-term debt, at the expense of rolling over debt more frequently. "Every time you roll it over, you're giving investors the opportunity to say, 'Can you meet your debt obligations?' If you're borrowing every six months or every 12 months, you've got to answer that question a lot more often," Waller said. "The minute a lender fears you may not be able to settle up this debt, they may either refuse to roll over the debt or raise the interest rates that you have to pay."

This perceived willingness—or growing lack thereof—to repay government debt is a major factor in Europe's current sovereign debt crisis.

Wake-up Calls

Even though many nations in Europe had operated with high debt for decades, no developed nation had defaulted since 1946, Waller said. But financial markets were rudely awakened to sovereign debt risk in the late 2000s. Greece's shaky financial status was well-known when it was admitted to the Economic and Monetary Union (EMU, aka the eurozone) in 2000, but the *true* depth of that nation's debt became known only in 2009.[1] (See "Greece and the Role of the EU" on Page 8.) Meanwhile, fellow EMU member Ireland, long a strong financial performer, had to bail out its entire banking system in 2007-2008. Between 2007 and 2010, the Irish debt-to-GDP ratio went from 25 to near 100 percent, and its deficit went from zero to more than 30 percent. (See Figure 1 on Page 1.)

By themselves, Greece and Ireland would not cause such consternation: "The combined GDP of Greece and Ireland is akin to the amount the state of Pennsylvania generates. It's hard to imagine that if Pennsylvania has a financial crisis, the rest of the country would collapse," Waller said.

But because members of the EMU are connected economically, smaller countries such as Greece, Ireland and Portugal (also experiencing sovereign debt woes) are the figurative canaries in the coal mine. "They were telling us that there was a bigger problem coming: Italy and Spain," Waller said. Those nations have much larger economies and debt outstanding—Italy, for example, has €2 trillion in debt and must roll over €300 billion in 2012, an amount akin to the *entire* Greek debt.

Markets Lose Confidence

Financial markets had come to treat the sovereign debt of all EMU members as identical by the end of the 1990s, using the bonds issued by fiscally strong Germany as the union's benchmark. (See Figure 2 above.) But after the Greek and Irish shocks, financial markets stopped viewing Italian, Greek, Irish, Portuguese and Spanish debt as close substitutes for German bonds, and they started hiking interest rates in the fall of 2008 to compensate for the heightened risk of default. By January 2012, the yield spread between German and Greek debt had increased by *3,300* basis points. (See Figure 3 above.)

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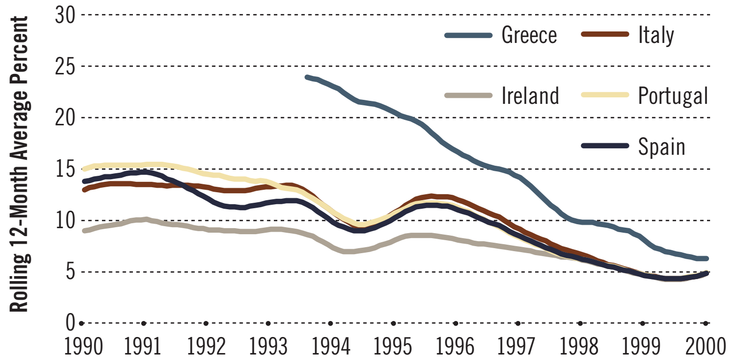
FIGURE 2

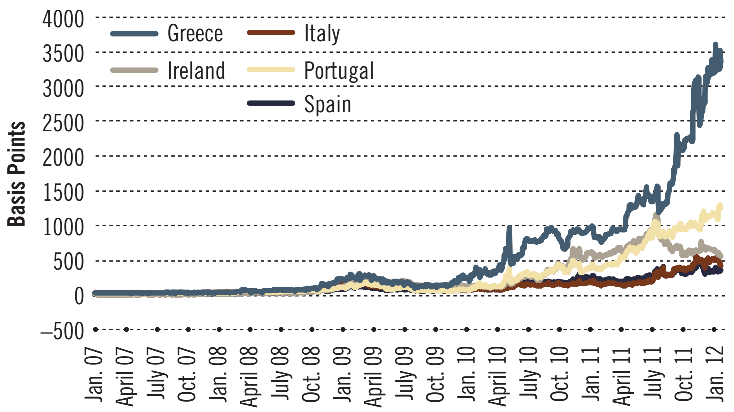
Long Term Interest Rates, 1990-2000



SOURCE: DG II/Statistical Office European Communities/Haver Analytics. As shown by the nearly identical long term interest rates, financial markets viewed the sovereign debt of eurozone members such as Ireland, Italy, Portugal and Spain as the same by the end of the decade, regardless of whether a country had its fiscal house in order. Greek long term interest rates had approached the levels of eurozone members by 2000, when Greece was admitted to the EMU. This identical treatment of sovereign debt lasted until late 2008.

FIGURE 3

Yield Spreads Over German 10-Year Bonds



SOURCE: Reuters/Haver Analytics. Once the deteriorating fiscal condition of Greece and Ireland became well-known, the markets began to incorporate default risk into the interest rates charged to governments to roll over their debt. By 2011, the spreads between what Germany paid on 10-year bonds, for example, and what the less frugal countries had to pay widened greatly—especially for Greece.

Sovereign Debt

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This loss of confidence was mirrored by the rise of prices for credit default swaps (CDS, essentially insurance policies against default). By late 2011, CDS on Greek debt stopped trading when markets gave Greece a 50 percent chance of default. CDS were triggered in March 2012 in response to a bond swap and restructuring deal that allowed Greece to effectively default on half of its debt.

Meanwhile, the rollover problem had hit Greek banks, which held about 20 percent of the government's sovereign debt (as of May 2012). The eventual Greek default dramatically weakened the banks' balance sheets, Waller explained. Because they feared Greece's banks would no longer honor obligations, markets stopped rolling over Greek bank debt, which in turn meant that Greek banks could no longer roll over funding of the government's debt.

Digging Out of the Deep Hole

Since 2010, the EU and International Monetary Fund have provided a total of more than €1 trillion in several loan packages to ease rollover problems, with Germany and France contributing the most. The European Central bank also injected up to €1 trillion of liquidity into the EU's banking system. And in June, the eurozone agreed to provide approximately €100 billion to help Spanish banks.[2] But the loans cannot cover all of the debt owed. So, what is a nation to do when faced with the default specter? It has alternatives that are both difficult and unpleasant:

Austerity measures — These are combinations of sharp tax increases and deep spending cuts. Greece and Ireland instituted tough austerity measures, which lowered Greece's deficit-to-GDP ratio from about 16 percent to a projected 9 percent for 2011 and reduced Ireland's deficit-to-GDP ratio from its 2010 peak of 31 percent to near 10 percent in 2011. However, the cost was substantial social unrest. "You upset people. The measures are unpopular, and we saw the results in May," Waller said, referencing the late spring elections, when several governments were voted out, including the Greek government that revealed the nation's true debt but also enacted five rounds of austerity measures.

Inflating away — "Inflating away debt by printing money is the politically less painful way of doing it, but that doesn't mean it would be easy," economist Fernando Martin said. Economist Christopher Neely agreed and noted that a substantial portion of sovereign debt is short-term and other debt is issued in the form of real bonds that depend on the price level. "So, unless you're willing to accept very high inflation for a long time, it's difficult to get a decent chunk of your debt inflated away, and if you do that, you're going to pay the costs of higher interest rates for a long time," he said.

"The pain associated with these actions will fall on different groups, and that leads to political conflict,"

Explore More of the "Modern Greek Tragedy"

Annual Report

Research Director Christopher Waller and economist Fernando Martin based their respective Dialogue presentations on their in-depth essay in the St. Louis Fed's 2011 Annual Report.

They reveal the historical roots of sovereign debt to help explain Europe's current crisis, why nations default and what may happen in the future. The essay is available in English and Spanish.

Visit www.stlouisfed.org/ar, where you can also see a 10-minute video that captures several of the essay's key points.

"Dialogue with the Fed" Materials

Visit www.stlouisfed.org/dialogue to view the videos and presentations from the May 8 Dialogue; the May 30 Dialogo; and last fall's events on the financial crisis, the federal budget deficit and the unemployment picture.

Credit Default Swaps

St. Louis Fed economists Bryan J. Noeth and Rajdeep Sengupta take "A Look at Credit Default Swaps and Their Impact on the European Debt Crisis" at www.stlouisfed.org/publications/re/articles/?id=2231 in the April 2012 *Regional Economist*.

Waller said. “Political conflict means delay in getting the fiscal situation on firmer ground, and it also erodes investor confidence.”

Taken together, the austerity measures, the international loans and liquidity injections helped calm the overall situation by early 2012. “It worked—for a while,” Waller said.

In Conclusion: The Moral of the Tragedy

Uncertainty came roaring back in late spring because of election results in Greece, France and elsewhere in the EMU, and anxiety increased over possible Spanish and/or Italian defaults, the possible Greek exit from the eurozone, and the ultimate fate of the euro and the EU. At the May 8 Dialogue, almost two-thirds of the audience believed that after the crisis the EMU will continue to exist, albeit with fewer members.

And regardless of the resolution of the crisis, “Greece and other nations will still have to solve their fiscal problems,” Martin said.

Calling Europe’s turmoil a “modern Greek tragedy” is not a mere play on words. Rather, it’s a tragedy because “borrowing is seductive,” Waller explained. “Although the ability to borrow to finance current spending can be very beneficial, it’s very tempting to borrow for the short-term gains and kick the pain down the road.”

As a result, governments—like households—can borrow too much. “And suddenly you wake up one day (realizing that) your debt burden is unsustainable, which leads to a crisis, periods of austerity, and pain and suffering,” he said.

“That’s the tragedy of sovereign debt,” Waller said.

ENDNOTES

1 The European Union (EU) is the organization formed in 1957. The 1992 Maastricht treaty led to the creation of the Economic and Monetary Union (EMU, aka the eurozone) and a single currency, the euro, managed by the pan-European institution the European Central Bank. Original eurozone members were Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxemburg, the Netherlands, Portugal and Spain. As of this writing, 17 of the 27 EU members are in the eurozone.

2 The European Central Bank committed to providing up to €1 trillion between 2012 and 2014.

Deep Structural Problems and the Debt Crisis

The May 8 Dialogue’s audience members asked whether factors such as inefficient tax collection and high unemployment —reasons other than those given in the presentation—helped push Europe into the sovereign debt crisis.

For example, one audience member pointed out that extremely inefficient tax collection policies in some southern European countries are one of the reasons why they’re in trouble. “Are these countries trying to fix it, or is tax avoidance simply a way of life?” he asked.

Economist Fernando Martin acknowledged that tax evasion and other inefficiencies are problems. “But they’re systemic problems that have been going on for a long time, and these countries have adapted to that reality,” Martin said. “Those problems are long-standing and not what really triggered these current events.”

One man said that people in some nations have a “mastery for tax evasion” because they are paid under the table for some work—a so-called informal sector that is not captured by the tax system. Noting that the U.S. also has such an informal sector, Martin said: “The connection to this particular crisis is that now people realize how burdensome these informal sectors are. Governments are providing everyone with public works, public education and more. But only people in the formal sector pay taxes—and the crisis has increased the political conflict because the informal sector does not want to be sucked into the formal sector and have to pay the tab.”

A Battle Fought on Many Fronts

Turning to Spain, one woman said: “They have the highest unemployment rate in the EU and EMU for people under 24, a collapsing banking system and problems in the property market. So, what do you see as their long-term future, and do they have ‘willingness’ to fix their problems?”

Noting that she was correct, Martin said that Spain and Portugal share a similar feature in that unemployment has been going up quite a lot—in Portugal for a longer time, in Spain more recently. “As for the willingness to fix those problems, that’s a question for the politicians there and the public that elects them,” he said. Spain and Portugal share structural problems and other features, such as rising expenditures since 2007 that have only now been coming down—and that’s what’s generating political conflict, which is on top of the labor market problems. “So now you have a battle being fought on many fronts—and it’s a political conflict,” Martin said.

Finally, audience members also asked whether the American investment banking industry and commodity price increases contributed to the sovereign debt crisis. Economist Christopher Neely answered that while investment bankers really couldn’t be blamed, commodity prices could have been a trigger: “A trigger but not a fundamental cause,” he said.

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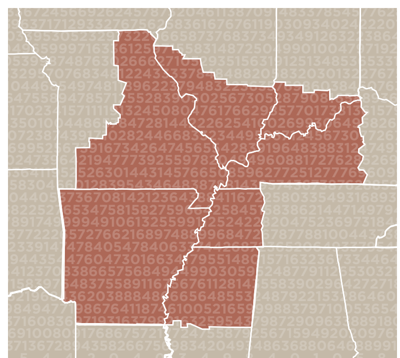

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