Exhibit OCS 2S-4

In the Matter of Staff's Motion Requesting The Commission Order Gorham Telephone Company to Submit to an Audit for Purposes of Determining its Cost-Based Kansas Universal Service Support, Pursuant to K.S.A. 66-2008	)))))	DOCKET NO. 12-GRHT-633-KSF

DIRECT TESTIMONY

OF

ADAM H. GATEWOOD

ON BEHALF OF

THE KANSAS CORPORATION COMMISSION

OF THE STATE OF KANSAS

Q Please state your name and business address.

A Adam H. Gatewood, 1500 Arrowhead Road, Topeka, Kansas 66604.

Q Who is your employer and what is your title?

A I am Managing Financial Analyst for the Kansas Corporation Commission (Commission).

Q What is your educational and professional background?

A I graduated from Washburn University with a B.A. in Economics in 1987 and a Masters of Business Administration in 1996. I have filed testimony on cost of capital, capital structure, and related issues before the Commission in more than 110 proceedings and before the Federal Energy Regulatory Commission.

Q What is the purpose of your testimony?

A My testimony provides the Commission with an estimate of Gorham Telephone Company's (Gorham) cost of equity, cost of debt, and its overall rate of return that Staff used in setting Gorham's revenue requirement and ultimately determines the support payment from the Kansas Universal Service Fund (KUSF). In doing so, I evaluate Gorham's requested cost of capital presented in its Application.

Q Please summarize your findings and recommendations.

A I am recommending a 6.63% rate of return (ROR) for Gorham based on the elements of capital shown in the following table.

Rate of Return for Gorham Telephone Co.
Proposed by Staff

	1 Capitalization Ratio	2 Cost of Capital	3 Weighted Cost
Long-term Debt	70.31%	5.00%	3.52%
Common Equity	29.69%	10.50%	3.12%
		Rate of Return	6.63%

1) capitalization ratios of consolidated capital structure
2) Staff's recommended cost of capital
3) column 1 x column 2

Q Describe the appendices and schedules attached to your testimony.

A Appendices attached to my testimony:

Appendix A: The standards used to evaluate a reasonable rate of return;

Appendix B: A discussion of the theory and mechanics of the discounted cash flow (DCF) model; and

Appendix C: A discussion of the theory and mechanics of the capital asset pricing model (CAPM).

Schedules attached to my testimony:

Schedule AHG-1: Value-Line Investment Survey Economic Forecast and J.P. Morgan Long-Term Capital Market Return Assumptions

Schedule AHG-2: Value-Line Proxy Company Reports

Schedule AHG-3: Proxy Company Business Descriptions from ThomsonFN (YahooFinance) and SEC Form 10-K

Schedule AHG-4: Discounted Cash Flow Model Calculations

Schedule AHG-5: ThomsonFN Growth Forecasts, Zack's Growth

Forecasts, and Stock Price Data

Q Please describe Gorham's ROR request.

A Gorham calculated its revenue requirement using an ROR of 9.50% as detailed in the table below.

Rate of Return
Proposed by Gorham Telephone

	1 Capitalization Ratio	2 Cost of Capital	3 Weighted Cost
Long-term Debt	40.00%	5.00%	2.00%
Common Equity	60.00%	12.50%	7.50%
		Rate of Return	9.50%

Source: Application, Section 7

The 12.50% return on equity (ROE) Gorham is requesting is not supported by any study or analysis that is filed in this docket.

Q Explain the root of the difference between Staff and Gorham's rate of return?

A There are two points of contention; capital structure and return on equity.

Standards for Evaluating a Fair Rate of Return

Q Please discuss legal standards used to evaluate a utility's allowed return on equity capital and allowed rate of return.

A I discuss these standards in Appendix A, attached to my testimony. Appendix A

discusses key rulings by the United States Supreme Court that financial analysts and policy makers rely on for guidance. My recommendation is consistent with the decisions from the United States Supreme Court in that I have based my recommendation on current data from the securities market and relied on data of publicly held companies in the rural local exchange segment of the telephony industry. The cost of debt and capital structure is Gorham's actual cost of debt; therefore, the Commission can be certain that Gorham is recovering its embedded cost of debt.

Q How does this docket, in which the Commission is setting the level of KUSF support for Gorham, differ from a typical rate case?

A In a general rate case, the revenue requirement is only collected from its customers. In determining a rural local exchange carrier's (RLEC) KUSF support, the Commission is not setting a revenue requirement to determine rates paid by the customers. The support is coming from all Kansans who contribute to the KUSF. Thus, we are transferring money from users of telecommunications services in Kansas to the owners of Gorham Telephone.

Q In authorizing an ROR in recent cases, has the Commission set forth any factors it relies on to guide its decisions?

A Yes. In Docket No. 10-KCPE-415-RTS, the Commission stated in its Order (415 Order), "The return on equity we authorize should: 1) fairly compensate the utility for its invested capital; 2) enable the utility to compete for new capital on equal

terms with other businesses in the same geographic area having similar risks; and 3) maintain the utility's financial integrity."[1]

In the 415 Order, the Commission also recognized its responsibility to balance the interests of investors seeking to earn a return on the capital they supply to the utility with the prices charged to utility consumers.[2] In that Order, the Commission explicitly noted that consumers' interests must be included in that balancing of interests, particularly in times of economic hardships.[3]

Q Do those principles apply to the RLECs subject to these KUSF audits?

A Yes, these principles apply equally to KUSF audits where we are determining a revenue requirement on a rate of return regulated service as they do for setting revenue requirements for any other rate regulated industry where a regulatory agency has to balance the interests of a regulated entity and the consumer. In this instance, consumers' interests encompass all who contribute to the KUSF support mechanism.

Q Does your recommendation meet the standards discussed in the 415 Order?

A Yes, my recommendation balances the competing interests of consumers and Gorham's owners. The ROR I recommend satisfies investors' required returns by including the actual cost of debt incurred by Gorham, so there is no doubt by Gorham's lenders that Staff's revenue requirement includes the interest expense

[1] Order, Docket No. 10-KCPE-415-RTS at p.41 (Nov. 22, 2010).
[2] Order, Docket No. 10-KCPE-415-RTS at p.37 (Nov. 22, 2010).
[3] Order, Docket No. 10-KCPE-415-RTS at p.39 (Nov. 22, 2010).

necessary to compensate them, but no more than what is absolutely required by the market.

My ROR also relies on Gorham's actual mix of debt and equity as of the end of the test-year. Debt and equity capital possess unique risks and, as a result, investors have different required returns on the two forms of capital. Using a capital structure different than the actual may enrich one of the interests at the expense of the other. In this instance, I can demonstrate that using a hypothetical capital structure results in an excessive return to Gorham's stockholders.

Staff's proposed ROE for Gorham is the result of a balanced, analytical review of the current capital markets. The ROE range I recommend to the Commission is based on investors' required returns observed in the current capital markets on investments of similar risks, namely publicly traded telecommunications companies serving rural areas. My recommendation balances consumers' interests and investors' interests by explicitly including forecasts of long-term growth rates for the broad economy, thus recognizing the realities of the current economy.

Economic Forecasts

Q Do your recommendations take into consideration the current economic environment?

A Yes, my recommendations take into consideration the current economic environment and investors' expectations. It is important that cost of capital

recommendations are built around inputs that encompass the current economic climate so as to meet the tenets of a reasonable return expressed by the Courts (see Appendix A). I have done that by using current data derived from the markets in the DCF and CAPM analysis. The market derived data is critical because it conveys investors' perception of the financial prospects of the companies in the proxy group and the prospects for the broader economy. We can be confident that the data from the market reflects investors' beliefs about the economy because it is generally accepted that rational, profit maximizing investors are forward-looking. That is, investors price securities by using the best available information to estimate the prospects of those investments. It is also generally accepted that our financial markets are efficient in that securities' prices reflect all of the public (and perhaps non-public) information.

With this information rolled into the market prices and interest rates used in my analysis, it is not necessary for the Commission to establish its own forecast of the economy. The information we rely on already embodies the market's forecast. If the Commission is interested in a sample of the type of information regarding what some expect is in store for the economy, I have attached economic and market forecasts published by Value-Line Investment Survey, The Survey of Professional Forecasters, and J.P. Morgan Long-Term Capital Market Return Assumptions (Schedule AHG-1).

Q Does Staff's cost of equity analysis take these complex economic issues into consideration?

A Yes, my analysis relies on price data taken directly from the securities markets, analyst's growth forecasts for the proxy companies and long-term forecasts of U.S. gross domestic product. Thus, Staff's recommendation captures recovery from the recent recession and the long-term growth prospects after the recovery.

Q Does Gorham's recommendation address these economic issues?

A No, I do not believe so. The cost of equity requested by Gorham is the product of a KUSF filing from late last year in dockets 11-RNBT-608-KSF and 12-S&TT-234-KSF. Gorham does not provide an analysis supporting that cost of equity as an accurate estimate for today.

Capital Structure

Q Does Staff have adjustments to Gorham's capital structure?

A Yes, Gorham states that its actual equity ratio is just 11% of its capital and as an atypical capital structure; Gorham chose to use a hypothetical capital. Gorham's revenue requirement in this docket is based on a hypothetical capital structure of 60% equity. I disagree with Gorham's use of a hypothetical capital structure. The mere fact that Gorham's capital structure is heavily leveraged is not a justification for making up a capital structure with a greater than actual equity ratio.

Q What is the harm of using a pretend or hypothetical capital structure?

A In this instance, using a hypothetical capital structure with 60% equity results in a

dramatic wind-fall for Gorham's shareholders; a wind-fall that is funded by all those who pay into the KUSF.

Q Is that wind-fall to stockholders quantifiable?

A Certainly, based on Gorham's requested rate of return of 9.50% (which incorporates a hypothetical capital structure of 60% equity) and its actual capital structure, Gorham stockholders would realize a return in excess of 59.0%. The dollars that fund that return would come from the KUSF and ultimately from consumers of telephony services in Kansas. It is clear that such an excessive return to shareholders would be to the determent of consumers.

Q How do you address the capital structure to prevent a wind-fall to stockholders?

A I believe the capital structure of the consolidated company is the proper capital structure to use because the consolidated capital structure is the only measure of precisely how Gorham has financed its assets. Using the consolidated capital structure is fair and reasonable; lenders to Gorham can be assured that interest payments on loans are included in the revenue requirement and stock holders will receive a return on the capital they provided to finance rate base. At the same time, Kansas consumers can rest assured that the KUSF payments to Gorham cover no more than what are the actual financing costs of the rate base.

Q Please define precisely what you mean when you state that you are using the

consolidated capital structure.

A I am using the consolidated capital structure of Gorham Communications, Inc. (GCI), the parent company of Gorham. The data I relied on was reported in the Independent Accountants' Compilation Report for 2011. Based on my review of this report, I conclude that GCI has a capital structure consisting of 70% debt and 30% equity.

Q How does Gorham's capital structure compare to that of the proxy group you selected?

A Gorham and its parent are heavily leveraged; the telephone service providers that make up my proxy group are similarly leveraged. Although you can see from the following table that there is a wide distribution among the proxy group.

2011 Consolidated Capital Structures

	Equity	Debt
Alaska Communications	-10%	110%
CenturyLink	49%	51%
Consolidated Comm.	5%	95%
Frontier Communications	35%	65%
Hickory Tech Corp	26%	74%
Shenandoah Telecom	52%	48%
Windstream	14%	86%
Average	25%	75%
GCI/Gorham	30%	70%

Source: SEC Form 10K 2011

Cost of Debt

Q What cost of debt are you using for Gorham's revenue requirement?

A Staff reviewed Gorham's cost of debt, its audited financial statements, and annual report filed with the Commission and determined that the 5.00% cost of debt Gorham requested is accurate.

Return on Equity

Q How did you estimate the cost of equity for Gorham?

A I selected a group of proxy companies and performed a discounted cash flow (DCF) analysis and capital asset pricing model (CAPM) analysis. For a description of these models, see Appendices B and C attached to my testimony.

Selecting Proxy Companies for the Analysis

Q How did you select a proxy group for your cost of capital study?

A I began with the telecommunication services companies followed by Value-Line Investment Survey and YahooFinance. From those groups, I selected companies that pay dividends and derive some of their revenue providing local exchange services in the United States. The Value-Line reports for each of the companies appear in Schedule AHG-2. Business risk descriptions for each company appear in Schedule AHG-3.

Each of the proxy companies provides services besides local exchange services such as digital subscriber line, long distance service, and wireless. Although it would be ideal to have a group of companies strictly in the business of providing local exchange services in rural areas, this is not a realistic selection criteria. There are hundreds of RLECs operating in the United States, and only a few of those companies are publicly traded and followed by investment analysts. It is necessary for the proxy companies to be publicly traded to provide a market determined stock price, which is a required input for the DCF model, since prices determined in an efficient market encase all of the information available to investors.

Q Because of these other lines of business, do the cost of equity estimates for the proxy companies include risks and growth potential that may not apply to Gorham's RLEC services?

A Yes, each of the proxy companies is engaged in other segments of the telecommunications industry and these services have higher growth rates than RLEC service. In fact, just like Gorham, the members of the proxy group are losing local service, wire-line customers to other forms of telephony service. The proxy companies that are growing wire-line customers are doing so by mergers and acquisitions.

The other telecommunication services are provided in a competitive environment. The local wire-line services that Gorham (and the other RLECs in Kansas) provide have access to state and federal subsidies to stabilize its cash-flows and recover invested capital. Support from the KUSF and USF enable local wire-line service providers to recoup costs of providing service and capital investments without raising local rates. In addition to these subsidies, a local telephone company that has opted for traditional rate of return regulation in Kansas can file for a revenue adjustment when it fails to earn its allowed return on capital. Rate of return established revenue streams are not an option for the business units of the proxy companies operating in a competitive environment.

Q What companies did you select for your analysis?

A I selected seven companies for the proxy group that derive some of their business through local wire-line service in rural areas. As you can see in the excerpts from their Form 10-K, each of these companies are exposed to risks associated with declining wire-line penetration and modifications in universal service support. As

an RLEC, Gorham is exposed to these risks. The excerpts from the proxy companies' SEC Form 10-K disclosing their risks is attached as Schedule AHG-3. Schedules AHG-2 Value-Line and ThomsonFN respectively, describe the proxy companies' general business operations and also provide a view of their business risks.

Alaska Communications	ALSK
CenturyLink, Inc	CTL
Consolidated Communications	CNSL
Frontier Communications	FTR
Hickory Tech Corporation	HTCO
Shenandoah Telecommunications	SHEN
Windstream Corporations	WIN

Q Is there a risk of losing all or part of the subsidies paid through the USF?

A Yes, the FCC is reviewing the USF mechanism. And the fact that the FCC's review could reduce their revenues is discussed as a risk in the SEC Form 10-K of each company in my proxy group. My analysis captures the risk associated with this policy change through the stock price I use to compute the dividend yield of each of the proxy companies. This risk is apparent in any review of events affecting telephone service providers serving high cost areas.

Cost of Equity Models

Q How did you estimate the cost of equity capital?

A I applied a DCF model and CAPM analysis to the proxy group. The results and calculations of my DCF analysis appear on Schedule AHG-4 and my CAPM

analysis appears later in my testimony.

Discounted Cash Flow Analysis

Q Please describe the DCF model you used in this analysis.

A The mechanics and theory underlying the DCF models are discussed in Appendix-B, attached to my testimony. I applied the DCF model to the proxy companies using recent stock prices and growth rate forecasts. The general form of the DCF model, used to estimate equity costs, incorporates the company's dividend yield plus its anticipated dividend growth rate.

Cost of equity = dividend yield + forecasted growth rate

Q How did you calculate the dividend yield?

A I use the 2012 expected annual dividend divided by the average stock price from June 20, 2012, through September 24, 2012. The data for the stock prices and calculation of the dividend yields appear in Schedule AHG-5.

Q Please explain how you estimated the growth rate used in Staff's DCF analysis.

A The growth rate is difficult to determine; particularly for a rural local exchange business. As I discuss in Appendix B, the growth rate in the DCF model is the growth rate investors apply to the company's dividends in perpetuity. The difficulty stems from trying to ascertain what growth estimate investors apply to the dividend stream over a very long time horizon.

For my DCF analysis of the telecommunications service providers, I relied on three sources for projected earnings growth rates: Value-Line Investment Survey, which provides three to five year growth estimates; ThomsonFN reports analysts' five year growth forecasts; and Zack's Investments, which also reports analysts' five year growth forecasts. I averaged these earnings growth forecasts together to arrive at a near-term growth estimate of the proxy companies.

Value-Line is a respected source for financial analyses, capital market commentary, and financial forecasts of publicly traded stocks. Its forecasts and commentary are readily available to institutional and individual investors. Value-Line's forecasts have been scrutinized in numerous academic studies and demonstrated to be a good source for financial forecasts used in the DCF and similar models.[4] As a result, Value-Line is the most frequently-quoted source for growth forecasts used in regulatory proceedings.

ThomsonFN is owned by Thomson-Reuters, and its five-year growth estimates are reported through YahooFinance. The forecasted growth rates it reports provide a different perspective from Value-Line. These are not growth estimates prepared by ThomsonFN; they are the forecasts of analysts who actively follow the companies. I incorporated ThomsonFN forecasts because these are the product of analysts working for institutional money managers; their decisions and forecasts affect investors' expectations and valuations of a stock's price (see Schedule AHG-5)

[4] "On the Use of Consensus Forecasts of Growth in the Constant Growth Model: The Case of Electric Utilities," Stephen Timme and Peter Eisemann; Journal of Financial Management; Winter 1989; pp 23-39 and "The Superiority of Analyst Forecasts as Measures of Expectations: Evidence from Earnings," Lawrence Brown and Michael Rozeff; The Journal of Finance; March 1978, Vol. 23; pp 1-16.

Zack's Investments is similar to ThomsonFN and reports consensus forecasts from analysts.

Q Do you believe these short-term, three to five year, earnings growth forecasts are useful for estimating Gorham's cost of equity?

A I believe these growth estimates are of a limited value in a DCF analysis of this industry. Earnings have been volatile for this group. As you can see in the Value-Line reports in Schedule AHG-2 and the following table, the proxy group exhibits historic earnings that have gone from strongly negative to forecasts of double digit positive growth. This volatility does not lend itself to estimating a *long-run* growth rate necessary for use in DCF analysis. The three to five year earnings growth forecasts are a sharp contrast to the contraction in wire-line services. Granted, a reduction in lines does not necessarily transfer to a comparable reduction in earnings; it is conceivable there can be continued earnings growth even with declines in access lines, although it is unlikely to continue in the long-run at rates shown in the following table.

	Historic 5 Year EPS		Forecasted EPS Growth		
	Value-Line	IBES	3 to 5 Year Value-Line	5 Year IBES	5 Year Zack's
Alaska Communications		-22.37%	21.80%	-10.00%	0.00%
CenturyLink, Inc	3.50%	-6.26%	1.50%	7.83%	3.00%
Consolidated Communications		7.60%	4.00%	2.00%	2.00%
Frontier Communications	-13.00%	-22.83%	6.00%	8.25%	28.00%
Hickory Tech Corporation		13.68%		3.80%	
Shenandoah Telecommunications		-9.80%		15.00%	
Windstream corporations	-7.50%	-9.88%	9.50%	-1.90%	2.00%
			8.56%	3.57%	7.00%

Q Are there other sources of growth estimates to help us in estimating Gorham's cost of equity?

A. Yes, I also include long-run growth estimates of our economy's nominal gross domestic product (nGDP) to provide a long-term outlook of expected economic growth. These forecasts are 25 to 75 year forecasts produced by the Energy Information Administration and the Social Security Administration.

It would be ideal to have *long-run* growth estimates specific to each of the proxy companies, but that information is not available. Nor is it possible to use historic growth rates of the proxy companies as an estimate for the future growth because of the number of mergers, divestures and reorganizations in the telecommunications industry. As a result, the historic growth rates, although easy to calculate, may not be meaningful when extrapolated into the future.

With these limitations, I believe the best alternative available is using a forecast of the broad U.S. economy such as nGDP. nGDP is a measure of the United State's

economic output -- the market value of all final goods and services made within the borders of the country in a year and includes the year-to-year effects of general price increases or inflation. The rationale for using this estimate in a DCF analysis is that, despite volatility of short-term corporate earnings forecasts, a mature, key industry such as RLEC, land-line telecommunications is likely to experience long-term growth in dividends likely no greater than that of the general economy.

Q Why do you believe that a growth estimate of the U.S. economy is a reasonable ceiling to estimate Gorham's cost of equity?

A Wire-line service is a mature industry that has limited growth prospects so the nGDP is a ceiling on potential growth in this industry. The growth rate used in the DCF analysis is a nominal growth rate; it includes the effects of inflation. What we are dealing with is a rate of return regulated service that can change its rates and request a review of the subsidies it receives in USF and KUSF payments if it is earning less than its allowed return. As input costs (plant, equipment, labor etc.) increase with inflation, Gorham could expect rate and subsidy changes comparable to the rate of inflation, making the inflation component in the nGDP estimate a minimum for long-run growth. In the long-run nGDP forecasts, the imbedded rate of inflation is 2.0% to 2.5%.

Q Is it accepted practice to use nGDP growth estimates in the DCF model?

A Yes, in the process of valuation analysis where a long-run growth estimate is necessary to estimate the value of a stream of future cash flows, it is a widely held

practice to incorporate long-run nGDP growth estimates in the analysis. An important question when considering the reasonableness of a growth estimate is whether a company in a mature industry can grow faster than the broad economy for infinity. That is an important question in this analysis, given the relatively high earnings growth forecasted for the proxy companies relative to long-run nGDP growth.

Q Is there academic support for this issue?

A Yes, in two of his books devoted to the subject of asset valuation, Investment Valuation: Tools and Techniques for Determining the Value of Any Asset, 2nd Edition and Damodaran on Valuation: Security Analysis for Investment and Corporate Finance, 2nd Edition, Professor Aswath Damodaran of the Stern School of Business at New York University discusses the nature of a stable growth rate for DCF models. He argues for viewing nominal economic growth as the absolute maximum when using a stable growth model, such as the DCF model we are using.

"The stable growth rate cannot exceed the growth rate of the economy in which a firm operates, but it can be lower. There is nothing that prevents us from assuming that mature firms will become a smaller part of the economy and it may, in fact, be the more reasonable assumption to make. Note that the growth rate of an economy reflects the contributions of both young, higher growth firms and mature, stable growth firms. If the former grow at a rate much higher than the growth rate of the economy, the latter have to grow at a rate that is lower.[5]

"The growth rate of a company cannot be greater than that of the economy but it can be less. Firms can become smaller over time relative to the economy. Thus, even though the cap on the growth rate may be the nominal growth rate of the

[5] Damodaran on Valuation: Security Analysis for Investment and Corporate Finance, 2nd edition; Aswath Damodaran; p.148.

economy, analysts may use growth rates much lower than this value for individual companies."[6]

Long-Run Growth Estimates

Q How did you arrive at a long-term estimate of nGDP growth?

A I obtained estimates of long-term growth from two sources that are likely the longest horizons published for such a forecast. The sources are the Energy Information Administration and the Social Security Administration. Weighting these two equally results in an average of 4.55%.

Forecasts of Long-Run Nominal GDP Growth

	2012 to 2035
Energy Information Administration (1)	4.50%
	2012 to 2090
OASDI Trustee Report (2)	4.56%

Sources:
1) Energy Information Administration; Annual Energy Outlook 2012 (Early Release) with Projections to 2035; Real GDP 2.6% + GDP Price Index 1.9%.
http://www.eia.gov/forecasts/aeo/er/early_economic.cfm

2) 2011 OASDI Trustees Report, Economic Assumptions & Methods; Social Security Administration; Table V. B1 and Table V.B2. Generally Real GDP of 2.1% and GDP Price Index of 2.4%
http://www.ssa.gov/oact/tr/2012/V_B_econ.html#209902
http://www.ssa.gov/oact/tr/2012/V_B_econ.html#236399

[6] Damodaran on Valuation: Security Analysis for Investment and Corporate Finance, 2nd edition; Aswath Damodaran; p.159

While there are some additional long-run GDP growth forecasts available, the two that I use are included in long-run growth forecasts used in DCF analyses before FERC and are sources that are readily available to all investors. In addition, the estimates that I use are similar to other forecasts of real GDP.

Comparison of Long-Term Real GDP Growth Projections

	Forecast Period	
	10 - '20	'20 -'35
EIA AEO2012 (Reference Case)	2.50%	2.60%
EIA AEO2011 (Reference Case)	2.80%	2.60%
HIS Global Insight (August 2011)	2.50%	2.50%
Office of Management & Budget (January 2012)	3.00%	--
Congressional Budget Office (January 2012)	2.80%	--
INFORUM (December 2012)	3.10%	2.40%
Social Security Admin. (August 2011)	3.00%	2.10%
International Energy Agency (2011)	2.60%	2.40%
Blue Chip Consensus (March 2011)	2.60%	--
ExxonMobile	2.70%	2.30%

Notes:
CBO and OMB forecasts end in 2022, and growth rates cited are for 2010-2022.
IEA publishes U.S. growth rates for certain intervals: 2009-2020 growth is 2.6%, and 2009-2035 growth rate is 2.4%.

Source:
Table 22. U.S. Energy Information Administration; Annual Energy Outlook 2012

Q How did you weight the short-term and long-term growth rate forecasts?

A I did not give any weight to the three-to-five year earnings growth forecasts for the reason I discussed earlier.

Q Please describe the results of your DCF analysis.

A As shown in the following table, the average forward looking cost of equity capital for the proxy group is 12.18%.

		Forecasted Growth	Dividend Yield	Cost of Equity
Alaska Communications	ALSK	4.56%	9.30%	13.86%
CenturyLink, Inc	CTL	4.56%	7.18%	11.74%
Consolidated Communications	CNSL	4.56%	9.72%	14.28%
Frontier Communications	FTR	4.56%	9.38%	13.94%
Hickory Tech Corporation	HTCO	4.56%	5.34%	9.90%
Shenandoah Telecommunications	SHEN	4.56%	2.15%	6.71%
Windstream corporations	WIN	4.56%	10.27%	14.83%
Mean		4.56%	7.62%	12.18%

Capital Asset Pricing Model

Q Did you utilize a capital asset pricing model (CAPM) to estimate GORHAM's cost of equity?

A Yes, my CAPM relies on forecasted returns for the equity markets and forecasted yields of the 10-year U.S. Treasury Bonds. I used this approach to capture investment professional's view of future returns and to eliminate the current low interest rates which have resulted from the Federal Reserve Board's monetary policy. Staff's CAPM relies on forecasted returns on common stocks and intermediate term Treasury Bonds to arrive at a risk premium of 7.69%. The source of these forecasts is J.P. Morgan Asset Management.[7] The other piece of forecasted data is the yield on 10-year U.S. Treasury Bond reported in the Survey

[7] J.P. Morgan Asset Management, Long-term Capital Market Return Assumptions, 2012 Edition; J.P. Morgan Asset Management. http://www.jpmorganinstitutional.com/cm/BlobServer/Long-term_Capital_Market_Return_Assumptions_-_2012_Paper.pdf?blobkey=id&blobwhere=1321475152490&blobheader=application%2Fpdf&blobcol=urldata&blobtable=MungoBlobs

of Professional Forecasters.[8]

Capital Asset Pricing Model -- Forecasted Risk Premium
Using Forecasted Equity Market Returns

1)	Forecasted Returns on Common Stocks		9.69%
2)	Forecasted Return on 10 Year T-Bonds	-	2.00%
3)	Resulting Risk Premium		7.69%
4)	Beta Staff' Telecom Proxy Group	x	0.85
5)	Risk Premium		6.54%
6)	Forecasted Yield on 10 Year T-Bonds	+	3.89%
7)	Forecasted Cost of Equity		10.43%

1) Forecasted 10 to 15 Year Annual Return Arithmetic return on stocks by J.P. Morgan Asset Management 2012 Edition.
2) Forecasted 10 to 15 Year Annual Return Arithmetic return on intermediate term U.S. Bonds by J.P. Morgan Asset Management 2012 Edition.
3) Resulting risk premium (1-2)
4) Beta coefficient of Telecommunications Proxy Group
5) row 3 x row 4 = asset specific risk premium
6) Forecasted yield on 10 year U.S. Treasury Bonds for 2015
7) Forecasted cost of equity capital row 5 + row 6

Cost of Equity Recommendation

Q How did you arrive at your estimate of 10.50%?

A I am relying on both the forward looking CAPM and DCF analyses. As I discussed earlier, it was necessary to eliminate the volatile three-to-five year earnings forecasts from the DCF analysis, instead relying solely on the nGDP forecasts. My recommendation is the lower end of the range bounded by 10.40% established by the CAPM analysis and 12.18% established by the DCF analysis. It is reasonable to use the low end of the range because of the limited growth prospects expected

[8] Survey of Professional Forecasters; First Quarter 2012, February 10, 2012; Research Department: Federal Reserve Bank of Philadelphia. http://www.philadelphiafed.org/research-and-data/.

for the wire-line industry. The cost of capital estimated using the DCF model range is from 7.43% to 14.73%; Staff's recommendation is within that range set by the DCF analysis using a long-run growth forecast of 4.56%. Assuming a long-run growth estimate closer to the rate of inflation would reduce the DCF results to approximately 10.00%.

Cost of Equity Estimates

Discounted Cash Flow Analysis based on nGDP growth of 4.56%:			
Mean			12.18%
with a range of 7.43%	to	14.73%	
Capital Asset Pricing Model			10.43%
Staff's recommendation is at the low-end of this range			**10.50%**

Q Did you analyze the adequacy of your recommendation?

A Yes, Staff's schedule calculated Gorham's ability to meet its annual interest payments known as a times interest earned ratio (TIER). Taking into account Staff's adjustments including Staff's rate of return, Staff's KUSF support level provides Gorham with a TIER of 2.89. The TIER calculation appears in Staff Schedules sponsored by Laura Bowman.

Q Can you provide some perspective on equity returns of the past and forecasted for the future?

A Gorham does not compare the expected returns available on other types of

investments to its requested ROE. In light of the returns available on other investments, Gorham's requested return of 12.50% is excessive. Certainly the actual return in excess of 55.00% is well above what is reasonable. A report published by J.P. Morgan Asset Management has the expected arithmetic return on U.S. large capitalization stocks at 9.69% and an annualized compound return of 8.00% for the 10 to 15 year time horizon. For U.S. mid-cap stocks, the forecast is 11.35% and 8.75% respectively.[9] An interesting note regarding J.P. Morgan's forecast is that it explicitly states it is based on a building block approach. For equity returns, those "building blocks" are:

Inflation + real earnings growth + dividend yield +/- impact of valuation changes

Valuation changes input would encompass changes in earnings multiples. As this equation illustrates, J.P. Morgan uses a "growth + yield" model similar to the DCF model analysts and regulators use to estimate public utilities' cost of equity capital.

A number of studies sought to measure past returns in an attempt to ascertain what could be expected in the future. The research performed by Dr. Jeremy J. Siegel is often cited on this topic. Dr. Siegel's research into asset returns goes beyond the 1926 date of the often cited by Ibbotson & Associates in its Annual Yearbook. Dr. Siegel's starting point is the early 1800's; over the long-term, real returns on

[9] J.P. Morgan Asset Management, Long-term Capital Market Return Assumptions, 2012 Edition; J.P. Morgan Asset Management. http://www.jpmorganinstitutional.com/cm/BlobServer/Long-term_Capital_Market_Return_Assumptions_-_2012_Paper.pdf?blobkey=id&blobwhere=1321475152490&blobheader=application%2Fpdf&blobcol=urldata&blobtable=MungoBlobs

common stocks have been in the 6.50% to 7.00% range.

Historical Real Returns on Common Stocks[10]

Periods	Geometric	Arithmetic
1802 to 2011	6.70%	8.20%
1870 to 2011	6.50%	8.20%
Major Sub-periods		
1802 to 1870	7.00%	8.30%
1871 to 1925	6.60%	7.90%
1926 to 2011	6.40%	8.40%
Lowest		
1966 to 1981	-0.40%	1.40%
Highest		
1982 to 1999	13.60%	14.30%
Recent		
2001 to 2011	0.80%	2.80%

Ibbotson & Associates' annual publication is often cited as a source for historic returns and its finds are similar to Dr. Siegel's.

Ibbotson & Associates[11]

1926 to 2011	Geometric	Arithmetic
Large Company Stocks (*nominal* returns)	9.80%	11.80%
Inflation	3.00%	3.10%

In a recent update, Dr. Siegel projects a real return of 6.00% to 7.00% for the next decade; such returns could be higher if the market price-earnings ratio increases.[12]

[10] Rethinking the Equity Risk Premium; Long-Term Stock Returns Unshaken by Bear Markets; Dr. Jeremy J. Siegel; The Research Foundation of CFA Institute; p146, Table 1

[11] Source: 2012 Ibbotson SBBI Classic Yearbook; p32, table 2-1.

[12] Rethinking the Equity Risk Premium; Long-Term Stock Returns Unshaken by Bear Markets; Dr. Jeremy J. Siegel; The Research Foundation of CFA Institute; p147.

Dr. Siegel's prediction for a real return of 6.00% to 7.00%, coupled with 10-year projections for inflation in the 2.25% to 2.49% range puts the nominal return in the range of 8.25% to 9.50%.[13]

Q Does this conclude your testimony?

A Yes.

[13] Survey of Professional Forecasters; First Quarter 2012, February 10, 2012; Research Department: Federal Reserve Bank of Philadelphia. http://www.philadelphiafed.org/research-and-data/.

Standards for a Reasonable Rate of Return

Q What is the role of rate of return in setting a revenue requirement for public utilities?

A The rate of return (ROR) earned on the utility's net plant is part of the revenue requirement equation. The ROR is a cost of providing the utility service, and all reasonable costs associated with the ROR need to be included in the revenue requirement.

Revenue Requirement = ROR (gross plant – accum. depr.) + Operating Exp. + Income Taxes

As you can see in the revenue requirement formula, the ROR expressed in this equation recovers the utility's return on its net plant investment.

Q How is the utility's ROR calculated?

A A utility's ROR is its weighted average cost of the capital. That is, the cost of each of the various forms of capital supplied by investors, which includes debt, preferred equity, common equity and any hybrid securities, multiplied by their respective weight in the utility's capital structure. The cost or return associated with each of these forms of capital is unique and it is a function of risks associated with that form of capital.

Q What are we talking about when we discuss a utility's rate of return or allowed return?

A In the broadest terms, a just and reasonable rate of return enables the utility to pay interest on its debt and earn a net income that is sufficient to compensate equity investors.

Q Please discuss the standards regulators rely on to evaluate a utility's allowed return.

A Estimating a utility's capital costs draws on elements of economics, finance and accounting. The standards to gauge the fairness or reasonableness of an estimate have been established through cases argued at the United States Supreme Court. Each case is the result of a public utility appealing a decision issued by a regulatory agency; either state or federal. Through these cases, the Court has put forth concepts of what constitutes a reasonable rate of return. Financial analysts and policy-makers rely on these decisions as a guide in estimating the appropriate cost of capital. The decisions issued by the Court do not articulate precisely how to estimate or model a reasonable cost of capital. Instead, the decisions provide critical questions for policy makers and analysts to consider in reaching their decision as to what is a reasonable return for a regulated utility.

In general, the Court's decisions state that returns granted to regulated public utilities should: 1) be commensurate with returns on investments of similar risk; 2) be sufficient to assure the financial integrity of the utility under economic management; and 3) change over time with changes in the money market and

business conditions.[1] The Court's decisions do not dictate precisely how to calculate a reasonable return; they provide criteria to determine if the return embedded in the revenue requirement is reasonable.

Q Discuss how rate of return analysts apply the standards established by the Court.

A For a rate of return to meet the legal standards, the return should be specific to the utility in question, taking into account the unique risks faced by that utility and the type of service it provides. The allowed return must also consider the mix of debt and equity capital it employs to finance its rate base and provide a reasonable return for each of those components.

The costs of debt and hybrid securities generally rely on a contractual agreement with the investor; their cost is relatively easy to determine. The cost of preferred equity securities are similar to debt and have a contractual obligation for a dividend payment. Thus, it is relatively easy to determine the cost of these forms of capital since it is a stated cost. The cost of common equity capital is more elusive because there is no contractual obligation for the utility to pay shareholders a return on their investment.

[1] Smyth v. Ames, 169 U.S. 466 (1898).
Wilcox v. Consolidated Gas Co., 212 U.S. 19, 48-49 (1909).
Blue Field Water Works & Improvement Company v. Public Service Commission of West Virginia, 262 U.S. 679, 692-3 (1923).
Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591, 603 (1944).

Q How do the Court's decisions offer guidance to analysts and Commissioners in setting a reasonable return on equity?

A The Court's decisions provide a framework to help decision-makers understand the critical elements of a fair return, but the Court's decisions do not endorse or reject any specific financial model. There are numerous financial models available for analysts to estimate a utility's cost of equity capital. Regardless of which model is used, the analyst's recommendation has to meet the principles set out in the Court's decisions.

Q Precisely, what are the financial models attempting to measure?

A The financial models are used by regulators to estimate the investors' required rate of return for owning the stock. The required rate of return is also referred to as an opportunity cost. Investors will only commit their capital to investments that meet their required return. Investors' required rate of return is their opportunity cost for investing in the utility, as opposed to using the funds for an alternative investment of comparable risk. Of course, risk is a vital consideration; the only relevant alternative investments are those that possess a comparable risk profile to that of the utility in question.

Q Is the return on equity supposed to compensate investors for all risks associated with the investment in a utility's common stock?

A No, it is not. Regulators need to be cognizant of financial theory, as well as decisions by the Court, when establishing the utility's allowed return on equity. Regulators must not attempt to compensate equity investors for every risk faced by a utility. To do so would overstate investors' required return because investors can, and therefore will, reduce risk by holding a broad and diverse group of investments with complimentary risk profiles. Prudent investors own a diversified portfolio of investments to reduce their exposure to risk. Diversification enables prudent investors to reduce risk without reducing the return. Diversification is implicit in cost of capital analyses because rational investors desire to seek out diversification as a way to achieve the greatest available return for the amount of risk. This is well documented in financial literature and is prudent, profit-maximizing behavior by the investors.[2]

Q Please describe the risks inherent in investing in common stocks.

A There are two categories of risk associated with common stocks: *systematic risks* that are global or macro-economic risks affecting all stocks; and *unsystematic risks* that are risks unique to a company.

Q Should the allowed return on equity attempt to compensate stockholders for both categories of risks?

[2] Steven G. Kihm, How Improper Risk Assessment Leads to Overstated Required Returns for Utility Stocks (2003), attached to the Direct Testimony of Adam Gatewood, KCC Docket No. 11-KCPE-581-PRE (June 3, 2011).

A No. In an efficient market, investors are not compensated for unsystematic risk because they can eliminate that risk through diversification. The unsystematic risks of companies in a diversified portfolio can offset one another, leaving the portfolio exposed to only systematic risks, that is, those risks affecting the general economy. Systematic risks include macro-economic features, such as changes in interest rates and economic growth that affect all companies.

Q Is it important for the Commission to be aware of these two categories?

A Yes, if Commissions are not cognizant of these differences, they might be persuaded to over-compensate equity investors by increasing the allowed returns to cover unsystematic risks. Some claim that there is no harm in Commissions increasing the allowed return above what is necessary so as to ensure that stockholders are adequately compensated. This practice results in poor allocation of resources, and it is harmful because it results in unnecessarily and unreasonably higher rates, transferring money from residential and business consumers in the service territory to the utility's shareholders.

Discounted Cash Flow (DCF) Model

Q Does the DCF model meet the legal standards discussed in Appendix A of your testimony?

A Yes, cost of equity estimates based on the DCF model meet the legal standards discussed in Appendix A because the model incorporates investors' expectations via forward-looking growth rates and encompasses current market information via current stock prices. Using market based information ensures the cost of equity estimate evaluates investors' required rate of return in the current economic environment, capturing risks specific to the company and the industry in question.

Q Has it been an accepted model for regulators to estimate the cost of equity?

A Yes. The DCF model is the most widely used model for regulatory bodies setting allowed returns, including the Kansas Corporation Commission. Regulatory agencies may incorporate more than one model to arrive at an estimate. If more than one is used, the DCF model is always one of the models. If only one model is used, it is going to be the DCF model.

Q What is the underlying basis for the DCF model?

A The DCF model is an investment valuation model used to value different and diverse types of investments such as real estate, bonds, and common stocks, for example. The DCF model is useful to value any investment that involves regular, periodic cash flows.

The notion of discounting a future receipt or payment back to the present so as to place a price or value on an investment probably goes back centuries. The formal presentation of the DCF model as we use it today dates back to the 1930's in Irving Fisher's book The Theory of Interest and John Burr Williams' 1938 text The Theory of Investment Value. These two authors formally expressed the DCF model in modern economic terms.

The premise of the DCF model in the valuation of common stock is that investors determine the value of a company's common stock by discounting its future dividend payments back to the present. The cornerstone of the DCF model is the process of discounting those future cash flows back to the present at the investors' required rate of return. An investor's required rate of return is risk sensitive, so that as the risk of the investment increases, so will the investors' required return. A higher required rate of return *decreases* the present value of the stream of dividends that equates to the price of the stock. With all other variables being equal, investors price the riskier of two common stocks lower because the cash flows or dividends are discounted back to the present at a higher rate.

The basic form of the DCF equation that is used to price or value common stock is:

$$P_0 = \frac{D_0\ (1+g)}{(1+Ke)} + \frac{D_0\ (1+g)^2}{(1+Ke)^2} + \frac{D_0\ (1+g)^3}{(1+Ke)^3} + \ldots\ldots$$

As this equation sums the increasing dividend payments indefinitely, it is simplified to:

$$P_0 = \frac{D_0(1+g)}{(Ke-g)}$$

Where:

P_0 = *Current Stock Price*

D_0 = *Current Dividend*

g = *Growth Forecast*

K_e = *Required return on equity or cost of equity*

Generally stated as:

Stock Price = Annual Dividend / (Req'd Rate of Return – Dividend Growth Rate)

The equation below shows the algebraic isolation of the investors' required rate of return (Ke). By isolating investors' required rate of return, Ke, in the equation, we can estimate it by knowing the stock's dividend yield and the annual dividend growth rate expected by investors. That form of the equation is:

Req'd Rate of Return = (Annual Dividend/Stock Price) + Dividend Growth Rate

Req'd Rate of Return = dividend yield + Dividend Growth Rate

Or

$$K_e = \frac{D_0(1+g)}{P_0} + g$$

Or frequently written as,

$$Ke = y + g$$

Where:

Ke = *Investors' required rate of return or cost of equity*

g = *expected dividend growth rate*

y = *dividend yield or (annual dividend / current price)*

The basic form of the DCF model shown above assumes the investor is paid a dividend at the end of each year. It is common to modify this assumption to account for semi-annual dividend payment and dividend growth that occurs during the year. This form of the DCF calculation is shown below and one that is routinely used at state commissions and the Federal Energy Regulatory Commission. Shown below is the form of the DCF model that I applied to each of the comparable utilities.

$$Ke = (1+.5g)\ y + g$$

Q How did you calculate the dividend yield (y) component of the DCF model?

A The dividend yield (y) is the easiest of the two components to measure. It is calculated by dividing the stock's forward-looking annual dividend payment per

share by its market price per share. For example, a company paying an annual dividend of $2.00 per share with a market price of $76.00 has a dividend yield of 2.63%.

Q What is the source of the dividend information?

A Historic and current dividend information is easily obtained from public sources. The DCF model requires a forward looking dividend payment which is often the current year's dividend payment increased by the expected growth rate or the forecasted growth rate for next year.

Q Do you rely on a price from a point in time or an average price taken from a period of time?

A I use the average price from the past three months. An analyst can use stock prices from either a point in time or an average from a period of time. Either method is reasonable as long as the prices reflect the current market conditions and embody the information available to investors.

Q Please discuss the importance of the second component, the growth rate (g), in the DCF equation.

A The "g" represents the anticipated growth in cash flows that investors expect to receive from the stock. This is a difficult and contentious issue in a DCF analysis for two reasons. First, it is a key element in the DCF model because the growth rate has a one-for-one affect on the utility's allowed return. All other factors

being equal, a higher growth rate results in a higher return on equity for the utility. Second, there is an element of subjectivity to selecting the growth rate due to the uncertainty about the future earnings and dividends. It is difficult to uncover what growth rate estimates investors rely on when they value a stock and where they obtain that information. There is academic research that addresses this issue, but even this research provides conflicting answers.

The appropriate growth estimate is that which is expected by the market and factored into investors' analyses to estimate the stock price. That is, it is the growth estimate investors used to determine the stock price. Determining precisely how investors estimate the growth rate used in evaluating common stocks is difficult.

Academics have studied this question and can provide us with some guidance. Unfortunately, the research does not provide a definitive answer on exactly how to estimate or where to obtain an estimate for the growth rate. I believe the research provides us with two key findings. First, earnings growth forecasts from financial analysts are superior to extrapolating historic data.[1] Second, earnings forecasts from Value-Line Investment Survey are a reasonable source for those

[1] On the Use of Consensus Forecasts of Growth in the Constant Growth Model: The Case of Electric Utilities; Stephen Timme and Peter Eisemann; Journal of Financial Management; Winter 1989; pp23-39.

The Superiority of Analyst Forecasts as Measures of Expectations: Evidence from Earnings; Lawrence Brown and Michael Rozeff; The Journal of Finance; March 1978, Vol. 23; pp1-16

forecasts.[2] Published, consensus estimates, that are published earnings estimates based on the mean or median of numerous analysts that follow a particular company, are also a source of forecasts investors frequently use in valuation analysis of common stocks.

Q What growth estimates have been researched and frequently incorporated in the DCF model?

A Earnings per share, dividends per share and intrinsic growth rates are the most common growth estimates incorporated into the DCF model. Most investment firms that publish growth forecasts publish 3- to 5-year annual earnings growth estimate. A few firms, such as Value-Line, publish an earnings growth forecast and a dividend growth forecast. A 3- to 5-year time horizon is about as far into the future that analysts provide. For longer time horizons, there are forecasts of the nation's Gross Domestic Product (GDP) that capture expectations for economy. As I discussed in my Direct Testimony, estimates of GDP growth can provide an idea of the maximum possible dividend growth rate for the DCF model. It's a maximum because of the unlikely scenario of a utility's dividend forever growing at a faster rate than the broadest measure of the nation's economy because of the illogical outcome of the utility becoming larger than the economy.[3]

Q What is the intrinsic growth rate?

[2] The Accuracy of Long-Term Earnings Forecasts for Industrial Firms; By: Chatfield, Robert E.; Moyer, R. Charles; Sisneros, Phillip M.. Quarterly Journal of Business & Economics, Summer 89, Vol. 28 Issue 3, p91, 14p

[3] Damodaran on Valuation: Security Analysis for Investment and Corporate Finance, 2nd edition; Aswath Damodaran; p148.

A The intrinsic growth rate, sometimes called a firm's internal growth rate, is another method of estimating a firm's long-term growth. The intrinsic growth rate is the product of a firm's forecasted earnings, forecasted book value, and the ratio of earnings that the firm does not pay out to common stockholders via dividends. A firm can either pay out the earnings to common stockholders as dividends or it can retain the earnings within the firm to finance new plant and equipment.

Intrinsic Growth = (% of earnings retained) X (% return on book value)

Intrinsic Growth = (1-(DPS/EPS)) X (EPS/BVPS)

Intrinsic Growth = B x R

As the equation above shows, the intrinsic growth rate (BxR) is equal to the fraction of earnings retained within the company to finance growth (B) multiplied by the return a firm earns on its book value (R). For this equation, I use the Value-Line forecast for earnings, dividends, and book value per share.

Q Is there evidence to support your use of an intrinsic growth rate?

A The intrinsic growth rate is regularly cited in finance textbooks as a reasonable method to estimate long-run, sustainable dividend growth for use in the DCF

model.[4] Investment and finance researchers refer to the intrinsic growth rate as a primary determinate of a stock's value.[5]

[4] James C. Van Horne, Financial Management and Policy: Ninth Edition, p30 (1992).

[5] Zvi Bodie, Alex Kane, and Alan Marcus, Investments, pp. 477-81 (1989).

Capital Asset Pricing Model Analysis

Q Please describe the capital asset pricing model (CAPM).

A The CAPM offers an intuitive explanation of the positive linear relationship between risk and rates of return required by investors.[1] It is appealing to regulators because it meets the legal standards I discussed in Appendix A, as it incorporates current data from the financial markets and the unique risks of the utility in question.

$$Ke = Rf + Beta\ (Rm - Rf) \quad \text{or}$$

$$Ke = Rf + Beta\ (Rp)$$

where:

Ke = required return on equity

Rf = return on the risk-free security

Rm = expected return from the market

Rp = risk premium required by investors to purchase common stocks instead of risk-free securities often calculated as Rm - Rf

Beta = volatility of the security's or portfolio's return relative to the volatility of the market's return

Rf

The Rf estimate is the interest rate investors believe represents a riskless return. Although it is a simple concept, the answer is not universally agreed upon. The 90-day U.S. Treasury Bill yields are commonly used as the risk-free rate because they possess no default-risk and the time to maturity is short enough to minimize

[1] The theoretical support for the CAPM is the work done by Harry Markowitz ("Portfolio Selection," Journal of Finance, March, 1952). W.F. Sharpe added the concept of a risk-free rate of return to the Markowitz model ("A Simplified Model of Portfolio Analysis," Management Science, January, 1963).

risks from inflation. The U.S. Treasury Bond is also used as a risk-free rate of return. This is not universally accepted because the value of U.S. Treasury Bonds fluctuates as interest rates change. An investment in U.S. Treasury Bonds is only a risk-free investment if the investor plans to hold it until maturity. The risk-free instrument will have an effect on the results of the CAPM analysis. Whichever instrument is selected, it should be used consistently in the equation.

Beta

The beta coefficient measures the volatility of return earned by the utility's stock, relative to the volatility of the returns earned by the broader equity market. The broad equity market is frequently measured using the S&P 500 Index or Value-Line Composite of 1700 stocks. This measure provides a look at the risk and volatility of a stock relative to other investments. A stock with a beta of one is just as volatile as the market. A stock with a beta of .50 is half as volatile as the market, and at 1.25, it is twenty-five percent more volatile than the market.

Rm

Rm is the expected return on the stock market such as the S&P 500 Index or Value-Line Composite of 1700 stocks. Long-run historic market returns offer information on investors' expectations because the historic returns of the stock market indexes are known and widely disseminated to investors. These historic returns are viewed as representative of the future because they cover a long time span encompassing a wide array of stock market and economic cycles. One source of a long-term market return is Ibbotson and Associates' annual publication, Stocks, Bonds, Bills and Inflation, which reports annual returns of the S&P 500 from 1926 to the present.

Rp

The risk premium is the difference between investors' expected return from the stock market and their expected return from the risk-free investment over the same time period. The risk premium is written as Rm-Rf. The market return and the risk-free return should be taken from the same time period so as to measure the additional return required by investors to take on the risk of common stocks over the risk-free investment. Rp is calculated using the historic market returns discussed above and the historic returns on U.S. Treasury Bills or Bonds from the same time period.

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VALUE LINE ECONOMIC AND STOCK MARKET COMMENTARY

Clouds are hovering over the horizon. True, these aren't the storm clouds that are massing over Europe, where that economically challenged region is battling a series of evolving recessions. Still, we have the feeling the sun will have difficulty breaking through the haze in the months to come on our shores. Business trends, for example, have been uninspiring, with data on retailing, manufacturing, nonmanufacturing, and employment largely pointing to anemic growth for the remainder of 2012. In truth, although our nation continues to distance itself from what many think was the most severe business contraction since the 1930s, progress remains slow, and there is the risk that the business recovery could face durability issues going forward. That's especially so as the clock ticks down to the so-called fiscal cliff that possibly awaits us from the automatic tax hikes and spending cuts that are set to kick in by the end of the year, unless Congress moves to remedy this vexing situation. In all, 2012 is starting to look a lot like 2011, when hopes for a pickup in business activity faded as the year concluded and the realities of the euro-zone crisis further sapped confidence on our shores. That said . . .

We sense that the cloud cover will lift slowly, most likely as we move into the early-to-middle stages of 2013. Three positive developments in this regard are the long-overdue recovery that seems to be evolving on the housing front, the commitment by the Federal Reserve to maintain a very accommodative monetary policy, and the comparatively stable level of energy prices currently in place. Helped by the benign news on these fronts, and further underpinned by a brighter picture in personal income, industrial production, and inflation, the rate of second-half business growth should tick up a bit from the 1.5% pace of improvement tallied in the April-to-June period to perhaps near 2%. Looking ahead, though . . .

(Continued on page 1412)

VALUE LINE FORECAST FOR THE U.S. ECONOMY

Statistical Summary for 2012-2013

	2012:2	2012:3	2012:4	2013:1	2013:2	2013:3	2013:4	2012	2013
GDP AND OTHER KEY MEASURES									
Real Gross Domestic Product	*13546*	*13603*	*13671*	*13732*	*13800*	*13879*	*13965*	*13579*	*13844*
Total Light Vehicle Sales (Mill. Units)	*14.1*	*14.1*	*14.2*	*14.5*	*14.8*	*15.0*	*15.2*	*14.2*	*14.9*
Housing Starts (Million Units)	*0.74*	*0.76*	*0.80*	*0.85*	*0.90*	*0.95*	*1.00*	*0.77*	*0.93*
After-Tax Profits ($Bill.)	*1663*	*1652*	*1620*	*1873*	*1796*	*1768*	*1733*	*1667*	*1793*
ANNUALIZED RATES OF CHANGE									
Gross Domestic Product (Real)	*1.5*	*1.7*	*2.0*	*1.8*	*2.0*	*2.3*	*2.5*	*2.0*	*2.0*
GDP Deflator	*1.6*	*2.0*	*2.0*	*1.9*	*1.8*	*1.7*	*1.8*	*1.9*	*1.8*
CPI-All Urban Consumers	*0.8*	*1.5*	*1.8*	*1.8*	*1.9*	*2.0*	*2.0*	*1.7*	*1.9*
AVERAGE FOR THE PERIOD									
National Unemployment Rate	*8.2*	*8.3*	*8.2*	*8.1*	*8.0*	*7.9*	*7.8*	*8.3*	*8.0*
Prime Rate	*3.3*	*3.3*	*3.3*	*3.3*	*3.3*	*3.3*	*3.3*	*3.3*	*3.3*
10-Year Treasury Note Rate	*1.8*	*1.6*	*1.7*	*1.8*	*2.0*	*2.3*	*2.5*	*1.8*	*2.2*

Value Line Forecast for the U.S. Economy

	ACTUAL	ESTIMATED						
	2012:1	2012:2	2012:3	2012:4	2013:1	2013:2	2013:3	2013:4
GROSS DOMESTIC PRODUCT AND ITS COMPONENTS (2005 CHAIN WEIGHTED $) BILLIONS OF DOLLARS								
Final Sales	13446	13487	13554	13631	13699	13766	13838	13914
Total Consumption	9538	9574	9621	9674	9729	9785	9843	9901
Nonresidential Fixed Investment	1511	1531	1550	1569	1592	1615	1643	1675
Structures	342	343	346	346	348	350	354	360
Equipment & Software	1182	1203	1224	1245	1269	1293	1319	1344
Residential Fixed Investment	351	359	370	379	388	397	411	430
Exports	1816	1840	1856	1879	1902	1925	1939	1954
Imports	2225	2258	2272	2283	2300	2322	2351	2380
Federal Government	1034	1033	1028	1020	1009	999	989	982
State & Local Governments	1434	1426	1423	1419	1416	1414	1412	1410
Gross Domestic Product	15446	15565	15709	15865	16011	16163	16323	16498
Real GDP (2005 Chain Weighted $)	13496	13546	13603	13671	13732	13800	13879	13965
PRICES AND WAGES-ANNUAL RATES OF CHANGE								
GDP Deflator	2.0	1.6	2.0	2.0	1.9	1.8	1.7	1.8
CPI-All Urban Consumers	2.5	0.8	1.5	1.8	1.8	1.9	2.0	2.0
PPI-Finished Goods	2.0	-3.2	3.0	2.0	2.2	2.2	2.2	2.3
Employment Cost Index—Total Comp.	1.7	2.1	2.0	2.0	2.1	2.1	2.2	2.2
Productivity	-0.5	1.6	1.0	0.5	0.5	0.5	0.7	0.8
PRODUCTION AND OTHER KEY MEASURES								
Industrial Prod. (% Change, Annualized)	5.8	2.2	2.5	2.5	2.3	2.5	2.5	2.5
Factory Operating Rate (%)	77.6	77.6	77.8	78.0	78.0	78.2	78.3	78.5
Nonfarm Inven. Change (2005 Chain Weighted $)	62.0	70.7	60.0	40.0	40.0	40.0	45.0	45.0
Housing Starts (Mill. Units)	0.72	0.74	0.76	0.80	0.85	0.90	0.95	1.00
Existing House Sales (Mill. Units)	4.57	4.54	4.50	4.60	4.75	4.85	5.00	5.10
Total Light Vehicle Sales (Mill. Units)	14.2	14.1	14.1	14.2	14.5	14.8	15.0	15.2
National Unemployment Rate (%)	8.3	8.2	8.3	8.2	8.1	8.0	7.9	7.8
Federal Budget Surplus (Unified, FY, $Bill)	-457	-125	-230	-300	-350	-50	-200	-250
Price of Oil ($Bbl., U.S. Refiners' Cost)	107.03	102.97	95.00	95.00	99.00	103.00	108.00	110.00
MONEY AND INTEREST RATES								
3-Month Treasury Bill Rate (%)	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Federal Funds Rate (%)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
10-Year Treasury Note Rate (%)	2.0	1.8	1.6	1.7	1.8	2.0	2.3	2.5
Long-Term Treasury Bond Rate (%)	3.1	3.2	3.2	3.3	3.4	3.6	3.8	4.0
AAA Corporate Bond Rate (%)	3.9	4.0	4.0	4.1	4.2	4.3	4.5	4.7
Prime Rate (%)	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
INCOMES								
Personal Income (Annualized % Change)	6.3	4.3	4.3	4.0	4.0	4.2	4.2	4.2
Real Disp. Inc. (Annualized % Change)	3.4	3.3	2.0	2.0	1.5	1.5	2.3	2.5
Personal Savings Rate (%)	3.6	4.0	4.0	4.0	3.7	3.7	3.6	3.6
After-Tax Profits (Annualized $Bill)	1734	1663	1652	1620	1873	1796	1768	1733
Yr-to-Yr % Change	19.1	13.1	10.0	6.0	8.0	8.0	7.0	7.0
COMPOSITION OF REAL GDP-ANNUAL RATES OF CHANGE								
Gross Domestic Product	2.0	1.5	1.7	2.0	1.8	2.0	2.3	2.5
Final Sales	2.4	1.2	2.0	2.3	2.0	2.0	2.1	2.2
Total Consumption	2.4	1.5	2.0	2.2	2.3	2.3	2.4	2.4
Nonresidential Fixed Investment	7.5	5.4	5.0	5.0	6.0	6.0	7.0	8.0
Structures	12.9	0.9	3.0	1.0	2.0	2.0	5.0	7.0
Equipment & Software	5.4	7.2	7.0	7.0	8.0	8.0	8.0	8.0
Residential Fixed Investment	20.6	9.8	12.0	10.0	10.0	10.0	15.0	20.0
Exports	4.4	5.3	3.5	5.0	5.0	5.0	3.0	3.0
Imports	3.1	6.0	2.5	2.0	3.0	4.0	5.0	5.0
Federal Government	-4.2	-0.4	-2.0	-3.0	-4.0	-4.0	-4.0	-3.0
State & Local Governments	-2.2	-2.1	-1.0	-1.0	-1.0	-0.5	-0.5	-0.5

Value Line Forecast for the U.S. Economy

	ACTUAL					*ESTIMATED*				
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
GROSS DOMESTIC PRODUCT AND ITS COMPONENTS (2005 CHAIN WEIGHTED $) BILLIONS OF DOLLARS										
Final Sales	13178	13201	12853	13029	13282	*13529*	*13804*	*14191*	*14602*	*15040*
Total Consumption	9263	9212	9038	9221	9421	*9602*	*9814*	*10050*	*10291*	*10548*
Nonresidential Fixed Investment	1550	1538	1263	1319	1436	*1540*	*1631*	*1745*	*1850*	*1943*
Structures	438	466	367	309	323	*344*	*353*	*374*	*399*	*426*
Equipment & Software	1107	1059	890	1019	1126	*1213*	*1306*	*1398*	*1495*	*1600*
Residential Fixed Investment	584	444	346	331	326	*365*	*407*	*480*	*552*	*618*
Exports	1554	1649	1494	1663	1774	*1848*	*1930*	*2027*	*2148*	*2298*
Imports	2203	2144	1853	2085	2188	*2259*	*2338*	*2443*	*2553*	*2656*
Federal Government	906	971	1030	1076	1055	*1029*	*995*	*965*	*946*	*936*
State & Local Governments	1528	1528	1514	1487	1454	*1426*	*1413*	*1417*	*1426*	*1440*
Gross Domestic Product	14029	14292	13939	14527	15088	*15646*	*16249*	*16971*	*17777*	*18676*
Real GDP (2005 Chain Weighted $)	13206	13162	12703	13088	13315	*13579*	*13844*	*14231*	*14658*	*15142*
PRICES AND WAGES-ANNUAL RATES OF CHANGE										
GDP Deflator	2.9	2.2	1.1	1.2	2.1	*1.9*	*1.8*	*1.5*	*1.6*	*1.7*
CPI-All Urban Consumers	2.9	3.8	-0.3	1.6	3.1	*1.7*	*1.9*	*2.0*	*2.1*	*2.3*
PPI-Finished Goods	3.9	6.4	-2.5	4.2	6.0	*1.0*	*2.2*	*1.5*	*1.8*	*2.2*
Employment Cost Index—Total Comp.	3.1	2.9	1.4	1.9	2.2	*2.0*	*2.2*	*2.5*	*2.6*	*2.6*
Productivity	1.5	0.6	2.3	4.1	0.6	*0.7*	*0.6*	*1.0*	*1.3*	*1.5*
PRODUCTION AND OTHER KEY MEASURES										
Industrial Prod. (% Change)	2.7	-3.7	-11.2	5.3	4.1	*3.3*	*2.5*	*3.0*	*3.2*	*3.3*
Factory Operating Rate (%)	79.2	74.9	66.2	71.7	75.0	*77.8*	*78.3*	*79.0*	*79.5*	*80.0*
Nonfarm Inven. Change (2005 Chain Weighted $)	28.7	-37.6	-143.8	60.7	44.3	*44.8*	*42.5*	*45.0*	*50.0*	*40.0*
Housing Starts (Mill. Units)	1.34	0.90	0.55	0.59	0.61	*0.76*	*0.93*	*1.25*	*1.50*	*1.65*
Existing House Sales (Mill. Units)	5.68	4.89	5.15	4.92	4.28	*4.55*	*4.93*	*5.30*	*5.60*	*5.70*
Total Light Vehicle Sales (Mill. Units)	16.1	13.2	10.4	11.6	12.7	*14.2*	*14.9*	*15.5*	*15.8*	*16.0*
National Unemployment Rate (%)	4.6	5.8	9.3	9.6	9.0	*8.3*	*8.0*	*7.7*	*7.0*	*6.5*
Federal Budget Surplus (Unified, FY, $Bill)	-162.0	-455.0	-1416	-1294	-1297	*-1112*	*-850*	*-704*	*-650*	*-600*
Price of Oil ($Bbl., U.S. Refiners' Cost)	67.98	95.29	59.20	76.70	101.80	*100.00*	*105.00*	*110.00*	*115.00*	*120.00*
MONEY AND INTEREST RATES										
3-Month Treasury Bill Rate (%)	4.4	1.4	0.2	0.1	0.1	*0.1*	*0.1*	*0.3*	*1.8*	*3.0*
Federal Funds Rate (%)	5.0	1.9	0.2	0.2	0.1	*0.1*	*0.1*	*0.3*	*1.8*	*3.0*
10-Year Treasury Note Rate (%)	4.6	3.7	3.3	3.2	2.8	*1.8*	*2.2*	*3.0*	*4.0*	*4.5*
Long-Term Treasury Bond Rate (%)	4.8	4.3	4.1	4.3	3.9	*3.2*	*3.7*	*4.0*	*4.6*	*5.0*
AAA Corporate Bond Rate (%)	5.6	5.6	5.3	4.9	4.6	*4.0*	*4.4*	*4.7*	*5.5*	*6.0*
Prime Rate (%)	8.1	5.1	3.3	3.3	3.3	*3.3*	*3.3*	*3.5*	*4.5*	*6.0*
INCOMES										
Personal Income (% Change)	5.7	4.6	-4.3	3.7	5.1	*4.7*	*4.2*	*4.9*	*5.1*	*5.2*
Real Disp. Inc. (% Change)	2.4	2.4	-2.3	1.8	1.3	*2.7*	*2.0*	*3.0*	*3.0*	*3.2*
Personal Savings Rate (%)	2.4	5.4	5.2	5.3	4.7	*3.9*	*3.7*	*4.0*	*4.5*	*5.0*
After-Tax Profits ($Bill)	1293	1051	1183	1408	1480	*1667*	*1793*	*1846*	*1938*	*2093*
Yr-to-Yr % Change	-4.2	-18.7	12.6	19.0	5.1	*12.7*	*7.5*	*3.0*	*5.0*	*8.0*
COMPOSITION OF REAL GDP-ANNUAL RATES OF CHANGE										
Gross Domestic Product	1.9	-0.3	-3.5	3.0	1.7	*2.0*	*2.0*	*2.8*	*3.0*	*3.3*
Final Sales	2.2	0.2	-2.6	1.4	2.0	*1.9*	*2.0*	*2.8*	*2.9*	*3.0*
Total Consumption	2.3	-0.6	-1.9	2.0	2.2	*1.9*	*2.2*	*2.4*	*2.4*	*2.5*
Nonresidential Fixed Investment	6.5	-0.8	-17.9	4.4	8.8	*7.3*	*5.9*	*7.0*	*6.0*	*5.0*
Structures	14.1	6.4	-21.2	-15.8	4.6	*6.6*	*2.6*	*6.0*	*6.5*	*7.0*
Equipment & Software	3.3	-4.3	-16.0	14.6	10.4	*7.8*	*7.6*	*7.0*	*7.0*	*7.0*
Residential Fixed Investment	-18.7	-23.9	-22.2	-4.3	-1.3	*11.9*	*11.5*	*18.0*	*15.0*	*12.0*
Exports	9.3	6.1	-9.4	11.3	6.7	*4.2*	*4.4*	*5.0*	*6.0*	*7.0*
Imports	2.4	-2.7	-13.6	12.5	4.9	*3.3*	*3.5*	*4.5*	*4.5*	*4.0*
Federal Government	1.2	7.2	6.0	4.5	-1.9	*-2.5*	*-3.3*	*-3.0*	*-2.0*	*-1.0*
State & Local Governments	1.4	0.0	-0.9	-1.8	-2.2	*-2.0*	*-0.9*	*0.3*	*0.6*	*1.0*

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Continued from cover page

We are a bit more hopeful about 2013. By then, assuming Washington is able to effect some reasonable tax and spending compromise (thereby avoiding the aforementioned fiscal cliff), the recent modest brightening in the payroll outlook is sustained, oil and natural gas prices remain at reasonable levels, and the Federal Reserve is prepared to stay fully supportive on the monetary front, GDP growth—now presumably locked in a 1.5%-2.0% band—could move somewhat above 2% later on next year. However, we caution that . . .

Europe remains a wild card, and one that could, if that troubled area were to become sufficiently unhinged, bring even our moderate 2013 growth expectations into question. For now, we believe that the indicated resolve by the European Central Bank—as recently affirmed by a pledge from ECB President, Mario Draghi—to take broad steps to ensure the viability of the euro zone and its ailing currency, the euro, will be at least moderately successful. Still, as we went to press, no tangible steps had yet been taken in this regard, and it is our sense that this process will be frustratingly slow. In fact, a fully effective strategy and one that will put the Continent on a sustained growth footing will be hard to achieve and could involve plenty of time and effort. However, any slip in resolve by the ECB and the stronger nations in the euro zone may produce a less fortuitous economic outcome over here. Then, there is China, where fears of a hard landing are on the rise, as that nation posts weaker economic data, and Iran, where the threat to oil prices from an armed confrontation with that nation appears to be only intensifying. All of that aside . . .

We believe that our nation is in the formative stages of a measured and uneven business up cycle, in which GDP growth may well average better than 3% by the middle-to-latter years of this decade. In all, we think that following the current soft patch, which we sense will run its course in the next 12 months, a definitive, albeit still understated, business up cycle will get under way and last through our 2015-2017 projection period. A benign scenario along these lines does not imply that another soft patch, or even a brief recession, may not occur in the interim. It is just that the aggregate long-term direction for the economy is likely to be forward—if still gingerly at times. The days of headier growth, as we had enjoyed in earlier up cycles, lie further into the future, in our opinion.

SOME SPECIFICS

Economic Growth: As noted, the 2012 business expansion has been an understated affair thus far, with respective GDP growth rates of 2.0% and 1.5% during the first and second quarters (Chart 1). Now, as the year moves into the late summer and early fall, things should get a little better, as we are seeing some spotty strides being made on the employment front (with July payrolls rising by 163,000), irregularly improving numbers on the housing front (Chart 2), and further spotty gains in the non-manufacturing arena. On the other hand, the pivotal manufacturing sector continues to slip back; retailing increased in July for just the first time in four months; and consumer confidence, while up in the July survey, is still down from early in the year. Taken together, the best spin we can put on things is that we are in a soft patch within a painfully slow business recovery. The logical outcome of this uninspiring set of conditions is that the nation will see growth of less than 2% in the current six months and just moderately more than that by later in 2013.

Meanwhile, external shocks remain a logical concern. For example, we continue to fear that Greece may exit the euro zone in 2013, which would intensify the pressure on two larger nations in that region, Spain and Italy. Other threats are the possibilities, as noted, of a hard landing in China, a heightened confrontation with Iran (and its impact on global oil prices), or the ill-timed unfolding of the feared "fiscal cliff" in Washington.

Assuming more benign outcomes on the U.S. and global fronts, we think that following another year of unprepossessing GDP growth during 2013, the rate of improvement will speed up in 2014, with growth moving into the 2.5%-3.0% range. After that, the maturing economic expansion will likely strengthen a little more as we press still deeper into the decade.

Inflation: Here, the news is still constructive, aided by a combination of little upward pressure on wages, the continuation of stable oil prices, the wealth of underutilized capacity (as factory usage holds below 80%), and the minimal competition for raw materials from a weaker euro zone and slowing growth in China. Adding it all up, we sense that the Federal Reserve's dual mandate of fostering maximum employment and price stability will be easier to achieve on the latter score than the former—at least over the intermediate term. In all, we look for the Producer and the Consumer Price Indexes to generally average increases of less than 2.5% through 2013 and no more than that by 2015-2017 (Chart 3). At some point, though, the tab for the earlier heavy counter-cyclical fiscal spending will come due. However, the timing of that projected payment continues to be uncertain.

Interest Rates: Here, as well, little has evolved in the months since our last in-depth look at the economy, as the Federal Reserve is still wedded to a policy of historically low short-term interest rates, with the federal funds rate target near zero percent. At the same time, long-term rates, which are set by the market, are down even further from where they were three

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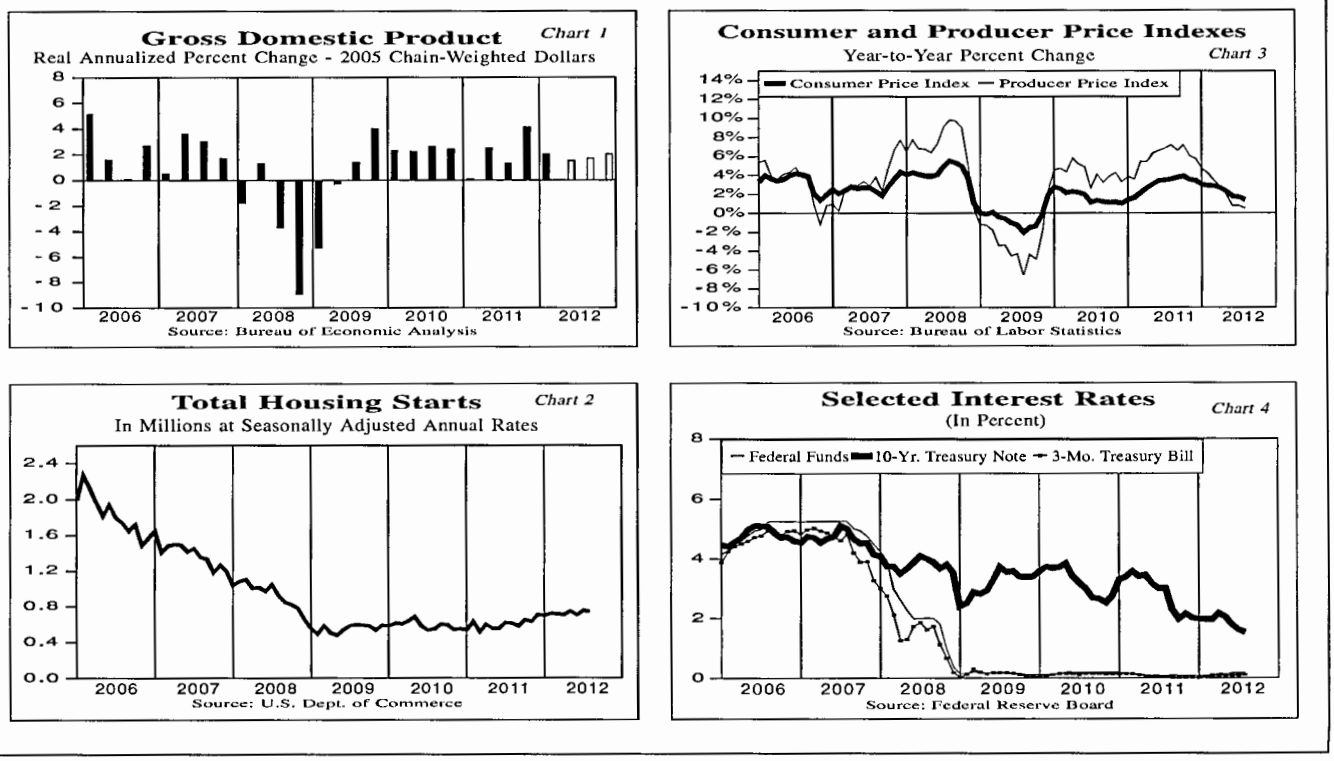
months ago. In fact, home buyers are now securing mortgages that are just barely above 3.5% on 30-year durations, while those opting for 15-year terms are paying less, on average. It's clearly a good time for borrowers. Still, the tough standards levied on applicants, and the hard time securing a job for so many potential home buyers are problematical. Meanwhile, the Fed has been floating the idea of further monetary easing, with its most recent FOMC meeting being a timely forum to opine that if things get worse on the economic front, the central bank would be prepared to do still more (Chart 4).

Corporate Profits: Here, the news while decent, isn't as overwhelmingly positive as it had been following the passing of the 2007-2009 recession. Tougher matchups, after a series of uniformly good results in the early aftermath of the business downturn, and fallout from the slowing pace of growth in recent months are behind the much-less-impressive results. More serious, even fewer companies are beating guidance on the revenue line, while many more are issuing cautious guidance for the rest of the year. Regarding earnings, analysts are paring growth expectations for the current period. Overall, we still expect corporate bottom lines to achieve a nice increase, on average in 2012, as well as moderating gains in 2013. We then expect to see a modest step-up in earnings growth later on in the decade, assuming our GDP forecast of better-than-3% growth is near the long-term mark.

THE STOCK MARKET

The equity market has done well for itself so far this year, managing to climb the proverbial wall of worry in the process. Indeed, given the trauma in the euro zone, the unimpressive economic showing at home, concerns about a hard landing in China, and fears the fractious situation in the Middle East cauldron (notably in Iran) could yet flare up, it is impressive that stocks have done as well as they have. Generally decent earnings, as indicated above, and a supportive Federal Reserve, which is committed to leaving short-term interest rates at their present low levels through 2014, so as to wake up the still-slumbering U.S. economy, are certainly playing a constructive role in keeping serious profit taking at bay. In fact, we are positive on the stock market for the next six months, given our forecast that GDP growth will step up some, that earnings will not fall apart, and that the worst of the euro-zone crisis will gradually pass.

Conclusion: As noted, we remain cautiously optimistic about the stock market over the next six months as historically moderate valuations suggest that a perfect outcome may not be needed for stocks to rise from these levels. Please refer to the inside back cover of *Selection & Opinion* for our statistically-based Asset Allocation Model's current reading.



Model Portfolios: Recent Developments

PORTFOLIO I

We are purchasing *V. F. Corporation* shares for Portfolio I this week. The company is a leading supplier of apparel, with strengths in the jeanswear, outdoor, sportswear, and work-apparel markets. Its portfolio of brands includes such names as *The North Face*, *Lee*, *Vans*, and *Nautica*. *V. F. Corporation* has a history of astute dealmaking, wherein it acquires a good brand that has grown a little stale or has not reached its full potential. The combination of the company's deep pockets and management's savvy works to turn these situations around and to further develop them for success. An example in this regard would be *VFC*'s latest addition, *Timberland*, the outdoor apparel maker. Although the brand has been neutral to earnings for the first six months of 2012, the company is looking for it to contribute $1.10 a share to the bottom line for the year.

Meanwhile, *V. F. Corporation* has an impressive financial record, showing growth in sales, earnings, and profit margins. Moreover, our sense is the company is positioned for continued success, particularly given the potential from international markets. Accordingly, *VFC* shares should fit in nicely with Portfolio I and its performance objective. To make room for this issue, we are selling our position in TEVA Pharmaceuticals; the ADR's Timeliness rank is now 3 (Average).

PORTFOLIO II

Portfolio II has lost its taste for McDonald's Corporation and is selling its position for a weighted average gain of 30% since its initial purchase in early 2010. After a series of lackluster monthly same-store sales reports, the stock price is down about 13% year to date. The latest blow came when the company reported flat comparable sales for the month of July, the worst performance in two and a half years. The softening global economy and consumer-confidence issues have caught up to the fast-food restaurateur, pressuring it to increase marketing and promote value, which will probably eat into profit margins, as will the likely rise in food costs. We also believe the competitive environment is getting more intense.

We are replacing McDonald's with *Golar LNG Limited*, a participant in the marine-transportation market. At first glance, a selection in such a volatile industry, one that is currently experiencing slower demand and oversupply in most segments, would seem unfit for Portfolio II. But all of *Golar*'s assets are either in the liquefied natural gas carrier or the floating storage and regasification markets. Both of these segments are enjoying strong secular growth and rising rates. The assets are also highly liquid, making the balance sheet safer than first appears. The company recently raised its dividend by 7%, and *GLNG* stock currently yields a healthy 3.5%.

PORTFOLIO III

Portfolio III continues to perform well midway through the September interim, buoyed by strength across the broader stock market. (The S&P 500 Index is up around 3% quarter to date.) Recent returns have been tarnished by the slump in *ITT Educational Services* stock, which has lost nearly half of its value since the beginning of July, but most of our holdings have been trending higher. Our technology names, in particular, including *Apple*, *Google*, and *Qualcomm*, have been on a roll ahead of the important back-to-school selling season. *Apple* has been the steadiest gainer of this group, getting a lift from *iPhone 5* speculation (a mid-September launch is rumored) and reports that the company is in talks with U.S. cable operators about marketing a branded set-top box that would be used for viewing live content.

Shares of *National Oilwell Varco*, meanwhile, were bid up some when it was revealed that Warren Buffett's Berkshire Hathaway had accumulated a sizable stake (2.8 million shares) in the company. The oilfield-services provider certainly seems to have a lot going for it. Indeed, its rig-technology unit should continue to thrive in the years ahead, as the entire global deepwater drilling complex is slowly upgraded. The company also has an enviable $11 billion backlog (that enhances earnings visibility) and a cash-rich balance sheet (that supports accretive acquisitions). Thus, we agree with Mr. Buffett that *National Oilwell* is a decent long-term buy.

We are making no changes to Portfolio III this week, though we remain on the hunt for a replacement for *ITT Educational Services*.

PORTFOLIO IV

The U.S. stock market continues to make strides in August, bringing the S&P 500 Index back near its 52-week high. Despite as-yet unresolved problems overseas, decent economic news and stable earnings reports have probably helped to brighten the mood. For its part, Portfolio IV continues to do well versus its income-oriented benchmark.

During the third quarter, a few names have made nice contributions. *International Paper* is up roughly 20% in the past couple of months. Despite a mixed earnings report, investors are more optimistic that that the Temple-Inland acquisition will provide substantial synergies. Notably, *International Paper* stock has a Beta coefficient of 1.40, and this propensity for volatility may be contributing to the upside. The company is also a member of the basic-materials sector, which has been a dynamic performer. Elsewhere, our portfolio has gotten a lift from *Mattel* stock. Following weakness earlier in the year, results at the recreation-industry participant should benefit from its strong collection of brands and expanding market share overseas.

While the second-quarter earnings season is largely over, we are still awaiting a report from *Heinz* in late August. For now, we are making no changes to our portfolio.

PORTFOLIO I: STOCKS WITH ABOVE-AVERAGE YEAR-AHEAD PRICE POTENTIAL

(primarily suitable for more aggressive investors)

Ratings & Reports Page	Ticker	Company	Recent Price	Time-liness	Safety	P/E	Yield%	Beta	Financial Strength	Industry Name
1172	BLL	Ball Corp.	42.01	2	2	13.2	1.0	0.95	B++	Packaging & Container
159	CAT	Caterpillar Inc.	87.87	1	3	8.8	2.4	1.30	A+	Heavy Truck & Equip
382	CSTR	Coinstar Inc.	47.46	2	3	9.5	Nil	0.90	B+	Industrial Services
357	CBRL	Cracker Barrel	62.41	1	3	13.6	2.6	1.00	B+	Restaurant
988	DAN	Dana Holding Corp.	13.82	1	4	6.9	1.4	2.50	B+	Auto Parts
1022	DTV	DIRECTV	51.91	1	3	10.7	Nil	0.90	B+	Cable TV
2220	FL	Foot Locker	34.27	2	3	13.9	2.1	1.05	B++	Retail (Softlines)
2158	GCO	Genesco Inc.	66.75	2	3	13.7	Nil	1.15	B+	Shoe
1013	HELE	Helen of Troy Ltd.	30.10	2	3	8.0	Nil	1.10	B++	Toiletries/Cosmetics
735	KMT	Kennametal Inc.	35.90	2	3	8.5	1.8	1.40	B++	Metal Fabricating
1336	NCR	NCR Corp.	22.65	2	3	12.7	Nil	1.20	B+	Electronics
343	NSC	Norfolk Southern	74.09	1	2	12.1	2.7	1.05	A	Railroad
325	ODFL	Old Dominion Freight	44.30	1	3	15.0	Nil	1.10	B+	Trucking
976	OCR	Omnicare, Inc.	31.77	1	3	9.5	0.9	1.00	B++	Pharmacy Services
2587	ORCL	Oracle Corp.	31.35	1	1	12.1	0.9	0.95	A++	Computer Software
2113	PVH	PVH Corp.	85.27	2	3	13.4	0.2	1.25	B+	Apparel
132	TMO	Thermo Fisher Sci.	56.71	1	2	11.6	0.9	0.95	A	Precision Instrument
730	TGI	Triumph Group Inc.	62.58	1	3	10.8	0.3	1.10	B++	Aerospace/Defense
2120	VFC	V.F. Corp.	149.36	1	2	14.3	1.9	0.90	A	Apparel
1630	WPI	Watson Pharmac.	80.18	1	2	13.1	Nil	0.75	B++	Drug

To qualify for purchase in the above portfolio, a stock must have a Timeliness Rank of 1 and a Financial Strength Rating of at least B+. If a stock's Timeliness rank falls below 2, it will be automatically removed. Stocks in the above portfolio are selected and monitored by Charles Clark, Associate Research Director.

PORTFOLIO II: STOCKS FOR INCOME AND POTENTIAL PRICE APPRECIATION

(primarily suitable for more conservative investors)

Ratings & Reports Page	Ticker	Company	Recent Price	Time-liness	Safety	P/E	Yield%	Beta	Financial Strength	Industry Name
1594	ABT	Abbott Labs.	66.17	1	1	13.0	3.1	0.60	A++	Drug
2600	ADP	Automatic Data Proc.	57.78	2	1	19.7	2.9	0.80	A++	IT Services
503	CVX	Chevron Corp.	113.32	3	1	7.8	3.2	0.95	A++	Petroleum (Integrated)
1969	KO	Coca-Cola	39.38	3	1	18.9	2.6	0.60	A++	Beverage
1189	CL	Colgate-Palmolive	105.42	3	1	19.4	2.5	0.60	A++	Household Products
2395	COP	ConocoPhillips	57.35	NR	1	8.8	4.6	NMF	A++	Petroleum (Producing)
1587	DD	Du Pont	50.14	3	1	11.4	3.5	1.15	A++	Chemical (Basic)
333	GLNG	Golar LNG Ltd.	39.73	3	3	19.4	3.5	1.60	B	Maritime
1752	HON	Honeywell Int'l	58.43	2	1	12.6	2.6	1.15	A++	Diversified Co.
1360	INTC	Intel Corp.	26.48	3	1	10.6	3.4	1.00	A++	Semiconductor
1924	KFT	Kraft Foods	40.90	3	1	16.0	2.8	0.65	A+	Food Processing
719	LMT	Lockheed Martin	91.35	2	1	11.2	4.7	0.80	A++	Aerospace/Defense
407	RSG	Republic Services	28.67	3	3	14.1	3.3	0.90	B+	Environmental
1626	SNY	Sanofi ADR	41.64	3	1	17.7	4.4	0.80	A+	Drug
1731	SNA	Snap-on Inc.	68.54	2	2	13.3	2.0	1.10	A+	Machinery
1767	MMM	3M Company	92.30	3	1	13.8	2.6	0.80	A++	Diversified Co.
345	UNP	Union Pacific	121.68	1	2	14.5	2.1	1.15	A	Railroad
316	UPS	United Parcel Serv.	76.18	3	1	15.5	3.0	0.85	A	Air Transport
942	VZ	Verizon Communic.	44.33	1	1	17.3	4.5	0.70	A++	Telecom. Services
2153	WMT	Wal-Mart Stores	74.01	2	1	14.9	2.1	0.60	A++	Retail Store

To qualify for purchase in the above portfolio, a stock must have a yield that is in the top half of the Value Line universe, a Timeliness Rank of at least 3 (unranked stocks may be selected occasionally), and a Safety Rank of 3 or better. If a stock's Timeliness Rank falls below 3, that stock will be automatically removed. (Occasionally a stock will be unranked (NR), usually because of a short trading history or a major corporate reorganization.) Stocks are selected and monitored by Craig Sirois, Editorial Analyst.

PORTFOLIO III: STOCKS WITH LONG-TERM PRICE GROWTH POTENTIAL

(primarily suitable for investors with a 3- to 5-year horizon)

Ratings & Reports Page	Ticker	Company	Recent Price	Time-liness	Safety	P/E	Yield%	Beta	3- to 5-yr Appreciation Potential	Industry Name
1546	AFL	Aflac Inc.	45.23	2	3	7.8	2.9	1.20	55 - 130%	Insurance (Life)
1397	AAPL	Apple Inc.	631.69	3	2	13.7	1.7	1.00	75 - 135	Computers/Peripherals
973	CVS	CVS Caremark Corp.	44.12	2	1	13.0	1.5	0.80	60 - 105	Pharmacy Services
354	CBOU	Caribou Coffee	12.51	4	4	24.1	Nil	0.95	60 - 180	Restaurant
1602	CELG	Celgene Corp.	71.12	3	2	13.8	Nil	0.75	40 - 95	Drug
2327	DIS	Disney (Walt)	49.69	2	1	15.7	1.2	1.05	20 - 50	Entertainment
927	DY	Dycom Inds.	17.75	1	3	13.4	Nil	1.40	70 - 180	Telecom. Services
2625	GOOG	Google, Inc.	668.66	3	2	18.3	Nil	0.90	40 - 90	Internet
2106	GES	Guess Inc.	31.59	3	3	11.7	2.5	1.25	90 - 185	Apparel
2307	HOG	Harley-Davidson	41.18	3	3	13.7	1.5	1.50	45 - 120	Recreation
1920	HRL	Hormel Foods	28.39	3	1	14.1	2.2	0.65	40 - 75	Food Processing
2002	ESI	ITT Educational	32.44	3	3	3.8	Nil	0.70	225 - 395	Educational Services
1000	MGA	Magna Int'l 'A'	44.30	1	3	8.6	2.5	1.20	80 - 170	Auto Parts
1590	MOS	Mosaic Company	57.63	3	3	12.2	1.7	1.55	45 - 125	Chemical (Basic)
2418	NOV	National Oilwell Varco	76.26	2	3	12.5	0.7	1.55	50 - 130	Oilfield Svcs/Equip.
1978	PEP	PepsiCo, Inc.	72.24	4	1	18.6	3.0	0.60	50 - 85	Beverage
966	QCOM	Qualcomm Inc.	62.39	3	2	19.2	1.6	0.85	35 - 85	Telecom. Equipment
1006	TEN	Tenneco Inc.	29.25	1	4	8.0	Nil	2.35	90 - 225	Auto Parts
754	X	U.S. Steel Corp.	22.64	3	3	27.0	0.9	1.75	165 - 300	Steel
816	UNH	UnitedHealth Group	51.97	2	2	10.3	1.6	1.00	75 - 140	Medical Services

To qualify for purchase in the above portfolio, a stock must have worthwhile and longer-term appreciation potential. Among the factors considered for selection are a stock's Timeliness and Safety Rank and its 3- to 5-year appreciation potential. (Occasionally a stock will be unranked (NR), usually because of a short trading history or a major corporate reorganization.) Stocks in the above portfolio are selected and monitored by Justin Hellman, Editorial Analyst.

PORTFOLIO IV: STOCKS WITH ABOVE-AVERAGE DIVIDEND YIELDS

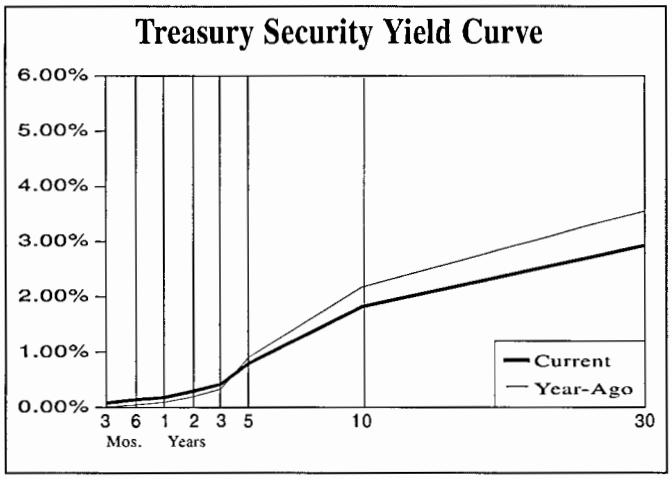
(primarily suitable for investors interested in current income)

Ratings & Reports Page	Ticker	Company	Recent Price	Time-liness	Safety	P/E	Yield%	Beta	Financial Strength	Industry Name
922	T	AT&T Inc.	37.25	1	1	15.0	4.8	0.75	A++	Telecom. Services
1594	ABT	Abbott Labs.	66.17	1	1	13.0	3.1	0.60	A++	Drug
903	LNT	Alliant Energy	46.18	2	2	15.5	4.0	0.70	A	Electric Util. (Central)
1041	BT	BT Group ADR	34.09	1	3	8.9	4.0	1.00	B+	Telecom. Utility
1990	BTI	Brit. Amer Tobac. ADR	108.30	3	2	16.3	3.9	0.70	B++	Tobacco
140	ED	Consol. Edison	63.20	2	1	16.4	3.9	0.60	A+	Electric Utility (East)
1587	DD	Du Pont	50.14	3	1	11.4	3.5	1.15	A++	Chemical (Basic)
1526	HCN	Health Care REIT	59.50	4	3	50.9	5.2	0.85	B+	R.E.I.T.
1917	HNZ	Heinz (H.J.)	55.50	3	1	15.9	3.8	0.65	A+	Food Processing
1162	IP	Int'l Paper	34.11	3	3	12.7	3.1	1.40	B+	Paper/Forest Products
543	LG	Laclede Group	42.99	3	2	16.3	3.9	0.60	B++	Natural Gas Utility
2312	MAT	Mattel, Inc.	35.66	1	2	14.3	3.5	0.85	A	Recreation
365	MCD	McDonald's Corp.	88.12	3	1	15.8	3.2	0.60	A++	Restaurant
721	NOC	Northrop Grumman	68.36	2	1	9.7	3.3	0.85	A++	Aerospace/Defense
916	OGE	OGE Energy	54.62	3	2	15.3	3.0	0.75	A	Electric Util. (Central)
1993	RAI	Reynolds American	46.60	2	2	16.0	5.1	0.55	B+	Tobacco
514	RDSA	Royal Dutch Shell 'A'	70.84	3	1	9.7	4.9	1.05	A++	Petroleum (Integrated)
151	SO	Southern Co.	46.60	2	1	17.4	4.3	0.55	A	Electric Utility (East)
1037	WPC	W.P. Carey & Co. LLC	46.22	3	3	18.2	4.9	0.90	B+	Property Management
412	WM	Waste Management	35.21	3	2	15.8	4.1	0.80	A	Environmental

To qualify for purchase in the above portfolio, a stock must have a yield that is at least 1% above the median for the Value Line universe, a Timeliness Rank of at least 3, and a Financial Strength Rating of at least B+. If a stock's Timeliness Rank falls below 4, that stock will be automatically removed. Stocks are selected and monitored by Adam Rosner, Senior Analyst.

Selected Yields

	Recent (8/15/12)	3 Months Ago (5/16/12)	Year Ago (8/17/11)
TAXABLE			
Market Rates			
Discount Rate	0.75	0.75	0.75
Federal Funds	0.00-0.25	0.00-0.25	0.00-0.25
Prime Rate	3.25	3.25	3.25
30-day CP (A1/P1)	0.21	0.31	0.36
3-month LIBOR	0.43	0.47	0.30
Bank CDs			
6-month	0.20	0.22	0.25
1-year	0.31	0.33	0.42
5-year	1.09	1.12	1.45
U.S. Treasury Securities			
3-month	0.08	0.09	0.01
6-month	0.14	0.14	0.05
1-year	0.18	0.18	0.09
5-year	0.80	0.74	0.91
10-year	1.82	1.76	2.17
10-year (inflation-protected)	-0.45	-0.38	-0.08
30-year	2.92	2.90	3.56
30-year Zero	3.12	3.13	3.94
Mortgage-Backed Securities			
GNMA 5.5%	1.03	1.13	0.87
FHLMC 5.5% (Gold)	1.89	2.09	1.48
FNMA 5.5%	1.69	1.87	1.43
FNMA ARM	2.27	2.32	2.49
Corporate Bonds			
Financial (10-year) A	3.23	3.36	3.86
Industrial (25/30-year) A	3.96	4.05	4.82
Utility (25/30-year) A	3.95	4.00	4.69
Utility (25/30-year) Baa/BBB	4.39	4.48	5.29
Foreign Bonds (10-Year)			
Canada	1.95	1.92	2.39
Germany	1.56	1.47	2.20
Japan	0.82	0.83	1.03
United Kingdom	1.68	1.88	2.43
Preferred Stocks			
Utility A	5.31	5.31	5.19
Financial A	6.07	6.69	6.48
Financial Adjustable A	5.51	5.52	5.52



	Recent (8/15/12)	3 Months Ago (5/16/12)	Year Ago (8/17/11)
TAX-EXEMPT			
Bond Buyer Indexes			
20-Bond Index (GOs)	3.75	3.71	3.97
25-Bond Index (Revs)	4.50	4.73	5.09
General Obligation Bonds (GOs)			
1-year Aaa	0.17	0.21	0.18
1-year A	0.85	0.95	0.96
5-year Aaa	0.77	0.78	0.94
5-year A	1.83	1.78	1.95
10-year Aaa	1.96	1.92	2.39
10-year A	3.10	3.06	3.92
25/30-year Aaa	3.31	3.50	3.97
25/30-year A	4.78	4.95	5.67
Revenue Bonds (Revs) (25/30-Year)			
Education AA	4.21	4.30	4.68
Electric AA	4.49	4.60	5.05
Housing AA	4.67	4.70	5.65
Hospital AA	4.46	4.56	5.00
Toll Road Aaa	4.30	4.42	4.75

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	8/8/12	7/25/12	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	1502604	1494298	8306	1469243	1493626	1513452
Borrowed Reserves	3673	4227	-554	5065	6234	8346
Net Free/Borrowed Reserves	1498931	1490071	8860	1464178	1487392	1505105

MONEY SUPPLY

(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Ann'l Growth Rates Over the Last...		
	7/30/12	7/23/12	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	2323.2	2313.6	9.6	12.5%	9.4%	15.6%
M2 (M1+savings+small time deposits)	10035.5	10029.8	5.7	6.0%	5.6%	6.6%

Closing Stock Market Averages as of Press Time

	8/8/2012	8/15/2012	%Change 1 week	%Change 12 months
Dow Jones Industrial Average	13175.64	13164.78	-0.1%	+14.6%
Standard & Poor's 500	1402.22	1405.53	+0.2%	+16.7%
N.Y. Stock Exchange Composite	8018.24	8029.01	+0.1%	+7.3%
NASDAQ Composite	3011.25	3030.93	+0.7%	+18.6%
NASDAQ 100	2714.02	2735.47	+0.8%	+23.5%
American Stock Exchange Index	2427.56	2420.90	-0.3%	+5.0%
Value Line (Geometric)	348.25	349.72	+0.4%	+5.3%
Value Line (Arithmetic)	2944.49	2959.47	+0.5%	+12.2%
London (FT-SE 100)	5845.92	5833.04	-0.2%	+9.0%
Tokyo (Nikkei)	8881.16	8925.04	+0.5%	-1.8%
Russell 2000	800.16	804.26	+0.5%	+11.9%

Major Insider Transactions†

PURCHASES

Latest Full-Page Report	Timeliness Rank	Company	Insider, Title	Date	Shares Traded	Shares Held	Price Range	Recent Price
307	2	Delta Air Lines	P. Jacobson, CFO	8/6/12	50,000	153,881	$9.34	9.28
2624	-	Facebook Inc.	R. Hastings, Dir.	8/8/12	47,846	47,846	$21.03	20.38
1750	2	Gen'l Electric	J. Brennan, Dir.	8/2/12	20,000	20,000	$20.44	20.94
104	4	General Motors	D.F. Akerson, Chair.	8/8/12	25,000	272,828	$20.35	20.21
2309	3	IMAX Corp.	K. Douglas *	8/7/12-8/8/12	120,000	3,191,212	$21.78-$21.81	20.88
335	5	Overseas Shipholding	T.B. Coleman, Dir.	8/3/12	100,000	104,787	$5.82	6.86
2336	3	Viacom Inc. 'B'	S.M. Redstone, Chair.	8/6/12	8,000	236,442	$47.68	49.28

SALES

Latest Full-Page Report	Timeliness Rank	Company	Insider, Title	Date	Shares Traded	Shares Held	Price Range	Recent Price
1746	3	Danaher Corp.	H.L. Culp Jr., CEO	8/3/12-8/6/12	100,000	895,673	$53.41-$53.56	53.58
1400	3	EMC Corp.	J.M. Tucci, Chair.	8/7/12	150,000	1,598,376	$27.04	25.71
1136	3	Fastenal Co.	R.A. Kierlin, Chair.	8/6/12	100,000	13,310,000	$42.89	42.28
1406	2	Int'l Business Mach.	M. Loughridge, CFO	8/2/12	27,000	25,395	$193.45	198.29
1992	3	Philip Morris Int'l	L.C. Camilleri, Chair.	8/6/12	50,000	1,560,858	$92.71	93.14
827	5	Quality Systems	A.D. Hussein, Dir.	7/31/12	970,053	5,993,844	$16.10	18.32
1540	3	Ventas, Inc.	D.A. Cafaro, Chair.	8/1/12-8/2/12	138,730	563,422	$67.00-$67.89	63.68

* *Beneficial owner of more than 10% of common stock.*

† *Includes only large transactions in U.S.-traded stocks; excludes shares held in the form of limited partnerships, excludes options & family trusts.*

Major Insider Transactions are obtained from Vickers Stock Research Corporation.

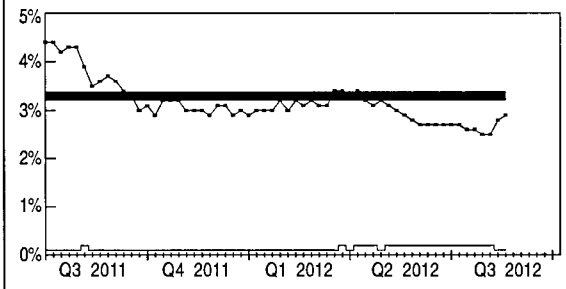
Market Monitor

Valuations and Yields	8/15	8/8	13-week range	50-week range	Last market top (7-13-2007)	Last market bottom (3-9-2009)
Median price-earnings ratio of VL stocks	14.6	15.1	14.0 - 15.1	12.9 - 15.8	19.7	10.3
P/E (using 12-mo. est'd EPS) of DJ Industrials	12.9	12.9	12.0 - 12.9	11.4 - 13.1	16.1	17.3
Median dividend yield of VL stocks	2.3%	2.3%	2.3 - 2.5%	2.1 - 2.5%	1.6%	4.0%
Div'd yld. (12-mo. est.) of DJ Industrials	2.7%	2.7%	2.7 - 2.8%	2.6 - 3.0%	2.2%	4.0%
Prime Rate	3.3%	3.3%	3.3 - 3.3%	3.3 - 3.3%	8.3%	3.3%
Fed Funds	0.1%	0.1%	0.1 - 0.2%	0.1 - 0.2%	5.3%	0.2%
91-day T-bill rate	0.1%	0.1%	0.1 - 0.1%	0.0 - 0.1%	5.0%	0.3%
AAA Corporate bond yield	3.6%	3.5%	3.2 - 3.8%	3.2 - 4.1%	5.8%	5.5%
30-year Treasury bond yield	2.9%	2.8%	2.5 - 2.9%	2.5 - 3.4%	5.1%	3.7%
Bond yield minus average earnings yield	-3.3%	-3.2%	-3.8 - -3.2%	-4.0 - -2.3%	0.7%	-4.3%
Market Sentiment						
Short interest/avg. daily volume (5 weeks)	19.1	18.4	15.5 - 19.1	10.3 - 19.1	8.1	8.6
CBOE put volume/call volume	.84	.83	.83 - 1.17	.67 - 1.31	.91	.93

VALUE LINE ASSET ALLOCATION MODEL

(Based only on economic and financial factors)

	Current (effective market open 4/2/12)	Previous
Common Stocks	**60%-70%**	**65%-75%**
Cash and Treasury Issues	**40%-30%**	**35%-25%**



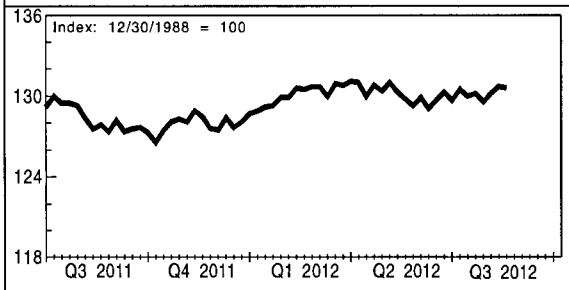
INTEREST RATES

Prime Rate

Federal Funds

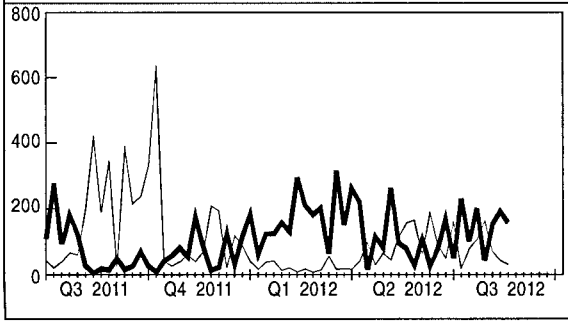
30-Year Treasury Bond

	Recent	Previous Week
Prime Rate	3.3%	3.3%
Fed Funds	0.1%	0.1%
30-Yr. Treasury	2.9%	2.8%



VALUE LINE UNIVERSE

	Recent	Previous Week
Advances	758	1236
Declines	921	448
Issues Covered	1698	1698
Market Value ($ Trillion)	19.172	19.258



VALUE LINE UNIVERSE

New Highs

New Lows

	Recent	Previous Week
New Highs	157	191
New Lows	31	44

INDUSTRY PRICE PERFORMANCE LAST SIX WEEKS ENDING 8/14/2012

7 Best Performing Industries

Oilfield Svcs/Equip.	+10.4%
Petroleum (Integrated)	+10.2%
Engineering & Const	+9.4%
Railroad	+8.8%
Shoe	+7.2%
Retail Automotive	+6.9%
Apparel	+6.2%

7 Worst Performing Industries

Healthcare Info	-12.6%
Securities Brokerage	-11.0%
Office Equip/Supplies	-8.8%
Hotel/Gaming	-7.0%
Retail/Wholesale Food	-7.0%
Advertising	-6.3%
Foreign Electronics	-6.2%

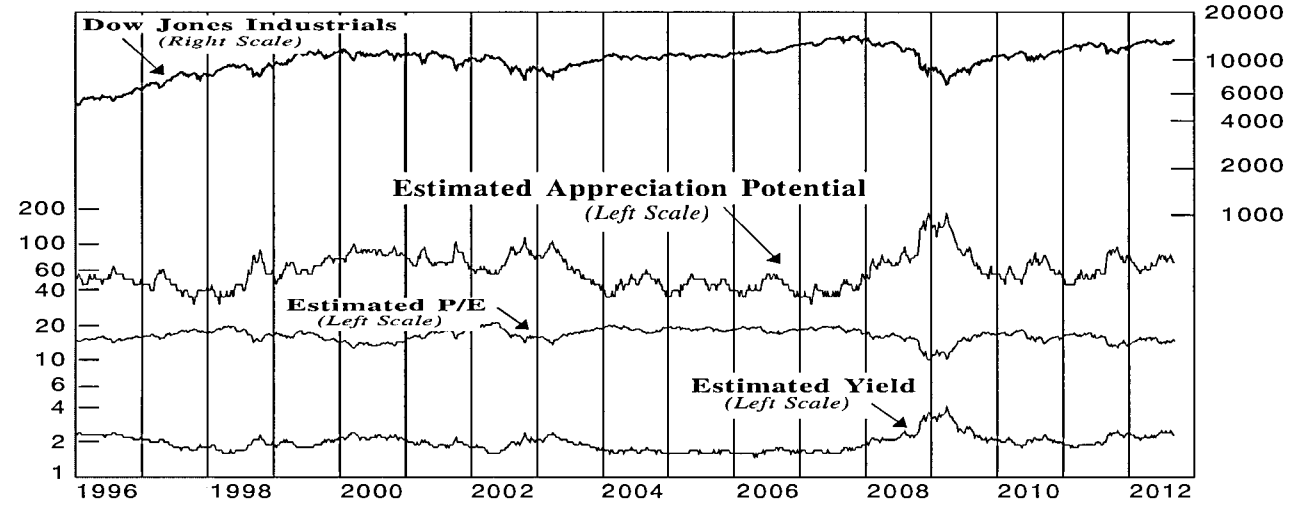
The corresponding change in the Value Line Arithmetic Average* is -0.3%

CHANGES IN FINANCIAL STRENGTH RATINGS

Company	Prior Rating	New Rating	Ratings & Reports Page
Cardinal Health	A+	A++	208
Oshkosh Corp.	C++	B+	168
STERIS Corp.	B++	A	193
Wabash Nat'l	B	C++	171

Stock Market Averages

VALUE LINE ESTIMATED P/E, YIELD, APPRECIATION POTENTIAL VERSUS DOW JONES INDUSTRIALS *(JANUARY 2, 1996 - AUGUST 14, 2012)*



THE VALUE LINE GEOMETRIC AVERAGES

	Composite 1671 stocks	Industrials 1567 stocks	Rails 8 stocks	Utilities 96 stocks
8/9/2012	349.27	279.32	5032.89	257.22
8/10/2012	349.59	279.50	5071.59	258.40
8/13/2012	348.54	278.67	5055.90	257.48
8/14/2012	347.47	277.70	5066.88	258.29
8/15/2012	349.72	279.58	5098.72	258.72
%Change last 4 weeks	+1.4%	+1.4%	+7.4%	+0.9%

Arithmetic* Composite 1671 stocks
2953.91
2957.00
2948.74
2940.06
2959.47
+2.1%

THE DOW JONES AVERAGES

Composite 65 stocks	Industrials 30 stocks	Transportation 20 stocks	Utilities 15 stocks
4444.99	13165.19	5048.23	483.75
4458.84	13207.95	5063.55	485.14
4447.66	13169.43	5062.16	482.99
4453.83	13172.14	5081.78	483.54
4462.91	13164.78	5142.03	481.37
+0.8%	+2.0%	0.0%	-1.2%

WEEKLY VALUE LINE GEOMETRIC AVERAGES* *(JULY 1, 2011 - AUGUST 15, 2012)*

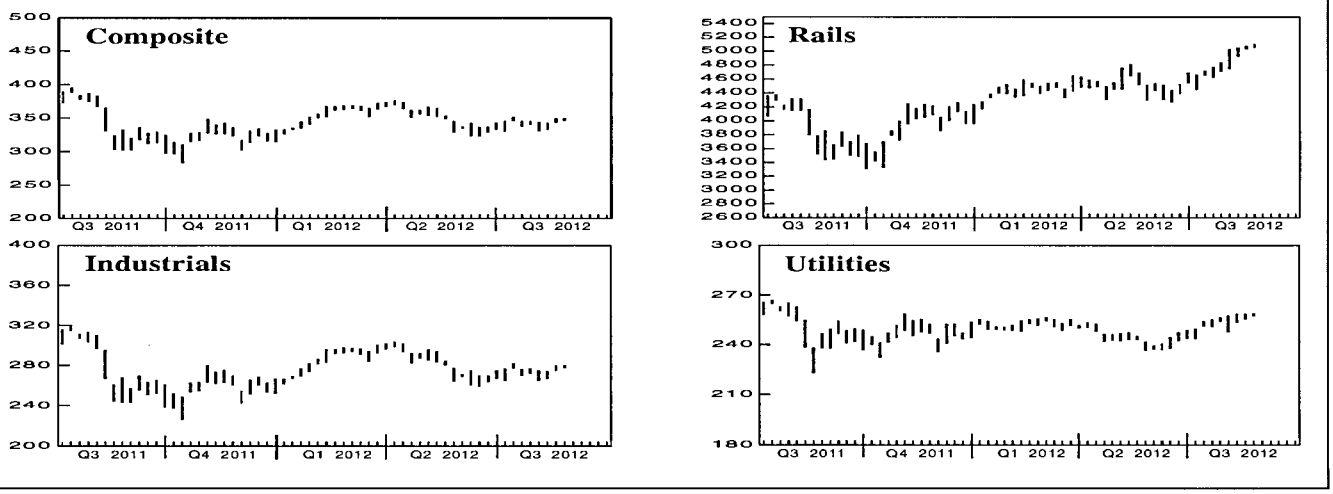
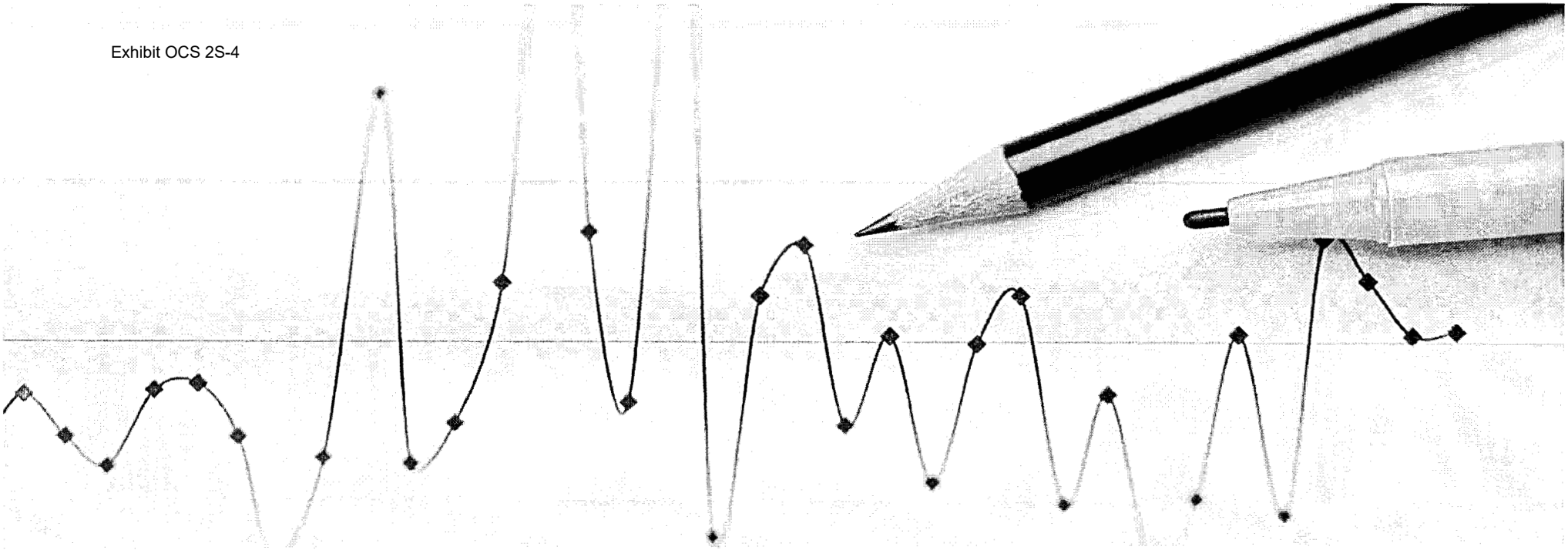


Exhibit OCS 2S-4



J.P. Morgan Asset Management

Long-term Capital Market Return Assumptions

2012 EDITION

J.P.Morgan
Asset Management

J.P. Morgan Asset Management Long-term Capital Market Return Assumptions

As of October 31, 2011

	Expected 10–15 year annualized compound returns (%)[1,2]		Rationale
ECONOMIC INDICATORS	Inflation	3.25	High unemployment and deleveraging of the public and private sectors to keep inflation low overall, while aggressive reflationary central bank policy and rising import prices risk higher inflation over the medium to longer term. Strong growth in the emerging economies should drive commodity prices higher, causing headline inflation to outstrip core.
	Core Inflation	2.75	
	Real GDP	2.25	Prolonged period of deleveraging in the public and private sectors and a slower rate of increase in the labor force to constrain economic growth.
FIXED INCOME	U.S. Cash	2.00	Federal Reserve to keep policy rates on hold for an extended period and raise them only gradually thereafter. Real rates to remain close to zero on average.
	U.S. Intermediate Treasury[3]	1.75	Absolute yields to stay low in the near term, rising toward higher equilibrium nominal levels as monetary policy is eventually normalized. Real total returns negative due to both low income return and capital losses as rates rise.
	U.S. Long Treasury[4]	1.75	
	U.S. TIPS	3.50	TIPS to outperform nominal Treasuries as expected inflation rises from current levels.
	U.S. Aggregate	3.00	Spreads expected to narrow, but total returns to be constrained as overall yields rise with Treasury rates.
	U.S. Short Duration Gov't/Credit	2.25	
	U.S. Long Duration Gov't/Credit	3.50	
	U.S. Investment Grade Corporate	4.00	
	U.S. Long Corporate	4.75	
	U.S. High Yield	7.00	Limited capital losses expected as spreads narrow significantly to offset projected rise in Treasury rates. Income expected to be the major driver of return. Haircut applied to total returns for expected defaults.
	U.S. Leveraged Loan	6.00	
	World Government Bond (local)	2.00	Government bond yields to rise globally from current levels leading to capital losses as rates converge to equilibrium.
	World ex-U.S. Government Bond (local)	2.25	
	World ex-U.S. Government Bond	2.50	Dollar depreciation against weighted average of WGBI currencies expected to boost returns to U.S. investors.
	Emerging Market Sovereign Debt	6.00	Spreads expected to narrow, but total returns to be constrained as overall yields rise with U.S. Treasury rates.
	Emerging Market Local Currency Sovereign Debt	6.75	Yields expected to rise as inflation and real rates in emerging economies increase over time. Total returns largely driven by income.
	Emerging Market Corporate Debt	6.50	Spreads expected to narrow, but total returns to be constrained as overall yields rise with U.S. Treasury rates.
	U.S. Municipal	2.50	Municipals to outperform taxable bonds as yield ratio converges toward historical norms, partially offsetting expected increase in Treasury yields.
EQUITY	U.S. Large Cap	8.00	Sum of below building blocks (Nominal EPS growth + Dividend yield + P/E return impact). Total returns expected to recover over the long term as corporate sector outperforms domestic economy.
	U.S. Large Cap EPS Growth	5.25	Corporate earnings growth expected to exceed nominal GDP growth as companies maintain cost discipline and revenues benefit from fast-growing overseas markets.
	U.S. Large Cap Dividend Yield	2.75	Dividend yields expected to rise as companies favor payouts over new investment given higher uncertainty over economic outlook.
	U.S. Large Cap P/E Return Impact	zero	Valuation multiples to remain below long-term historical averages given persistent deleveraging pressures and higher expected inflation.
	U.S. Mid Cap	8.75	Premium to large cap assumed for both. Mid-cap companies in particular likely to benefit from acquisition activity by larger firms, especially given significant cash build-up on large-cap corporate balance sheets.
	U.S. Small Cap	8.50	
	U.S. Large Cap Value	7.75	Growth expected to outperform value given more favorable sector concentrations and higher share of revenues sourced from overseas markets.
	U.S. Large Cap Growth	8.25	
	Europe ex-U.K. Large Cap (local)	8.25	European corporate earnings premium to nominal GDP expected given relatively large share of emerging market sourced revenues. Valuations to improve from depressed levels as a resolution to the debt crisis is ultimately reached. Moderate rise in dividend yields expected.
	Japan Large Cap (local)	5.50	Japanese earnings to outperform domestic economy given exposure to fast-growing overseas markets. Japan to remain a global underperformer given demographic challenges and ongoing battle with deflation.
	U.K. Large Cap (local)	8.25	U.K. earnings premium to nominal GDP expected given supports from foreign-sourced revenues and proactive approach to fiscal consolidation. Tolerance for higher inflation to keep valuations in check, but dividend yields expected to rise moderately.
	EAFE Equity (local)	7.50	Market capitalization weighted average of expectations for regional equity returns.
	EAFE Equity	7.75	Dollar depreciation against weighted average of EAFE currencies expected to boost returns to U.S. investors.
	Emerging Market Equity	10.00	Healthier economic fundamentals, more favorable demographics and more policy flexibility to support long-run emerging market growth. Capital inflows expected to support equity returns, particularly given low current investor allocations.
	Asia ex-Japan Equity	10.00	Headwinds from higher imported commodity prices expected to be offset by stronger underlying economic growth than in other emerging regions.
	Global Equity	8.25	Market capitalization weighted average of expectations for regional equity returns.
ALTERNATIVES	U.S. Private Equity[5,6]	8.75	Median returns assumed to be in line with mid-cap equity. Sizeable divergence expected across private investments.
	U.S. Direct Real Estate (unlevered)[5,6]	6.75	Returns typically between stocks and bonds. Some boost from valuation still assumed, but larger discount to equities expected given recent period of sustained outperformance.
	U.S. Value Added Real Estate (unlevered)[5,6]	8.00	Premium to direct real estate assumed as in prior years for specialized acquisition and management expertise.
	European Real Estate (unlevered, local)[5,6]	6.50	European real estate to lag U.S. given weaker economic outlook and less room for price appreciation after shallower downturn and earlier recovery.
	U.S. REITs	7.00	Small premium to underlying core real estate restored given recent period of sustained underperformance and return boost from leverage.
	Global Infrastructure[5,6]	7.75	Exposure to government-regulated sectors to limit return downside. Returns boosted by leverage, modest exposure to fast-growing emerging markets and likely increase in privatizations.
	Hedge Fund–Diversified[5,6]	6.25	Expected hedge fund returns based on multi-variate regressions to public markets. Blend of emerging market, commodities, small cap and U.S. investment grade bond betas the main driver of median manager expected retu Sizeable divergences expected among managers.
	Hedge Fund–Event Driven[5,6]	7.25	Blend of emerging market, commodities, mid cap, small cap, EAFE, U.S. high yield and cash betas the main driver of median manager expected return. Sizeable divergences expected among managers.
	Hedge Fund–Long Bias[5,6]	7.75	Blend of commodities, Asia and small cap betas the main driver of median manager expected return. Sizeable divergences expected among managers.
	Hedge Fund–Relative Value[5,6]	5.25	Blend of emerging market, commodities, U.S. high yield and investment grade bond betas the main driver of median manager expected return. Sizeable divergences expected among managers.
	Hedge Fund–Macro[5,6]	7.50	Blend of commodities and cash betas the main driver of median manager expected return. Sizeable divergences expected among managers.
	Commodities (spot)[5]	6.50	Expected return based on expectation for global nominal GDP growth, with the majority of demand growth coming from the emerging economies.
	Gold (spot)	6.75	Expected return based on historical relationship with inflation expectations, the U.S. dollar and emerging markets.

[1] Return estimates are on a compound or internal rate of return (IRR) basis. Equivalent arithmetic averages, as well as further information, are shown on the following page.
[2] All asset class assumptions are in total return terms, including equity return assumptions. All returns are in U.S. dollar terms unless otherwise indicated.
[3] U.S. Intermediate Treasury returns based on Barclays Capital U.S. Treasury: 7-10 Year Index.
[4] U.S. Long Treasury returns based on Barclays Capital U.S. Treasury: 20+ Year Index.
[5] Private equity, hedge funds, real estate, infrastructure and commodities are unlike other asset categories shown above in that there is no unde. investible index. Hedge fund returns are shown net of manager fees.
[6] The return estimates shown for these asset classes and strategies are our estimates of industry medians–the dispersion of returns among managers in these asset classes and strategies is typically far wider than for traditional asset classes.
See additional notes on the following page.

Schedule AHG-1
12-GRHT-633-KSF

Exhibit OCS 2S-4

Correlation Matrix*

	Expected annualized volatility (%)[2]	Expected compound return (%)[2]	Expected arithmetic return (%)[2]
U.S. Inflation	3.26	3.25	1.50
U.S. Cash	2.00	2.00	0.50
U.S. Intermediate Treasury[3]	2.01	1.75	7.25
U.S. Long Treasury[4]	2.66	1.75	13.75
U.S. TIPS	3.74	3.50	7.00
U.S. Aggregate	3.07	3.00	3.75
U.S. Short Duration Gov't/Credit	2.26	2.25	1.50
U.S. Long Duration Gov't/Credit	3.95	3.50	9.75
U.S. Investment Grade Corporate	4.29	4.00	7.75
U.S. Long Corporate	5.29	4.75	10.75
U.S. High Yield	8.31	7.00	17.00
U.S. Leveraged Loan	7.07	6.00	15.25
World Government Bond (hedged)	2.54	2.50	3.00
World Government Bond (unhedged)	2.77	2.50	7.50
World ex-U.S. Government Bond (hedged)	2.55	2.50	3.25
World ex-U.S. Government Bond (unhedged)	2.89	2.50	9.00
Emerging Market Sovereign Debt	6.61	6.00	11.50
Emerging Market Local Currency Sovereign Debt	7.36	6.75	11.50
Emerging Market Corporate Debt	7.04	6.50	10.75
U.S. Municipal	2.57	2.50	3.75
U.S. Large Cap	9.69	8.00	19.50
U.S. Mid Cap	11.35	8.75	24.50
U.S. Small Cap	11.21	8.50	25.00
U.S. Large Cap Value	9.66	7.75	20.75
U.S. Large Cap Growth	10.11	8.25	20.50
Europe ex-U.K. Large Cap	11.31	8.00	27.75
Japan Large Cap	8.86	6.75	21.75
U.K. Large Cap	10.62	8.00	24.50
EAFE Equity (hedged)	9.62	7.75	20.50
EAFE Equity (unhedged)	10.42	7.75	24.75
Emerging Market Equity	13.88	10.00	30.50
Asia ex-Japan Equity	13.59	10.00	29.25
Global Equity	10.47	8.25	22.50
U.S. Private Equity[5,6]	13.59	8.75	34.25
U.S. Direct Real Estate (unlevered)[5,6]	7.41	6.75	12.00
U.S. Value Added Real Estate (unlevered)[5,6]	10.37	8.00	23.25
European Direct Real Estate (unlevered)[5,6]	7.39	6.25	15.75
U.S. REITs	9.90	7.00	25.75
Global Infrastructure[5,6]	8.46	7.75	12.50
Hedge Fund–Diversified[5,6]	6.50	6.25	7.25
Hedge Fund–Event Driven[5,6]	7.78	7.25	10.75
Hedge Fund–Long Bias[5,6]	8.49	7.75	12.75
Hedge Fund–Relative Value[5,6]	5.59	5.25	8.50
Hedge Fund–Macro[5,6]	8.13	7.50	11.75
Commodities (spot)[5]	8.01	6.50	18.25
Gold (spot)	8.18	6.75	17.75

	U.S. Inflation	U.S. Cash	U.S. Intermediate Treasury[3]	U.S. Long Treasury[4]	U.S. TIPS	U.S. Aggregate	U.S. Short Duration Gov't/Credit	U.S. Long Duration Gov't/Credit	U.S. Investment Grade Corporate	U.S. Long Corporate	U.S. High Yield	U.S. Leveraged Loan	World Government Bond (hedged)	World Government Bond (unhedged)	World ex-U.S. Government Bond (hedged)	World ex-U.S. Government Bond (unhedged)	Emerging Market Sovereign Debt	Emerging Market Local Currency Sovereign Debt	Emerging Market Corporate Debt	U.S. Municipal	U.S. Large Cap	U.S. Mid Cap	U.S. Small Cap	U.S. Large Cap Value	U.S. Large Cap Growth	Europe ex-U.K. Large Cap	Japan Large Cap	U.K. Large Cap	EAFE Equity (hedged)	EAFE Equity (unhedged)	Emerging Market Equity	Asia ex-Japan Equity	Global Equity	U.S. Private Equity[5,6]	U.S. Direct Real Estate (unlevered)[5,6]	U.S. Value Added Real Estate (unlevered)[5,6]	European Direct Real Estate (unlevered)[5,6]	U.S. REITs	Global Infrastructure[5,6]	Hedge Fund–Diversified[5,6]	Hedge Fund–Event Driven[5,6]	Hedge Fund–Long Bias[5,6]	Hedge Fund–Relative Value[5,6]	Hedge Fund–Macro[5,6]	Commodities (spot)[5]	Gold (spot)
U.S. Inflation	1.00																																														
U.S. Cash	0.07	1.00																																													
U.S. Intermediate Treasury[3]	-0.24	-0.02	1.00																																											
U.S. Long Treasury[4]	-0.27	-0.04	0.89	1.00																																										
U.S. TIPS	0.09	-0.08	0.67	0.54	1.00																																									
U.S. Aggregate	-0.21	-0.06	0.87	0.80	0.79	1.00																																								
U.S. Short Duration Gov't/Credit	-0.19	0.16	0.75	0.55	0.65	0.80	1.00																																							
U.S. Long Duration Gov't/Credit	-0.25	-0.10	0.85	0.87	0.70	0.92	0.64	1.00																																						
U.S. Investment Grade Corporate	-0.22	-0.12	0.59	0.54	0.68	0.83	0.63	0.82	1.00																																					
U.S. Long Corporate	-0.23	-0.15	0.59	0.61	0.65	0.82	0.52	0.86	0.92	1.00																																				
U.S. High Yield	-0.02	-0.11	-0.09	-0.08	0.31	0.25	0.09	0.26	0.56	0.58	1.00																																			
U.S. Leveraged Loan	0.11	-0.10	-0.27	-0.29	0.19	0.05	-0.06	0.05	0.38	0.37	0.76	1.00																																		
World Government Bond (hedged)	-0.29	0.03	0.89	0.85	0.54	0.81	0.71	0.79	0.53	0.54	-0.13	-0.31	1.00																																	
World Government Bond (unhedged)	-0.11	-0.02	0.62	0.52	0.64	0.68	0.67	0.60	0.56	0.53	0.17	-0.07	0.62	1.00																																
World ex-U.S. Government Bond (hedged)	-0.26	0.04	0.79	0.76	0.44	0.71	0.61	0.70	0.46	0.46	-0.17	-0.33	0.93	0.57	1.00																															
World ex-U.S. Government Bond (unhedged)	-0.08	-0.03	0.52	0.41	0.59	0.60	0.60	0.51	0.51	0.48	0.21	-0.02	0.52	0.95	0.50	1.00																														
Emerging Market Sovereign Debt	-0.07	-0.08	0.29	0.25	0.55	0.56	0.34	0.54	0.69	0.70	0.72	0.43	0.24	0.40	0.18	0.40	1.00																													
Emerging Market Local Currency Sovereign Debt	0.00	0.00	0.11	0.05	0.42	0.37	0.28	0.32	0.53	0.53	0.63	0.36	0.11	0.53	0.10	0.56	0.74	1.00																												
Emerging Market Corporate Debt	-0.07	-0.11	0.31	0.22	0.62	0.59	0.40	0.55	0.78	0.74	0.69	0.57	0.23	0.39	0.16	0.38	0.82	0.67	1.00																											
U.S. Municipal	-0.08	-0.07	0.58	0.48	0.56	0.71	0.60	0.62	0.63	0.57	0.18	0.20	0.56	0.44	0.50	0.38	0.38	0.21	0.43	1.00																										
U.S. Large Cap	-0.02	-0.02	-0.29	-0.28	0.04	-0.06	-0.18	-0.04	0.21	0.23	0.69	0.46	-0.31	0.08	-0.29	0.15	0.57	0.60	0.44	-0.13	1.00																									
U.S. Mid Cap	-0.02	-0.05	-0.28	-0.25	0.09	-0.04	-0.17	0.00	0.26	0.29	0.72	0.51	-0.30	0.07	-0.28	0.14	0.58	0.63	0.49	-0.08	0.94	1.00																								
U.S. Small Cap	-0.01	-0.05	-0.34	-0.29	0.01	-0.10	-0.24	-0.07	0.17	0.21	0.66	0.47	-0.32	0.03	-0.30	0.10	0.49	0.59	0.40	-0.13	0.89	0.93	1.00																							
U.S. Large Cap Value	-0.03	-0.01	-0.26	-0.25	0.06	-0.02	-0.14	-0.01	0.24	0.26	0.68	0.44	-0.25	0.13	-0.24	0.20	0.59	0.64	0.46	-0.10	0.95	0.94	0.89	1.00																						
U.S. Large Cap Growth	-0.01	-0.03	-0.32	-0.31	0.03	-0.10	-0.20	-0.08	0.18	0.20	0.69	0.49	-0.34	0.03	-0.34	0.10	0.53	0.54	0.42	-0.14	0.94	0.92	0.86	0.92	1.00																					
Europe ex-U.K. Large Cap	-0.04	0.03	-0.23	-0.22	0.07	0.00	-0.07	0.01	0.27	0.28	0.67	0.43	-0.23	0.26	-0.22	0.34	0.59	0.71	0.45	-0.12	0.89	0.87	0.81	0.90	0.87	1.00																				
Japan Large Cap	0.00	-0.02	-0.04	0.00	0.24	0.17	0.07	0.20	0.40	0.38	0.54	0.38	-0.07	0.25	-0.10	0.28	0.45	0.51	0.44	0.02	0.54	0.58	0.54	0.56	0.50	0.57	1.00																		
U.K. Large Cap	0.00	-0.01	-0.27	-0.29	0.08	0.00	-0.06	-0.02	0.30	0.29	0.64	0.50	-0.27	0.21	-0.25	0.28	0.57	0.66	0.51	-0.05	0.84	0.82	0.73	0.84	0.82	0.91	0.56	1.00																	
EAFE Equity (hedged)	-0.06	0.03	-0.38	-0.31	-0.11	-0.14	-0.25	-0.08	0.19	0.22	0.66	0.50	-0.35	-0.09	-0.33	-0.03	0.52	0.52	0.39	-0.19	0.88	0.87	0.80	0.86	0.87	0.85	0.63	0.84	1.00																
EAFE Equity (unhedged)	-0.04	0.01	-0.22	-0.21	0.12	0.06	-0.03	0.06	0.34	0.34	0.70	0.47	-0.21	0.27	-0.20	0.34	0.62	0.73	0.52	-0.08	0.89	0.87	0.81	0.90	0.86	0.94	0.68	0.93	0.87	1.00															
Emerging Market Equity	-0.04	0.03	-0.23	-0.23	0.14	0.02	-0.06	0.03	0.30	0.30	0.67	0.46	-0.25	0.15	-0.25	0.22	0.62	0.73	0.53	-0.10	0.82	0.83	0.77	0.81	0.80	0.85	0.60	0.83	0.83	0.88	1.00														
Asia ex-Japan Equity	-0.09	0.03	-0.23	-0.23	0.10	0.00	-0.08	0.02	0.27	0.29	0.66	0.48	-0.24	0.12	-0.24	0.18	0.54	0.66	0.48	-0.11	0.78	0.80	0.74	0.76	0.77	0.80	0.56	0.77	0.79	0.84	0.93	1.00													
Global Equity	-0.03	0.00	-0.26	-0.25	0.09	-0.01	-0.11	0.01	0.29	0.30	0.72	0.49	-0.27	0.18	-0.27	0.25	0.62	0.70	0.51	-0.11	0.93	0.92	0.86	0.92	0.91	0.93	0.62	0.91	0.89	0.94	0.90	0.85	1.00											
U.S. Private Equity[5,6]	-0.03	-0.08	-0.33	-0.30	0.04	-0.11	-0.21	-0.07	0.19	0.22	0.68	0.51	-0.32	0.06	-0.30	0.13	0.48	0.58	0.41	-0.12	0.86	0.91	0.94	0.87	0.86	0.80	0.55	0.72	0.79	0.81	0.78	0.76	0.86	1.00										
U.S. Direct Real Estate (unlevered)[5,6]	0.04	-0.03	0.00	-0.01	0.17	0.14	0.06	0.12	0.21	0.24	0.37	0.27	0.00	0.17	-0.01	0.19	0.29	0.37	0.27	0.10	0.35	0.40	0.41	0.38	0.32	0.33	0.29	0.29	0.28	0.34	0.30	0.28	0.34	0.37	1.00									
U.S. Value Added Real Estate (unlevered)[5,6]	0.04	-0.03	-0.05	-0.06	0.10	0.07	0.02	0.05	0.14	0.16	0.29	0.22	-0.04	0.12	-0.04	0.14	0.22	0.30	0.21	0.05	0.29	0.32	0.34	0.31	0.26	0.28	0.23	0.26	0.24	0.28	0.25	0.23	0.29	0.31	0.70	1.00							
European Direct Real Estate (unlevered)[5,6]	0.03	-0.04	0.01	-0.03	0.18	0.15	0.10	0.11	0.21	0.22	0.33	0.23	0.01	0.22	0.01	0.25	0.32	0.40	0.31	0.09	0.31	0.35	0.36	0.36	0.27	0.35	0.28	0.34	0.26	0.36	0.29	0.26	0.33	0.32	0.50	0.50	1.00						
U.S. REITs	0.07	-0.05	-0.11	-0.12	0.21	0.13	0.01	0.12	0.30	0.34	0.65	0.48	-0.11	0.22	-0.10	0.27	0.49	0.62	0.44	0.10	0.67	0.73	0.76	0.72	0.62	0.62	0.51	0.56	0.56	0.63	0.56	0.54	0.66	0.70	0.60	0.47	0.51	1.00					
Global Infrastructure[5,6]	0.30	0.00	0.19	0.15	0.35	0.28	0.18	0.25	0.26	0.26	0.26	0.17	0.14	0.27	0.11	0.27	0.29	0.32	0.29	0.21	0.21	0.24	0.24	0.23	0.18	0.20	0.22	0.17	0.11	0.21	0.17	0.14	0.21	0.20	0.29	0.21	0.25	0.45	1.00				
Hedge Fund–Diversified[5,6]	0.00	0.06	-0.26	-0.26	0.14	0.00	-0.04	0.01	0.33	0.29	0.53	0.51	-0.27	0.07	-0.27	0.13	0.45	0.52	0.46	0.03	0.58	0.63	0.58	0.56	0.59	0.63	0.57	0.70	0.67	0.71	0.77	0.73	0.70	0.64	0.17	0.15	0.18	0.35	0.08	1.00			
Hedge Fund–Event Driven[5,6]	-0.03	-0.03	-0.32	-0.31	0.10	-0.04	-0.13	-0.02	0.31	0.30	0.73	0.60	-0.32	0.06	-0.31	0.12	0.57	0.58	0.54	-0.04	0.80	0.84	0.80	0.78	0.81	0.79	0.57	0.80	0.81	0.83	0.83	0.79	0.85	0.84	0.27	0.23	0.26	0.53	0.13	0.85	1.00		
Hedge Fund–Long Bias[5,6]	-0.04	0.00	-0.33	-0.33	0.09	-0.05	-0.13	-0.05	0.29	0.27	0.68	0.54	-0.34	0.08	-0.34	0.15	0.55	0.64	0.51	-0.09	0.82	0.86	0.82	0.82	0.83	0.83	0.63	0.84	0.84	0.88	0.90	0.87	0.90	0.85	0.29	0.25	0.28	0.57	0.14	0.86	0.93	1.00	
Hedge Fund–Relative Value[5,6]	-0.06	-0.03	-0.16	-0.18	0.24	0.17	0.07	0.17	0.54	0.49	0.76	0.76	-0.20	0.08	-0.22	0.12	0.61	0.56	0.69	0.18	0.60	0.65	0.56	0.57	0.61	0.63	0.53	0.71	0.68	0.69	0.73	0.71	0.69	0.61	0.23	0.19	0.23	0.43	0.13	0.82	0.82	0.80	1.00
Hedge Fund–Macro[5,6]	-0.06	0.09	0.03	0.00	0.23	0.10	0.17	0.09	0.19	0.15	0.06	0.02	0.04	0.40	0.04	0.43	0.12	0.34	0.13	0.05	0.15	0.19	0.17	0.16	0.14	0.28	0.38	0.31	0.16	0.34	0.39	0.36	0.28	0.24	0.06	0.05	0.08	0.11	0.04	0.60	0.38	0.44	0.30
Commodities (spot)[5]	0.25	0.03	-0.11	-0.18	0.34	0.06	0.06	0.03	0.23	0.21	0.33	0.26	-0.16	0.28	-0.15	0.33	0.34	0.49	0.40	-0.09	0.38	0.42	0.37	0.38	0.38	0.45	0.36	0.53	0.32	0.50	0.54	0.48	0.48	0.37	0.18	0.15	0.21	0.32	0.20	0.56	0.48	0.57	0.46
Gold (spot)	-0.02	0.01	0.27	0.17	0.44	0.32	0.28	0.27	0.30	0.28	0.13	0.00	0.17	0.46	0.14	0.46	0.37	0.43	0.39	0.17	0.07	0.10	0.08	0.10	0.04	0.13	0.22	0.15	-0.05	0.18	0.29	0.24	0.16	0.07	0.10	0.07	0.13	0.14	0.14	0.29	0.20	0.25	0.21

	Hedge Fund–Macro[5,6]	Commodities (spot)[5]	Gold (spot)
Hedge Fund–Macro[5,6]	1.00		
Commodities (spot)[5]	0.53	1.00	
Gold (spot)	0.51	0.49	1.00

* All estimates on this page are in U.S. dollar terms. As of October 31, 2011.

Note: Given the complex risk-reward trade-offs involved, we advise clients to rely on judgment as well as quantitative optimization approaches in setting strategic allocations to all the above asset classes and strategies. Please note that all information shown is based on qualitative analysis. Exclusive reliance on the above is not advised. This information is not intended as a recommendation to invest in any particular asset class or strategy or as a promise of future performance. Note that these asset class and strategy assumptions are passive only-they do not consider the impact of active management. References to future returns are not promises or even estimates of actual returns a client portfolio may achieve. Assumptions, opinions and estimates are provided for illustrative purposes only. They should not be relied upon as recommendations to buy or sell securities. Forecasts of financial market trends that are based on current market conditions constitute our judgment and are subject to change without notice. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. This material has been prepared for information purposes only and is not intended to provide, and should not be relied on for, accounting, legal or tax advice. See footnotes on the prior page.

Schedule AHG-1
12-GRHT-633-KSF

Exhibit OCS 2S-4

"A more challenging macro environment should hold interest rates down for longer, but we expect risk markets to recover as the corporate sector outperforms the broader economy."

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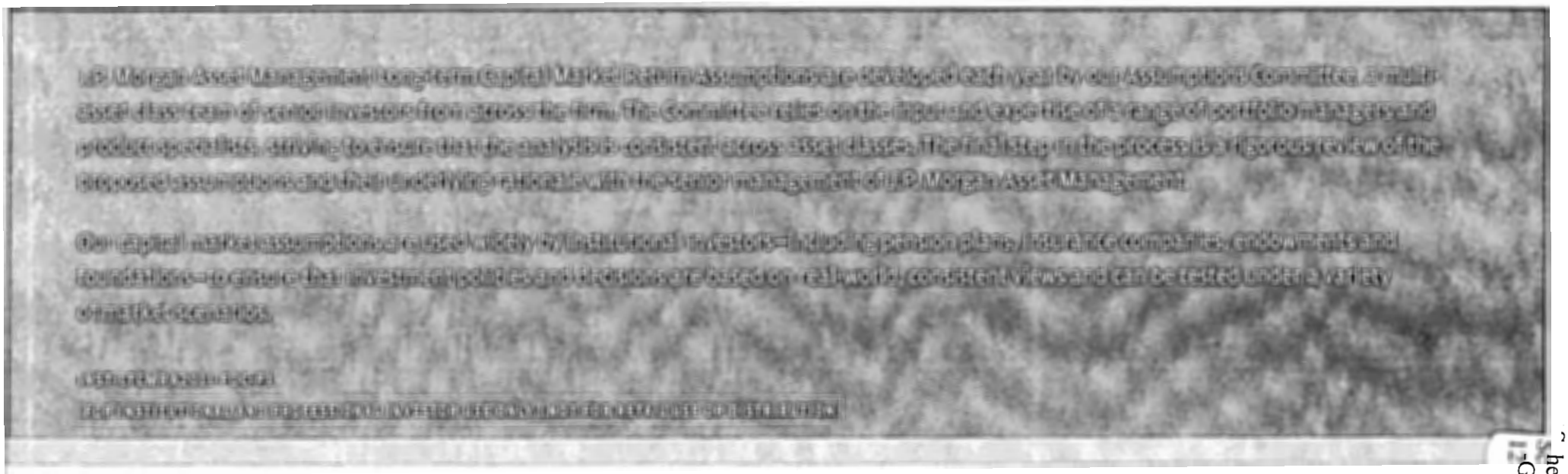
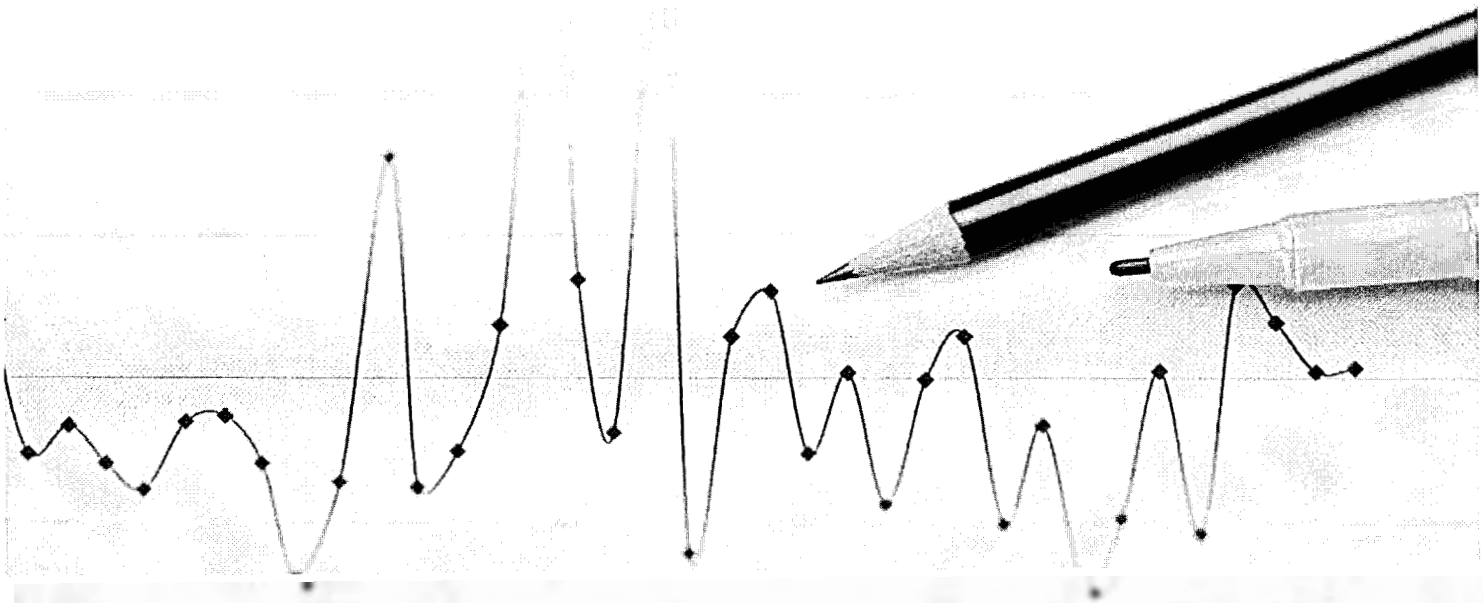


J.P.Morgan
Asset Management

Schedule AHG-1
GRHT-633-KSF



Long-term Capital Market Return Assumptions

Executive Summary

Welcome to a world of deleveraging, debasement and default. The next 15 years to 2026 are likely to be more difficult to navigate for policymakers and investors than the previous 15 years.

We expect the global economy to experience shorter, choppier business cycles as OECD economies seek to resolve their debt problems, both at the public and private sector levels. Having experienced just two mild recessions between the early 1980s and the most recent downturn, it is indeed possible that up to three recessions could be in store over the next decade. We have therefore revised our growth expectations lower.

We have been here before

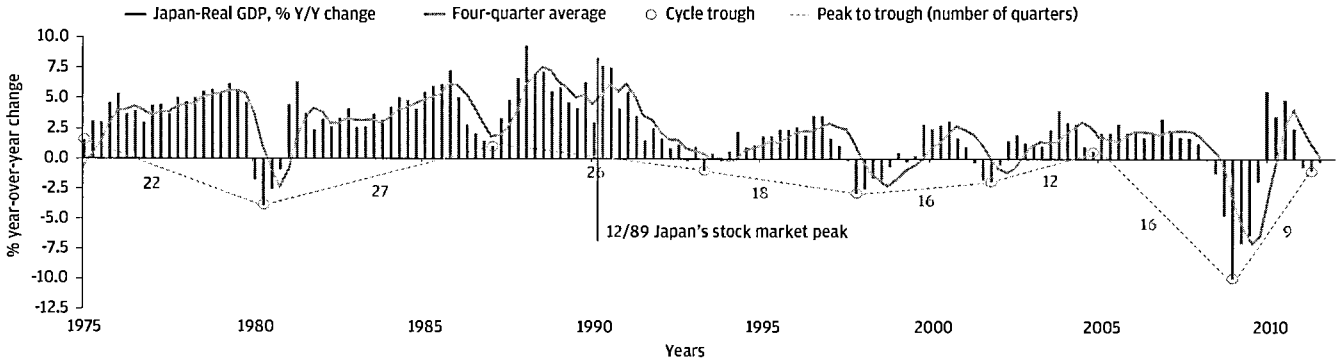
We envisage a greatly changed world economic order but not an altogether new one, since much of what we expect will be old hat to historians. Indeed, our outlook accommodates the message from Professors Reinhart and Rogoff's seminal work on financial crises:[1] "We have been here before." The experience of Japan after the bursting of its bubble in 1990 endorses our expectation of shorter, shallower business cycles. As **Exhibit 1** shows, prior to the onset of Japan's banking crisis, the previous three business cycles had averaged just over six years in length; since its stock market peaked in December 1989, the duration of cycles has dropped to less than four years.

[1] Carmen Reinhart and Kenneth Rogoff, 2009, *This Time Is Different: Eight Centuries of Financial Folly.*

Long-term Capital Market Return Assumptions

We've been here before—the lesson from Japan

EXHIBIT 1: SHORTER CYCLES AND MORE RECESSIONS



Sources: Economic Planning Agency, MacData, J.P. Morgan Asset Management. Data as of Q3 2011.

Against that backdrop, this report summarizes: the insights, analysis and assessments that go into the development of our assumptions each year, the methodology employed and the highlights of our 2012 long-term return assumptions. For the full white paper and complete assumption set, please visit: jpmorgan.com/institutional.

Guiding themes

Three principal themes that have helped to guide our thinking for this edition of the *Long-term Capital Market Return Assumptions*—deleveraging, inflation and the impact of demographics on valuations:

- The theme of deleveraging could well dominate the next 10 to 15 years in the markets, with OECD governments confronting potentially crushing debt and defending their credit ratings. We are anticipating slower trend rates of growth coupled with a drift toward higher inflation, as some governments seek less onerous paths to reducing real debt burdens. Emerging market growth and releveraging in a prosperous and less risk-averse developed market corporate sector could counter these trends, but only partially.
- We expect developed world consumer price inflation to remain low over the next 10 to 15 years. However, emerging economy-driven international price shifts will place increasing upward pressure on commodity prices, with headline rates of inflation in the major developed markets expected to outstrip core (i.e., non-food and energy) measures.
- Over the last two decades the average equity valuation, as measured by the price/earnings ratio, rose from its long-term multiple of 15x to more than 20x. Some academic studies identified favorable population dynamics since the 1970's as key drivers for this trend. Now as the baby boomer generation retires from the workforce, a possible reversal of this trend is raising concerns about a secular decline in equity valuations.

Deteriorating economic fundamentals

The upshot, we believe, is that the developed world's growth and inflation mix is likely to deteriorate over our outlook period. We have revised lower our assumptions for real GDP growth in the U.S. and European economies, while keeping our estimate for Japan unchanged. We have increased our estimates for inflation for the U.S., U.K. and Japan, though not for Europe (**Exhibit 2**, on the following page). Our thinking is influenced by the analysis undertaken in the feature on inflation in our full report.

Eurozone tail risk

At the time of writing (November, 2011), the crisis in the eurozone has intensified, with very real concerns for the viability of the European single currency. We believe that the causes of the crisis are due to three interrelated factors. The first issue is that of fiscal sustainability (which we address in a separate feature in our full report). The second relates to bank

Developed market economic outlook

EXHIBIT 2: EXPECTED 10- TO 15-YEAR ANNUALIZED GROWTH AND INFLATION RATES

Comparison of Assumptions*	2012 (%)	2011 (%)
UNITED STATES		
Headline inflation	3.25	3.00
Core inflation	2.75	2.50
Real GDP	2.25	2.50
U.K.		
Headline inflation	3.00	2.75
Core inflation	2.50	2.25
Real GDP	1.75	2.00
EUROPE		
Headline inflation	2.00	2.00
Core inflation	1.75	1.75
Real GDP	1.25	1.50
JAPAN		
Headline inflation	1.00	0.75
Core inflation	0.50	0.50
Real GDP	1.00	1.00

Source: J.P. Morgan Asset Management estimates.
* 2012 capital market assumptions as of October 31, 2011; 2011 assumptions as of November 30, 2010.

capital adequacy, while the third issue is that of competitiveness and how the countries of the eurozone periphery can restore it and avoid deep recession, or even depression. The escalation of the crisis during the third quarter of 2011 led to a dramatic widening of bond spreads and yield levels that were incompatible with long-term fiscal solvency as the crisis spread to Italy and Spain, having swept through Greece, Portugal and Ireland, with France also threatened.

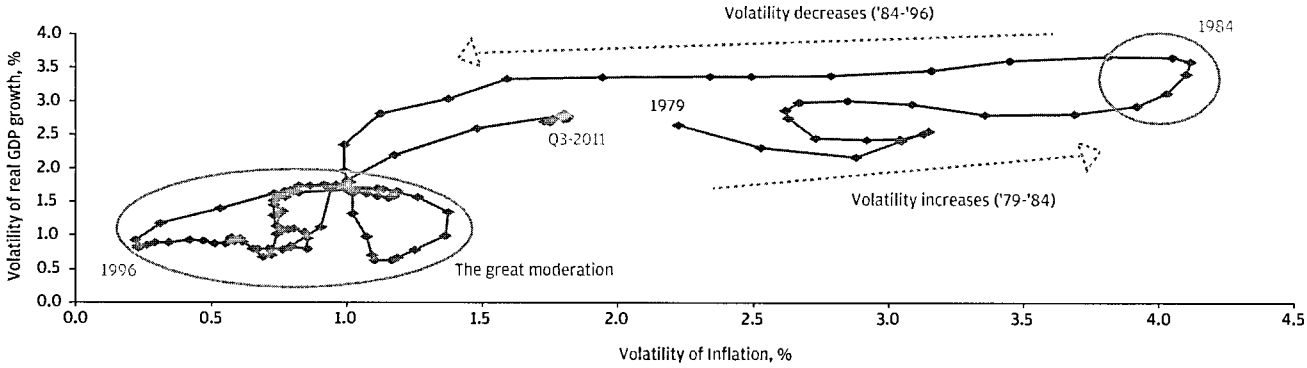
We therefore recognize that "tail risk" has surged and that a euro break up, or a modified form of European Monetary Union (EMU) perhaps involving fewer members, is now a viable alternative scenario. The other "tail risk" of a deepening of the ties in Europe leading to political, regulatory and fiscal union, also remains a credible scenario. Yet our central case view is that EMU continues to exist in its current form—shaken but not stirred in (James) Bond-speak. We have sought nevertheless to reflect the heightened uncertainty in terms of higher volatility assumptions, not least in asset prices. **Exhibit 3**, a scatter chart plotting the annual volatility of GDP growth against the annual volatility of inflation in the U.S., indicates that the coming new world of volatility may look a lot like the old world investors knew in the years before the so-called Great Moderation—the cluster of data points in the benign lower left quadrant.

Half empty but half full as well

A challenging economic environment no doubt awaits the unwary. The propensity to volatility and compressed business cycles that we foresee could prove a difficult one for the buy-and-hold investor. The same environment may, however, hold quite different prospects for the active investor. Prepared to navigate non-conventional asset classes and follow the trend of global growth into the developing markets, the active investor with a flexible process built on a robust and transparent discipline might well be entering upon a world of opportunity.

How the worm has turned

EXHIBIT 3: U.S. INFLATION AND GROWTH VOLATILITY



Sources: MacData, J.P. Morgan Asset Management. Data as of Q3 2011.
Note: Quarterly data using five-year standard deviations of annual growth rates.

Long-term Capital Market Return Assumptions

Asset class implications

Fixed income

Bond yields are likely to rise significantly from today's levels, although not for a while. Fixed income returns are likely to fall as yields rise toward expected higher "equilibrium" levels, although the period of "normalization" is likely to be extended as central banks keep policy rates lower for longer. Real returns on U.S. Treasuries are expected to be negative over our investment horizon, given an assumed annual core inflation rate of 2.75% in the U.S. This is symptomatic of a new era of "financial repression," as explained in the feature on deleveraging in our full report. Indeed, any exercise that assumed a pattern of mean reversion of returns over a 10-year period suggests that real returns would be negative for U.S. bonds, barring a stagnant economy with average inflation declining to less than 2% (see **Exhibit 4A**).

Equity

Equity returns are likely to benefit from higher dividend yields, though we expect only marginal or even no boost in returns from revaluation. And while domestic growth prospects may have dimmed, we continue to look for Western companies to benefit from fast growing markets overseas. Emerging stock markets are expected to remain the top performers.

Nominal U.S. equity returns of 8% equate to average annual real returns of 5.25%, after subtracting our core inflation estimate. While at first blush those real returns appear rich, they are below the historical long-term average of 6.2% dating back to 1850, a stretch that includes a mix of bull and bear markets, and takes in two world wars, the Great Depression and a secular bear market (see **Exhibit 4B**).

Selected Long-term (10 to 15 Year) Capital Market Return Assumptions

EXHIBIT 4A: FIXED INCOME

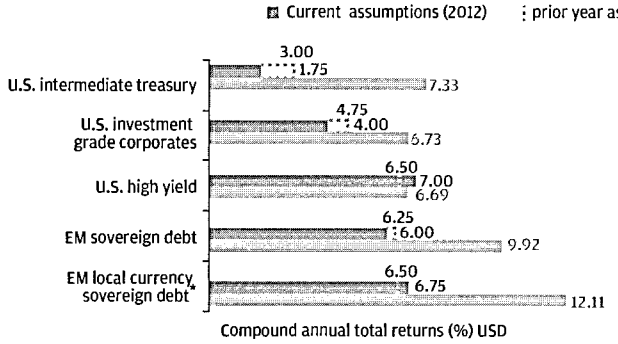


EXHIBIT 4B: EQUITY

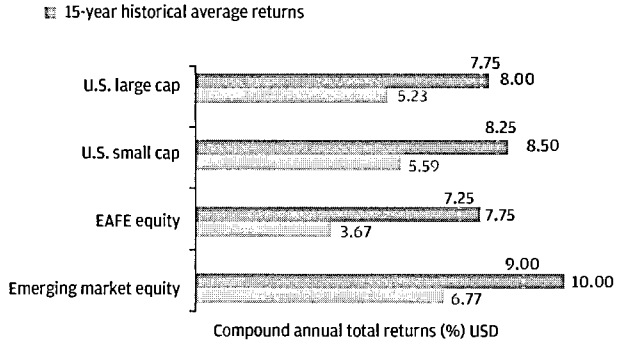


EXHIBIT 4C: REAL ASSETS

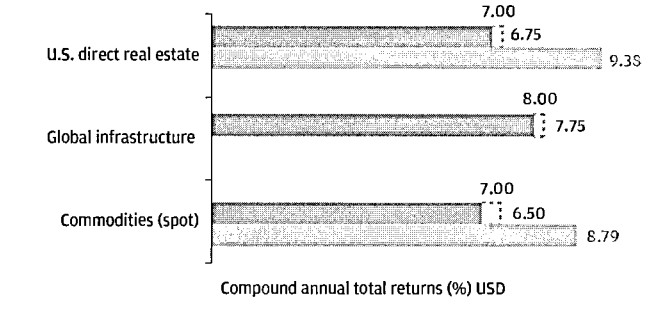
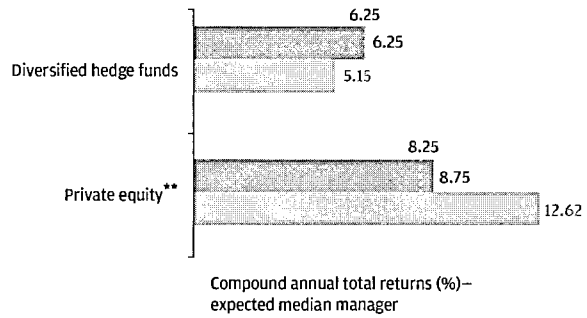


EXHIBIT 4D: ALTERNATIVES



Source: J.P. Morgan Asset Management (assumptions as of October 31, 2011 and November 30, 2010), Bloomberg (October 1996-September 2011). Indices used: Barclays Capital U.S. Treasury 7-10 Year Index, Barclays Capital U.S. Corporate Index, Merrill Lynch High Yield Master II Index, J.P. Morgan EMBI Global Composite Index, J.P. Morgan GBI-EM Global Diversified, S&P 500 Index, Russell 2000 Index, MSCI EAFE Index, MSCI Emerging Markets Index, NCREIF Property Index, Dow Jones-UBS Commodity Spot Index, HFRI Fund of Funds Diversified Index, Thomson Venture Economics.

* Historical performance since January 2003.

**Source: Thomson Venture Economics. History represents U.S. buyouts pooled average time-weighted returns from September 30, 1996-June 30, 2011.

Real Assets

The outlook for real estate returns remains promising. Capitalization rates have compressed over the past year, but property prices remain depressed and operating fundamentals are likely to strengthen. In the case of global infrastructure, exposure to government regulated sectors should limit the return downside, while leverage, modest exposure to fast-growing emerging markets and a likely increase in privatizations should boost returns. Commodity returns are still expected to outstrip inflation, but are likely to ease slightly given the projected moderation in global growth (see **Exhibit 4C** on the previous page).

Alternatives

With the slight improvement assumed for risk assets in public markets overall, median hedge fund returns are also expected to rise, particularly for more directional strategies. Median manager private equity returns should also benefit as public markets revive (see **Exhibit 4D** on the previous page).

Methodology

As in previous years, we have used a building block approach to arrive at our assumptions. We believe that this provides clarity and transparency for readers and enables them to challenge and reconcile the inputs that go into these estimates. The building blocks are as follows:

Fixed income return

Expected future yields +/- change in bond prices

Equity return

Inflation + real earnings growth + dividend yield +/- impact of valuation changes

Alternative asset returns

Historical analysis/investor judgment about relationship to public markets

Volatility and correlations

In our view, investors should allow and adjust for the effects of serial correlation of asset returns on volatility/risk estimates. These effects may lead to a significant underestimation of risk at the asset class, strategy and/or portfolio levels, which may result in excessive risk taking and suboptimal asset allocation decisions. In our *Long-term Capital Market Return Assumptions*, we therefore test for serial correlation and adjust our volatility estimates accordingly, based on quantitative techniques in addition to a qualitative review for reasonableness and consistency. We believe that these risk estimates represent improved—albeit not perfect—inputs into an asset allocation process.

For the following additional information on our Long-term Capital Market Return Assumptions, please visit jpmorgan.com/institutional:

- A brief video introducing our *Long-term Capital Market Return Assumptions*
- Our full set of return and risk assumptions and correlations, across asset classes and strategies
- The complete white paper, *Long-term Capital Market Return Assumptions: 2012 estimates and the thinking behind the numbers.*
- A replay of our December 1, 2011 *Outlook for Long-term Capital Market Returns* webcast

Long-term Capital Market Return Assumptions

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SURVEY OF PROFESSIONAL FORECASTERS

Release Date: August 10, 2012

THIRD QUARTER 2012

Forecasters Revise Downward Their Estimates for Growth

The outlook for growth in the U.S. economy looks weaker now than it did three months ago, according to 48 forecasters surveyed by the Federal Reserve Bank of Philadelphia. The forecasters expect real GDP to grow at an annual rate of 1.6 percent this quarter, down from the previous estimate of 2.5 percent. Over the next three quarters, they expect GDP growth to average 2.1 percent, down from the previous average of 2.6 percent. On an annual-average over annual-average basis, the forecasters also predict slower real output growth over the next four years. The forecasters see real GDP growing 2.2 percent in 2012, down from their prediction of 2.3 percent in the survey of three months ago. The forecasters predict real GDP will grow 2.1 percent in 2013, 2.7 percent in 2014, and 3.1 percent in 2015, each somewhat lower than their respective predictions in the last survey.

Projections for weaker conditions in the labor market accompany the outlook for real output. Unemployment is projected to be an annual average of 8.2 percent in 2012, before falling to 7.9 percent in 2013, 7.3 percent in 2014, and 7.0 percent in 2015. The estimates for unemployment are slightly higher than the projections in the last survey.

On the employment front, the forecasters have revised downward their estimates of the growth in jobs over the next four quarters. The forecasters see nonfarm payroll employment growing at a rate of 125,000 jobs per month this quarter and 135,300 jobs per month next quarter. The forecasters' projections for the annual-average level of nonfarm payroll employment suggest job gains at a monthly rate of 154,600 in 2012 and 143,200 in 2013, as the table below shows. (These annual-average estimates are computed as the year-to-year change in the annual-average level of nonfarm payroll employment, converted to a monthly rate.)

Median Forecasts for Selected Variables in the Current and Previous Surveys

	Real GDP (%)		*Unemployment Rate (%)*		*Payrolls (000s/month)*	
	Previous	*New*	*Previous*	*New*	*Previous*	*New*
Quarterly data:						
2012:Q3	2.5	1.6	8.0	8.2	170.0	125.0
2012:Q4	2.6	2.2	7.9	8.1	172.6	135.3
2013:Q1	2.6	1.8	7.9	8.0	170.3	151.7
2013:Q2	2.7	2.3	7.7	7.9	185.8	139.7
2013:Q3	N.A.	2.5	N.A.	7.8	N.A.	149.0
Annual data (projections are based on annual-average levels):						
2012	2.3	2.2	8.1	8.2	171.9	154.6
2013	2.7	2.1	7.7	7.9	175.7	143.2
2014	3.1	2.7	7.2	7.3	N.A.	N.A.
2015	3.4	3.1	6.6	7.0	N.A.	N.A.

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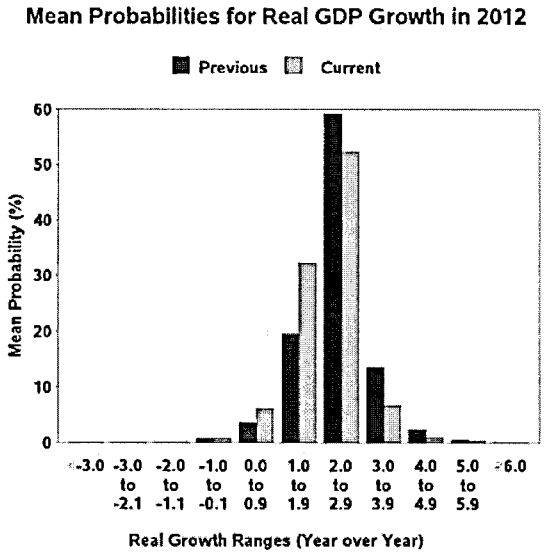
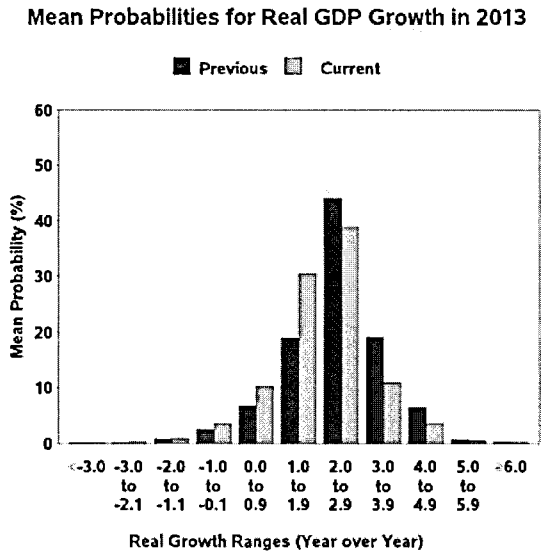
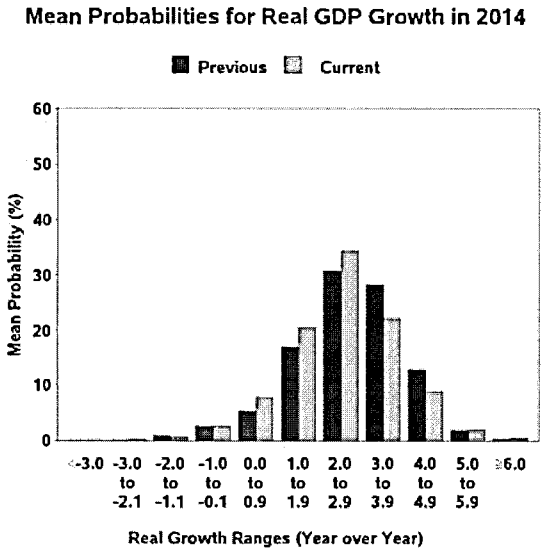
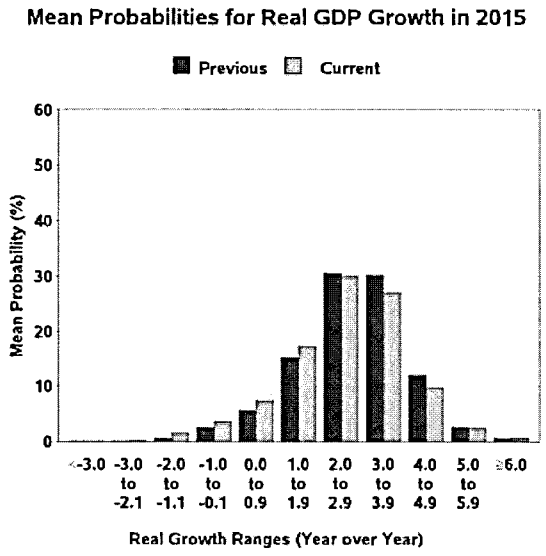
The charts below provide some insight into the degree of uncertainty the forecasters have about their projections for the rate of growth in the annual-average level of real GDP. Each chart presents the forecasters' previous and current estimates of the probability that growth will fall into each of 11 ranges. The forecasters have shifted the distributions of density to the left for 2012, 2013, 2014, and 2015, indicating their expectations of lower real GDP growth compared with their previous estimates.

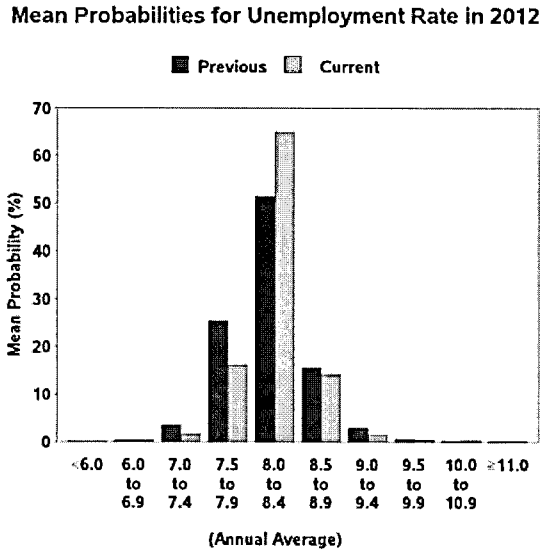


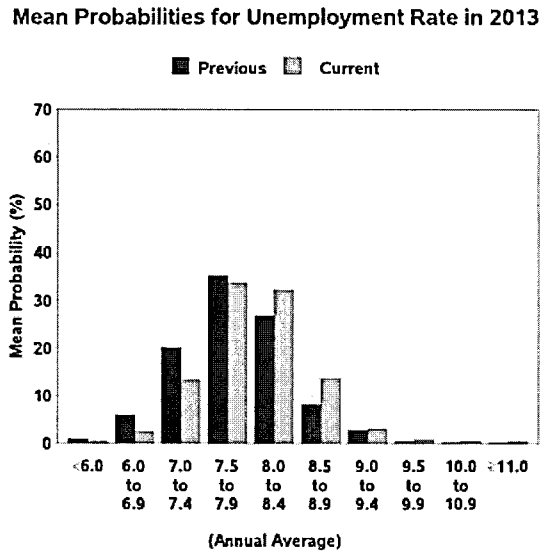


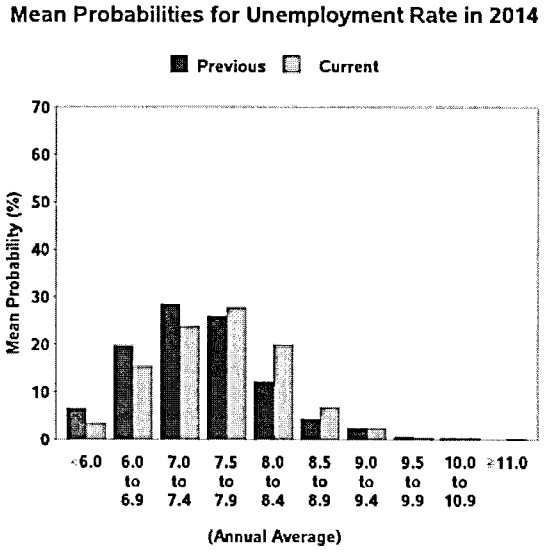


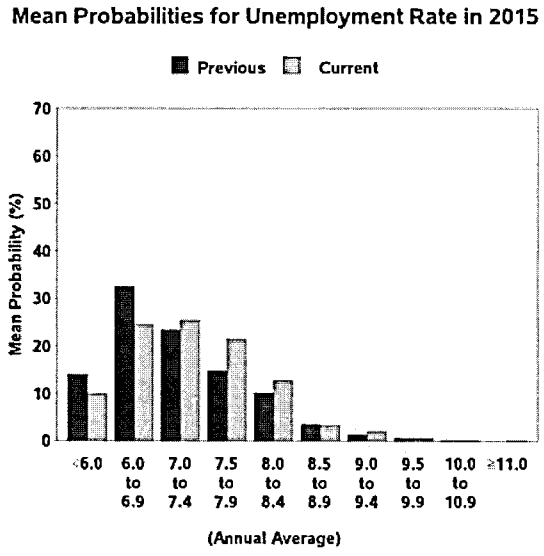


The forecasters' density projections, as shown in the charts below, shed light on the odds of a recovery in the labor market over the next four years. Each chart presents the forecasters' previous and current estimates of the probability that unemployment will fall into each of 10 ranges. The forecasters have shifted the distributions of density to the right for 2013, 2014, and 2015, indicating their expectations of higher unemployment rates over the next three years compared with their previous estimates.









Mixed Results on Expectations for Long-Term Inflation

The forecasters expect current-quarter headline CPI inflation to average 1.5 percent, down from the last survey's estimate of 2.3 percent. They predict current-quarter headline PCE inflation of 1.5 percent, 0.4 percentage point lower than their previous estimate.

Measured on a fourth-quarter over fourth-quarter basis, headline CPI inflation is expected to average 1.8 percent in 2012, down from 2.3 percent in the last survey; 2.2 percent in 2013, up from 2.1 percent; and 2.3 percent in 2014, down from 2.5 percent. Forecasters expect fourth-quarter over fourth-quarter headline PCE inflation to average 1.7 percent in 2012, down from 2.1 percent in the last survey; 2.0 percent in 2013, unchanged from the previous estimate; and 2.2 percent in 2014, also unchanged from the previous estimate.

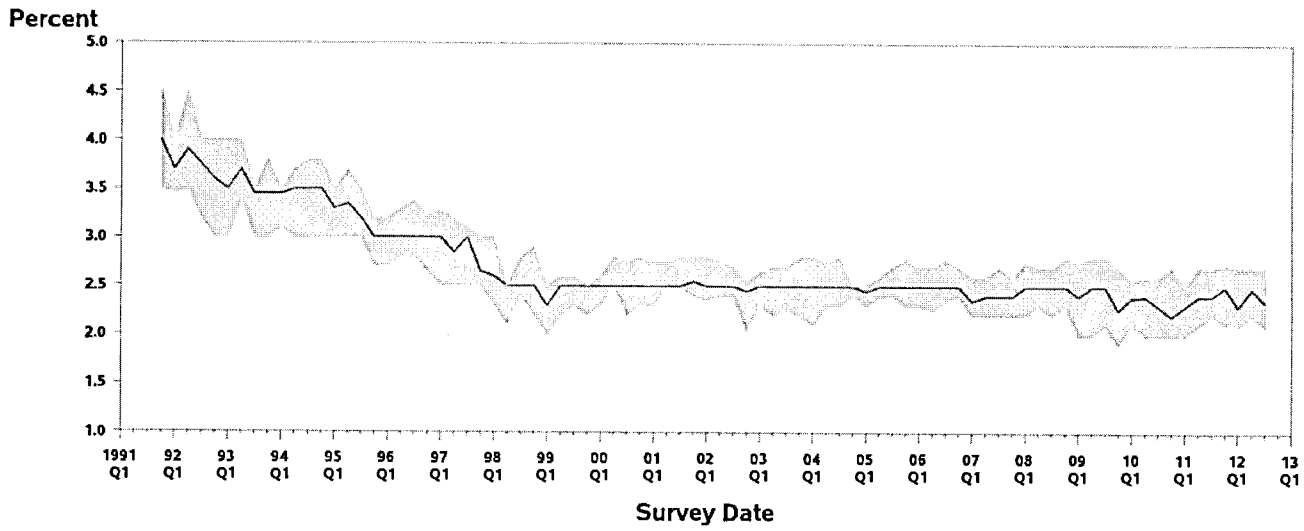
Revisions to the projections for long-term inflation depend on the measure. Over the next 10 years, 2012 to 2021, the forecasters expect headline CPI inflation to average 2.35 percent at an annual rate, *lower* than the estimate of 2.48 percent from the survey of three months ago. The corresponding estimate for 10-year annual-average headline PCE inflation remained *unchanged* at 2.20 percent.

Median Short-Run and Long-Run Projections for Inflation (Annualized Percentage Points)

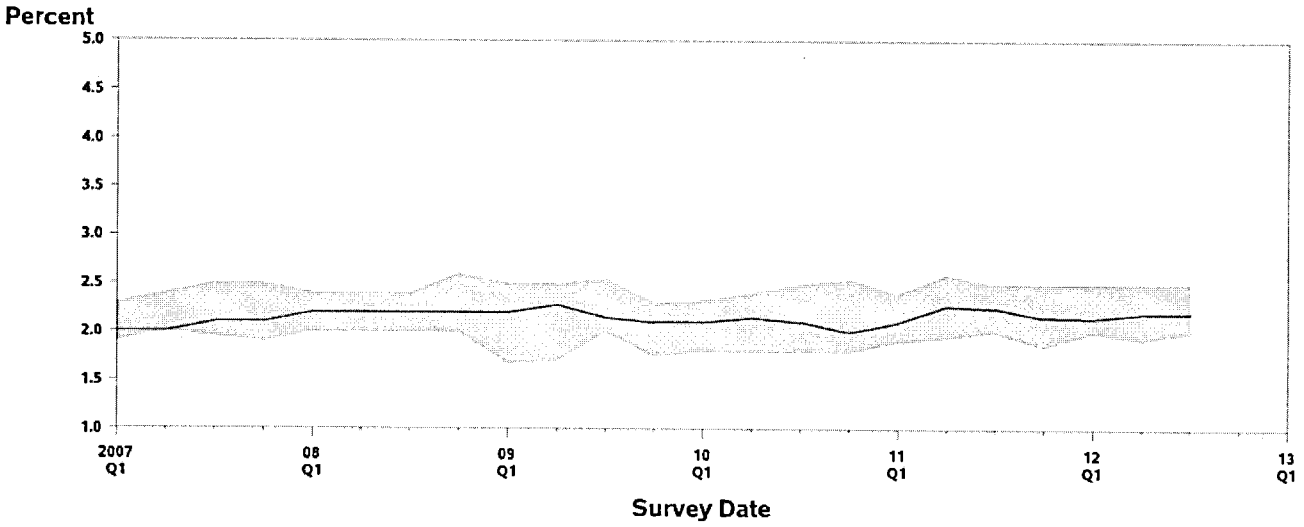
	Headline CPI		Core CPI		Headline PCE		Core PCE	
	Previous	Current	Previous	Current	Previous	Current	Previous	Current
Quarterly								
2012:Q3	2.3	1.5	2.0	2.2	1.9	1.5	1.7	1.9
2012:Q4	2.1	2.0	2.0	2.0	2.0	2.0	1.7	1.8
2013:Q1	2.2	2.1	2.0	2.0	2.2	2.0	1.9	1.9
2013:Q2	2.2	2.1	2.1	2.0	2.0	2.0	1.9	2.0
2013:Q3	N.A.	2.2	N.A.	2.1	N.A.	2.1	N.A.	2.0
Q4/Q4 Annual Averages								
2012	2.3	1.8	2.0	2.2	2.1	1.7	1.8	1.9
2013	2.1	2.2	2.0	2.0	2.0	2.0	1.9	2.0
2014	2.5	2.3	2.2	2.2	2.2	2.2	2.0	2.0
Long-Term Annual Averages								
2012-2016	2.35	2.20	N.A.	N.A.	2.04	2.00	N.A.	N.A.
2012-2021	2.48	2.35	N.A.	N.A.	2.20	2.20	N.A.	N.A.

The charts below show the median projections (the red line) and the associated interquartile ranges (the gray area around the red line) for 10-year annual-average CPI and PCE inflation. The top panel shows the downward revision for CPI inflation, from 2.48 percent to 2.35 percent. The bottom panel highlights the unchanged 10-year forecast for PCE inflation.

Projections for the 10-Year Annual-Average Rate of CPI Inflation
(Median and Interquartile Range)

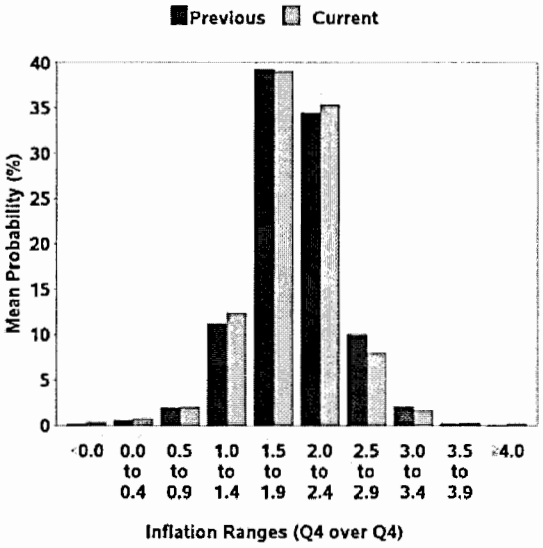


Projections for the 10-Year Annual-Average Rate of PCE Inflation
(Median and Interquartile Range)

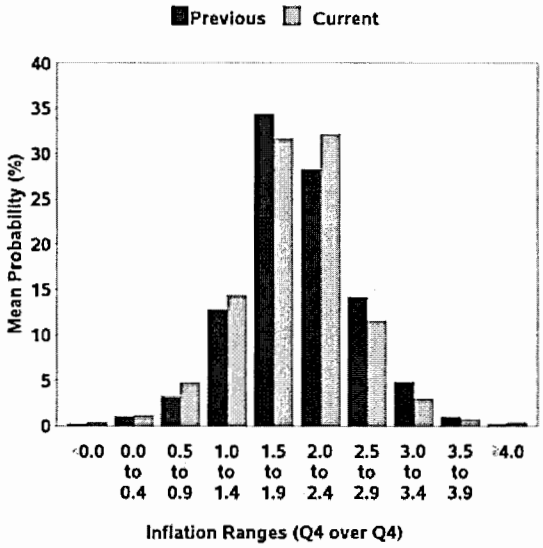


The figures below show the probabilities the forecasters are assigning to the possibility that fourth-quarter over fourth-quarter core PCE inflation in 2012 and 2013 will fall into each of 10 ranges. The charts show that the estimates of uncertainty about core PCE inflation in 2012 and 2013 remained mostly unchanged from the previous survey.

Mean Probabilities for Core PCE Inflation in 2012



Mean Probabilities for Core PCE Inflation in 2013



Higher Risk of a Negative Quarter

The forecasters have revised upward the chance of a contraction in real GDP in any of the next four quarters. For the current quarter, they predict a 13.8 percent chance of negative growth, up from 12.2 percent in the survey of three months ago. As the table below shows, the panelists have also made upward revisions to their forecasts for the following three quarters.

Risk of a Negative Quarter (%)
Survey Means

Quarterly data:	*Previous*	*New*
2012: Q3	12.2	13.8
2012: Q4	14.5	17.0
2013: Q1	17.3	21.2
2013: Q2	17.8	21.0
2013: Q3	N.A.	19.1

Natural Rate of Unemployment Estimated at 6.0 percent

In third-quarter surveys we ask the forecasters to provide their estimates of the natural rate of unemployment — the rate of unemployment that occurs when the economy reaches equilibrium. The forecasters peg this rate at 6.0 percent. The table below shows, for each third-quarter survey since 1996, the percentage of respondents who use the natural rate in their forecasts, and for those who use it, the median estimate and the lowest and highest estimates. Sixty-three percent of the 35 forecasters who answered the question report that they use the natural rate in their forecasts. The lowest estimate is 4.75 percent and the highest estimate is 7.0 percent.

Median Estimates of the Natural Rate of Unemployment

Survey Date	Percentage Who Use The Natural Rate	Median Estimate (%)	Low (%)	High (%)
1996:Q3	62	5.65	5.00	6.00
1997:Q3	59	5.25	4.50	5.88
1998:Q3	47	5.30	4.50	5.80
1999:Q3	43	5.00	4.13	5.60
2000:Q3	48	4.50	4.00	5.00
2001:Q3	34	4.88	3.50	5.50
2002:Q3	50	5.10	3.80	5.50
2003:Q3	41	5.00	4.31	5.40
2004:Q3	46	5.00	4.00	5.50
2005:Q3	51	5.00	4.25	5.50
2006:Q3	53	4.95	4.00	5.50
2007:Q3	52	4.65	4.20	5.50
2008:Q3	48	5.00	4.00	5.50
2009:Q3	61	5.00	4.00	6.00
2010:Q3	64	5.78	4.50	6.80
2011:Q3	41	6.00	4.75	7.00
2012:Q3	63	6.00	4.75	7.00

The Federal Reserve Bank of Philadelphia thanks the following forecasters for their participation in recent surveys:

Scott Anderson, Bank of the West (BNP Paribas Group); **Robert J. Barbera**, Mount Lucas Management; **Christine Chmura, Ph.D.** and **Xiaobing Shuai, Ph.D.**, Chmura Economics & Analytics; **Gary Ciminero, CFA**, GLC Financial Economics; **Julia Coronado**, BNP Paribas; **David Crowe**, National Association of Home Builders; **Rajeev Dhawan**, Georgia State University; **Shawn Dubravac**, Consumer Electronics Association; **Michael R. Englund**, Action Economics, LLC; **Stephen Gallagher**, Societe Generale; **Timothy Gill**, NEMA; **James Glassman**, JPMorgan Chase & Co.; **Ethan Harris**, Bank of America-Merrill Lynch; **Keith Hembre**, Nuveen Asset Management; **Peter Hooper**, Deutsche Bank Securities, Inc.; **IHS Global Insight**; **Peter Jaquette**, PIRA Energy Group; **Fred Joutz**, Benchmark Forecasts and Research Program on Forecasting, George Washington University; **Kurt Karl**, Swiss Re; **N. Karp**, BBVA Compass; **Walter Kemmsies**, Moffatt & Nichol; **Jack Kleinhenz,** Kleinhenz & Associates, Inc.; **Thomas Lam**, OSK Group/DMG & Partners; **L. Douglas Lee**, Economics from Washington; **Allan R. Leslie**, Economic Consultant; **John Lonski**, Moody's Capital Markets Group; **Macroeconomic Advisers, LLC**; **Dean Maki**, Barclays Capital; **Jim Meil** and **Arun Raha**, Eaton Corporation; **Anthony Metz**, Pareto Optimal Economics; **Ardavan Mobasheri**, AIG Global Economic Research; **Michael Moran**, Daiwa Capital Markets America; **Joel L. Naroff**, Naroff Economic Advisors; **Mark Nielson, Ph.D.**, MacroEcon Global Advisors; **Michael P. Niemira**, International Council of Shopping Centers; **Luca Noto**, Anima Sgr; **Brendon Ogmundson**, BC Real Estate Association; **Martin A. Regalia**, U.S. Chamber of Commerce; **David Resler**, Nomura Securities International, Inc.; **Philip Rothman**, East Carolina University; **Chris Rupkey**, Bank of Tokyo-Mitsubishi UFJ; **John Silvia**, Wells Fargo; **Allen Sinai**, Decision Economics, Inc; **Tara M. Sinclair**, Research Program on Forecasting, George Washington University; **David Sloan**, Thomson Reuters; **Sean M. Snaith, Ph.D.**, University of Central Florida; **Constantine G. Soras, Ph.D.**, CGS Economic Consulting; **Neal Soss**, Credit Suisse; **Stephen Stanley**, Pierpont Securities; **Charles Steindel**, New Jersey Department of the Treasury; **Susan M. Sterne**, Economic Analysis Associates, Inc.; **Thomas Kevin Swift**, American Chemistry Council; **Andrew Tilton**, Goldman Sachs; **Lea Tyler**, Oxford Economics USA, Inc.; **Jay N. Woodworth**, Woodworth Holdings, Ltd.; **Richard Yamarone**, Bloomberg, LP; **Mark Zandi**, Moody's Analytics

This is a partial list of participants. We also thank those who wish to remain anonymous.

SUMMARY TABLE
SURVEY OF PROFESSIONAL FORECASTERS
MAJOR MACROECONOMIC INDICATORS

	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2012	2013	2014	2015
						(YEAR-OVER-YEAR)			
PERCENT GROWTH AT ANNUAL RATES									
1. REAL GDP (BILLIONS, CHAIN WEIGHTED)	1.6	2.2	1.8	2.3	2.5	2.2	2.1	2.7	3.1
2. GDP PRICE INDEX (PERCENT CHANGE)	1.7	1.9	1.8	1.7	2.0	1.7	1.8	N.A.	N.A.
3. NOMINAL GDP ($ BILLIONS)	3.5	3.9	4.1	4.3	4.7	4.0	4.1	N.A.	N.A.
4. NONFARM PAYROLL EMPLOYMENT									
(PERCENT CHANGE)	1.1	1.2	1.4	1.3	1.3	1.4	1.3	N.A.	N.A.
(AVG MONTHLY CHANGE)	125.0	135.3	151.7	139.7	149.0	154.6	143.2	N.A.	N.A.
VARIABLES IN LEVELS									
5. UNEMPLOYMENT RATE (PERCENT)	8.2	8.1	8.0	7.9	7.8	8.2	7.9	7.3	7.0
6. 3-MONTH TREASURY BILL (PERCENT)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	1.5
7. 10-YEAR TREASURY BOND (PERCENT)	1.6	1.7	1.8	2.0	2.2	1.8	2.1	2.7	3.3

	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2012	2013	2014
						(Q4-OVER-Q4)		
INFLATION INDICATORS								
8. CPI (ANNUAL RATE)	1.5	2.0	2.1	2.1	2.2	1.8	2.2	2.3
9. CORE CPI (ANNUAL RATE)	2.2	2.0	2.0	2.0	2.1	2.2	2.0	2.2
10. PCE (ANNUAL RATE)	1.5	2.0	2.0	2.0	2.1	1.7	2.0	2.2
11. CORE PCE (ANNUAL RATE)	1.9	1.8	1.9	2.0	2.0	1.9	2.0	2.0

THE FIGURES ON EACH LINE ARE MEDIANS OF 48 INDIVIDUAL FORECASTERS.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA.
SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 2012.

SURVEY OF PROFESSIONAL FORECASTERS

Third Quarter 2012

Tables

Note: Data in these tables listed as "actual" are the data that were available to the forecasters when they were sent the survey questionnaire on July 27; the tables do not reflect subsequent revisions to the data. All forecasts were received on or before August 7, 2012.

TABLE ONE
MAJOR MACROECONOMIC INDICATORS
MEDIANS OF FORECASTER PREDICTIONS

	NUMBER OF FORECASTERS	ACTUAL 2012 Q2	FORECAST 2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	ACTUAL 2011 ANNUAL	FORECAST 2012 ANNUAL	2013 ANNUAL	2014 ANNUAL	2015 ANNUAL
1. GROSS DOMESTIC PRODUCT (GDP) ($ BILLIONS)	46	15596	15732	15886	16046	16217	16403	15076	15673	16320	N.A.	N.A.
2. GDP PRICE INDEX (2005=100)	46	115.05	115.54	116.09	116.60	117.10	117.68	113.37	115.30	117.41	N.A.	N.A.
3. CORPORATE PROFITS AFTER TAXES ($ BILLIONS)	32	N.A.	1498.6	1526.0	1542.0	1569.0	1594.1	1447.9	1489.3	1592.0	N.A.	N.A.
4. UNEMPLOYMENT RATE (PERCENT)	47	8.2	8.2	8.1	8.0	7.9	7.8	9.0	8.2	7.9	7.3	7.0
5. NONFARM PAYROLL EMPLOYMENT (THOUSANDS)	43	133009	133384	133790	134245	134664	135111	131359	133214	134932	N.A.	N.A.
6. INDUSTRIAL PRODUCTION (2007=100)	42	97.2	97.9	98.5	99.2	99.9	100.7	93.7	97.6	100.4	N.A.	N.A.
7. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	43	0.74	0.76	0.78	0.81	0.83	0.85	0.61	0.75	0.84	N.A.	N.A.
8. 3-MONTH TREASURY BILL RATE (PERCENT)	45	0.09	0.10	0.10	0.10	0.11	0.14	0.05	0.09	0.15	0.30	1.50
9. AAA CORPORATE BOND YIELD (PERCENT)	37	3.80	3.50	3.58	3.70	3.80	4.00	4.64	3.71	3.95	N.A.	N.A.
10. BAA CORPORATE BOND YIELD (PERCENT)	35	5.09	4.90	4.93	5.00	5.11	5.30	5.66	5.02	5.24	N.A.	N.A.
11. 10-YEAR TREASURY BOND YIELD (PERCENT)	45	1.82	1.58	1.70	1.80	2.00	2.20	2.79	1.79	2.10	2.74	3.30
12. REAL GDP (BILLIONS, CHAIN WEIGHTED)	45	13558	13612	13686	13749	13828	13915	13299	13592	13884	14259	14701
13. TOTAL CONSUMPTION EXPENDITURE (BILLIONS, CHAIN WEIGHTED)	45	9582.0	9626.4	9672.6	9725.4	9781.4	9840.3	9428.8	9606.8	9814.7	N.A.	N.A.
14. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	43	1489.3	1510.1	1530.1	1553.7	1577.9	1599.4	1378.2	1500.0	1586.9	N.A.	N.A.
15. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	42	360.4	368.4	377.1	385.7	394.0	404.0	327.6	364.2	399.0	N.A.	N.A.
16. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	42	1022.2	1021.9	1021.0	1017.7	1015.4	1013.0	1047.0	1021.9	1014.3	N.A.	N.A.
17. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	42	1457.4	1453.6	1450.7	1449.8	1447.4	1447.5	1482.0	1456.9	1449.0	N.A.	N.A.
18. CHANGE IN PRIVATE INVENTORIES (BILLIONS, CHAIN WEIGHTED)	43	66.3	56.7	51.0	48.4	47.4	43.9	31.0	57.7	45.3	N.A.	N.A.
19. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	43	-424.3	-425.8	-427.0	-428.3	-428.9	-429.5	-408.0	-422.1	-427.3	N.A.	N.A.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA. SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 2012.

TABLE TWO
MAJOR MACROECONOMIC INDICATORS
PERCENTAGE CHANGES AT ANNUAL RATES

	NUMBER OF FORECASTERS	Q2 2012 TO Q3 2012	Q3 2012 TO Q4 2012	Q4 2012 TO Q1 2013	Q1 2013 TO Q2 2013	Q2 2013 TO Q3 2013	2011 TO 2012	2012 TO 2013	2013 TO 2014	2014 TO 2015
1. GROSS DOMESTIC PRODUCT (GDP) ($ BILLIONS)	46	3.5	3.9	4.1	4.3	4.7	4.0	4.1	N.A.	N.A.
2. GDP PRICE INDEX (2005=100)	46	1.7	1.9	1.8	1.7	2.0	1.7	1.8	N.A.	N.A.
3. CORPORATE PROFITS AFTER TAXES ($ BILLIONS)	32	4.0	7.5	4.2	7.2	6.6	2.9	6.9	N.A.	N.A.
4. UNEMPLOYMENT RATE (PERCENT)	47	0.0	-0.1	-0.1	-0.1	-0.1	-0.8	-0.3	-0.6	-0.4
5. NONFARM PAYROLL EMPLOYMENT										
(PERCENT CHANGE)	43	1.1	1.2	1.4	1.3	1.3	1.4	1.3	N.A.	N.A.
(AVG MONTHLY CHANGE)	43	125.0	135.3	151.7	139.7	149.0	154.6	143.2	N.A.	N.A.
6. INDUSTRIAL PRODUCTION (2007=100)	42	2.9	2.7	2.9	2.7	3.3	4.2	2.8	N.A.	N.A.
7. NEW PRIVATE HOUSING STARTS (ANNUAL RATE, MILLIONS)	43	10.1	11.6	14.6	13.0	10.5	22.0	12.2	N.A.	N.A.
8. 3-MONTH TREASURY BILL RATE (PERCENT)	45	0.01	0.00	0.00	0.01	0.03	0.04	0.06	0.16	1.20
9. AAA CORPORATE BOND YIELD (PERCENT)	37	-0.30	0.08	0.12	0.10	0.20	-0.93	0.24	N.A.	N.A.
10. BAA CORPORATE BOND YIELD (PERCENT)	35	-0.19	0.03	0.07	0.11	0.20	-0.64	0.21	N.A.	N.A.
11. 10-YEAR TREASURY BOND YIELD (PERCENT)	45	-0.24	0.12	0.10	0.20	0.20	-1.00	0.31	0.64	0.56
12. REAL GDP (BILLIONS, CHAIN WEIGHTED)	45	1.6	2.2	1.8	2.3	2.5	2.2	2.1	2.7	3.1
13. TOTAL CONSUMPTION EXPENDITURE (BILLIONS, CHAIN WEIGHTED)	45	1.9	1.9	2.2	2.3	2.4	1.9	2.2	N.A.	N.A.
14. NONRESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	43	5.7	5.4	6.3	6.4	5.6	8.8	5.8	N.A.	N.A.
15. RESIDENTIAL FIXED INVESTMENT (BILLIONS, CHAIN WEIGHTED)	42	9.1	9.8	9.5	8.9	10.6	11.2	9.6	N.A.	N.A.
16. FEDERAL GOVERNMENT C & I (BILLIONS, CHAIN WEIGHTED)	42	-0.1	-0.4	-1.3	-0.9	-0.9	-2.4	-0.7	N.A.	N.A.
17. STATE AND LOCAL GOVT C & I (BILLIONS, CHAIN WEIGHTED)	42	-1.0	-0.8	-0.2	-0.7	0.0	-1.7	-0.5	N.A.	N.A.
18. CHANGE IN PRIVATE INVENTORIES (BILLIONS, CHAIN WEIGHTED)	43	-9.6	-5.7	-2.6	-1.0	-3.5	26.7	-12.3	N.A.	N.A.
19. NET EXPORTS (BILLIONS, CHAIN WEIGHTED)	43	-1.5	-1.2	-1.3	-0.6	-0.6	-14.1	-5.3	N.A.	N.A.

NOTE: FIGURES FOR UNEMPLOYMENT RATE, TREASURY BILL RATE, AAA CORPORATE BOND YIELD, BAA CORPORATE BOND YIELD, AND 10-YEAR TREASURY BOND YIELD ARE CHANGES IN THESE RATES, IN PERCENTAGE POINTS.
FIGURES FOR CHANGE IN PRIVATE INVENTORIES AND NET EXPORTS ARE CHANGES IN BILLIONS OF CHAIN-WEIGHTED DOLLARS.
ALL OTHERS ARE PERCENTAGE CHANGES AT ANNUAL RATES.

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA. SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 2012.

TABLE THREE
MAJOR PRICE INDICATORS
MEDIANS OF FORECASTER PREDICTIONS

	NUMBER OF FORECASTERS	ACTUAL 2012 Q2	FORECAST(Q/Q) 2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	ACTUAL 2011 ANNUAL	FORECAST(Q4/Q4) 2012 ANNUAL	2013 ANNUAL	2014 ANNUAL
1. CONSUMER PRICE INDEX (ANNUAL RATE)	45	0.8	1.5	2.0	2.1	2.1	2.2	3.3	1.8	2.2	2.3
2. CORE CONSUMER PRICE INDEX (ANNUAL RATE)	43	2.6	2.2	2.0	2.0	2.0	2.1	2.2	2.2	2.0	2.2
3. PCE PRICE INDEX (ANNUAL RATE)	40	0.7	1.5	2.0	2.0	2.0	2.1	2.5	1.7	2.0	2.2
4. CORE PCE PRICE INDEX (ANNUAL RATE)	41	1.8	1.9	1.8	1.9	2.0	2.0	1.7	1.9	2.0	2.0

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA. SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 2012.

TABLE FOUR
ESTIMATED PROBABILITY OF DECLINE IN REAL GDP

ESTIMATED PROBABILITY (CHANCES IN 100)	Q2 2012 TO Q3 2012	Q3 2012 TO Q4 2012	Q4 2012 TO Q1 2013	Q1 2013 TO Q2 2013	Q2 2013 TO Q3 2013
			NUMBER OF FORECASTERS		
10 OR LESS	25	17	12	8	10
11 TO 20	8	16	13	20	20
21 TO 30	7	7	14	11	9
31 TO 40	2	2	3	3	2
41 TO 50	1	1	0	0	1
51 TO 60	0	1	1	2	1
61 TO 70	0	0	1	0	0
71 TO 80	0	0	0	0	0
81 TO 90	0	0	0	0	0
91 AND OVER	0	0	0	0	0
NOT REPORTING	5	4	4	4	5
MEAN AND MEDIAN					
MEDIAN PROBABILITY	10.00	15.00	20.00	20.00	20.00
MEAN PROBABILITY	13.83	16.99	21.22	20.97	19.10

NOTE: TOTAL NUMBER OF FORECASTERS REPORTING IS 43.
SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA.
SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 2012.

TABLE FIVE
MEAN PROBABILITIES

MEAN PROBABILITY ATTACHED TO POSSIBLE
CIVILIAN UNEMPLOYMENT RATES:
(ANNUAL AVERAGE)

	2012	2013	2014	2015
11.0 PERCENT OR MORE	0.21	0.34	0.04	0.06
10.0 TO 10.9 PERCENT	0.27	0.49	0.23	0.12
9.5 TO 9.9 PERCENT	0.44	0.76	0.42	0.54
9.0 TO 9.4 PERCENT	1.47	2.99	2.35	1.97
8.5 TO 8.9 PERCENT	14.23	13.54	6.69	3.33
8.0 TO 8.4 PERCENT	65.01	32.24	19.95	12.67
7.5 TO 7.9 PERCENT	16.21	33.66	27.74	21.42
7.0 TO 7.4 PERCENT	1.72	13.28	23.79	25.40
6.0 TO 6.9 PERCENT	0.33	2.41	15.39	24.50
LESS THAN 6.0 PERCENT	0.11	0.30	3.39	9.98

MEAN PROBABILITY ATTACHED TO POSSIBLE
PERCENT CHANGES IN REAL GDP:
(ANNUAL-AVERAGE OVER ANNUAL-AVERAGE)

	2011-2012	2012-2013	2013-2014	2014-2015
6.0 OR MORE	0.17	0.22	0.46	0.66
5.0 TO 5.9	0.40	0.56	1.95	2.39
4.0 TO 4.9	1.03	3.67	8.97	9.77
3.0 TO 3.9	6.70	11.05	22.30	27.11
2.0 TO 2.9	52.21	38.89	34.40	30.02
1.0 TO 1.9	32.22	30.39	20.52	17.30
0.0 TO 0.9	6.12	10.29	7.86	7.37
-1.0 TO -0.1	0.81	3.62	2.67	3.61
-2.0 TO -1.1	0.19	0.96	0.65	1.54
-3.0 TO -2.1	0.10	0.21	0.15	0.16
LESS THAN -3.0	0.06	0.15	0.07	0.08

MEAN PROBABILITY ATTACHED TO POSSIBLE
PERCENT CHANGES IN GDP PRICE INDEX:
(ANNUAL-AVERAGE OVER ANNUAL-AVERAGE)

	2011-2012	2012-2013
8.0 OR MORE	0.06	0.06
7.0 TO 7.9	0.11	0.09
6.0 TO 6.9	0.18	0.22
5.0 TO 5.9	0.33	0.36
4.0 TO 4.9	0.96	1.66
3.0 TO 3.9	4.55	7.50
2.0 TO 2.9	27.95	35.85
1.0 TO 1.9	58.22	41.94
0.0 TO 0.9	6.70	10.08
WILL DECLINE	0.95	2.23

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA.
SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 2012.

TABLE SIX
MEAN PROBABILITY OF CORE CPI AND CORE PCE INFLATION (Q4/Q4)

MEAN PROBABILITY ATTACHED TO CORE CPI INFLATION:

	11Q4 TO 12Q4	12Q4 TO 13Q4
4 PERCENT OR MORE	0.17	0.73
3.5 TO 3.9 PERCENT	0.38	1.60
3.0 TO 3.4 PERCENT	2.51	4.82
2.5 TO 2.9 PERCENT	13.45	15.63
2.0 TO 2.4 PERCENT	41.68	32.44
1.5 TO 1.9 PERCENT	32.08	28.22
1.0 TO 1.4 PERCENT	6.81	11.28
0.5 TO 0.9 PERCENT	1.95	2.64
0.0 TO 0.4 PERCENT	0.68	2.36
WILL DECLINE	0.30	0.27

MEAN PROBABILITY ATTACHED TO CORE PCE INFLATION:

	11Q4 TO 12Q4	12Q4 TO 13Q4
4 PERCENT OR MORE	0.17	0.37
3.5 TO 3.9 PERCENT	0.25	0.72
3.0 TO 3.4 PERCENT	1.68	2.98
2.5 TO 2.9 PERCENT	7.96	11.58
2.0 TO 2.4 PERCENT	35.36	32.11
1.5 TO 1.9 PERCENT	39.07	31.66
1.0 TO 1.4 PERCENT	12.39	14.34
0.5 TO 0.9 PERCENT	2.06	4.74
0.0 TO 0.4 PERCENT	0.72	1.13
WILL DECLINE	0.33	0.38

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA.
SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 2012.

TABLE SEVEN
LONG-TERM (5-YEAR AND 10-YEAR) FORECASTS

ANNUAL AVERAGE OVER THE NEXT 5 YEARS: 2012-2016

CPI INFLATION RATE		PCE INFLATION RATE	
MINIMUM	0.87	MINIMUM	0.72
LOWER QUARTILE	2.00	LOWER QUARTILE	1.80
MEDIAN	2.20	MEDIAN	2.00
UPPER QUARTILE	2.60	UPPER QUARTILE	2.25
MAXIMUM	4.00	MAXIMUM	3.90
MEAN	2.28	MEAN	2.04
STD. DEVIATION	0.57	STD. DEVIATION	0.51
N	43	N	42
MISSING	5	MISSING	6

ANNUAL AVERAGE OVER THE NEXT 10 YEARS: 2012-2021

CPI INFLATION RATE		PCE INFLATION RATE	
MINIMUM	1.21	MINIMUM	1.17
LOWER QUARTILE	2.10	LOWER QUARTILE	2.00
MEDIAN	2.35	MEDIAN	2.20
UPPER QUARTILE	2.70	UPPER QUARTILE	2.50
MAXIMUM	4.30	MAXIMUM	4.10
MEAN	2.45	MEAN	2.21
STD. DEVIATION	0.57	STD. DEVIATION	0.48
N	40	N	39
MISSING	8	MISSING	9

SOURCE: RESEARCH DEPARTMENT, FEDERAL RESERVE BANK OF PHILADELPHIA.
SURVEY OF PROFESSIONAL FORECASTERS, THIRD QUARTER 2012.

The Telecom Utility Industry is currently ranked 31st for Timeliness, still in the top third of the roughly 100 industries in the *Value Line* universe, but down 22 spots from the time of our June report. Overall, telecom utility stocks have struggled to keep pace with the broader market so far in 2012, though most have picked up the pace of late, registering strong share-price gains over the past three months. Meanwhile, the yields on many of these equities are well above the median for the typical dividend-paying stock.

From an operating standpoint, 2012 is shaping up as a difficult year for the industry, as companies seek to navigate an operating environment marked by an unsettled economic outlook, a changing competitive landscape, and evolving technology. Indeed, revenue growth is likely to be anemic, at best, while earnings figure to decline year over year. In such a setting, well-executed cost-cutting programs are often key to keeping profits moving in the right direction.

Rising Prices

As depicted in the chart below, the Telecom Utility space has proved to be a rather disappointing hunting ground for investors over the last several years, with returns lagging well behind the broader market. The past few months, though, have been more rewarding. The standout performer has been *Cincinnati Bell* stock, which has risen 50% since our June report. By comparison, the S&P 500 Index has advanced about 8% (excluding dividends) over this stretch.

The rest of the group, for the most part, has also enjoyed market-beating gains since our June report, with only *Alaska Communications* and *tw telecom* missing out on the action.

Trying Times

For most of the telecom utilities, 2012 is shaping up as another year of little or no top-line growth. Core businesses, particularly traditional voice-related services, continue to face mounting competition from alternative providers, such as wireless and cable networks. Efforts to develop new revenue streams are having some success, but most of these companies will likely continue to struggle to generate meaningful revenue gains.

Furthermore, though demand for telecom services tends to be comparatively noncyclical, the lackluster economic landscape performance adds to this challenge. In this regard, the domestic telecom utilities are generally better off than their overseas counterparts.

In such a challenging operating environment, keeping a close watch on expenses is essential to maintaining any positive bottom-line momentum. Not surprisingly, many of these companies are now executing expense-reduction programs. In particular, those that have been active on the acquisition front in recent year figure to have the most to gain from these efforts, given the opportunities to eliminate duplicate functions.

INDUSTRY TIMELINESS: 31 (of 98)

Income Opportunities and Pitfalls

For the most part, the Telecom Utility Industry will be of most interest to income-oriented investors. Most of these equities offer yields that are well in excess of the *Value Line* median for dividend-paying equities (2.3%). Also, the majority of telecom-utility stocks get better-than-average scores for Price Stability, which should add to their appeal to conservative accounts.

Still, in view of the challenges facing the industry, investors need to remain vigilant. As shareholders of *Alaska Communications* and *Telefonica* have discovered, dividend payouts are not written in stone. Last December, *Alaska Communications* announced that it was slashing its cash distribution by 77%. More recently, *Telefonica* announced that it will be suspending its dividend until next fall. This move is part of a strategy to improve the heavily leveraged company's financial flexibility while it confronts difficult operating conditions, particularly in its home market of Spain.

Those who put a priority on income and stability will likely be best served by taking a closer look at *CenturyLink* stock and *Deutsche Telekom* ADRs. These equities offer yields of 6.8% and 7.0%, respectively, and also carry Above-Average (2) ranks for Safety.

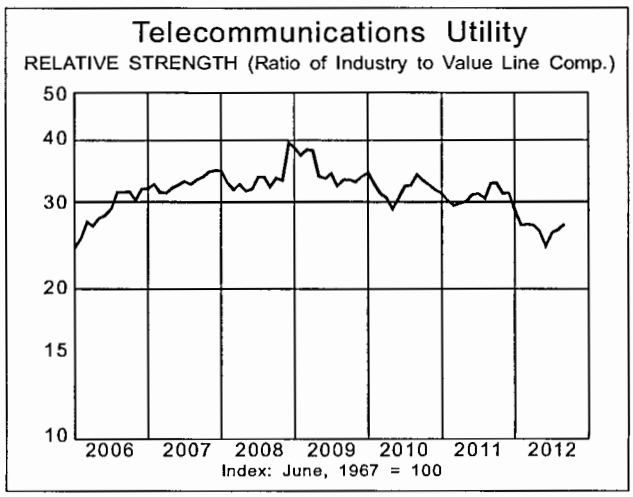
Conclusion

The industry still sports an above-average rank for Timeliness. But, as we discuss above, telecom utility stocks are likely to most appeal to income-oriented investors. We advise investors to study the individual pages that follow this overview to identify the issues that best meet their individual risk/return profiles.

Robert M. Greene, CFA

Composite Statistics: Telecommunications Utility Industry

2008	2009	2010	2011	2012	2013		15-17
225361	238886	233086	*239250*	*238500*	*241750*	Revenues ($mill)	*259250*
15718	19158	21175	*21125*	*19250*	*21250*	Net Profit ($mill)	*27250*
30.0%	30.5%	26.1%	*27.5%*	*27.5%*	*27.5%*	Income Tax Rate	*28.0%*
7.0%	8.0%	9.1%	*8.8%*	*8.1%*	*8.8%*	Net Profit Margin	*10.5%*
60.6%	60.7%	57.9%	*58.0%*	*57.0%*	*55.0%*	Long-Term Debt Ratio	*53.0%*
38.7%	38.4%	41.2%	*41.0%*	*42.0%*	*44.0%*	Common Equity Ratio	*46.0%*
262161	288904	300903	*313250*	*312750*	*321000*	Total Capital ($mill)	*351500*
152712	171336	174885	*175250*	*175750*	*177000*	Net Plant ($mill)	*182500*
8.8%	9.1%	8.8%	*8.5%*	*7.5%*	*8.0%*	Return on Total Cap'l	*9.5%*
15.2%	16.9%	16.7%	*16.5%*	*14.5%*	*15.0%*	Return on Shr. Equity	*16.5%*
15.4%	17.2%	17.0%	*16.5%*	*14.5%*	*15.0%*	Return on Com Equity	*17.0%*
.5%	2.7%	2.6%	*2.0%*	*1.0%*	*2.0%*	Retained to Com Eq	*3.5%*
97%	84%	85%	*88%*	*92%*	*87%*	All Div'ds to Net Prof	*79%*
16.6	11.2	11.0	*15.0*	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*13.5*
1.00	.75	.70	*.95*			Relative P/E Ratio	*.90*
5.8%	7.5%	7.7%	*6.3%*			Avg Ann'l Div'd Yield	*5.9%*



ALASKA COMM. SYS. NDQ-ALSK

RECENT PRICE 2.14 | P/E RATIO 10.2 (Trailing: 71.3 Median: NMF) | RELATIVE P/E RATIO 0.67 | DIV'D YLD 9.3-4.7% | VALUE LINE

TIMELINESS 4 Lowered 9/7/12
SAFETY 4 Lowered 3/27/09
TECHNICAL 1 Raised 7/27/12
BETA .80 (1.00 = Market)

2015-17 PROJECTIONS

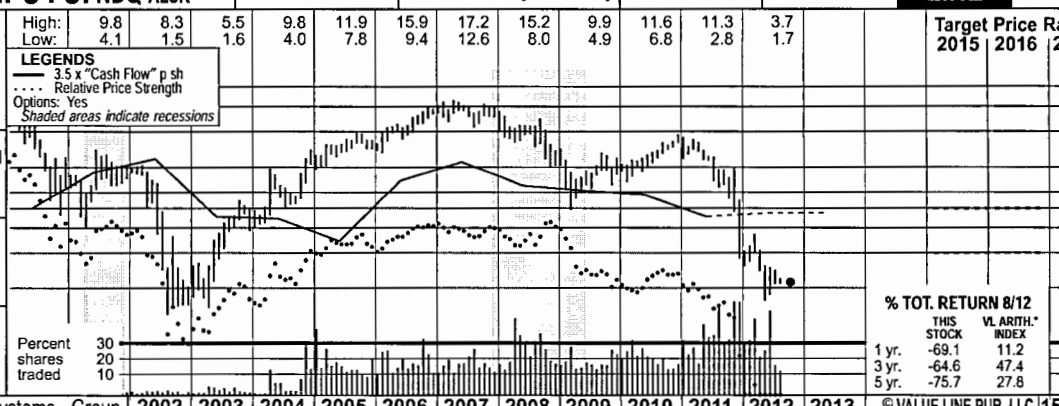
	Price	Gain	Ann'l Total Return
High	5	(+135%)	28%
Low	3	(+40%)	16%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	4Q2011	1Q2012	2Q2012
to Buy	43	47	33
to Sell	63	45	57
Hld's(000)	19689	18572	13798



Alaska Communications Systems Group was incorporated in Delaware in October 1998. The company began operations in May 1999 when it completed the acquisition of four local telephone companies in Alaska. Since 1999, has built its network and service capabilities under a single brand name. As an integrated company, it has provided the leading facilities-based telecommunications services in Alaska.

CAPITAL STRUCTURE as of 6/30/12
Total Debt $563.6 mill. **Due in 5 Yrs** $563.6 mill.
LT Debt $536.8 mill. **LT Interest** $38.0 mill.
Includes $120.0 mill. 6¼% conv. notes ('18) and $21.7 mill. 5¾% conv. notes ('13).
(More than 100% of Capital)

Leases, Uncapitalized Annual rentals $5.7 mill.
Pension Assets-12/11 $10.2 mill.
Oblig. $15.2 mill.

Preferred Stock None
Common Stock 45,662,660 shares as of 7/20/12
MARKET CAP: $100 million (Small Cap)

CURRENT POSITION ($MILL.)	2010	2011	6/30/12
Cash Assets	20.2	25.4	22.3
Receivables	37.0	37.0	39.7
Materials & Supplies	6.5	5.4	10.1
Other	15.0	11.6	12.7
Current Assets	78.7	79.4	84.8
Payables & Other	62.5	48.9	58.3
Debt Due	5.2	30.9	26.8
Advance Billings	9.6	9.3	8.9
Current Liab.	77.3	89.1	94.0

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '09-'11 to '15-'17
Revenues	-1.0%	-2.5%	-.5%
"Cash Flow"	1.5%	2.0%	1.0%
Earnings	--	--	NMF
Dividends	--	7.0%	-22.0%
Book Value	--	--	NMF

Calendar	QUARTERLY REVENUES ($ mill.) A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	86.1	86.0	91.3	83.1	346.5
2010	82.4	84.5	89.8	84.8	341.5
2011	86.6	84.9	90.3	87.5	349.3
2012	85.9	90.0	*94.0*	*90.1*	*360*
2013	*82.0*	*85.0*	*88.0*	*85.0*	*340*

Calendar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	.05	.03	--	d.16	d.08
2010	.03	.05	d.07	.04	.05
2011	.06	d.08	d.02	.05	.01
2012	.02	d.02	*.12*	*.10*	*.22*
2013	*.01*	*d.02*	*.09*	*.07*	*.15*

Calendar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2008	.215	.215	.215	.215	.86
2009	.215	.215	.215	.215	.86
2010	.215	.215	.215	.215	.86
2011	.215	.215	.215	.215	.86
2012	.05	.05	.05		

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	© VALUE LINE PUB. LLC	15-17
	11.17	11.03	9.86	7.84	8.27	9.00	8.91	7.79	7.64	7.71	*7.85*	*7.25*	Revenues per sh A	*7.50*
	2.52	1.30	1.27	.99	1.97	2.43	1.86	1.76	1.66	1.30	*1.35*	*1.35*	"Cash Flow" per sh	*1.50*
	d.17	d1.47	d1.33	d1.04	.46	.75	.16	d.08	.05	.01	*.22*	*.15*	Earnings per sh A	*.25*
	--	--	.19	.80	.85	.86	.86	.86	.86	.86	*.20*	*.20*	Div'ds Decl'd per sh B■	*.20*
	2.18	1.65	1.68	1.40	1.42	1.46	2.74	1.22	.86	1.15	*1.75*	*1.60*	Cap'l Spending per sh	*1.35*
	.00	.06	d1.09	d.45	d.58	1.73	.29	.75	d.46	d1.12	*d1.05*	*d.75*	Book Value per sh C	*.30*
	30.74	29.34	30.70	41.68	42.32	42.88	43.72	44.48	44.70	45.30	*45.75*	*46.75*	Common Shs Outst'g D	*48.00*
	--	--	--	--	27.7	20.1	NMF	--	NMF	NMF	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*15.0*
	--	--	--	--	1.50	1.07	NMF	--	NMF	NMF			Relative P/E Ratio	*1.00*
	--	--	3.1%	8.1%	6.6%	5.7%	7.5%	11.6%	9.5%	10.6%			Avg Ann'l Div'd Yield	*5.0%*
	343.5	323.5	302.7	326.8	349.8	385.8	389.6	346.5	341.5	349.3	*360*	*340*	Revenues ($mill) A	*360*
	d5.3	d44.1	d39.3	d41.6	20.0	32.9	7.3	d3.3	2.3	.5	*10.0*	*8.0*	Net Profit ($mill)	*12.0*
	--	--	--	--	2.2%	.0%	43.7%	--	NMF	NMF	*45.0%*	*45.0%*	Income Tax Rate E	*43.0%*
	NMF	NMF	NMF	NMF	5.7%	8.5%	1.9%	NMF	.7%	.1%	*2.6%*	*2.4%*	Net Profit Margin	*3.3%*
	100.0%	99.7%	106.8%	104.4%	106.0%	85.4%	97.8%	94.2%	103.9%	110.4%	*110%*	*105%*	Long-Term Debt Ratio	*95%*
	.0%	.3%	NMF	NMF	NMF	14.6%	2.2%	5.8%	NMF	NMF	*NMF*	*NMF*	Common Equity Ratio	*NMF*
	602.1	550.1	490.1	426.0	412.5	506.2	573.6	572.0	527.6	487.7	*515*	*550*	Total Capital ($mill) C	*600*
	465.1	438.1	412.3	398.0	396.5	383.6	499.5	450.9	411.0	405.2	*420*	*440*	Net Plant ($mill)	*450*
	3.4%	NMF	NMF	NMF	8.6%	9.3%	4.3%	2.5%	3.1%	3.3%	*5.5%*	*5.5%*	Return on Total Cap'l	*6.0%*
	NMF	NMF	--	--	--	44.5%	57.7%	NMF	NMF	NMF	*NMF*	*NMF*	Return on Shr. Equity	*NMF*
	NMF	NMF	--	--	--	44.5%	57.7%	NMF	NMF	NMF	*NMF*	*NMF*	Return on Com Equity	*NMF*
	NMF	NMF	--	--	--	NMF	NMF	NMF	NMF	NMF	*NMF*	*NMF*	Retained to Com Eq	*16.0%*
	--	--	--	NMF	NMF	111%	NMF	NMF	NMF	NMF	*NMF*	*NMF*	All Div'ds to Net Prof	*80%*

BUSINESS: Alaska Communications Systems Group, Inc. provides leading integrated communications services in Alaska. Its wireline and wireless networks extend throughout the 49th State and into the Continental U.S. via two undersea fiber optic cable systems. The wireline business is one of the most comprehensive in Alaska. The wireless segment includes a state-wide third-generation (3G) network. Employs approximately 855. Officers & directors own 2.0% of common; BlackRock, 7.5%; Prudential Financial, 5.8%; The Vanguard Group, 5.1% (4/11 proxy). President & CEO: Anand Vadapalli. Chairman: Liane Pelletier. Incorporated: Delaware. Address: 600 Telephone Avenue, Anchorage, Alaska 99503. Telephone: 907-297-3000. Internet: www.alsk.com.

Alaska Communications Systems Group (ACS) is no longer timely following its recent stumble. The company suffered a loss of $0.02 a share in the second quarter, which, despite being less than the year-before deficit, came in well below our $0.06 share-net estimate. The costs of doing business far exceeded the 6% sales growth achieved during the period, with the launch of the *iPhone* and associated subsidies taking a toll.

Earnings growth ought to get back on track in the second half, however. Management does not believe that it will see similar subsidies in the months ahead. Having the *iPhone* in its arsenal, however, probably will help continue boosting wireless accounts and reducing the churn rate. Wireless connections increased 3%, while the churn rate fell 10% in the June period.

Still, we have serious concerns heading forward. True, the *iPhone* helps from a competitive standpoint, but we remain extremely worried about the overall landscape as Verizon's arrival to the 49th state draws closer. It plans on being operational in Alaska by yearend. There are only about three-quarter of a million residents in Alaska, leading us to question just how much market share will ultimately be available, and if the company will be able to retain its customers. As a result, we look for both the top and bottom line to digress a bit next year.

All but the most aggressive investors will want to take a pass. Although the stock holds wide recovery potential at the beaten-down price, there is much uncertainty here. The current dividend is attractive, but is barely being covered, and the company's finances are weak. A cut could be in store if ACS cannot hold off it's rivals and keep operations on the mend. ACS' strategic alliance, to partner with in-state rival General Communications (GCI) to form Alaska Wireless Network, LLC (AWN), ought to help by providing a greater ability to compete, but there is still much uncertainty surrounding the joint venture, in our opinion.

Andre J. Costanza *September 21, 2012*

CASH POSITION	5-Year Av'g	6/30/12
Current Assets to Current Liabilities:	172%	90%
Cash & Equiv's to Current Liabilities:	87%	25%
Working Capital to Revenues:	15%	NMF

(A) Discontinued regulatory accounting in '09. Diluted earnings. Excludes nonrecurring: '06, d22¢; '07, $2.51; '08, d39¢; '09, 85¢; '10, d74¢. Quarterly figures may not sum due to rounding. Next earnings report due late Oct. (B) Dividends historically paid in early January, April, July, and October. ■ Dividend reinvestment plan available. (C) Includes intangibles. In '11: $33.0 million, 73¢ a share. (D) In millions. (E) Unused Federal and State net operating loss carry forwards were $168.2 million and $163.7 million, respectively, in '11.

Company's Financial Strength	C+
Stock's Price Stability	45
Price Growth Persistence	35
Earnings Predictability	25

CENTURYLINK, INC. NYSE-CTL

RECENT PRICE 42.36 | P/E RATIO 16.7 (Trailing: 17.0 / Median: 13.0) | RELATIVE P/E RATIO 1.10 | DIV'D YLD 6.8% | VALUE LINE

TIMELINESS 3 New 9/25/09
SAFETY 2 Raised 6/29/07
TECHNICAL 4 Lowered 9/21/12
BETA .75 (1.00 = Market)

2015-17 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	50	(+20%)	10%
Low	35	(-15%)	3%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	1	0	1	2	0	0	0	0
to Sell	2	4	2	2	8	5	1	3	3

Institutional Decisions

	4Q2011	1Q2012	2Q2012
to Buy	349	344	360
to Sell	221	271	228
Hld's(000)	435583	447943	414482

	High:	39.9	35.5	36.8	35.5	36.5	44.1	49.9	42.0	37.2	46.9	46.8	43.4		
	Low:	25.5	21.1	25.3	26.2	29.5	32.5	39.9	20.5	23.4	14.2	31.2	36.3		

LEGENDS
— 4.0 x "Cash Flow" p sh
···· Relative Price Strength
3-for-2 split 4/99
Options: Yes
Shaded areas indicate recessions

Target Price Range 2015 | 2016 | 2017

80 60 50 40 30 25 20 15 10 7.5

Percent shares traded 18 12 6

% TOT. RETURN 8/12

	THIS STOCK	VL ARITH.* INDEX
1 yr.	26.5	11.2
3 yr.	65.7	47.4
5 yr.	25.1	27.8

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	© VALUE LINE PUB. LLC	15-17
5.57	6.60	11.42	11.98	13.12	14.99	15.52	16.48	18.19	18.91	21.61	24.02	25.91	25.59	23.09	30.22	*29.45*	*29.10*	Revenues per sh	*28.25*
1.93	2.26	3.81	4.15	4.32	4.76	5.25	5.65	6.33	6.61	7.89	8.21	8.69	8.61	8.07	10.65	*10.50*	*10.60*	"Cash Flow" per sh	*11.15*
.95	1.09	1.42	1.65	1.55	1.40	2.27	2.39	2.40	2.49	3.07	3.13	3.37	3.46	3.41	2.64	*2.55*	*2.75*	Earnings per sh A	*3.50*
.16	.16	.17	.18	.19	.20	.21	.22	.23	.24	.25	.26	1.54	2.80	2.90	2.90	*2.90*	*2.90*	Div'ds Decl'd per sh B■	*2.90*
1.66	1.33	2.25	2.79	3.20	3.59	2.70	2.62	2.91	3.17	2.77	3.01	2.86	2.52	2.83	3.90	*4.50*	*4.50*	Cap'l Spending per sh	*4.50*
7.56	9.46	11.03	13.15	14.39	16.49	21.55	24.04	25.70	27.54	28.11	31.42	31.55	31.64	31.64	33.67	*32.60*	*34.75*	Book Value per sh C	*43.55*
134.68	136.66	138.08	139.95	140.67	141.23	142.96	144.36	132.37	131.07	113.25	108.49	100.28	299.19	304.95	618.51	*623.00*	*622.00*	Common Shs Outst'g D	*620.00*
15.3	14.8	22.1	25.6	21.3	22.5	13.0	13.4	12.9	13.4	12.5	14.5	10.0	8.9	10.9	14.7	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*12.0*
.96	.85	1.15	1.46	1.38	1.15	.71	.76	.68	.71	.67	.77	.60	.59	.69	.93			Relative P/E Ratio	*.80*
1.1%	1.0%	.6%	.4%	.6%	.6%	.7%	.7%	.7%	.7%	.7%	.6%	4.6%	9.1%	7.8%	7.5%			Avg Ann'l Div'd Yield	*6.9%*
2218.7	2379.2	2407.4	2479.3	2447.7	2606.1	2598.4	7655.7	7041.5	18692	*18350*	*18090*	Revenues ($mill)	*17500*
325.0	345.8	337.2	334.5	370.0	354.3	347.1	1033.6	1028.3	1617.0	*1590*	*1710*	Net Profit ($mill)	*2170*
35.3%	35.7%	38.4%	37.8%	37.4%	37.7%	37.0%	37.4%	37.8%	39.4%	*38.5%*	*38.5%*	Income Tax Rate	*38.5%*
14.6%	14.5%	14.0%	13.5%	15.1%	13.6%	13.4%	13.5%	14.6%	8.7%	*8.7%*	*9.5%*	Net Profit Margin	*12.4%*
53.7%	47.2%	44.8%	39.6%	43.1%	44.5%	51.0%	43.4%	43.1%	50.6%	*49.0%*	*47.0%*	Long-Term Debt Ratio	*41.5%*
46.2%	52.7%	55.1%	60.2%	56.8%	55.5%	49.0%	56.6%	56.9%	49.4%	*51.0%*	*53.0%*	Common Equity Ratio	*58.5%*
6666.1	6587.8	6171.8	5993.3	5603.8	6143.6	6457.4	16720	16963	42183	*39800*	*40900*	Total Capital ($mill)	*46000*
3531.6	3455.5	3341.4	3304.5	3109.3	3108.4	2895.9	9097.1	8754.5	19436	*19000*	*18500*	Net Plant ($mill)	*17500*
6.4%	6.8%	7.0%	7.1%	8.4%	7.5%	6.9%	7.9%	7.7%	5.4%	*5.0%*	*5.5%*	Return on Total Cap'l	*6.0%*
10.5%	9.9%	9.9%	9.2%	11.6%	10.4%	11.0%	10.9%	10.7%	7.8%	*8.0%*	*8.0%*	Return on Shr. Equity	*8.0%*
10.5%	10.0%	9.9%	9.3%	11.6%	10.4%	11.0%	10.9%	10.7%	7.8%	*8.0%*	*8.0%*	Return on Com Equity	*8.0%*
9.6%	9.0%	9.0%	8.4%	10.7%	9.5%	6.1%	5.0%	1.6%	.3%	*NMF*	*NMF*	Retained to Com Eq	*1.5%*
9%	9%	9%	10%	8%	8%	44%	54%	85%	96%	*NMF*	*NMF*	All Div'ds to Net Prof	*83%*

CAPITAL STRUCTURE as of 6/30/12

Total Debt $21585 mill. **Due in 5 Yrs** $9000 mill.
LT Debt $19682 mill. **LT Interest** $1000 mill.

(Total interest coverage: 3.0x) (49% of Cap'l)

Pension Assets-12/11 $11814 mill. **Oblig.** $13596 mill.

Common Stock 622.6 mill. shares
as of 8/2/12

MARKET CAP: $26.4 billion (Large Cap)

CURRENT POSITION ($MILL.)	2010	2011	6/30/12
Cash Assets	172.9	128.0	281.0
Other	970.2	3395.0	3566.0
Current Assets	1143.1	3523.0	3847.0
Accts Payable	299.6	1399.0	1134.0
Debt Due	11.6	480.0	1903.0
Other	699.8	2140.0	2170.0
Current Liab.	1011.0	4019.0	5207.0

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '09-'11 to '15-'17
Revenues	7.0%	6.0%	*1.0%*
"Cash Flow"	7.5%	5.5%	*3.5%*
Earnings	7.5%	3.5%	*1.5%*
Dividends	31.0%	64.0%	*Nil*
Book Value	8.0%	3.5%	*5.0%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	1982.0	1960.0	1874.3	1839.4	7655.7
2010	1800.4	1772.0	1747.1	1722.0	7041.5
2011	4737.0	4669.0	4633.0	4653.0	18692.0
2012	4610.0	4612.0	*4573*	*4555*	*18350*
2013	*4545*	*4530*	*4515*	*4500*	*18090*

Calendar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	.80	.81	.90	.95	3.46
2010	.93	.88	.83	.76	E3.41
2011	.79	.69	.61	.55	2.64
2012	.68	.65	*.60*	*.62*	*2.55*
2013	*.66*	*.68*	*.70*	*.71*	*2.75*

Calendar	QUARTERLY DIVIDENDS PAID B■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2008	.068	.068	.70	.70	1.54
2009	.70	.70	.70	.70	2.80
2010	.725	.725	.725	.725	2.90
2011	.725	.725	.725	.725	2.90
2012	.725	.725	.725		

BUSINESS: CenturyLink, Inc., formerly CenturyTel, is the third largest telephone company in the U.S. It provides broadband, voice, and wireless services to consumers and businesses across the country. It also offers advanced entertainment services under the *CenturyLink*, *Prism TV*, and *DIRECTV* brands. Acquired Pacific Telecom in 12/97; Verizon wireline assets in Alabama, 7/02; Verizon wireline assets in Missouri, 9/02; Embarq Corp., 7/09; Qwest, 4/11. Employs about 49,000. All Off./Dir. as a group own less than 1% of common stock; State Street Corporation, 5.6%; BlackRock, 7.9% (4/12 Proxy). Pres. & CEO: Glen F. Post III. Inc.: Louisiana. Addr.: 100 CenturyLink Drive, Monroe, Louisiana 71203. Tel.: 318-388-9000. Internet: www.centurylink.com.

The fundamental picture at CenturyLink remains bright. The rural exchange provider, currently the third-largest telephone company in the country, has been on a shopping spree over the past few years, acquiring Embarq (2009), Qwest Communications (2011), and Savvis (2011) in an effort to add needed scale and enhance its revenue and cost-cutting opportunities. And recent results suggest that the M&A binge is starting to pay off, which should come as welcome news to investors at a time when federal USF (Universal Service Fund) subsidies are waning and landline customers throughout the sector are increasingly embracing wireless/cable alternatives. Indeed, while access-line losses remain a headwind . . .

The top line appears to be stabilizing. (Revenues declined a modest 1.2% during the second quarter.) We attribute this to heightened broadband penetration, growth in data centers, and new FTTT (Fiber-To-The-Tower) ventures with leading wireless carriers that are driving up bandwidth usage. Product rollouts, including the company's successful *Prism TV* television service and a variety of managed hosting/cloud computing services, are also bolstering the top line during these challenging economic times. Meanwhile . . .

Cost-control efforts are lending support to share earnings. And merger-related savings continue to mount, with synergies from the Qwest transaction alone likely to reach $465 million by year's end. This should enable CenturyLink to further deleverage its balance sheet as we head toward mid-decade. (With maturities approaching, debt repayment appears to be more of a priority than stock buybacks these days.) What's more, the cost savings ought to allow the company to maintain its $2.90-a-share annual dividend payout for some time to come, making this telecom issue a reasonably safe play for income-oriented investors.

We like this quality issue for its attractive yield and defensive characteristics. We do not envision much price appreciation, however, given the full valuation here. And momentum players would do well to look elsewhere, as the shares are pegged to merely mirror the broader market in the year ahead.

Justin Hellman *September 21, 2012*

(A) Diluted earnings. Excludes nonrecurring items: '96, d1¢; '97, 77¢; '98, 21¢; '99, 5¢; '00, 8¢; '01, $1.01; '02: $3.34; '03, d1¢; '04, 4¢. Next earnings report due early November. (B) Dividends historically paid in March, June, September, and December. ■ Dividend reinvestment plan available. Excludes one-time dividend: Q3 '08, $0.633. (C) Includes intangibles. In 2011: $21,724 million ($35.12/share). (D) In millions, adjusted for split. (E) Quarterly earnings do not sum to yearend total in '10 due to rounding.

Company's Financial Strength	B++
Stock's Price Stability	90
Price Growth Persistence	55
Earnings Predictability	85

Exhibit OCS 2S-4

Schedule AHG-2
12-GRHT-633-KSF

CONSOL. COMMUN. NDQ-CNSL

RECENT PRICE 16.80 | P/E RATIO 41.0 (Trailing: 28.0 / Median: NMF) | RELATIVE P/E RATIO 2.70 | DIV'D YLD 9.2% | VALUE LINE

TIMELINESS 3 Lowered 5/11/12
SAFETY 3 New 9/26/08
TECHNICAL 3 Raised 9/21/12
BETA .85 (1.00 = Market)

2015-17 PROJECTIONS

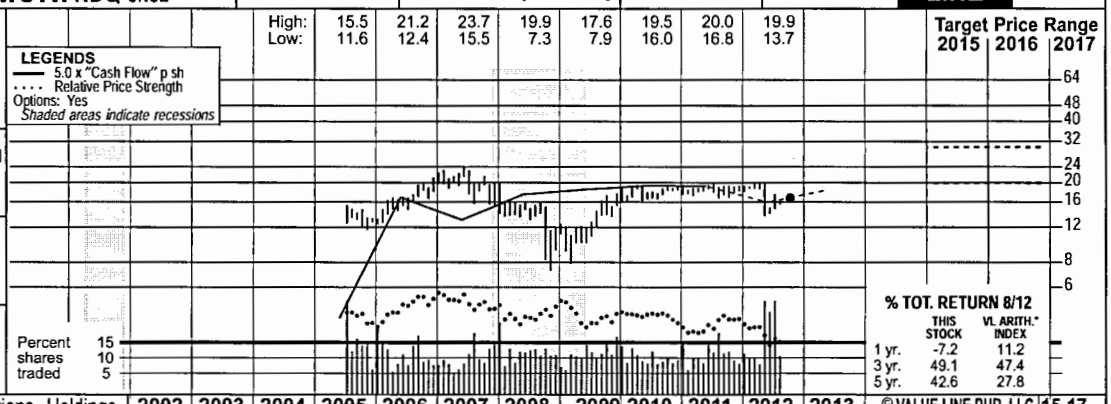
	Price	Gain	Ann'l Total Return
High	30	(+80%)	21%
Low	20	(+20%)	11%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	0	0	0	0	0
Options	0	0	0	0	0	0	0	0	0
to Sell	1	1	2	0	1	1	0	0	0

Institutional Decisions

	4Q2011	1Q2012	2Q2012
to Buy	43	58	75
to Sell	46	30	58
Hld's(000)	13324	14488	23450



Consolidated Communications Holdings, Inc. was formed through a series of acquisitions and mergers from 1906 to 1935, then known as Illinois Consolidated Telephone Company (ICTC). In 2002, ICTC was sold by McLeodUSA with whom it merged in 1997. The new entity was renamed Consolidated Communications. The company went public in July 2005. The initial offering of 15.6 million shares at $13 was underwritten by Citigroup and CreditSuisse FirstBoston.

CAPITAL STRUCTURE as of 6/30/12
Total Debt $1178.3 mill. **Due in 5 Yrs** $500.0 mill.
LT Debt $1169.3 mill. **LT Interest** $45.0 mill. (98% of Capital)
Leases, Uncapitalized Annual rentals $1.9 mill.

Pension Assets 12/11 $142.7 mill. **Oblig.** $202.3 mill.
Preferred Stock None

Common Stock 39,917,265 shs. as of 8/3/12
MARKET CAP: $675 million (Small Cap)

CURRENT POSITION ($MILL.)	2010	2011	6/30/12
Cash Assets	67.7	105.7	85.0
Receivables	42.0	35.5	35.2
Other	26.6	27.1	346.1
Current Assets	136.3	168.3	466.3
Accts Payable	10.0	13.7	15.1
Debt Due	.1	9.0	9.0
Other	65.5	62.6	78.2
Current Liab	75.6	85.3	102.3

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '09-'11 to '15-'17
Revenues	--	2.5%	6.0%
"Cash Flow"	--	12.5%	5.0%
Earnings	--	--	4.0%
Dividends	--	5.5%	Nil
Book Value	--	-18.0%	6.5%

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	101.7	102.0	101.6	100.9	406.2
2010	98.3	95.7	95.6	93.8	383.4
2011	95.4	92.6	92.5	93.8	374.3
2012	93.4	93.0	*154*	*154.6*	*495*
2013	*157*	*155*	*156*	*157*	*625*

Calendar	EARNINGS PER SHARE[A] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	.11	.25	.24	.24	.84
2010	.23	.24	.24	.23	.94
2011	.25	.18	.19	.26	.88
2012	.06	.09	*.09*	*.11*	*.35*
2013	*.12*	*.14*	*.14*	*.15*	*.55*

Calendar	QUARTERLY DIVIDENDS PAID[B] Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2008	.387	.387	.387	.387	1.55
2009	.387	.387	.387	.387	1.55
2010	.387	.387	.387	.387	1.55
2011	.387	.387	.387	.387	1.55
2012	.387	.387	.387		

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	© VALUE LINE PUB. LLC	15-17
	--	--	--	10.80	12.34	11.18	14.19	13.72	12.88	12.53	*12.40*	*15.65*	Revenues per sh	*18.50*
	--	--	--	.85	3.38	2.62	3.49	3.72	3.87	3.86	*3.20*	*3.70*	"Cash Flow" per sh	*5.15*
	--	--	--	d.83	.75	.44	.18	.84	.94	.88	*.35*	*.55*	Earnings per sh [A]	*1.10*
	--	--	--	.80	1.55	1.55	1.55	1.55	1.55	1.55	*1.55*	*1.55*	Div'ds Decl'd per sh [B]	*1.55*
	--	--	--	1.04	1.28	1.14	1.63	1.43	1.40	1.43	*1.50*	*1.50*	Cap'l Spending per sh	*1.60*
	--	--	--	6.69	4.42	5.28	2.38	2.52	2.25	1.42	*1.40*	*1.65*	Book Value per sh [D]	*3.00*
	--	--	--	29.78	26.00	29.44	29.49	29.61	29.76	29.87	*40.00*	*40.00*	Common Shs Outst'g [C]	*40.00*
	--	--	--	--	22.0	45.3	77.5	15.1	19.0	21.1	*Bold figures are Value Line estimates*		Avg Ann'l P/E Ratio	*22.5*
	--	--	--	--	1.19	2.40	4.66	1.01	1.21	1.33			Relative P/E Ratio	*1.50*
	--	--	--	5.9%	9.4%	7.8%	11.1%	12.2%	8.7%	8.4%			Avg Ann'l Div'd Yield	*6.2%*
	--	--	--	321.4	320.8	329.2	418.4	406.2	383.4	374.3	*495*	*625*	Revenues ($mill)	*740*
	--	--	--	37.8%	39.9%	40.2%	39.7%	38.4%	39.9%	41.1%	*39.0%*	*40.0%*	Operating Margin	*42.0%*
	--	--	--	67.4	67.4	65.7	97.7	85.2	87.1	88.7	*115*	*125*	Depreciation ($mill)	*160*
	--	--	--	d4.5	20.6	11.4	5.3	24.9	28.0	26.4	*12.0*	*22.0*	Net Profit ($mill)	*45.0*
	--	--	--	NMF	17.4%	29.0%	55.8%	32.3%	36.0%	35.5%	*31.0%*	*31.0%*	Income Tax Rate	*35.0%*
	--	--	--	NMF	6.4%	3.5%	1.3%	6.1%	7.3%	7.1%	*2.4%*	*3.5%*	Net Profit Margin	*6.1%*
	--	--	--	11.1	8.4	14.7	7.3	23.8	60.7	83.0	*350*	*380*	Working Cap'l ($mill)	*2500*
	--	--	--	555.0	594.0	891.6	880.3	880.0	884.0	875.7	*1170*	*1155*	Long-Term Debt ($mill)	*1100*
	--	--	--	199.2	115.0	155.4	70.1	74.5	67.0	42.3	*55.0*	*65.0*	Shr. Equity ($mill)	*120*
	--	--	--	2.7%	6.0%	3.8%	4.1%	5.6%	5.6%	5.6%	*4.0%*	*4.5%*	Return on Total Cap'l	*6.5%*
	--	--	--	NMF	17.9%	7.4%	7.5%	33.4%	41.8%	62.4%	*22.0%*	*34.0%*	Return on Shr. Equity	*37.5%*
	--	--	--	NMF	NMF	NMF	NMF	NMF	NMF	NMF	*NMF*	*NMF*	Retained to Com Eq	*NMF*
	--	--	--	NMF	NMF	NMF	NMF	NMF	NMF	NMF	*NMF*	*NMF*	All Div'ds to Net Prof	*NMF*

BUSINESS: Consolidated Communications Holdings, Inc. provides communications services to residential and business customers in Illinois, Pennsylvania, Texas, Kansas, Missouri, and California. The company offers local and long distance service, custom calling features, private line services, dial-up and high-speed Internet access, digital TV, carrier access services, network capacity services over its regional fiber optic network, and directory publishing. It also operates telemarketing, order fulfillment, telephone services to county jails and state prisons, and mobile services. 2011 depreciation rate: 8.4%. CEO & President: Robert J. Currey. Incorporated: Delaware. Address: 121 South 17th Street, Mattoon, Illinois 61938-3987. Telephone: (217) 235-3311. Internet: www.consolidated.com.

Consolidated Communications just completed its acquisition of SureWest Communications, a provider of similar services, with 2011 revenues of about $248 million. Terms called for Consolidated to acquire all of the outstanding shares of SureWest through a cash-and-stock deal valued at nearly $341 million, exclusive of debt. To help finance the purchase, the company sold $300 million in senior notes due 2020.

We like this strategy. For one thing, SureWest brings some 130,000 residential subscribers and about 15,700 commercial customers in Kansas City, Kansas; Kansas City, Missouri; and Sacramento, California (three new states for the telecom company). Integration charges will probably dilute earnings per share in 2012. Nevertheless, synergies ought to lead to accretion to the bottom line next year and thereafter.

Meanwhile, Consolidated's 2012 profits have been substantially lower than last year's. That is attributable partially to certain financing and related costs incurred as a result of the SureWest purchase. What's more, the traditional wireline operation continues to struggle, given heightened competition from such entities as wireless providers and cable operators. On the positive side, data and Internet revenues are on the rise. That reflects growth in the number of DSL and IPTV subscribers, made possible, in part, by the offering of more-appealing bundled service packages. Still, it appears that full-year share net will plummet roughly 60%, to $0.35. But the bottom line stands to recover some in 2013, possibly to $0.55 a share, as the benefits of the SureWest transaction come to the fore.

The neutrally ranked stock offers an appealing level of current dividend income, thanks to healthy cash flows. The payout ratio is on the high side, but ought to improve, in time, with the addition of SureWest. Meanwhile, these shares have limited capital appreciation potential at the recent quotation.

Frederick L. Harris, III September 21, 2012

CASH POSITION	5-Year Av'g	6/30/12
Current Assets to Current Liabilities:	147%	NMF
Cash & Equiv's to Current Liabilities:	66%	83%
Working Capital to Revenues:	10%	195%

(A) Based on diluted shares. Excludes nonrecurring tax benefit: '10, 16¢. Next earnings report due early Nov.
(B) Div'ds paid early February, May, August and November.
(C) In millions.
(D) Includes intang. At 12/31/11: $590.7 mill., $19.78/share.

Company's Financial Strength	C++
Stock's Price Stability	75
Price Growth Persistence	85
Earnings Predictability	30

FRONTIER COMMUN. NDQ-FTR

RECENT PRICE 4.76 | P/E RATIO 16.4 (Trailing: 19.0 / Median: 25.0) | RELATIVE P/E RATIO 1.08 | DIV'D YLD 8.4% | VALUE LINE

TIMELINESS 3 Lowered 9/7/12
SAFETY 3 Lowered 4/6/01
TECHNICAL 1 Raised 8/31/12
BETA .95 (1.00 = Market)

2015-17 PROJECTIONS

	Price	Gain	Ann'l Total Return
High	9	(+90%)	22%
Low	6	(+25%)	12%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	1	0	0	0	0	0	8	2
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	0	0	0	0	0

Institutional Decisions

	4Q2011	1Q2012	2Q2012
to Buy	201	206	220
to Sell	306	288	251
Hld's(000)	471718	586249	548534

	2010	2011	2012	2013
High:	12.9	8.9	9.8	9.8	5.4
Low:	6.4	5.3	7.0	4.8	3.1

LEGENDS
4.0 x "Cash Flow" p sh
Relative Price Strength
Options: Yes
Shaded areas indicate recessions

Percent shares traded: 21, 14, 7

Target Price Range 2015 | 2016 | 2017: 32, 24, 20, 16, 12, 10, 8, 6, 4, 3

% TOT. RETURN 8/12

	THIS STOCK	VL ARITH.* INDEX
1 yr.	-30.9	11.2
3 yr.	-9.3	47.4
5 yr.	-45.3	27.8

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	© VALUE LINE PUB. LLC	15-17
5.06	5.42	5.95	4.15	6.78	8.73	9.45	8.59	6.46	6.59	6.28	6.86	7.19	6.78	3.82	5.27	5.00	4.75	Revenues per sh	4.15
1.47	.76	1.33	1.07	1.35	1.88	2.26	2.52	2.17	2.26	2.15	2.24	2.39	1.91	1.05	1.65	1.65	1.65	"Cash Flow" per sh	1.90
.70	d.17	.33	.07	d.11	d.38	d.42	.43	.52	.59	.65	.57	.57	.38	.23	.24	.27	.30	Earnings per sh A	.40
--	--	--	--	--	--	--	--	2.50D	1.00	1.00	1.00	1.00	1.00	.88	.75	.40	.40	Div'ds Decl'd per sh D	.40
1.35	2.07	1.86	1.85	2.02	1.89	1.66	.98	.81	.82	.83	.96	.93	.82	.58	.83	.75	.70	Cap'l Spending per sh	.55
6.50	6.54	6.92	7.33	6.47	6.92	4.15	4.97	4.01	3.17	3.28	3.04	1.67	1.05	5.24	4.49	4.35	4.60	Book Value per sh B	5.35
258.17	256.96	259.15	262.08	265.77	281.29	282.48	284.71	339.63	328.17	322.27	327.75	311.31	312.33	993.86	995.13	998.00	997.00	Common Shs Outst'g C	995.00
14.9	--	27.5	NMF	--	--	--	26.4	25.3	22.2	20.5	25.1	18.7	19.3	34.8	31.2	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	18.0
.93	--	1.43	NMF	--	--	--	1.51	1.34	1.18	1.11	1.33	1.13	1.29	2.21	1.95			Relative P/E Ratio	1.20
--	--	--	--	--	--	--	--	19.0%	7.6%	7.5%	7.0%	9.4%	13.7%	11.0%	10.0%			Avg Ann'l Div'd Yield	5.6%
2669.3	2444.9	2193.0	2162.5	2025.4	2249.3	2237.0	2117.9	3797.7	5243.0	4980	4730	Revenues ($mill)	4150
d111.7	128.3	163.0	200.2	215.3	189.0	182.7	120.8	152.7	236.0	270	300	Net Profit ($mill)	400
--	34.4%	25.0%	29.6%	34.6%	37.4%	36.8%	36.2%	42.5%	39.5%	37.5%	38.0%	Income Tax Rate	38.0%
NMF	5.2%	7.4%	9.3%	10.6%	8.4%	8.2%	5.7%	4.0%	4.5%	5.4%	6.3%	Net Profit Margin	9.6%
78.3%	72.2%	75.8%	79.3%	80.8%	82.6%	90.1%	93.6%	60.5%	64.7%	64.0%	61.0%	Long-Term Debt Ratio	55.0%
18.5%	24.3%	24.2%	20.7%	19.2%	17.4%	9.9%	6.4%	39.5%	35.3%	36.0%	39.0%	Common Equity Ratio	45.0%
6330.8	5812.1	5629.2	5041.2	5518.8	5734.8	5240.7	5121.7	13193	12675	12000	11750	Total Capital ($mill)	11800
3690.1	3525.6	3338.3	3186.5	2983.5	3335.2	3240.0	3133.5	7590.6	7547.5	7600	7700	Net Plant ($mill)	8000
2.0%	5.8%	6.3%	7.3%	6.9%	6.6%	6.9%	6.1%	3.1%	4.5%	4.0%	4.0%	Return on Total Cap'l	5.0%
NMF	7.9%	12.0%	19.2%	20.3%	18.9%	35.2%	36.9%	2.9%	5.3%	6.0%	6.5%	Return on Shr. Equity	7.5%
NMF	8.6%	12.0%	19.2%	20.3%	18.9%	35.2%	36.9%	2.9%	5.3%	6.0%	6.5%	Return on Com Equity	7.5%
NMF	8.6%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	Retained to Com Eq	Nil
NMF	5%	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	All Div'ds to Net Prof D	100%

CAPITAL STRUCTURE as of 6/30/12

Total Debt $8287.1 mill. **Due in 5 Yrs** $2500 mill.
LT Debt $7670.5 mill. **LT Interest** $675.0 mill.

No Defined Benefit Pension Plan

Pfd Stock None

Common Stock 998,525,000 shs.
as of 7/27/12

MARKET CAP: $4.8 billion (Mid Cap)

CURRENT POSITION ($MILL.)	2010	2011	6/30/12
Cash Assets	251.3	326.1	410.0
Other	877.1	943.9	888.8
Current Assets	1128.4	1270.0	1298.8
Accts Payable	436.9	519.5	314.7
Debt Due	280.0	94.0	616.6
Other	722.5	569.7	608.3
Current Liab.	1439.4	1183.2	1539.6
Fix. Chg. Cov.	174%	159%	156%

ANNUAL RATES of change (per sh)	Past 10 Yrs.	Past 5 Yrs.	Est'd '09-'11 to '15-'17
Revenues	-2.0%	-4.0%	-4.0%
"Cash Flow"	.5%	-7.0%	3.5%
Earnings	--	-13.5%	6.0%
Dividends	--	-10.0%	-12.5%
Book Value	-6.5%	.5%	7.0%

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	538.0	532.1	526.8	521.0	2117.9
2010	519.9	516.1	1403.0	1358.7	3797.7
2011	1346.7	1322.3	1290.9	1283.1	5243.0
2012	1268.1	1258.8	1233.1	1220	4980
2013	1205	1190	1175	1160	4730

Calendar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	.12	.09	.17	.01	E.38
2010	.07	.05	.04	.07	.23
2011	.06	.06	.05	.07	.24
2012	.05	.08	.07	.07	.27
2013	.07	.07	.08	.08	.30

Calendar	QUARTERLY DIVIDENDS PAID D Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2008	.25	.25	.25	.25	1.00
2009	.25	.25	.25	.25	1.00
2010	.25	.25	.188	.188	.88
2011	.188	.188	.188	.188	.75
2012	.10	.10	.10		

BUSINESS: Frontier Communications Corporation (formerly Citizens Communications) offers voice, data, high-speed Internet, and satellite video services to consumers and businesses in 27 states. It had also provided competitive local exchange carrier (CLEC) services to retail business customers and to other communications carriers through Electric Lightwave, Inc., which it sold in 7/06. It previously divested its public services businesses. Acquired Commonwealth Telephone Enterprises, 3/07; Verizon's local wireline unit, 7/10. Has about 15,400 employees. Officers/Directors own less than 1% of common (3/12 proxy). Chairman & CEO: Maggie Wilderotter. Inc.: DE. Addr.: 3 High Ridge Park, Stamford, CT 06905. Tel.: 203-614-5600. Internet: www.frontieronline.com.

Things are starting to look up at Frontier Communications. Investors have generally been steering clear of this high-yield RLEC (Rural Local Exchange Carrier), due, we think, to fears that the dividend would have to be cut once again in order to deleverage the balance sheet and further upgrade the landline assets that the company purchased from Verizon back in mid-2010. But the current payout (of $0.10 a quarter) appears to be on safe ground for the foreseeable future, thanks to refinancing activities that have reduced Frontier's debt burden and to some significant operational improvements. In fact, the company now has one of the better-covered dividends in the RLEC sector (the total payout relative to available cash flow), making this issue a decent choice for income-oriented accounts.

Recent results have been pretty encouraging. After a challenging stretch, when Frontier looked to be struggling to integrate the acquired Verizon properties, fundamentals seem to be getting better. During the June interim, access-line losses of 93,000 were far fewer than we had anticipated, primarily because of customer service enhancements and the rollout of new product bundles in the former Verizon territories. Moreover, broadband subscriber growth remained solid (net additions were 5,400 in the period), which helped to offset the line erosion. And savings stemming from the Verizon deal continued to mount, bolstering the company's all-important free cash flow.

Annualized merger-related synergies are currently tracking at about $640 million. Even better, the year-end run-rate ought to reach at least $650 million, as Frontier realizes more savings from its systems consolidation efforts. And we expect costs to be further pared next year, aided by more network integration and a consolidation of real estate holdings.

These shares, rebounding a bit of late, are now ranked 3 (Average) for Timeliness. The stock has appeal as a yield play, however, as we have already suggested. Indeed, we see no reason for income-driven investors to hesitate here, given the heightened broadband penetration, rising synergies, and better overall execution on the part of management.

Justin Hellman *September 21, 2012*

(A) Diluted earnings. Excl. nonrecurring gains/(losses): '97, $0.21; '98, ($0.11); '99, $0.38; '02, ($2.01); '03, $0.24; '04, ($0.28). Excl. gain from disc. ops.: '99, $0.10. Next earnings report due early November. (B) Incl. intang.: '11, $8302.2 mill. ($8.34/sh.) (C) In mill. (D) Incl. special dividend in '04 of $2.00. New quarterly dividend policy adopted in 7/04. Payments typically made in March, June, September, and December. (E) Quarterly share net does not sum in '09 due to rounding.

Company's Financial Strength	B
Stock's Price Stability	75
Price Growth Persistence	5
Earnings Predictability	65

WINDSTREAM CORP. NDQ-WIN

RECENT PRICE 10.52 | P/E RATIO 18.8 (Trailing: 18.5 Median: NMF) | RELATIVE P/E RATIO 1.24 | DIV'D YLD 9.5% | VALUE LINE

TIMELINESS 3 Lowered 3/23/12
SAFETY 3 New 12/29/06
TECHNICAL 3 Lowered 8/17/12
BETA .90 (1.00 = Market)

2015-17 PROJECTIONS

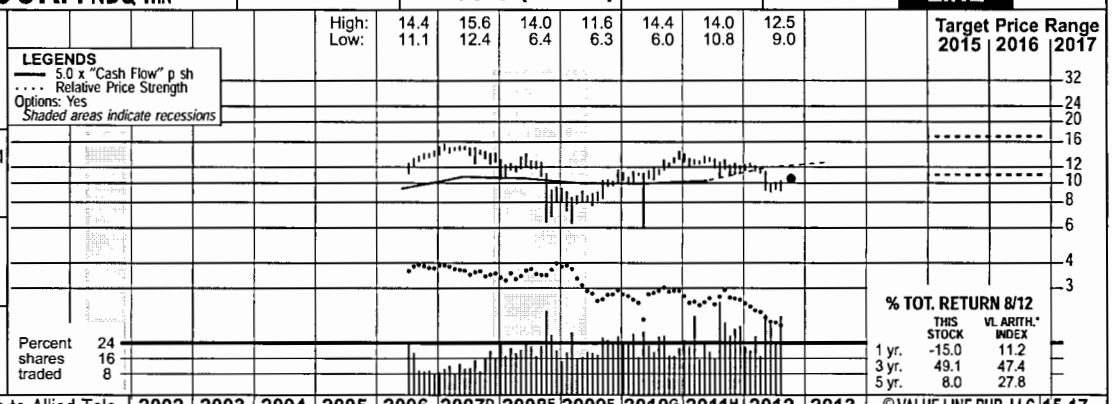
	Price	Gain	Ann'l Total Return
High	17	(+60%)	18%
Low	11	(+5%)	8%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	1	0	0	0	0	0	9	3
Options	0	0	0	0	0	0	0	0	0
to Sell	0	0	0	0	1	0	0	0	0

Institutional Decisions

	4Q2011	1Q2012	2Q2012
to Buy	227	243	217
to Sell	210	180	206
Hld's(000)	269249	307095	278944



Windstream traces its roots to Allied Telephone Co. of Little Rock, Arkansas formed in 1943. In 1983, Allied merged with Mid-Continent Telephone Co. of Ohio, creating ALLTEL Corp. ALLTEL acquired Standard Group, Inc. and Aliant Communications in 1999. That telco purchased phone lines from GTE, Verizon and others. On 7/17/06, in a $9.1 billion equity and debt deal, ALLTEL spun off its wireline assets, which merged with VALOR Communications to form Windstream. Since then, the company has grown via several multi-million dollar acquisitions.

CAPITAL STRUCTURE as of 6/30/12
Total Debt $8860.1 mill. **Due in 5 Yrs** $3280.4 mill.
LT Debt $8794.3 mill. **LT Interest** $560.0 mill.
(LT interest earned: 2.0x;
total interest coverage: 2.1x)
Leases, Uncapitalized Annual rentals $175.6 mill.
Pension Assets-12/11 $948.9 mill.
Oblig. $1282.9 mill.
Pfd Stock None
Common Stock 587,994,865 shs. **as of 7/31/12**
MARKET CAP: $6.8 billion (Large Cap)

CURRENT POSITION ($MILL.)	F2010	G2011	6/30/12
Cash Assets	42.3	248.7	65.3
Other	645.4	1269.7	1046.6
Current Assets	687.7	1518.4	1111.9
Accts Payable	151.3	296.0	306.2
Debt Due	139.2	213.7	65.8
Other	695.0	949.8	929.7
Current Liab.	985.5	1459.5	1301.7
Fix. Chg. Cov.(%)	214	215	152

ANNUAL RATES (of change (per sh))	Past 10 Yrs.	Past 5 Yrs.	Est'd '09-'11 to '15-'17
Revenues	--	2.5%	*8.5%*
"Cash Flow"	--	1.5%	*8.5%*
Earnings	--	-7.5%	*9.5%*
Dividends	--	37.5%	*Nil*
Book Value	--	10.0%	*.5%*

Calendar	QUARTERLY REVENUES ($ mill.) Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	755	753	734	755	F2997
2010	848	917	966	981	G3712
2011	1023	1030	1023	1210	H4286
2012	1545	1538	*1500*	*1417*	*6000*
2013	*1400*	*1550*	*1600*	*1650*	*6200*

Calendar	EARNINGS PER SHARE A Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	.20	.21	.18	.17	F.76
2010	.16	.17	.18	.15	G.66
2011	.18	.18	.17	.15	H.68
2012	.13	.12	*.14*	*.16*	*.55*
2013	*.14*	*.15*	*.15*	*.16*	*.60*

Calendar	QUARTERLY DIVIDENDS PAID B ■ Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2008	.25	.25	.25	.25	1.00
2009	.25	.25	.25	.25	1.00
2010	.25	.25	.25	.25	1.00
2011	.25	.25	.25	.25	1.00
2012	.25	.25	.25		

	2002	2003	2004	2005	2006	2007D	2008E	2009F	2010G	2011H	2012	2013	© VALUE LINE PUB. LLC	15-17
	--	--	--	--	6.36	7.17	7.22	6.86	7.36	7.31	*10.20*	*10.55*	Revenues per sh	*11.85*
	--	--	--	--	1.89	2.14	2.12	2.00	1.99	2.06	*2.40*	*2.55*	"Cash Flow" per sh	*3.30*
	--	--	--	--	1.03	.98	.98	.76	.66	.68	*.55*	*.60*	Earnings per sh A	*1.20*
	--	--	--	--	.20	1.00	1.00	1.00	1.00	1.00	*1.00*	*1.00*	Div'ds Decl'd per sh B ■	*1.00*
	--	--	--	--	.78	.80	.72	.68	.82	1.20	*1.75*	*1.30*	Cap'l Spending per sh	*1.20*
	--	--	--	--	.99	1.54	.57	.60	1.65	2.56	*2.05*	*1.60*	Book Value per sh	*1.65*
	--	--	--	--	476.80	454.50	439.40	436.80	504.30	586.30	*588.00*	*589.00*	Common Shs Outst'g C	*590.00*
	--	--	--	--	13.0	14.5	11.5	11.7	17.6	18.4	*Bold figures are*		Avg Ann'l P/E Ratio	*11.5*
	--	--	--	--	.70	.77	.69	.78	1.12	1.16	*Value Line*		Relative P/E Ratio	*.75*
	--	--	--	--	1.5%	7.0%	8.9%	11.2%	8.6%	8.0%	*estimates*		Avg Ann'l Div'd Yield	*7.1%*
	--	--	2933.5	2923.5	3033.3	3260.8	3171.5	2996.6	3712.0	4285.7	*6000*	*6200*	Revenues ($mill)	*7000*
	--	--	386.3	381.7	450.5	465.8	434.9	334.5	310.7	361.4	*300*	*330*	Net Profit ($mill)	*660*
	--	--	40.2%	41.2%	38.3%	35.1%	39.4%	38.7%	38.5%	36.9%	*38.0%*	*40.0%*	Income Tax Rate	*40.0%*
	--	--	13.2%	13.1%	14.9%	14.3%	13.7%	11.2%	8.4%	8.4%	*5.0%*	*5.3%*	Net Profit Margin	*9.4%*
	--	--	6.6%	6.4%	92.1%	88.4%	95.5%	96.0%	89.6%	85.6%	*84.5%*	*84.0%*	Long-Term Debt Ratio	*83.0%*
	--	--	93.4%	93.6%	7.9%	11.6%	4.5%	4.0%	10.4%	14.4%	*15.5%*	*16.0%*	Common Equity Ratio	*17.0%*
	--	--	3967.6	3727.9	5926.0	6031.0	5610.5	6532.1	8017.2	10435	*7675*	*5950*	Total Capital ($mill)	*5775*
	--	--	3074.3	2963.6	3939.8	4042.3	3897.1	3992.6	4772.7	5708.1	*5640*	*5255*	Net Plant ($mill)	*3725*
	--	--	10.0%	10.5%	9.4%	11.4%	11.4%	8.2%	7.1%	6.1%	*4.0%*	*5.5%*	Return on Total Cap'l	*11.5%*
	--	--	10.4%	10.9%	95.9%	66.6%	NMF	NMF	37.4%	24.1%	*25.0%*	*34.5%*	Return on Shr. Equity	*67.5%*
	--	--	10.4%	10.9%	95.9%	66.6%	NMF	NMF	37.4%	24.1%	*25.0%*	*34.5%*	Return on Com Equity	*67.5%*
	--	--	10.4%	10.9%	74.1%	NMF	NMF	NMF	NMF	NMF	*NMF*	*NMF*	Retained to Com Eq	*7.0%*
	--	--	--	--	23%	102%	102%	NMF	NMF	NMF	*NMF*	*NMF*	All Div'ds to Net Prof	*89%*

BUSINESS: Windstream Corp. is one of the largest rural wireline telecom companies in the U.S. Provides local telephone service to over three million customers across 29 states. Also operates long distance phone, Internet, product distribution, and communication and technology solutions. Sold directory publishing business 11/07, wireless operations 12/08. Local and long-haul fiber network: 115,000 miles. Access lines: 3.2 mill. Has 1.34 mill. broadband and 445,800 digital-TV accounts. Off. & dir. own less than 1% of com; BlackRock, 5.75% (4/12 proxy). 2011 deprec. rate: 6.6%. Has 14,638 empls. Chrmn: Dennis Foster. Pres. & CEO: J.Gardner. Inc.: DE. Addr.: 4001 Rodney Parham Rd., Little Rock, AR 72212. Tel.: 501-748-7000. Web: www.windstream.com/about.

Windstream may have a difficult time meeting full-year guidance. Second-quarter earnings were in line with our estimate and management's forecast, but top-line results were below the year-earlier figure on a pro forma basis. Too, operating income before depreciation and amortization (OIBDA) fell 2%. However, management reiterated the company should meet the lower end of guidance in 2012, betting on a turnaround in the second half that may well materialize due to higher pricing, upselling add-on services, and new features in the consumer segment. In accordance with the surrounding skepticism, we have maintained our estimates for the year until we see a convincing third-quarter performance.

The company is in the midst of a restructuring phase. Windstream hopes to optimize its operating model to increase cost savings. These efforts should be realized in the third quarter, and are expected to contribute between $30 million and $40 million in annualized savings. These efforts should augur well for Windstream's bottom-line going forward.

Fiber-to-the-tower looks to be completed by the end of 2013. While the company continues to integrate its PAETEC acquisition, it also furthers the reconfiguration of its cell sites to support higher bandwidth. With over 1,500 towers completed, and 2,100 currently under construction, WIN expects between 4,000 and 5,000 towers to be completed by the end of next year. We maintain a high capex figure for the current year, which we expect to drop next year and onward as certain projects wind down.

The dividend may be in jeopardy. The consensus on the Street seems to be a revenue miss for the current year. The company has a high payout ratio, so any profit turbulence could pressure the distribution. Also, the company expects cash taxes to rise in 2013, so free cash flow generation and EBITDA growth will be essential in maintaining the current yield. The pending cut in capital spending should help ease any decline.

This high-yielding stock may be worthwhile for the time being. However, appreciation potential remains modest, at best, over the 3- to 5-year pull.

Eugene Varghese *September 21, 2012*

(A) Diluted earnings. Excludes net nonrecurring gains/(loss): '06, 22¢; '07, 96¢; '08, (5¢); '11, (35¢); Q1 '12 (2¢). Next earnings report due early November. (B) Dividends paid in mid-January, April, July and October. ■ Dividend reinvestment plan available. (C) In millions. (D) Excludes directory publishing unit and includes CT Comm. (E) Excludes former CT Comm. wireless ops. (F) Includes D&E Comm. and Lexcom (G) Incl. NuVox and Iowa Telecom beginning 6/1/10. (H) Incl. PAETEC acquisition.

Company's Financial Strength	B
Stock's Price Stability	85
Price Growth Persistence	55
Earnings Predictability	90

Alaska Communications Systems

Business Description from ThomsonFN (YahooFinance):

Alaska Communications Systems Group, Inc. provides integrated communications services primarily in Alaska. The company operates in two segments, Wireline and Wireless. The Wireline segment offers voice, broadband data, internet access, long distance, and other communications products and services; local exchange network and network connectivity solutions; voice and broadband termination services to inter and intrastate carriers; and multi-protocol label switching, metro Ethernet, network access, and other information technology infrastructure hosting and management services. This segment serves business customers; multi-national corporations; municipal, state, and federal governments; residential customers; small and medium sized businesses; governmental entities; and other telecommunications carriers. The Wireless segment provides facilities-based voice, data, and other value-added services, as well as equipment sales services; and operates 14 retail stores. As of December 31, 2011, its wireless network supported approximately 118,000 connections. Alaska Communications Systems Group, Inc. was founded in 1998 and is headquartered in Anchorage, Alaska.

From 2011 SEC Form 10-K; p10

Federal universal service support

The Communications Act requires the FCC to establish a universal service program to ensure that affordable, quality telecommunications services are available to all Americans. The Company receives USF funding for its wireless business as a CETC, and for its local exchange businesses as a price cap carrier. For the year ended December 31, 2011, the Company recognized $26.9 million in wireless CETC and $21.3 million in high cost loop support for its LECs; for the year ended December 31, 2010, the corresponding amounts were $25.7 million and $23.8 million. Combined, these amounts represent 13.8% of our total revenues for the twelve month period ended December 31, 2011.

The universal service support program at the federal level has several components, including one that pays support to LECs serving areas for which the costs of providing basic telephone service are higher than the national average. In addition to support for serving high cost areas, ACS is eligible for support for communications services provided to low-income consumers under the Lifeline program, and for connecting schools and libraries to the Internet under the E-rate program. The Lifeline program recently was reformed by the FCC, and the E-rate program is the subject of ongoing FCC rulemaking proceedings. Recently the FCC significantly modified the high cost program in the USF/ICC Order, and additional changes to the high cost program are pending.

USF disbursements may be distributed only to carriers that are designated as "eligible telecommunications carriers" ("ETCs") by a state regulatory commission. All of the ACS ILECs are ETCs in Alaska. Some of our competitors and ACS Wireless, Inc. ("ACSW") are competitive ETCs ("CETCs") in the service areas of the ACS ILECs and elsewhere.

The recent USF/ICC Order made a number of changes, including:

•Phasing out the existing high cost funding mechanisms and establishing the Connect American Fund ("CAF") to support both voice and broadband fixed services in high cost areas served by price cap carriers, such as our LECs; and

•Establishing a separate mobility fund to support mobile voice and broadband services in unserved and high cost areas while freezing and phasing out the identical support rule for CETCs, including ACSW and our competitors.

Funding under the new programs will generally require recipients to provide broadband to unserved locations throughout the designated coverage area by the end of a specified build-out period – typically three to five years – as well as meeting interim build-out obligations. Extremely high cost locations are exempt from the build-out requirement, and will be targeted through a separate support mechanism, the Remote Areas Fund, which the FCC is developing. Financial penalties may apply if build-out obligations or service metrics are not met.

CenturyLink, Inc.

Business Description from ThomsonFN (YahooFinance):

CenturyLink, Inc. operates as an integrated telecommunications company in the United States. The company provides local and long-distance, network access, private line, public access, broadband, data, managed hosting, colocation, wireless, and video services to consumers and businesses. It offers video entertainment services under the CenturyLink Prism TV and DIRECTV brands. CenturyLink also provides data, voice, and managed services to enterprise, government, and wholesale customers in local, national, and select international markets through its fiber optic network and data centers. In addition, it provides network services, cloud infrastructure, and hosted information technology solutions for enterprises. CenturyLink sells its products through direct sales representatives, inbound call centers, local retail stores, telemarketing, and third parties. It has strategic partnership with DIRECTV and Verizon Wireless. The company was founded in 1968 and is headquartered in Monroe, Louisiana.

From 2011 SEC Form 10-K, pp12-13

Our legacy services continue to generate declining revenues, and our efforts to offset these declines may not be successful.

The telephone industry has experienced a decline in access lines and network access revenues, which, coupled with the other changes resulting from competitive, technological and regulatory developments, continue to place downward pressure on the revenues we generate from our legacy services.

We have taken a variety of steps to counter these declines, including:

• an increased focus on selling a broader range of strategic services, including broadband, satellite television provided by DIRECTV and wireless voice services provided by Verizon Wireless, as well as our own facilities-based digital video services;

• greater use of service bundles; and

• acquisitions to increase our scale and strengthen our product offerings, including new products and services provided by our Savvis operations.

However, some of these strategic services generate lower profit margins than our traditional services, and some can be expected to experience slowing growth as increasing numbers of our

existing or potential customers subscribe to these newer products. Moreover, we cannot assure you that the revenues generated from our new offerings will offset revenue losses associated from reduced sales of our legacy products, nor can we assure you that we will be able to continue to grow through acquisitions. In addition, our reliance on services provided by others could constrain our flexibility, as described further below.

Universal Service Fund and Other Related Matters

For decades, the FCC has regularly considered various intercarrier compensation reforms, generally with a goal to create a uniform mechanism to be used by the entire telecommunications industry for payments between carriers originating, terminating, or carrying telecommunications traffic. In connection therewith, the FCC has received intercarrier compensation proposals from several industry groups, and solicited public comments on a variety of topics related to access charges and intercarrier compensation. In early 2011, the FCC issued a notice of proposed rulemaking focused on modernizing its universal service policies and intercarrier compensation rules.

On October 27, 2011, the FCC adopted the Connect America and Intercarrier Compensation Reform order ("CAF order") intended to reform the existing regulatory regime to recognize ongoing shifts to new technologies, including VoIP, and gradually re-direct universal service funding to foster nationwide broadband coverage. This initial ruling provides for a multi-year transition over the next decade as intercarrier compensation charges are reduced, universal service funding is explicitly targeted to broadband deployment, and subscriber line charges paid by end user customers are gradually increased. These changes will substantially increase the pace of reductions in the amount of switched access revenues we receive in our wholesale segment, while creating opportunities for increases in federal USF and retail revenue streams. The ultimate effect of this order on communications companies is largely dependent on future FCC proceedings designed to implement the order, the most significant of which are scheduled to be determined in 2012 and 2013.

Consolidated Communications Holdings (CNSL)

Business Description from ThomsonFN (YahooFinance):

Consolidated Communications Holdings, Inc., together with its subsidiaries, provides telecommunications services to residential and business customers in Illinois, Texas, and Pennsylvania. Its telecommunications services include local and long-distance services, high-speed broadband Internet access, standard and high-definition digital television, digital telephone services, custom calling features, private line services, carrier access services, network capacity services over its regional fiber optic network, and competitive local exchange carrier (CLEC) services. The company also offers telephone directory publishing services, wholesale transport services on its fiber-optic network in Texas, billing and collection services, inside wiring services, and maintenance services. In addition, it provides automated calling services for correctional facilities; and sells and supports telecommunications equipment, such as key, private branch exchange, and IP-based telephone systems to business customers in Texas and Illinois. The company serves residential customers, and universities and hospitals, as well as retail, commercial, light manufacturing, and service industry accounts in Illinois; manufacturing and retail industries, hospitals, local governments, and school districts in Texas; and small to mid-sized businesses, educational institutions, and healthcare facilities in Pennsylvania. As of December 31, 2011, it had 227,992 local access lines, 110,913 digital subscriber lines, 34,356 Internet protocol digital television subscribers, 9,199 voice over Internet protocol, and 89,774 CLEC access line equivalents. The company was founded in 1894 and is headquartered in Mattoon, Illinois.

2011 SEC Form 10-K, pp40-41

Regulatory Risks -- The telecommunications industry is subject to extensive regulation that could change in a manner adverse to us.

Our main sources of revenues are our local telephone businesses in Illinois, Pennsylvania and Texas. The laws and regulations governing these businesses may be, and in some cases have been, challenged in the courts, and could be changed by Congress, state legislatures, or regulators. In addition, federal or state authorities could impose new regulations that increase our operating costs or capital requirements or that are otherwise adverse to us. We cannot predict future developments or changes to the regulatory environment or the impact such developments or changes may have on us.

Legislative or regulatory changes could reduce or eliminate the revenues our rural telephone companies receive from network access charges.

A significant portion of our ILECs' revenues come from network access charges paid by long-distance and other carriers for using our local telephone facilities to originate or terminate long-distance calls in our service areas. The amount of network access charge revenues that our ILECs receive is based on interstate rates set by the FCC and intrastate rates set by state regulators. The FCC has reformed, and continues to reform, the federal network access system.

The FCC order released November 18, 2011 addresses comprehensive reform of all access charges, state and interstate, as well as a complete overhaul of the universal service high cost program. The full impact of the comprehensive order is not known at this time, and the FCC through various regulatory processes could have material changes to its initial order. In addition, there are several companies, state commissions and associations that have filed an appeal of the order, including Consolidated. It is unclear at this time what impact, if an, there would be from any of these processes.

Legislative or regulatory changes could reduce or eliminate the government subsidies we receive

The federal and state systems of subsidies, which constitute a significant portion of our revenues, may be modified. On November 18, 2011 the FCC released its comprehensive order on intercarrier compensation and universal service reform. See Part I - Item 1- "Business — Regulatory Environment — FCC Access Charge and Universal Service Reform Order." The PUCT has initiated proceedings to review the state high cost funds for large and small carriers. The proceedings will take a comprehensive review of high cost funds and provide recommended changes to the legislature.

During the last three years, the FCC has modified the Federal Universal Service Fund system to change the sources of support and the method for determining the level of support that will be distributed. The FCC is considering proposals for additional changes to the Federal Universal Service Fund. These issues may become the subject of legislative amendments to the Telecommunications Act. In addition, the Pennsylvania PUC has a proceeding to review its state universal service fund program. As part of the proceeding, the PAPUC could attempt to override the current Pennsylvania statute 183 which provides for revenue offsets for any reduction to intrastate access.

If our rural telephone companies do not continue to receive federal and state subsidies, or if these subsidies are reduced, these subsidiaries likely will have lower revenues and may not be able to operate as profitably as they have in the past.

Proposed access and universal service reforms could have an adverse impact on our revenues.

Frontier Communications

Business Description from ThomsonFN (YahooFinance):

Frontier Communications Corporation provides communications services for residential and business customers in the United States. The company offers local and long distance voice services, including basic telephone wireline services to residential and business customers; and packages of communications services. It also provides data and Internet services comprising residential services, such as high-speed Internet, dial up Internet, portal and e-mail products, and hard drive back-up services; commercial services, such as Ethernet, dedicated Internet, multiprotocol label switching, and TDM data transport services; and wireless data services. In addition, the company offers switched access services that allow other carriers to use the facilities to originate and terminate their local and long distance voice and data traffic; and direct broadcast satellite services and fiber optic video services. Further, it sells a range of third-party telecommunications equipment for business customers. The company was formerly known as Citizens Communications Company and changed its name to Frontier Communications Corporation in July 2008. Frontier Communications Corporation was founded in 1927 and is based in Stamford, Connecticut.

2011 SEC Form 10-K, p15

We will likely face further reductions in access lines, switched access minutes of use, long distance revenues and federal and state subsidy revenues, which could adversely affect us .

We have experienced declining access lines, switched access minutes of use, long distance revenues, federal and state subsidies and related revenues because of economic conditions, increasing competition, changing consumer behavior (such as wireless displacement of wireline use, e-mail use, instant messaging and increasing use of VoIP), technology changes and regulatory constraints. For example, Frontier's access lines declined 8% in 2011 and 9% in 2010 on a full year pro forma basis. In addition, Frontier's switched access minutes of use declined 11% in 2011 and declined 14% in 2010 on a full year pro forma basis. We will likely continue to experience reductions in the future. The factors referred to above, among others, are likely to cause our local network service, switched network access, long distance and subsidy revenues to continue to decline, and these factors may cause our cash generated by operations to decrease.

Hickory Tech Corporation (HTCO)

Business Description from ThomsonFN (YahooFinance):

Hickory Tech Corporation provides integrated communications services to business and residential customers in the Midwest. The company operates in two segments, Business Sector and Telecom Sector. The Business Sector segment offers integrated data services, such as fiber, data and Internet, voice and voice over Internet protocol, managed and hosted, data center, equipment, and total care support services. This segment also distributes telecommunications and data processing equipment, as well as provides network and equipment monitoring, maintenance, and equipment consulting services; and offers fiber-based transport for regional and national telecommunications carriers, wireless carriers, and other providers. It serves businesses primarily in the upper Midwest. The

Telecom Sector segment offers network access services; and broadband services, such as residential and business DSL access, high-speed Internet, digital TV, and business Ethernet services. It also provides local telephone, long distance, and calling features services; and directory assistance, operator service, and long distance private lines. In addition, this segment offers directory publishing, customer premise equipment sales, bill processing, and add/move/change services. It owns and operates approximately 900 mile fiber optic network and facilities in Minnesota. Hickory Tech Corporation was founded in 1898 and is headquartered in Mankato, Minnesota

2011 SEC Form 10-K, pp17-18

Legislative or regulatory changes could reduce or eliminate the government subsidies we receive. The federal system of subsidies, from which we derive a portion of our revenue, is subject to modification. In its Order released November 18, 2011, the FCC adopted rules which dramatically reform the universal service program and intercarrier compensation regime unless they are changed as a result of petitions for reconsideration or appellate court challenges, we anticipate sources of revenue to shift from intercarrier compensation to end users.

In addition, under the Telecommunications Act of 1996, our competitors may obtain Federal Universal Service Fund subsidies if the MPUC or IUB, as applicable, determine that granting these subsidies to competitors would be in the public interest and the competitors offer certain telephone services as required by the Telecommunications Act of 1996 and the FCC. Under current rules, any such payments to our competitors would not affect the level of subsidies received by our ILEC and CLEC operations, but they would facilitate competitive entry into our ILEC and CLEC service areas and we may not be able to compete as effectively or otherwise continue to operate as profitably. Because of the growing number of competitors receiving Universal Service Fund subsidies, the FCC has taken action to discontinue payments to CLEC's. (PAGE 18)

<u>Shenandoah Telecommunications (SHEN)</u>

Business Description from ThomsonFN (YahooFinance):

Shenandoah Telecommunications Company, a diversified telecommunications company, provides regulated and unregulated telecommunications services to end-user customers and other communications providers in the southeastern United States. It offers a suite of voice, video, and data communications services; and sells telecommunications equipment. The company's Wireless segment provides digital wireless service to a portion of a four-state area covering the region from Harrisburg, York, and Altoona, Pennsylvania to Harrisonburg, Virginia. It owns 149 towers and leases tower space to other wireless communications providers in Virginia, West Virginia, Maryland, and Pennsylvania. This segment also offers personal communications services through a digital wireless telephone and data network. Its Wireline segment provides regulated and unregulated telephone services and leases fiber optic facilities primarily in the northern Shenandoah Valley. This segment also offers information services and Internet access to customers in the northern Shenandoah Valley and surrounding areas. In addition, it is involved in the resale of long distance service for calls placed to locations outside the regulated telephone service area by telephone customers. As of December 31, 2011, this segment had approximately 1,410 dial-up customers and 12,351 digital subscriber line customers, as well as served approximately 10,483 long distance customers. The company's Cable Television segment provides coaxial cable-based television service in the portions of Shenandoah County, Virginia, as well as in communities in West Virginia, southern and southwestern Virginia, and western Maryland. It had approximately 137,238 cable revenue generating units. The company was founded in 1902 and is headquartered in Edinburg, Virginia

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Universal Service Fund -- Shenandoah Telephone receives revenues from the USF. In October 2011, the FCC adopted comprehensive changes to the universal service program that are intended in part to stabilize the USF, the total funding of which has increased considerably in recent years. Some of the FCC's reforms impact the rules that govern disbursements from the USF to rural ILECs such as Shenandoah Telephone, and to other providers. Although a number of challenges to the FCC's reforms remain pending, such changes, and additional future changes, may reduce the size of the USF and payments to Shenandoah Telephone, which could have an adverse impact on the Company's financial position, results of operations, and cash flows. The Company is not able to predict if or when additional changes will be made to the USF, or whether and how such changes would affect the extent of our total federal universal service assessments, the amounts we receive, or our ability to recover costs associated with the USF.

Declines in consumer voice customers -- In spite of our ongoing efforts to gain market share, our consumer business remains under pressure due to competition from wireless carriers, cable television companies and other companies using emerging technologies. For the year ended December 31, 2011, our consumer access lines decreased by 81,000 lines, or 4.0 percent , as compared to the prior year.

Windstream Corporation (WIN)

Business Description from ThomsonFN (YahooFinance):

Windstream Corporation provides communications and technology solutions in the United States. The company offers business services, as well as provides broadband, voice, and video services to consumers primarily in rural markets. It offers business data services, including multi-site networking, high-speed Internet access; data center services; carrier services, such as Ethernet transport, and special access services, which provide access and network transport services to end users; and telephone services, as well as sells customized communications equipment systems to business customers. The company also provides consumer broadband services, including high-speed Internet, online backup services, and Internet security services; telephone services, which include call waiting, caller identification, and call forwarding; and video services, as well as sells broadband modems, home networking gateways, personal computers, and home phones. In addition, it offers wholesale services, which include switched access services to long-distance companies and other local exchange carriers for access to the company's network in connection with the completion of long-distance calls; and receives compensation from wireless and other local exchange carriers for the use of its facilities. Further, the company sells network equipment to contractors on a wholesale. As of December 31, 2011, its network consisted of approximately 115,000 of fiber optic plant in fiber backbone and local service areas. The company is based in Little Rock, Arkansas.

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Given these realities, it is vital that we remain squarely focused on expanding business and broadband services to drive top-line growth. By doing so, we expect to continue to create significant value for both our customers and our shareholders.

We are subject to various forms of regulation from the Federal Communications Commission ("FCC") and state regulatory commissions in the states in which we operate, which limit our pricing flexibility for regulated voice and high-speed Internet products, subject us to service quality, service

reporting and other obligations and expose us to the reduction of revenue from changes to the universal service fund or the intercarrier compensation system.

		Forecasted EPS Growth							
		3 to 5 Year Value-Line	5 Year IBES	5 Year Zack's	Forecast Average	Long-Run nGDP	Dividend Yield	2013 Dividend	Average Price
Alaska Communications	ALSK	21.80%	-10.00%	0.00%	3.93%	4.56%	9.30%	$ 0.20	$ 2.20
CenturyLink, Inc	CTL	1.50%	7.83%	3.00%	4.11%	4.56%	7.18%	$ 2.90	$ 41.30
Consolidated Communications	CNSL	4.00%	2.00%	2.00%	2.67%	4.56%	9.72%	$ 1.55	$ 16.32
Frontier Communications	FTR	6.00%	8.25%	28.00%	14.08%	4.56%	9.38%	$ 0.40	$ 4.36
Hickory Tech Corporation	HTCO	na	3.80%		3.80%	4.56%	5.34%	$ 0.56	$ 10.72
Shenandoah Telecommunications	SHEN		15.00%		15.00%	4.56%	2.15%	$ 0.33	$ 15.73
Windstream corporations	WIN	9.50%	-1.90%	2.00%	3.20%	4.56%	10.27%	$ 1.00	$ 9.96
		8.56%	3.57%	7.00%	6.68%	4.56%	7.62%		

		Forecasted Growth	Dividend Yield	Cost of Equity
Alaska Communications	ALSK	4.56%	9.30%	13.86%
CenturyLink, Inc	CTL	4.56%	7.18%	11.74%
Consolidated Communications	CNSL	4.56%	9.72%	14.28%
Frontier Communications	FTR	4.56%	9.38%	13.94%
Hickory Tech Corporation	HTCO	4.56%	5.34%	9.90%
Shenandoah Telecommunications	SHEN	4.56%	2.15%	6.71%
Windstream corporations	WIN	4.56%	10.27%	14.83%
Mean		4.56%	7.62%	12.18%

Alaska Communications Systems Group, Inc. (ALSK)

Earnings Growth Estimates (%)	ALSK	IND	S&P
Current Qtr (09/2012)	700	N/A	N/A
Next Qtr (12/2012)	50	N/A	N/A
Current Year (09/2011)	1.7	-12.3	5.7
Next Year (09/2012)	11.5	19.6	6.5
Past 5 Years	-9.6	-2.2	3.2
Next 5 Years	**0**	**12.1**	**0**
PE	61.8	-176	14.3
PEG Ratio	0	-12.5	0

Zacks.com

Growth Est	ALSK	Industry	Sector	S&P 500
Current Qtr.	7.00	N/A	N/A	0.07
Next Qtr.	0.60	N/A	7.13	0.20
This Year	19.00	0.04	0.70	0.08
Next Year	0.10	0.59	0.01	0.14
Past 5 Years (per annum)	(0.20)	N/A	N/A	N/A
Next 5 Years (per annum)	**(0.10)**	**0.15**	**0.18**	**0.10**
Price/Earnings (avg. for comparison categories)	11.8	1.53	12.22	8.9
PEG Ratio (avg. for comparison categories)	-1.18	0.2	1.12	2.36

Thomson Financial (I/B/E/S) http://finance.yahoo.com

Value-Line Growth Forecasts 2009 2011 to 2015 2017		
	EPS	21.8%
	DPS	-22.0%

September 21, 2012 Value-Line Investment Survey

Date	Close
9/24/2012	$ 2.26
9/17/2012	$ 2.47
9/10/2012	$ 2.26
9/4/2012	$ 2.14
8/27/2012	$ 2.15
8/20/2012	$ 2.17
8/13/2012	$ 2.12
8/6/2012	$ 2.15
7/30/2012	$ 2.19
7/23/2012	$ 2.18
7/16/2012	$ 2.28
7/9/2012	$ 2.30
7/2/2012	$ 2.26
6/25/2012	$ 2.10
6/20/2012	$ 1.98
Average	$ 2.20
2013 Div	$ 0.20
Yield	9.09%

CenturyLink, Inc. (CTL)

Earnings Growth Estimates (%)	CTL	IND	S&P
Current Qtr (09/2012)	73.5	N/A	N/A
Next Qtr (12/2012)	11.6	N/A	N/A
Current Year (09/2011)	14.6	6.6	5.7
Next Year (09/2012)	-1.5	19	6.5
Past 5 Years	-4.3	4	3.2
Next 5 Years	**3.1**	**9.8**	**0**
PE	18.9	157.2	14.3
PEG Ratio	5.4	19.2	0

Zacks.com

Growth Est	CTL	Industry	Sector	S&P 500
Current Qtr.	-3.30%	N/A	-58.60%	6.70%
Next Qtr.	6.90%	N/A	-8.90%	19.50%
This Year	-5.20%	-11.20%	14.60%	8.40%
Next Year	-0.40%	17.80%	61.00%	13.50%
Past 5 Years (per annum)	-7.69%	N/A	N/A	N/A
Next 5 Years (per annum)	**7.83%**	**11.16%**	**9.09%**	**10.14%**
Price/Earnings (avg. for comparison categories)	16.58	79.15	37.16	8.9
PEG Ratio (avg. for comparison categories)	2.12	19.58	13.07	2.36

Thomson Financial (I/B/E/S) http://finance.yahoo.com

Value-Line Growth Forecasts 2009 2011 to 2015 2017		
	EPS	1.50%
	DPS	NA

September 21, 2012 Value-Line Investment Survey

Date	Close
9/24/2012	$ 41.23
9/17/2012	$ 41.89
9/10/2012	$ 42.37
9/4/2012	$ 41.93
8/27/2012	$ 42.26
8/20/2012	$ 42.26
8/13/2012	$ 42.06
8/6/2012	$ 42.78
7/30/2012	$ 41.74
7/23/2012	$ 41.33
7/16/2012	$ 41.48
7/9/2012	$ 40.73
7/2/2012	$ 39.36
6/25/2012	$ 39.49
6/20/2012	$ 38.64
Average	$ 41.30
Dividends	**$ 2.90**
Yield	7.02%

Consolidated Communications Holdings Inc. (CNSL)

Earnings Growth Estimates (%)	CNSL	IND	S&P
Current Qtr (09/2012)	-54.4	N/A	N/A
Next Qtr (12/2012)	-57.7	N/A	N/A
Current Year (09/2011)	-63.2	-12.3	5.7
Next Year (09/2012)	71.4	19.6	6.5
Past 5 Years	13.6	-2.2	3.2
Next 5 Years	**2**	12.1	0
PE	22.8	-176	14.3
PEG Ratio	25.4	-12.5	0

Zacks.com

Growth Est	CNSL	Industry	Sector	S&P 500
Current Qtr.	-52.60%	N/A	-58.60%	6.80%
Next Qtr.	-63.00%	N/A	-8.90%	19.60%
This Year	-64.60%	-11.20%	14.60%	8.40%
Next Year	58.80%	17.80%	61.20%	13.50%
Past 5 Years (per annum)	5.91%	N/A	N/A	N/A
Next 5 Years (per annum)	**2.00%**	11.16%	9.12%	10.14%
Price/Earnings (avg. for comparison categories)	51.12	79.15	46.61	15.99
PEG Ratio (avg. for comparison categories)	25.56	19.58	10.97	2.57

Thomson Financial (I/B/E/S) http://finance.yahoo.com

Value-Line Growth Forecasts 2009 2011 to 2015 2017		
	EPS	4.00%
	DPS	NA

September 21, 2012 Value-Line Investment Survey

Date	Close
9/24/2012	$ 17.56
9/17/2012	$ 17.79
9/10/2012	$ 16.99
9/4/2012	$ 16.82
8/27/2012	$ 16.28
8/20/2012	$ 16.22
8/13/2012	$ 16.36
8/6/2012	$ 16.19
7/30/2012	$ 16.08
7/23/2012	$ 15.71
7/16/2012	$ 15.69
7/9/2012	$ 17.18
7/2/2012	$ 16.64
6/25/2012	$ 14.80
6/20/2012	$ 14.44
avarage	$ 16.32
Dividend	$ 1.55
Yield	9.50%

Frontier Communications Corp (FTR)

Earnings Growth Estimates (%)	FTR	IND	S&P
Current Qtr (09/2012)	46.2	N/A	N/A
Next Qtr (12/2012)	9.5	N/A	N/A
Current Year (09/2011)	10.4	-12.3	5.7
Next Year (09/2012)	4.7	19.6	6.5
Past 5 Years	-19.3	-2.2	3.2
Next 5 Years	**28.8**	12.1	0
PE	19.9	-176	14.3
PEG Ratio	0.7	-12.5	0

Zacks.com

Growth Est	FTR	Industry	Sector	S&P 500
Current Qtr.	60.00%	N/A	-58.60%	6.70%
Next Qtr.	14.30%	N/A	-8.90%	19.50%
This Year	17.40%	-11.20%	14.60%	8.40%
Next Year	0.00%	17.80%	61.00%	13.50%
Past 5 Years (per annum)	-19.89%	N/A	N/A	N/A
Next 5 Years (per annum)	**8.25%**	11.16%	9.09%	10.14%
Price/Earnings (avg. for comparison categor	18.11	79.15	37.16	8.9
PEG Ratio (avg. for comparison categories)	2.2	19.58	13.07	2.36

Thomson Financial (I/B/E/S) http://finance.yahoo.com

Value-Line Growth Forecasts 2009 2011 to 2015 2017	
EPS	6.00%
DPS	-12.50%

September 21, 2012 Value-Line Investment Survey

Date	Close
9/24/2012	$ 4.94
9/17/2012	$ 4.98
9/10/2012	$ 4.65
9/4/2012	$ 4.55
8/27/2012	$ 4.62
8/20/2012	$ 4.63
8/13/2012	$ 4.63
8/6/2012	$ 4.75
7/30/2012	$ 4.40
7/23/2012	$ 3.72
7/16/2012	$ 3.74
7/9/2012	$ 3.93
7/2/2012	$ 4.01
6/25/2012	$ 3.83
6/20/2012	$ 4.02
Average	$ 4.36
Dividends	$ 0.40
Yield	9.17%

Hickory Tech Corp. (HTCO)

Earnings Growth Estimates (%)	HTCO	IND	S&P
Current Qtr (09/2012)	-13.6	N/A	N/A
Next Qtr (12/2012)	-9.1	N/A	N/A
Current Year (09/2011)	-11.4	4.3	5.7
Next Year (09/2012)	14.5	7.1	6.5
Past 5 Years	3.1	5.6	3.2
Next 5 Years	**0**	9.1	0
PE	16.8	9.8	14.3
PEG Ratio	0	-1.4	0

Zacks.com

Growth Est	HTCO	Industry	Sector	S&P 500
Current Qtr.	N/A	N/A	-58.60%	6.70%
Next Qtr.	N/A	N/A	-8.90%	19.50%
This Year	N/A	-11.20%	14.60%	8.40%
Next Year	36.80%	17.80%	61.00%	13.50%
Past 5 Years (per annum)	12.79%	N/A	N/A	N/A
Next 5 Years (per annum)	**3.80%**	11.16%	9.09%	10.14%
Price/Earnings (avg. for comparison categories)	18.28	79.15	37.16	8.9
PEG Ratio (avg. for comparison categories)	4.81	19.58	13.07	2.36

Thomson Financial (I/B/E/S) http://finance.yahoo.com

Value-Line Growth Forecasts 2009 2011 to 2015 2017	
EPS	na
DPS	na

September 21, 2012 Value-Line Investment Survey

Date	Close
9/24/2012	$ 10.60
9/17/2012	$ 10.56
9/10/2012	$ 10.67
9/4/2012	$ 10.50
8/27/2012	$ 10.47
8/20/2012	$ 10.38
8/13/2012	$ 10.57
8/6/2012	$ 10.84
7/30/2012	$ 10.87
7/23/2012	$ 10.80
7/16/2012	$ 10.55
7/9/2012	$ 11.33
7/2/2012	$ 10.90
6/25/2012	$ 11.11
6/20/2012	$ 10.68
Average	$ 10.72
Dividend	$ 0.56
Yield	5.22%

Shenandoah Telecommunications Co. (SHEN)

Earnings Growth Estimates (%)	SHEN	IND	S&P
Current Qtr (09/2012)	26.7	N/A	N/A
Next Qtr (12/2012)	25	N/A	N/A
Current Year (09/2011)	21.1	4.3	5.7
Next Year (09/2012)	5.8	7.1	6.5
Past 5 Years	-3.4	5.6	3.2
Next 5 Years	**0**	9.1	0
PE	24.8	9.8	14.3
PEG Ratio	0	-1.4	0

Zacks.com

Growth Est	SHEN	Industry	Sector	S&P 500
Current Qtr.	58.30%	N/A	5.90%	6.70%
Next Qtr.	33.30%	2609.00%	29.50%	19.50%
This Year	-1.90%	61.50%	5.30%	8.40%
Next Year	13.50%	23.30%	14.30%	13.50%
Past 5 Years (per annum)	-9.77%	N/A	N/A	N/A
Next 5 Years (per annum)	**15.00%**	15.00%	14.06%	10.14%
Price/Earnings (avg. for comparison categories)	34.04	46.44	17.13	8.9
PEG Ratio (avg. for comparison categories)	2.27	2.12	1.31	2.36

Thomson Financial (I/B/E/S) http://finance.yahoo.com

Value-Line Growth Forecasts 2009 2011 to 2015 2017	
EPS	na
DPS	na

September 21, 2012 Value-Line Investment Survey

Date	Close
9/24/2012	$ 18.03
9/17/2012	$ 18.32
9/10/2012	$ 16.80
9/4/2012	$ 16.30
8/27/2012	$ 15.38
8/20/2012	$ 15.37
8/13/2012	$ 16.92
8/6/2012	$ 15.58
7/30/2012	$ 15.97
7/23/2012	$ 15.85
7/16/2012	$ 15.21
7/9/2012	$ 15.35
7/2/2012	$ 14.97
6/25/2012	$ 13.61
6/20/2012	$ 12.34
Average	$ 15.73
2013	
Dividends	$ 0.33
Yield	2.10%

WindStream Corp (WIN)

Earnings Growth Estimates	WIN	IND	S&P
Current Qtr (09/2012)	-34	N/A	N/A
Next Qtr (12/2012)	-26.3	N/A	N/A
Current Year (09/2011)	-34.6	-12.3	5.7
Next Year (09/2012)	11.9	19.6	6.5
Past 5 Years	-1	-2.2	3.2
Next 5 Years	**2.00**	12.1	0
PE	17.4	-176	14.3
PEG Ratio	10.5	-12.5	0

Zacks.com

Growth Est	WIN	Industry	Sector	S&P 500
Current Qtr.	-31.60% N/A		-58.60%	6.70%
Next Qtr.	-26.30% N/A		-8.90%	19.50%
This Year	-32.90%	-11.20%	14.60%	8.40%
Next Year	11.80%	17.80%	61.00%	13.50%
Past 5 Years (per annum)	-12.07% N/A	N/A	N/A	
Next 5 Years (per annum)	**-1.90%**	11.16%	9.09%	10.14%
Price/Earnings (avg. for comparison categories)	21.49	79.15	37.16	8.9
PEG Ratio (avg. for comparison categories)	-11.31	19.58	13.07	2.36

Thomson Financial (I/B/E/S) http://finance.yahoo.com

Value-Line Growth Forecasts 2009 2011 to 2015 2017	
EPS	9.50%
DPS	na

September 21, 2012 Value-Line Investment Survey

Date	Close
9/24/2012	$ 10.42
9/17/2012	$ 10.93
9/10/2012	$ 10.78
9/4/2012	$ 10.21
8/27/2012	$ 9.87
8/20/2012	$ 9.73
8/13/2012	$ 9.55
8/6/2012	$ 9.41
7/30/2012	$ 10.04
7/23/2012	$ 9.73
7/16/2012	$ 9.85
7/9/2012	$ 9.77
7/2/2012	$ 9.76
6/25/2012	$ 9.66
6/20/2012	$ 9.68
Average	$ 9.96
2013	
Dividends	$ 1.00
Yield	10.04%

CERTIFICATE OF SERVICE

12-GRHT-633-KSF

I, the undersigned, hereby certify that a true and correct copy of the above and foregoing Direct Testimony of Adam H. Gatewood was served by electronic service on this 18th day of October, 2012, to the following parties who have waived receipt of follow-up hard copies.

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