TIAA-CREF asset management®
a division of Teachers Advisors, Inc.

MARKET MONITOR
DECEMBER 11, 2006

BRETT HAMMOND
CHIEF INVESTMENT STRATEGIST

LEO KAMP
CHIEF ECONOMIST

DOUGLAS FORE
DIRECTOR OF PORTFOLIO ANALYTICS

On Advice

Financial advice is a little like getting a medical checkup. The first step — deciding to make the appointment — is the most important but may be the most difficult one of all to do. The next step is an interactive one that involves an exchange of information with an expert in the field. The patient answers questions, submits to examination, and takes any needed tests. Then, the physician assesses the available evidence and formulates conclusions, including recommended therapies and behaviors. The following step, like the first one, is again largely up to the patient, who must decide whether or not to follow the advice. And the final step is where the doctor and patient assess the outcome: is the patient ultimately better off?

Clearly the medical and financial advice systems exhibit commonalities, but both the similarities and some significant differences are instructive:

- Finance, like medicine, combines science and practical knowledge with action;
- However, it is much harder for the financial "patient" to know where to turn for advice, to select the right "therapy," and to assess the results; and
- Financial advice is very much a work in progress, based in part on solid theory but still developing in response to challenges such as differences among individuals and among asset classes.

TIAA CREF
FINANCIAL SERVICES FOR THE GREATER GOOD®

We can extend the analogy between medicine and personal finance just a little further with a few other observations:

- *Both finance and medicine combine research and practice.* Medicine may have a head start and its R&D system is much larger than the one in finance, but both fields share a focus on research-based advances in practice. For example, in the field of financial advice there is a continuing need for conceptual and practical advances, particularly in designing retirement income options that are attractive and solidly grounded.

- *Financial and medical advice often involves small steps that add up to long-term health.* While there are high-tech approaches in both arenas, we know that, in medicine, today's diet, exercise, and regular attention to personal health can affect health outcomes many years in the future. Similarly, today's savings and asset allocation decisions are essential to long-term investing success. In both cases, the long-term nature of the effects makes it a challenge to always do the right thing.

- *Advice isn't a one-time thing.* Periodic checkups are important in both fields since circumstances can change over time.

- *Aging is a fairly recent focus.* In medicine and in personal finance, except for the very wealthy, geriatric medicine and retirement income advice have only recently become fashionable as the baby boom presents opportunities and challenges to the professionals.

While we see some similarities between financial and medical advice, the two fields are not alike in all respects. Special challenges faced by the financial "patient" who seeks advice include the following:

- *Most of us aren't accustomed to financial checkups* like we have been since childhood to medical checkups. Whether or not they understand what is going on, kids do get used to going to the doctor. It would seem silly either to give kids detailed financial advice or to think that they would need it. Mostly we do it for them. Consequently, older kids and young adults who grow up with an under-standable ignorance of financial checkups don't always think to obtain professional financial advice. And if they do, they aren't always experienced in where to turn.

- *We can seek financial advice to a variety of sources,* such as financial advisers, financial planners, employers, stock brokers, and insurance experts. Doctors don't necessarily have a monopoly on medical knowledge, but the national system of medical education, certification, and legal rules produces experts who are widely and formally acknowledged as such. In contrast, financial advice of various kinds is offered by people with a variety of educational backgrounds and types of certification that can make it difficult to know who to trust on what subjects.

- *The onus is on the individual to decide and act* on their own finances. Individuals are ultimately responsible for their own medical care. However, we usually cede far more authority to medical professionals than to financial professionals to act on our behalf and to tell us precisely what to do.

- *Lack of attention to financial matters is less likely to be fatal.* We may miss out on opportunities to improve our current or future financial well being by being inattentive, but we know the consequences of medical inattention can be far more immediate and critical. This difference can mean that we face fewer incentives in personal finance to diagnose and treat problems.

As with any analogy, it is possible to carry the medical analogy too far when thinking about personal finance. However, perhaps the most important contrast between the two systems is that in finance, we are still developing conceptual and practical models for some of the very basic problems we face. For instance, outside of the admonition to save more and invest in low-cost options, the field of personal finance has no equivalent to highly effective vaccines and public health measures. And no financial adviser can prescribe a solution that works essentially all the time.

In personal finance, we do have forms of advice that can be very helpful to people who aren't used to regular financial checkups. The Ibbotson advice model and several others like it are based on modern portfolio theory and long-term

human capital. Moreover, the very act of sitting down with a financial consultant has been shown to improve individual financial choices. But in personal finance, we still don't have tests that focus as finely as medicine can on the needs of each individual. A risk questionnaire, for example, is not the equivalent of a CT scan. Moreover, we have much better understanding of the possible consequences of some investment choices than others. A case in point is alternative asset classes such as hedge funds, asset-back securities, private equity, venture capital, real estate, and commodities. These can be attractive investments, but how do they fit into formal models? And then who is suited to purchase them?

Without the definitive diagnosis or magic bullet for these challenges, we appropriately hedge our risks by diversifying across traditional and alternative asset classes and we constantly seek ways to improve understanding and practical action in the area of financial advice. We are working hard to advance the field and to incorporate improvements into our own financial education capabilities. Stay tuned.

TIAA-CREF is a national financial services organization and the leading provider of retirement services in the academic, research, medical and cultural fields with more than $390 billion in combined assets under management (9/30/06). Further information can be found at www.tiaa-cref.org.

Market Monitor is prepared by TIAA-CREF Asset Management and represents the views of TIAA-CREF's Investment Strategy and Client Solutions Group as of December 11, 2006. These views may change in response to changing economic and market conditions. Past performance is not indicative of future results. The material is for informational purposes only and should not be regarded as a recommendation or an offer to buy or sell any product or service to which this information may relate.

TIAA-CREF Asset Management is a division of Teachers Advisors, Inc., a registered investment advisor and wholly owned subsidiary of Teachers Insurance and Annuity Association (TIAA). TIAA-CREF® personnel in its investment management area provide investment advice and portfolio management services through the following entities: Teachers Advisors, Inc., TIAA-CREF Investment Management, LLC, and Teachers Insurance and Annuity Association® (TIAA®). TIAA-CREF Individual & Institutional Services, LLC, distributes securities, member NASD/SIPC. TIAA, TIAA-CREF, Teachers Insurance and Annuity Association, TIAA-CREF Asset Management and FINANCIAL SERVICES FOR THE GREATER GOOD are registered trademarks of Teachers Insurance and Annuity Association.

Brett Hammond, Leo Kamp and Douglas Fore are available to comment on economic data. If you wish to speak with them, please contact Chad Peterson, Media Relations, 212-916-4808 or email cpeterson@tiaa-cref.org.

C37444