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Special Commentary

Jay H. Bryson, Global Economist
jay.bryson@wellsfargo.com • (704) 383-3518
Tyler B. Kruse, Economic Analyst
tyler.kruse@wellsfargo.com • (704) 715-1030

With Greece "Stabilized," Will the Fire Spread?

Executive Summary

In the second of two reports on the European sovereign debt crisis, we analyze the ability of Ireland, Portugal, Spain, Italy and Belgium to achieve government debt sustainability. Under four separate nominal GDP growth assumptions and four interest rate assumptions, we calculate the primary budget surpluses (in some cases, deficits) that would be required to stabilize government debt-to-GDP ratios in each country.

If nominal GDP growth and interest rates return to prerecession parameters, then Ireland and Portugal should have little trouble stabilizing their respective debt-to-GDP ratios. However, if interest rates remain elevated and growth sluggish, both countries may find it very challenging to achieve debt sustainability. In our view, the probability that both Portugal and Ireland will eventually require concessional financing from the private sector along the lines that have been offered to Greece is not insignificant.

Neither Belgium nor Spain is completely "out of the woods." However, achieving debt sustainability in these countries does not appear to be especially onerous unless the worst-case scenario of economic stagnation and punitive interest rates were to develop. The Italian case is very interesting. If Italy can return to its prerecession rate of nominal GDP growth, which is not a high hurdle, then it should be able to stabilize its government debt-to-GDP ratio. However, it will become more difficult for Italy to achieve debt sustainability if the economy stagnates. If Italy is the most interesting case, it is also arguably the most worrying case. A fiscal crisis in Italy, should one occur, could be the catalyst that tears the Eurozone apart.

Will Other European Countries Require a Bailout Package?

In a recent report, we analyzed the second bailout package that leaders of the European Union (EU) cobbled together for Greece.[1] We concluded that under certain favorable conditions Greece could stabilize its debt-to-GDP ratio at roughly 160 percent, but that the country would remain vulnerable to negative shocks for the foreseeable future. Greece's debt-to-GDP ratio could rise indefinitely if the economy stagnates and/or the Greek government does not fully follow through on its fiscal austerity plans.

A disconcerting turn in the European sovereign debt crisis has occurred.

The fire in Greece seems to be contained, at least for now, but will Ireland and Portugal require a second bailout package as Greece did? Will Spain, Italy and, perhaps even, Belgium need to be rescued? Until the past few weeks, the crisis seemed to be contained to Greece, Ireland and Portugal, which are all smaller economies that are relatively easy to rescue. However, the sharp rise in yields on Italian and Spanish government bonds relative to their German counterparts in recent weeks marks a disconcerting turn in the European sovereign debt crisis. Italy is the eighth largest economy in the world, and Spain is the 12th largest. Bailing out these governments would be very difficult if not impossible for the EU and the IMF. Will the governments of Spain, Italy

[1] **See "Is the Greek Debt Problem "Solved"? (July 25, 2011), which is posted at www.wellsfargo.com/economics or which is available on request.**

and Belgium be able to stabilize their debt-to-GDP ratios that have risen in recent years (Figure 1) as budget deficit have widened (Figure 2)?

As we pointed out in our earlier report, economists generally define debt sustainability as a situation in which a country's debt-to-GDP ratio is stable. Economic theory shows that debt sustainability depends on four factors: the debt-to-GDP ratio at present, the government's primary fiscal surplus or deficit (i.e., the fiscal position net of interest payments), the nominal GDP growth rate and the rate of interest the government needs to pay on its debt.[2] A country's long-run growth rate and long-term interest rate are largely beyond the direct control of the government. It is arguably easier for the government to determine its primary deficit or surplus than it is to influence these other two variables. Therefore, in this report, we examine debt dynamics in Ireland, Portugal, Spain, Italy and Belgium in the context of four different assumptions about nominal GDP growth and four different assumptions about borrowing costs. We calculate the primary surpluses that would be needed to stabilize the government debt-to-GDP ratio under 16 different interest rate and growth situations.

Figure 1

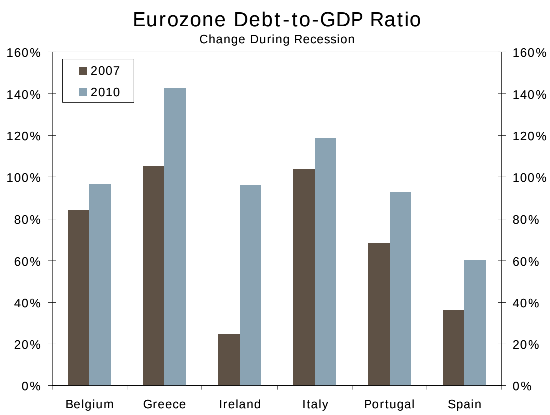
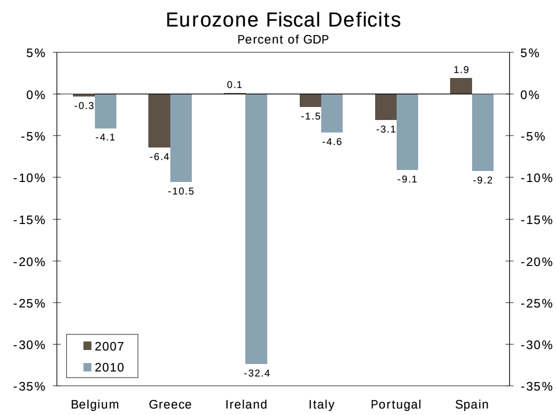


Figure 2



Source: IHS Global Insight and Wells Fargo Securities, LLC

Does Ireland Need a Greek-Style Rescue Package?

The government debt-to-GDP ratio in Ireland has shot up to nearly 100 percent.

Because we focused on Greece in detail in our earlier report, we will eschew discussion of the Hellenic Republic in this report and start with Ireland. After Greece, Ireland was the first Eurozone country that was forced to accept EU and IMF financing. Ireland's problems are rooted in an ailing financial sector that experienced heavy real estate-related losses after the collapse of the country's massive housing boom. The government sought to recapitalize the damaged banking sector, but in doing so greatly exacerbated the country's debt-to-GDP ratio. Prior to the crisis, Ireland's debt burden was a very modest 25 percent of GDP, but, as of 2010, the government debt-to-GDP ratio had shot up to nearly 100 percent.

In our simulations, we considered four long-term growth rate scenarios. Between 1999 and 2007, nominal GDP in Ireland grew at an annual average rate of 8.8 percent. Therefore, we asked what would happen if Irish growth returns to its predownturn pace. Next, we considered a growth rate of roughly one-half of the predownturn pace (about 4.5 percent). The IMF projects that Irish nominal GDP will grow 2.8 percent in 2012, which became our third growth rate scenario. Finally, we adopted a very pessimistic scenario of zero nominal GDP growth in the long run.

We also considered four interest rate scenarios. The first scenario considers what would happen if the Irish government can return to predownturn borrowing rates. The duration of Irish government debt is a bit more than five years, and the yield on the 5-year Irish government bond averaged about 4.00 percent between 1999 and 2007. Under the terms of the recently proposed

[2] **For a technical discussion on debt dynamics see, for example, Christian Broda and David Weinstein, "Happy News from the Dismal Science: Reassessing Japanese Fiscal Policy and Sustainability," National Bureau of Economic Research Working Paper #10988, December 2004.**

debt exchanges for Greece, the Greek government will pay an average coupon rate of roughly 5.00 percent over the next few years. Therefore, our second interest rate scenario assumes that Ireland would also seek similar financing terms. Between the beginning of 2010 and today, the yield on the 5-year Irish government bond has averaged roughly 9.00 percent, which became our third interest rate scenario. Finally, our fourth scenario assumes that borrowing costs remain near current levels (16.00 percent).

The table below shows a matrix of the four different growth rate scenarios and the four different interest rate scenarios. The entry in each cell shows the primary budget surplus (or deficit) that is needed to stabilize the debt-to-GDP ratio under each specific growth rate and interest rate assumption. Under the most optimistic scenario in which Ireland returns to predownturn rates of growth and borrowing costs, the Irish government could incur a primary *deficit* of 4.2 percent of GDP and still stabilize its debt-to-GDP ratio (see upper left cell of Table 1). Obviously, a primary *deficit* of this size is not a challenging situation for the Irish government, but the growth rate and interest rate assumptions on which it is based do not seem to be very realistic either, at least not at present.

Table 1

Debt Stabilization Scenarios: Ireland

Growth Rates	Interest Rates			
	4.00%	5.00%	9.00%	16.00%
8.8%	-4.2%	-3.3%	0.2%	6.4%
4.5%	-0.5%	0.5%	4.1%	10.6%
2.8%	1.2%	2.1%	5.9%	12.4%
0.0%	3.8%	4.8%	8.7%	15.4%

Source: Wells Fargo Securities, LLC

The primary surpluses highlighted in red exceed 5 percent of GDP, which we judge to be politically unsustainable. The yellow-shaded cells show primary surpluses that exceed 3 percent of GDP, which may be difficult to sustain for long periods of time as well.[3] The table shows that if the Irish government returns to private credit markets at 9.00 percent interest rates, let alone at the punitive rates that prevail today, it would have a very difficult, if not impossible, job of stabilizing its debt-to-GDP ratio. However, if Ireland, were to receive private-sector involvement (PSI) on the same terms as Greece, where exchanged bonds pay coupons of roughly 5 percent for the next few years, then it would be much easier for the Irish government to stabilize its debt-to-GDP ratio, even if economic growth remains sluggish. The Irish government ran an average primary surplus of 2.8 percent of GDP from 1999, when it entered European Monetary Union, until 2007, which gives cause for some optimism that the country should have the political latitude to sustain elevated primary surpluses in the near term.

Unless interest rates come down significantly, Ireland will have a difficult time stabilizing its debt-to-GDP ratio.

Portugal: In Desperate Need of Stronger Economic Growth

Portugal was forced to seek aid from the EU and IMF shortly after Ireland, but its debt history is quite dissimilar to Ireland's. While Ireland suffered from a massive collapse in the real estate sector, Portugal never really suffered from a speculative real estate bubble. With Portugal, investors are chiefly concerned by the dismal growth outlook for the relatively small economy. Portugal entered the financial crisis with a debt-to-GDP ratio of less than 70 percent, but it has

[3] **Sooner or later, citizenries grow weary of austerity. Outside of Norway, where oil revenues help to swell government coffers, and Belgium, which ran primary surpluses that were greater than 5 percent of GDP between 1997 and 2002, no other OECD country has incurred primary budget surpluses in excess of 5 percent of GDP for more than a year or two. Three percent of GDP primary budget surpluses may also be difficult to maintain. Among 30 OECD countries over the past two decades, primary budget surpluses of 3 percent of GDP or larger have been achieved only 20 percent of the time.**

subsequently swelled to about 90 percent, and the OECD projects that it will hit 100 percent by next year.

Between 1999 and 2007, nominal GDP in Portugal grew at an annual average rate of only 4.5 percent, well below the 8.8 percent rate that Greece enjoyed. Our first growth scenario assumes that the Portuguese economy soon returns to its prerecession rate of nominal GDP growth. However, a return to prerecession rates of growth seems unlikely, at least over the next few years, as the country grapples with austerity measures. Therefore, we assume that nominal GDP grows at one-half its prerecession rate (2.3 percent) in our second scenario. Growth rates of 1.0 percent, which the IMF projects for 2012, and complete stagnation (i.e., zero nominal GDP growth) comprise our third and fourth scenarios. Our four interest rate scenarios are return to precrisis interest rates (4.00 percent), financing at concessionary rates along the lines of the Greek restructuring (5.00 percent), elevated interest rates (8.00 percent) and current rates (17.00 percent).

Analyzing Table 2, we can see that three-quarters of the 16 scenarios necessitate primary surpluses we consider to be politically unsustainable for most developed nations. Even if Portugal is able to grow at 4.5 percent, equivalent to its average prerecession growth rate, it would need to run unsustainable primary surpluses under the current financing environment. If Portugal manages to grow at one-half of its prerecession pace, it would need concessionary interest rates and primary budget surpluses on the order of 2.5 percent of GDP to stabilize its debt-to-GDP ratio. In that regard, Portugal has a history of poor fiscal discipline. From 1999 to 2007, Portugal averaged a 1.0 percent primary deficit, and its largest primary surplus in the past 20 years was a paltry 0.6 percent in 1995. Only two scenarios in Table 2 allow Portugal to run such a low surplus, both of which assume the country returns to prerecession growth rates in the next two years.

If Portugal fails to achieve stronger economic growth, it may eventually require concessional financing.

Our analysis for Portugal points to an extremely tenuous path forward, with little room for error or negative shocks. The key for Portugal in the near term is to foster a business environment conducive to higher rates of economic growth, which may entail large-scale structural adjustments in the labor market and the public sector. If Portugal fails to achieve stronger economic growth, it may eventually require concessional financing from the private sector along the lines that have been offered recently to Greece.

Table 2

Debt Stabilization Scenarios: Portugal

Growth Rates	Interest Rates 4.00%	5.00%	8.00%	17.00%
4.5%	-0.4%	0.4%	3.1%	11.1%
2.3%	1.6%	2.5%	5.2%	13.4%
1.0%	2.8%	3.7%	6.4%	14.7%
0.0%	3.7%	4.7%	7.4%	15.8%

Source: Wells Fargo Securities, LLC

Spain: Ailing Financial Sector, but Strong Fundamentals

Spain should be able to stabilize its debt-to-GDP ratio.

Spain, much like Ireland, experienced a real estate boom during the past expansion, which unraveled at an alarming rate during the crisis. The Spanish banking system, specifically local mortgage lenders called cajas, was left severely damaged and required recapitalization by the Spanish government. The recapitalization of the financial system along with cyclical factors caused the Spanish debt-to-GDP ratio to expand from 36 percent to 60 percent of GDP over the course of the recession. The weakness of the banking sector and the fast-paced deterioration in the country's debt burden has alarmed investors since the sovereign debt crisis began.

However, it appears that Spain is better positioned to achieve debt sustainability than most of the other countries considered in this report. Although Spain's access to market financing has undoubtedly been stressed, Spanish interest rates have yet to reach the astronomical levels experienced by Greece, Ireland and Portugal. Under most of our growth and interest rate scenarios, Spain should be able to stabilize its debt-to-GDP ratio. Prior to the recession, Spain averaged a healthy primary surplus of 2.3 percent of GDP. Only four of the most severe scenarios would require Spain to boost its primary surplus beyond average prerecession ratios. Spain would find it challenging, but not impossible, to achieve debt sustainability even under our most severe scenario of zero nominal GDP growth and current market financing costs.

The chief concern for Spain is the health of the financial sector.

The chief concern for Spain is the health of the financial sector. If the Spanish government were forced to continually pour billions of euro into the financial sector to stem real estate-related losses, it could limit its capacity to run healthy primary surpluses and further exacerbate the debt-to-GDP ratio. Total write-downs as of 2010 have amounted to roughly 9 percent of GDP, with the majority related to real estate holdings in Spanish cajas. The Spanish government has already infused the sector with €15.5 billion in capital (2 percent of GDP) in the past two years, but real estate prices continue to slide. Home prices are down nearly 4 percent thus far in 2011, bringing their overall decline since 2008 to more than 15 percent. Another government infusion of capital into the banking sector could inhibit the central government's budgetary flexibility.

A bailout for Spain, should one be necessary, would be very costly. We estimate that it would take €400 billion to €500 billion to roll maturing Spanish government debt and finance modest budget deficits over the next three years, which would completely exhaust the existing €440 billion European Financial Stability Facility (EFSF).

Table 3

Debt Stabilization Scenarios: Spain

Growth Rates	Interest Rates			
	4.00%	5.00%	6.00%	8.00%
7.3%	-1.8%	-1.3%	-0.7%	0.4%
3.8%	0.1%	0.7%	1.3%	2.5%
3.0%	0.6%	1.2%	1.8%	2.9%
0.0%	2.4%	3.0%	3.6%	4.8%

Source: Wells Fargo Securities, LLC

Italy: Stronger Growth Is Priority No. 1

The recent financial duress experienced by Europe's third-largest economy poses the most significant threat to the stability of the Eurozone and the European Union as a whole. Italy's debt-to-GDP ratio has long been among the highest in the developed world; ranking second behind Japan among G7 countries. Unlike Ireland and Spain, the Italian banking system's losses were not severe enough to necessitate large-scale recapitalization, and the government has incurred modest fiscal deficits over the past few years.[4] Like Portugal, Italy's problem is slow economic growth. Between 1999 and 2007, nominal GDP in Italy grew at an average rate of only 3.8 percent per annum.

If Italy returns to pre-recession growth rates, then stabilizing the debt-to-GDP ratio seems plausible.

The debt stabilization scenarios in Italy, though not as favorable as Spain's, are also not as dire as the countries that have already accepted bailouts (i.e., Greece, Ireland and Portugal). If Italy returns to its prerecession growth rate in the near term, then stabilizing the debt-to-GDP ratio seems plausible even if borrowing costs remain at their current elevated rates. During the expansion of the past decade, Italy averaged a 2.1 percent primary surplus, with two years of surpluses beyond 5 percent of GDP. If the Italian economy does not manage to match prerecession growth rates, then the necessary budget tightening becomes significantly more painful. Only under our worst-case scenario, that is, no nominal GDP growth and current market

[4] **Italy's government deficit rose from less than 3 percent of GDP before the recession to about 5 percent in 2009 and 2010. In contrast, deficits in Spain and Greece in 2009 mushroomed to 11 percent and 14 percent, respectively.**

financing conditions, does the necessary primary surplus exceed Italy's largest primary surplus in recent history: 6.1 percent of GDP in 1997. Although the austerity measures necessary to cope with some of our more severe scenarios will be painful, the primary surpluses required are not impossible given Italy's history of strong budgetary discipline in the late 1990s.

In the years ahead, it is crucial that Italy achieves stronger nominal GDP growth than the 1.8 percent rate that the IMF forecasts it will register in 2011. In that regard, structural reforms that can help lift the country's long-run growth rate are imperative. Failure by Italy to stabilize its debt-to-GDP ratio could mean the end of the Eurozone in its present form. We reckon that the price tag to bail out Italy would approach €1 trillion, which few politicians in Europe would have the stomach, if not the wallet, to bankroll.[5]

Table 4

Debt Stabilization Scenario: Italy

Growth Rates	Interest Rates			
	3.75%	4.25%	5.00%	6.00%
3.8%	0.0%	0.6%	1.4%	2.6%
3.0%	0.9%	1.4%	2.3%	3.5%
1.8%	2.3%	2.9%	3.8%	5.0%
0.0%	4.5%	5.1%	6.0%	7.1%

Source: Wells Fargo Securities, LLC

Is Belgium in "the Clear"?

Belgium has long been considered a "core" Eurozone country and, in fact, was a founding member of not only the European Monetary Union, but it also was a charter member of the European Union. Despite its status as part of the Eurozone "core," the country has come under some investor scrutiny recently, because its debt-to-GDP ratio currently exceeds 100 percent. Out of context, this elevated ratio is a cause for some concern; however, Belgium's debt-to-GDP ratio decreased by more than 25 percentage points between 1993 and 2007. It is the second-most successful OECD country in terms of budgetary discipline, running primary surpluses in excess of 3 percent of GDP almost every year from 1993 until the recession. For six years straight, the Belgian government achieved a primary surplus in excess of 5 percent, a feat no OECD country has accomplished outside of Norway.[6]

Belgium seems poised to weather the Eurozone sovereign debt crisis relatively well.

With this promising track record in mind, Belgium seems poised to weather the Eurozone sovereign debt crisis relatively well. In fact, even our most pessimistic scenario, zero nominal GDP growth and Italy-like financing costs, the primary surplus necessary to stabilize the debt burden is well below the 6.4 percent surplus the country ran in 2001. However, the IMF projects that nominal GDP in Belgium will grow roughly 4 percent in 2011, and that this rate will be maintained over the next few years. If Belgium does indeed grow at this rate, it should have little problem stabilizing its debt-to-GDP ratio.

There are two downside risks for Belgium. First, contagion in the form of sharply rising interest rates could conceivably spread to Belgium if Spain or Italy were to encounter significant financing difficulties. Currently, the yield on the Belgian 7-year bond is below 4.00 percent, which is relatively low among Eurozone countries. However, if Belgian borrowing costs were to rise sharply and growth was to slow, the government would need to undertake more fiscal restraint to keep its debt-to-GDP ratio on a sustainable path. Second, Belgian politics reflect the Flanders/Wallonia split. As noted above, the fiscal rectitude exhibited by the Belgian government

[5] **There are more than €800 billion worth of maturing debt and interest payments that Italy must finance between now and the end of 2014. Adding in modest budget deficits would bring the total price tag to close to €1 trillion.**

[6] **As noted in footnote No. 3, Norway is a major oil producer, which helps the government run large primary surpluses.**

over the past two decades has been admirable. However, investors could become very nervous if Belgian politics became completely paralyzed along regional lines.

Table 5

Debt Stabilization Scenarios: Belgium				
Growth Rates	Interest Rates			
	3.50%	4.00%	5.00%	6.00%
4.0%	-0.5%	0.0%	0.9%	1.9%
3.0%	0.5%	0.9%	1.9%	2.8%
2.0%	1.4%	1.9%	2.8%	3.8%
0.0%	3.4%	3.9%	4.8%	5.8%

Source: Wells Fargo Securities, LLC

Conclusion

The recent agreement among EU leaders to extend another bailout package to Greece caused government bond yields in the Eurozone's highly indebted countries to recede from recent highs. However, relative to earlier this year, government bond yields in these countries remain elevated, suggesting that investors remain nervous about debt sustainability prospects. Our analysis indicates that investors have reason to be nervous, at least for some of the highly indebted countries.

Ireland and Portugal are the two countries (besides Greece) where the path to debt sustainability is the most challenging. Under the assumption that nominal GDP growth and borrowing costs return to prerecession parameters, both countries will have little trouble stabilizing their respective debt-to-GDP ratios. However, a return to "normal" does not appear to be likely, at least not in the foreseeable future. If borrowing costs remain near current rates, then neither Portugal nor Ireland has much hope of stabilizing its debt-to-GDP ratio. Even if borrowing costs return to average rates that have prevailed since early 2010 (about 8 percent from Portugal and 9 percent for Ireland), both countries will find it difficult to achieve debt sustainability. The probability that both Portugal and Ireland will eventually require concessional financing from the private sector along the lines that have been offered to Greece is not insignificant.

The probability that both Portugal and Ireland will eventually require concessional financing from the private sector along the lines that have been offered to Greece is not insignificant.

Unless the Belgian economy was to completely stagnate over the next few years and/or political paralysis was to grip the country, the government should have little trouble stabilizing the debt-to-GDP ratio. Our analysis suggests that Spain should also be able to achieve debt sustainability, especially if the economy can achieve nominal GDP growth of 3 percent or higher over the next few years. That said, interest rates could move higher, which would complicate efforts to achieve debt sustainability, if another government infusion of capital into the banking system proves necessary.

Perhaps the most interesting case is Italy. If Italy can return to prerecession rates of nominal GDP growth in the next few years, then it, too, should have little trouble achieving debt sustainability again. In that regard, the IMF projects that Italian nominal GDP growth will average 3.4 percent per annum between 2012 and 2016, just a shade below its prerecession rate of 3.8 percent. If the Italian economy were to stagnate, however, achieving debt sustainability will not be impossible, but it could be very challenging. If Italy is the most interesting case, it arguably is also the most worrying. A fiscal crisis in Italy, should one occur, could be the catalyst that tears the Eurozone apart.

Wells Fargo Securities, LLC Economics Group

Diane Schumaker-Krieg	Global Head of Research & Economics	(704) 715-8437 (212) 214-5070	diane.schumaker@wellsfargo.com
Paul Jeanne	Associate Director of Research & Economics	(443) 263-6534	paul.jeanne@wellsfargo.com
John E. Silvia, Ph.D.	Chief Economist	(704) 374-7034	john.silvia@wellsfargo.com
Mark Vitner	Senior Economist	(704) 383-5635	mark.vitner@wellsfargo.com
Jay Bryson, Ph.D.	Global Economist	(704) 383-3518	jay.bryson@wellsfargo.com
Scott Anderson, Ph.D.	Senior Economist	(612) 667-9281	scott.a.anderson@wellsfargo.com
Eugenio Aleman, Ph.D.	Senior Economist	(704) 715-0314	eugenio.j.aleman@wellsfargo.com
Sam Bullard	Senior Economist	(704) 383-7372	sam.bullard@wellsfargo.com
Anika Khan	Economist	(704) 715-0575	anika.khan@wellsfargo.com
Azhar Iqbal	Econometrician	(704) 383-6805	azhar.iqbal@wellsfargo.com
Ed Kashmarek	Economist	(612) 667-0479	ed.kashmarek@wellsfargo.com
Tim Quinlan	Economist	(704) 374-4407	tim.quinlan@wellsfargo.com
Michael A. Brown	Economist	(704) 715-0569	michael.a.brown@wellsfargo.com
Tyler B. Kruse	Economic Analyst	(704) 715-1030	tyler.kruse@wellsfargo.com
Joe Seydl	Economic Analyst	(704) 715-1488	joseph.seydl@wellsfargo.com
Sarah Watt	Economic Analyst	(704) 374-7142	sarah.watt@wellsfargo.com

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