



The <u>NAIC's Capital Markets Bureau</u> monitors developments in the capital markets globally and analyzes their potential impact on the investment portfolios of US insurance companies. A list of archived Capital Markets Bureau Special Reports is available via the <u>index</u>

## **Price Volatility Among European 10-year Government Bonds**

The Eurozone sovereign debt crisis persists throughout most of Europe, having spread country by country since inception sometime in 2009. As a result, the European Central Bank (ECB) along with the International Monetary Fund (IMF) and the European Financial Stability Fund (EFSF) have loaned and continue to loan funds to affected countries so that they can meet maturing debt requirements. While European political leaders and policymakers continue to meet to devise a long-term solution, the longer this crisis continues, the more likely it will continue to spread to other countries, including those outside of Europe. Consequently, many of the impacted euro members have had severe and multiple ratings downgrades on their long-term debt ratings by the nationally recognized statistical ratings organizations (NRSROs), including having their ratings put on credit watch negative as a warning for additional future negative ratings actions if the situation does not improve. As discussed in previous Capital Markets Bureau Special Reports, the U.S. insurance industry's investment in the sovereign (and corporate) debt of the affected Eurozone countries is significant but does not pose immediate concern.

The sentiment in Greece may be worsening, as Fitch Ratings (Fitch) stated that Greece will likely not be able to meet its €14.5 billion March 2012 bond payment, and it considers the country "insolvent." Currently, Eurozone finance ministers have been discussing the restructuring of Greece's €360 billion debt burden, calling for Greek creditors (the main group of which holds €200 billion of the Greek bonds and is represented by the Institute of International Finance (IIF)) to exchange their holdings for a combination of new, short- and long-term bonds with half the face value. Likely, the creditors may take a value loss between 65%–70% as part of the restructuring, with the new bonds carrying an interest rate of approximately 4%. However, the proposed interest rate is viewed as too high by the IMF (which insists the coupon should not exceed 3.5%), as well as by others involved in the discussions. The interest rate is currently the largest hurdle in finalizing the debt restructuring. Once finalized, the new agreement would reduce Greek debt to 120% of gross domestic product (GDP) in 2020, from its current 160% of GDP. However, this goal could be problematic, given that the Greek economy is expected to shrink by 6% in 2012 and 3% in 2013.

European Sovereign Debt and EFSF Rating Downgrades

On Jan. 13, 2012, Standard & Poor's (S&P) lowered the long-term sovereign ratings on 16 European countries. The 10-year price (and, inversely, the yield) of certain European nations — particularly those members of the European Union that utilize the euro as their national currency — have fluctuated since the onset of the Eurozone crisis, which, for the most part, occurred in October 2009 when Greece announced that its budget deficit would be double previous forecasts and far exceed EU limits, causing Fitch to lower Greece's long-term sovereign rating to A- from A. Fitch currently rates Greece's long-term sovereign debt as CCC. Following this rating action, S&P on Jan. 16, 2012, lowered the issuer credit rating of the EFSF to AA+ from AAA, while both Fitch and Moody's have continued to maintain issuer credit ratings on the fund at AAA and Aaa, respectively. The EFSF was established in May 2010 and was

used to provide emergency loans to Ireland and Portugal. It may also contribute to a second bailout of Greece. The EFSF has an effective lending capacity of €440 billion and depends mostly on guarantees from the Eurozone's AAA-rated countries (currently, Germany, Finland, Luxembourg and the Netherlands). S&P's rating action was primarily due to the downgrades of the long-term debt ratings of France and Austria from AAA to AA+, as these two countries had been two of the EFSF's guarantors.

The 17 Eurozone ministers, along with the ministers of the 10 other European Union countries (that do not use the euro as their national currency) will be meeting Jan. 30, 2012, to finalize a treaty establishing a permanent bailout fund for the euro area — the €500 billion European Stability Mechanism (ESM) — because the EFSF is viewed as insufficient. The ESM is to become effective in July 2012. However, in recent news, Italy's Prime Minister Mario Monti and European Central Bank President Mario Draghi are requesting that the ESM be increased to €1 trillion.

In addition to Greece, some of the most impacted countries within the Eurozone include Italy, Ireland, Portugal and Spain. Most recently, and despite their overall financial strength, France and Austria have also been pulled into the mix of sovereign debt rating downgrades. As a result, we analyzed recent trends (primarily over the past six months) in the prices of the 10-year Treasury bonds for these countries. Note that yields move in the opposite direction of prices. Our analysis showed that not all of the countries' bond prices were affected by the recent S&P downgrades (particularly those with the highest credit quality). Nevertheless, a brief review is informative, as bond prices are indicative of market sentiment.

Some of S&P's ratings and credit watch actions on Jan. 13, 2012, include:

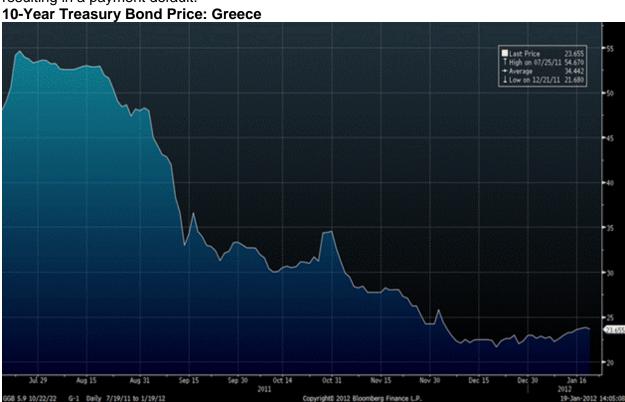
Country	To:	From:
Austria	AA+/Negative	AAA/Negative
France	AA+/Negative	AAA/Negative
Italy	BBB+/Negative	A/Negative
Portugal	BB/Negative	BBB-/Negative
Spain	A/Negative	AA-/Negative

S&P cites the primary reason for the ratings actions to be that "the policy initiatives that have been taken by European policymakers in recent weeks may be insufficient to fully address ongoing systemic stresses in the Eurozone." In their view, "these stresses include: (1) tightening credit conditions, (2) an increase in risk premiums for a widening group of Eurozone issuers, (3) a simultaneous attempt to delever by governments and households, (4) weakening economic growth prospects, and (5) an open and prolonged dispute among European policymakers over the proper approach to address challenges."

## Greece

While there has not been much in the way of volatility with regard to the price of the Greek 10-year government bonds (as shown in the graph below), over the past six months, it has been on a relatively steady decline from a high of almost 55% of par in July 2011 to a low of close to 22% of par as of December 2011 (averaging 34% of par). Since the beginning of December 2011, the bond price has been relatively flat and was about 23.6% of par as of Jan. 19, 2012. The long-term sovereign debt of Greece is currently rated CC by S&P, CCC by Fitch and Ca by Moody's. Initiatives to assist Greece with reducing its debt burden were first introduced in early 2010 — by Greek government officials recommending spending cuts and tax revenue increases, as well as through assistance by other European officials. Since then, the NRSROs have lowered the ratings on Greece's long-term sovereign debt, complete with continuing negative ratings outlooks. Despite substantial amounts of financial aid from the ECB and IMF, along with a change in government leadership in mid-November 2011, Greece's financial distress continues. Most recently the Greek government has been negotiating with private creditors regarding restructuring the country's debt, which will, in part, determine how much

additional bailout funds Greece will receive from the IMF and the ECB. Currently, Greece's total debt is €360 billion (US\$464.8 billion); relief from the private sector would decrease this amount by approximately €103 billion, with additional bailout money from the IMF and ECB totaling €130 billion, which is said to cover its financing needs through 2015. Greece's economy continues to deteriorate and, without additional bailout funding, it will not meet its March 2012 debt payment, resulting in a payment default.



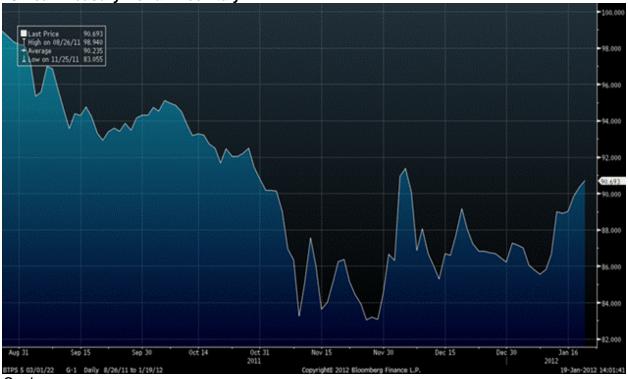
Italy

Over the past, approximately, five months, the price of Italy's 10-year Treasury bond went from a high of 98.9% of par in August 2011 (yielding 5.2%) to a low of 83.0% of par in November 2011 (yielding 7.5%). In August 2011, Italy announced it would reduce public spending by €45 billion to balance its budget; also in August, the ECB purchased approximately €14.3 billion of the sovereign debt of member states, particularly that of Spain and Italy, in an effort to reduce yields on the debt of what was then the weakest Eurozone countries (after Greece). The NRSROs lowered the ratings on Italy's long-term sovereign debt, which is currently rated BBB+, A+ and A2 by S&P, Fitch and Moody's, respectively. As its sovereign debt crisis worsened, in November 2011, Italy rejected financing from the IMF, and its prime minster was replaced. As indicated in the graph below by the sharp drop in price, on Nov. 27, 2011, the yield on the Italian 10-year government bond reached a record high (above 7%) in connection with a bond auction. The record high yield was due, in part, to investor concern over the risk of Italy becoming the next Eurozone country to require a bailout. The newly elected Prime Minister Mario Monti then proposed austerity measures, including tax increases and spending cuts, as yields on Italian government bonds were considered dangerously high. In addition, the ECB bought Italian bonds in an effort to lower rising yields. By year-end 2011, Italy held a few bond auctions that yielded above 7%; this trend continued into 2012, with a 10-year bond auction held Jan. 6, 2012, that yielded 7.12%, while the ECB bought more Italian debt. Also in January, Fitch announced that it believed Italy was the greatest threat to the euro currency due, in part, to lack of a plan in

general to stop the crisis, as well as Italy's continued large debt burden and high borrowing costs.

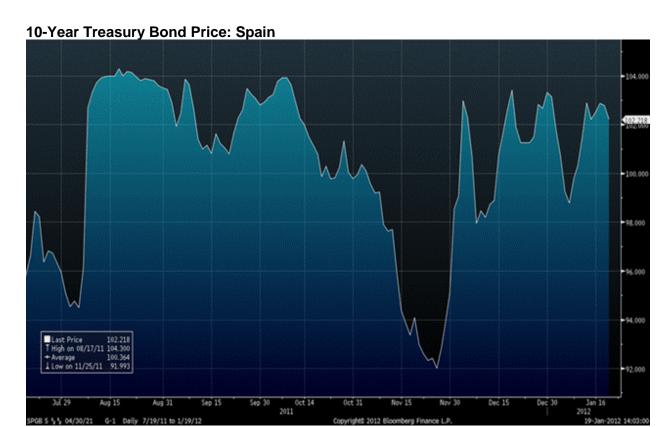
Since the November 2011 low, prices on Italy's 10-year Treasury have fluctuated, mostly in the mid-to-high 80% range, reaching almost 91% of par as of Jan. 19, 2012, and unaffected by S&P's recent downgrade.

10-Year Treasury Bond Price: Italy



Spain

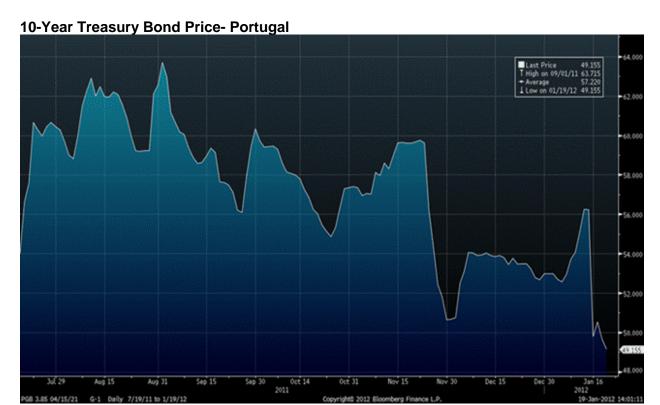
In December 2009, S&P revised its outlook on Spain's long-term sovereign debt to negative, suggesting the country would likely see "significantly lower" economic growth. Over the past six months, the price on Spain's 10-year government debt decreased from a high of 104.3% of par (yielding 4.97%) in August 2011 to a low of 92% of par (yielding 6.66%) on Nov. 25, 2011. In the interim, the ECB had been purchasing both Italian and Spanish bonds in the open market to suppress their borrowing costs. Additionally, at the end of November 2011, six central banks, including the Federal Reserve, joined together to increase liquidity in Europe by providing inexpensive U.S. dollar loans to banks in Europe through February 2013. This might have contributed to the corresponding spike in the 10-year Spanish government bond price, as shown in the graph below. Beginning in early 2010, Spain made efforts to address its financial crisis, issuing bonds and raising taxes. However, as the Eurozone crisis spread, the NRSROs began lowering ratings on Spain's long-term sovereign debt. A change in government leadership took effect in mid-December 2011, which was followed by the new government's announcement that Spain's budget deficit forecast for 2011 increased by two points. As a result, new taxes and budget cuts were approved. In January 2012, the ECB stepped in to buy more Spanish debt while, a week later, S&P lowered the rating on Spain's long-term sovereign debt to A. Currently, Moody's and Fitch rate Spain's long-term sovereign debt A1 and AA-, respectively. As of Jan. 19, 2012, Spain's 10-year government bonds were trading at a premium at 102.2% of par. In its most recent bond auction, Spain paid lower borrowing costs than in previous auctions because markets were upbeat, given news of possible additional resources from the IMF, along with the likelihood that Greece is closer to agreement on the terms of its debt restructuring with its private noteholders.



## Portugal

Following NRSRO downgrades to its long-term sovereign debt ratings in 2009 due, in large part, to a budget deficit, in early 2010, Portugal devised a budget plan, pledging to lower the ratio of debt to GDP, freeze wages and reduce payrolls. As its sovereign debt continued to increase, NRSROs continued to downgrade its sovereign debt ratings, despite tax increases and salary reductions for government officials and other public employees. In March 2011, Portugal's government collapsed, calling for early elections for governmental leaders, which took place in June 2011. In May 2011. Portugal agreed to a €78 billion financial bailout, receiving funds from the IMF, EFSF and the European Union's European Financial Stability Mechanism. Despite budget cuts by the government in October 2011 — which included tax increases and pay cuts for public workers and retirees making more than €1,000 a month — Portugal's financial deficit continued to grow. This resulted in additional rating downgrades by the NRSROs, including Fitch's downgrade on its long-term sovereign debt to BB+ with a negative outlook in November 2011, citing "fiscal imbalances, high indebtedness across all sectors, and adverse macroeconomic outlook." On Jan. 13, 2012, S&P downgraded Portugal's long-term sovereign debt to BB (with a negative outlook). Moody's currently rates Portugal's long-term sovereign debt Ba2, with a negative outlook.

As the graph below shows, over the past six months, the price of Portugal's 10-year government debt reached a low Jan. 19, 2012, at 49.2% of par (yielding 13.9%) from a high of 63.7% of par in September 2011.



France and Austria

On Jan. 13, 2012, S&P lowered the ratings on both France and Austria's long-term sovereign debt from the highest credit quality attainable (AAA) to AA+, both with negative outlooks. Despite this, the price on France and Austria's 10-year government bonds was relatively unaffected, marked at par and 103.2% of par, respectively, as of Jan. 19, 2012. A dip below par for France to its low for the most recent six-month period (96% of par) occurred Nov. 24, 2011, around the time France and Germany announced that they would lead efforts in negotiating a pact to create a centralized fiscal enforcement authority for euro-member states. According to S&P, the negative outlooks for these two countries (and the other aforementioned countries) indicate that S&P predicts a 33% chance that these ratings could be lowered further in 2012 or 2013.

## Summary

If the crisis continues to expand beyond the Eurozone into, perhaps, emerging markets countries, the credit quality of their respective debt (and, therefore, the status of their sovereign debt ratings) could also be negatively impacted. Most recently, the World Bank has warned developing countries about the potential for significantly slower global growth in 2012, particularly if financial markets refuse to fund Eurozone economies. That is because, according to the World Bank, these countries have "much less abundant capital, less vibrant trade opportunities and weaker financial support for both private and public activity [than in 2009]." In addition, in a research article dated Jan. 18, 2012, S&P noted that, "Country risks, rather than cyclical swings, will determine the credit fortunes of European corporates over the coming year." S&P anticipates that European corporates with localized businesses (as opposed to those businesses that trade goods and services globally) in euro areas most impacted by the crisis will be most exposed to credit quality deterioration in the coming months.

Several times in recent months, the NAIC Capital Markets Bureau has reported on the ongoing economic issues in Europe and expects to continue focusing on this topic, as the sovereign debt crisis has the potential to spread financial distress to other countries (such as those in emerging markets). Notwithstanding the U.S. insurance industry's relatively limited exposure to the

countries of greatest concern, the potential systemic and interconnectedness issues warrant a heightened level of diligence.

	0, 2012						<b>n</b> :		
Major Insurer Share Prices		61		hange 9		Prior			
		Close	Week	QTD	YTD	Week	Quarter	Year	
1.0.	16	\$47.02	0.2	10.6	10.6	\$12.76	612.26	642.2	
Life	Aflac Ameriprise	\$47.83 54.56	ı	10.6 9.9	10.6 9.9	\$43.76 51.61	\$43.26 49.64	\$43.20 49.6	
	Genworth	8.23	9.5	25.6	25.6	7.51	6.55	6.5	
	Lincoln	22.51	ı	15.9	15.9	21.29	19.42	19.4	
	MetLife	36.23	ı	16.2	16.2	34.66	31.18	31.1	
	Principal	27.08	ı	10.1	10.1	26.43	24.60	24.6	
	Protective	25.32	3.2	12.2	12.2	24.54	22.56	22.5	
	Prudential	57.34	5.0	14.4	14.4	54.59	50.12	50.1	
	UNUM	22.75	1.9	8.0	8.0	22.33	21.07	21.0	
PC	ACE	\$72.62	3.8	3.6	3.6	\$69.99	\$70.12	\$70.1	
	Axis Capital	31.34	ı	(1.9)	(1.9)	31.16	31.96	31.9	
	Allstate	29.81	ı	8.8	8.8	29.06	27.41	27.4	
	Arch Capital	37.41	1.2	0.5	0.5	36.95	37.23	37.2	
	Cincinnati	32.55	3.9	6.9	6.9	31.34	30.46	30.4	
	Chubb	70.93	1.6	2.5	2.5	69.81	69.22	69.2	
	Everest Re	86.47	2.5	2.8	2.8	84.40	84.09	84.0	
	Progressive	20.82	5.9	6.7	6.7	19.66	19.51	19.5	
	Travelers	61.53	3.0	4.0	4.0	59.72	59.17	59.1	
	WR Berkley	34.90	1.7	1.5	1.5	34.30	34.39	34.3	
	XL	20.39	1.3	3.1	3.1	20.13	19.77	19.7	
Other	AON	\$47.45	2.1	1.4	1.4	\$46.49	\$46.80	\$46.8	
	AIG	25.71		10.8	10.8	24.55	23.20	23.2	
	Assurant	39.32	2.6	(4.2)	(4.2)	38.31	41.06	41.0	
	Fidelity National	17.64	6.5	10.7	10.7	16.57	15.93	15.9	
	Hartford	18.56	5.1	14.2	14.2	17.65	16.25	16.2	
	Marsh	31.60	0.9	(0.1)	(0.1)	31.33	31.62	31.6	
Health	Aetna	\$43.71	(2.0)	3.6	3.6	\$44.58	\$42.19	\$42.1	
	Cigna	46.10	(1.3)	9.8	9.8	46.70	42.00	42.0	
	Humana	92.19	(3.5)	5.2	5.2	95.53	87.61	87.6	
	United	52.25	(2.4)	3.1	3.1	53.53	50.68	50.6	
	WellPoint	71.73	(1.4)	8.3	8.3	72.78	66.25	66.2	
Monoline	Assured	\$15.84	4.7	20.5	20.5	\$15.13	\$13.14	\$13.1	
	MBIA	12.45	0.9	7.4	7.4	12.34	11.59	11.5	
	MGIC	4.29	9.8	15.0	15.0	3.91	3.73	3.7	
	Radian	3.12	7.2	33.3	33.3	2.91	2.34	2.3	
	XL Capital	20.39	1.3	3.1	3.1	20.13	19.77	19.7	
January 20	2012								
•	ket Variables		Change %			Prior			
Major Mar	Ret variables	Close	Week		YTD	Week	Quarter	Year	
Dow Jones	Ind	12,720.48		4.1	4.1	12,482.07	12,217.56	12,217.5	
S&P 500		1,315.38		4.6	4.6	1,293.67	1,257.60	1,257.6	
S&P Finan		190.73		8.8	8.8	184.71	175.23	175.2	
S&P Insura		181.85		6.9	6.9	175.72	170.17	170.1	
US Dollar \$			Change %		_	Prior			
	/ Euro	\$1.29	ı	(0.2)	(0.2)	\$1.27	\$1.30	\$1.3	
	/ Crude Oil bbl	98.46	(y		(0.4)	100.78	98.83	98.8	
/ Gold oz		1,666.60	0.9	6.4	6.4	1,651.40	1,566.80	1,566.8	
Treasury Y		%		Change		9/0	9/0	9/0	
1 Year		0.11	0.01	0.00	0.00	0.10	0.11	0.11	
	10 Year	2.03	0.17	0.15	0.15	1.86	1.88	1.88	
30 Year		3.10	0.20	0.21	0.21	2.90	2.90	2.90	
	Corp Credit Spreads -bp								
Corp Credi	t Spreads -bp		C	hange 9	6		Prior		

	y 20, 2012							
Major I	Major Insurer Bond Yields Weekly Change						ge	
				Price			Spread	
	Company	Coupon	Maturity	Current	Change	Yield	B.P.	Change
Life	Aflac	8.500%	5/15/2019	\$123.55	(\$1.22)	4.66%	311	6
	Ameriprise	5.300%	3/15/2020	\$108.10	(\$0.95)	4.12%	233	(3)
	Genworth	6.515%	5/15/2018	\$96.67	\$0.93	7.18%	587	(33)
	Lincoln National	8.750%	7/15/2019	\$121.31	(\$0.95)	5.25%	347	(8)
	MassMutual	8.875%	6/15/2039	\$143.92	(\$3.08)	5.69%	267	(1)
	MetLife	4.750%	2/15/2021	\$109.31	(\$0.91)	3.54%	161	(3)
	Mutual of Omaha	6.800%	6/15/2036	\$115.88	(\$2.33)	5.60%	276	(4)
	New York Life	6.750%	11/15/2039	\$128.91	(\$3.64)	4.85%	177	0
	Northwestern Mutual	6.063%	3/15/2040	\$119.12	(\$3.70)	4.82%	174	7
	Pacific Life	9.250%	6/15/2039	\$132.06	(\$2.42)	6.68%	365	6
	Principal	6.050%	10/15/2036	\$104.38	(\$1.97)	5.72%	287	(0)
	Prudential	4.500%	11/15/2020	\$102.25	(\$0.86)	4.19%	230	(5)
	TIAA	6.850%	12/15/2039	\$127.78	(\$2.35)	4.99%	191	(5)
P&C	ACE INA	5.900%	6/15/2019	\$119.09	(\$0.94)	3.00%	139	(2)
	Allstate	7.450%	5/15/2019		(\$1.19)	3.85%	226	2
	American Financial	9.875%	6/15/2019	\$119.51	(\$0.38)	6.50%	487	(8)
	Berkshire Hathaway	5.400%	5/15/2018	\$118.76	\$0.15	2.20%	84	(13)
	Travelers	3.900%	11/15/2020	\$106.54	(\$1.01)	3.04%	113	(4)
	XL Group	6.250%	5/15/2027	\$101.96	(\$1.79)	6.05%	371	(1)
Other	AON	5.000%	9/15/2020	\$110.00	(\$1.05)	3.64%	179	(6)
	AIG	5.850%	1/15/2018	\$100.21	\$0.31	5.81%	456	(17)
	Fidelity National	7.875%	7/15/2020	\$110.94	\$0.63	6.20%	477	(49)
	Hartford	5.500%	3/15/2020	\$101.34	(\$0.43)	5.30%	349	(11)
	Marsh	9.250%	4/15/2019	\$133.75	\$1.45	3.85%	193	(68)
	Nationwide	9.375%	8/15/1939	\$119.53	(\$2.37)	7.66%	460	(4)
Health	Aetna	3.950%	9/15/2020	\$103.87	(\$1.26)	3.43%	154	(1)
	CIGNA	5.125%	6/15/2020	\$107.98	(\$0.94)	3.99%	213	(4)
	United Healthcare	3.875%	10/15/2020	\$106.74	(\$0.79)	2.99%	112	(7)
	Wellpoint	4.350%	8/15/2020	\$108.31	(\$1.29)	3.23%	136	(1)

Questions and comments are always welcome. Please contact the Capital Markets Bureau at <a href="mailto:CapitalMarkets@naic.org">CapitalMarkets@naic.org</a>.

The views expressed in this publication do not necessarily represent the views of NAIC, its officers or members. NO WARRANTY IS MADE, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY OPINION OR INFORMATION GIVEN OR MADE IN THIS PUBLICATION.

© 1990 – 2018 National Association of Insurance Commissioners. All rights reserved.