



YANNI  
PARTNERS

# MEASURING UP

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DELIVERING  
THE PROMISE

## Capital Market Expectations *The Foundation for an Investment Strategy*

IN THIS  
ISSUE

The  
development  
of realistic  
capital market  
expectations.

The development of a successful long-term investment strategy requires realistic expectations of the capital markets' risks and returns. Optimistic return assumptions might prompt the organization to assume excessive risks and make commitments (such as increases in spending) that it cannot support over the long term. Pessimistic assumptions might lead to an overly defensive posture that might deprive the organization of mission-critical resources.

Yanni Partners has devoted a high level of attention to the development of realistic capital market expectations. A key role of a consultant is to offer a rigorous framework for projecting capital market risks and returns. We have developed a framework that projects equity returns based on the current dividend yield, expected earnings growth and changes in valuation levels. We project fixed income returns from the current yield curve and anticipated changes in interest rates. In January 2001, Yanni Partners documented this framework.<sup>1</sup> **A key conclusion from our January 2001 paper was that future equity market returns are likely to lag returns from recent decades due to high valuation levels.**

During the 25 years ending June 2003, balanced portfolios, with equity allocations ranging between 20% and 80%, would have earned annualized returns ranging between 10.0% and 12.5%.

Balanced portfolios, with equity allocations ranging between 20% and 80%, are likely to earn annualized returns ranging between 5.2% and 7.4% during the next 10 years, based on Yanni Partners' current capital market expectations.

The reduction in expected returns poses significant management challenges for organizations. Some pension fund sponsors face the prospects of increases in pension expense and cash contributions. Many healthcare entities will receive diminished support from their funded depreciation pools for purposes such as capital spending and debt service. Many charitable and educational institutions might experience a reduction in the endowment draw due to the modest performance of the markets.

Yanni Partners will determine each client's appropriate strategy, in light of these forecasts, based on each client's unique needs.

Note:

<sup>1</sup>Yanni Partners, "Capital Market Assumptions for Asset Allocation Analysis and Style Tilts Within Diversified Portfolios," 23 January 2001.

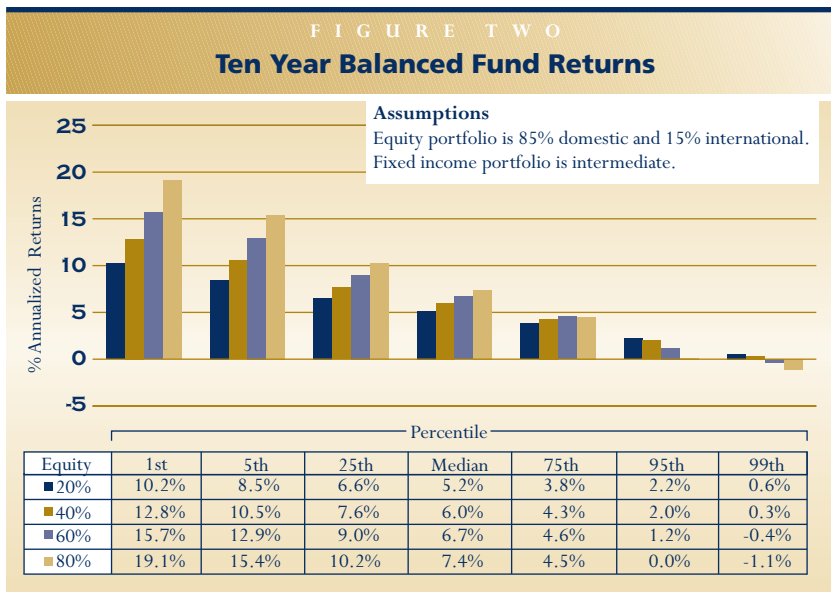
## Future Returns Summary

The capital markets are likely to produce single digit returns for the foreseeable future. *Figure One, Projected Capital Market Returns*, summarizes our projected returns for the markets over the next 5, 10 and 30 years.

FIGURE ONE  
**Projected Capital Market Returns**

	5 Years	10 Years	30 Years
Domestic Equity	8.0%	8.0%	8.0%
International Equity	8.0%	8.0%	8.0%
Core Bonds	3.0%	4.4%	5.0%
Intermediate Bonds	3.0%	4.3%	4.8%
Short Bonds	2.8%	3.9%	4.5%
T-Bills	2.7%	3.5%	4.0%
Inflation	3.3%	3.3%	3.3%

What are the implications of these market projections for portfolios? Balanced portfolios are likely to produce annualized returns ranging from 5.2% to 7.4% during the next ten years. *Figure Two, Ten Year Balanced Fund Returns*, displays projected returns for



portfolios with equity allocations ranging from 20% to 80%. Actual returns might diverge from these expected returns due to the volatility of the capital markets. *Figure Two* quantifies the potential dispersion of returns. *Figure Two* summarizes seven

points from the distribution of potential outcomes for each asset mix. For example, the median is the “expected” return – 50% of the outcomes are likely to be higher and 50% of the results are likely to be lower than the median. The 5th percentile result means that 5% of the outcomes are likely to be more favorable, whereas the 95th percentile result means that 95% of the outcomes are likely to be more favorable.

Future returns are likely to lag historical returns due to much higher current valuation levels, for equities and fixed income, relative to 25 years ago. The domestic equity market yields only 1.7% today, compared to 5.3% in 1978. The 10-year U. S. Treasury (UST) bond yields only 4.2% today, compared to 9.0% in 1978.

## Analytical Framework

Our framework projects equity and fixed income returns based on the key determinants of long-term returns. The variables that drive equity returns are corporate earnings and changes in valuation levels. The major determinant of a bond’s return is the current coupon. **Historical returns serve as poor predictors of future returns.** The conditions that have given rise to historical returns are not necessarily present today. A simple extrapolation of historical returns can lead to erroneous conclusions about future returns. Investment planning based on simple historical returns might lead to unsustainable spending patterns that might deplete investment portfolios well before the applicable investment horizon such as several decades for a pension plan.

*Figure Three, Historical Return Patterns on Rolling 10-Year Basis*, demonstrates the erratic pattern of historical equity and fixed income returns from 1969 to 2002. *Figure Three* shows rolling 10-year returns.

Historical risk patterns have been fairly stable compared to the historical returns as *Figure Four, Historical Risk Patterns on Rolling 10-Year Basis*, demonstrates.

Our formula for projecting equity returns includes three factors:

- Current dividend yield
- Expected growth in dividends (corporate earnings)
- Changes in valuation levels

We assume future inflation of 3.3% and real earnings growth of 3.0%. We therefore project total nominal annual earnings growth of 6.3%.

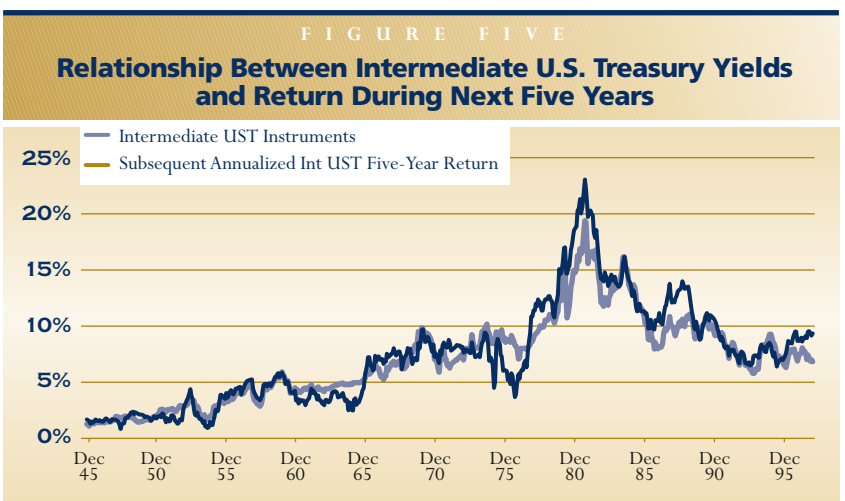
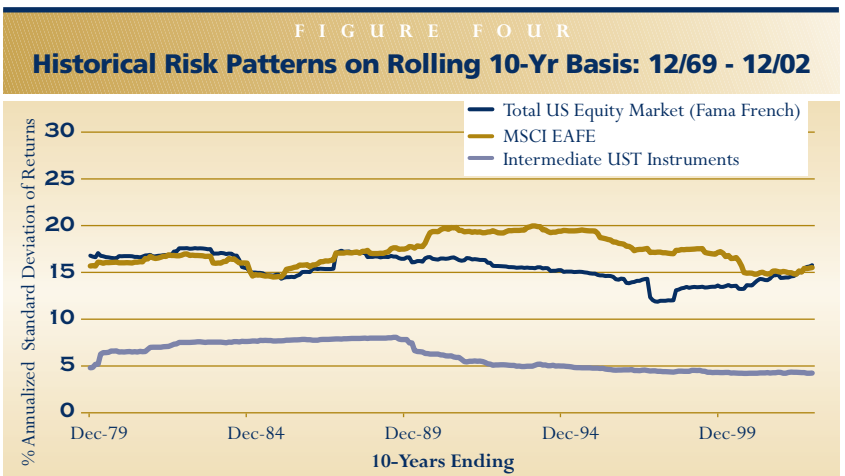
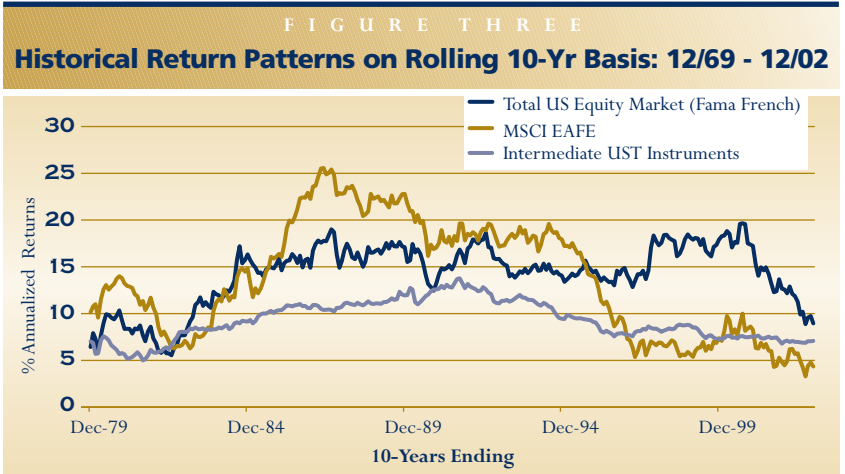
Valuation levels (Price/Earnings ratios) have tended to revert to mean historical levels over long periods. It is difficult to measure the current Price/Earnings (P/E) ratio with precision due to the volatility inherent in earnings. We do not project a significant change in the equity valuation level because the current level remains reasonably close to historical levels.

The 31 December 2002 broad domestic equity market P/E ratio was 18x. The historical P/E ratio has averaged 14x from 1946 to 2002. (Since 1946, the market reached its peak P/E ratio of 32x in 1999.) This broad market P/E ratio is derived by dividing the value of domestic equities (from Federal Reserve Board Flow of Funds Accounts) by annual trailing corporate earnings as measured by the National Income and Product Accounts compiled by the Bureau of Economic Analysis, Department of Commerce.

The current dividend yield for the broad domestic equity market is 1.7%. Adding anticipated nominal earnings growth of 6.3% to the current yield produces a total domestic equity return of 8.0%.

We assume that overseas markets will also produce a long-term return of 8.0% due to the global mobility of capital.

We base the future fixed income return on the current yield curve. Current coupon levels are key determinants of future fixed income returns. The 7-year U. S. Treasury note is a good proxy for the



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investment-grade market. It is currently yielding approximately 3.7%. We assume increases in interest rates due to higher inflation than the level currently embedded in the fixed income market. The U. S. Treasury market is currently forecasting long-term inflation of 2.5%. The fixed income market has been a poor predictor of inflation. Yanni Partners believes that a more realistic projection of inflation is 3.3%, consistent with long-term experience since World War I. Our framework produces annualized return forecasts, for the core investment-grade market, of 3.0%, 4.4% and 5.0% over the next 5, 10 and 30 years, respectively.

*Figure Five, Relationship Between Intermediate U.S. Treasury Yields and Return During Next Five Years,*

documents the close historical relationship between the current coupon and subsequent fixed income returns.

### Summary

Future capital market returns are likely to lag returns from recent decades. Higher valuation levels restrain the prospects for returns. Balanced portfolios are likely to earn returns ranging between 5.2% and 7.4% during the next 10 years. Organizations will be better prepared to manage resources effectively by anticipating the likelihood of these modest returns. Yanni Partners will determine each client's appropriate strategy according to each client's unique needs.

## Calendar of Events

APR. 18-21

2004

**Healthcare  
Investment  
and Finance  
Symposium**

*The Ritz Carlton,  
Key Biscayne, FL*

*Attendance by  
invitation only.*



### Michael E. Nelson

Michael E. Nelson has joined Yanni Partners as an Investment Consulting Analyst. Mr. Nelson will support the Consulting staff in various projects including preparation of quarterly client reports and

report graphics. He will assist with presentation materials, research projects and manager searches. Mr. Nelson graduated from Allegheny College with a B.A. in Economics. His previous business experience includes Sales and Marketing with Queen City Lacrosse and with a national brokerage firm, where he assisted in projecting client portfolio performance.



### Rose Martin

Rose Martin has joined Yanni Partners as Executive/Marketing Assistant. Ms. Martin will be providing complete administrative and marketing assistance to the Principals of the Firm.

Before Yanni Partners, she was a PR Specialist at an integrated marketing firm and the Communications Coordinator at Phipps Conservatory and Botanical Gardens. Ms. Martin graduated from Duquesne University with a B.A. in Journalism, concentrating in PR. She was the 2001 recipient of the Public Relations Society of America Renaissance Rising Star Award.

Yanni Partners provides a full range of consulting services vital to the management of various portfolios. Our ultimate goal is to offer a basis for improved investment monitoring and performance.

Yanni Partners, Inc. is registered as an investment advisor with the Securities Exchange Commission.

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