Kenneth R. Leibler

Chair of the Trustees
The Putnam Funds

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The Putnam Funds

A message to shareholders from the Chair of the Trustees of the Putnam funds

The Trustees of the Putnam funds are responsible for ensuring that each fund is managed in the best interests of its shareholders. One way we fulfill this responsibility is by voting proxies of the securities held in the funds' portfolios. This activity is conducted through the Trustees' Board Policy and Nominating Committee, which annually reviews and recommends policies governing our proxy votes for approval by the Board. In accordance with the policies, this Committee also considers proxy votes for certain matters on a case-by-case basis.

The Trustees have long been active in voting proxies on behalf of Putnam fund shareholders in the belief that the proxy voting process is a significant means of addressing crucial corporate governance issues and encouraging corporate actions that enhance shareholder value. We believe that the process also allows us to promote principles that provide a solid foundation for sound corporate governance, which will, in turn, promote robust capital markets. To that end, we regularly review and update the funds' proxy voting guidelines, which include our policies on important matters such as the composition and independence of boards of directors, executive compensation, issuance of new shares of stock, and proposed mergers. In applying the funds' proxy voting guidelines, we are mindful of emerging best practices in the areas of corporate governance, environmental stewardship and sustainability, and social responsibility. Recognizing that these matters may, in some instances, bear on investment performance, they may from time to time be considerations in the funds' voting decisions.

The Putnam funds' proxy voting guidelines emphasize the need for strong boards that are effectively independent of company management and that are held strictly accountable for the long-term performance and conduct of their companies. For example, the guidelines require that boards have a majority of independent directors who are selected solely by independent members of the board and who have no material familial, business, or current or recent employment relationships with the company. The independent members should determine their own compensation (limited strictly to fees for board service), and only independent members should serve on the company's audit, compensation, and nominating committees. The Putnam funds' independence standards are generally consistent with the New York Stock Exchange Corporate Governance rules, but in some instances are more demanding. The goal is to maximize the focus of directors on their key duties as fiduciaries to the shareholders of the corporation. These duties are the "duty of loyalty," which requires directors to act in good faith and in what they believe to be the best interests of the shareholders, disregarding any personal interest they may have; and the "duty of care," which requires that directors exercise reasonable diligence in making their decisions and in supervising the corporation's management and officers.

The Putnam fund guidelines make it clear that the Trustees will support boards that recognize these duties and meet our strict standards for independence and governance by generally voting for proposals approved by these boards, as long as the proposals are consistent in all other respects with the more specific requirements of our guidelines. At the same time, we will withhold our support from those boards that do not meet these standards, either in fact or in spirit.

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In addition, the proxy voting guidelines emphasize the need for reasonable compensation arrangements for company executives that align the interests of shareholders and management over the long term, as well as transparent disclosure regarding the source and amounts of, and factors influencing, such compensation. The guidelines include rigorous standards for evaluating proposed equity-based compensation arrangements for management, including strict limits on the actual and potential dilutive effect of stock awards and option grants. Moreover, the guidelines stress the need for executive pay to be correlated with company performance. We believe that boards should be held accountable for the compensation paid to company executives. Accordingly, we consider on a case-by-case basis withholding the funds' votes from all nominees to a company's board of directors when we determine that the board has approved compensation arrangements for company management that are excessive by reasonable corporate standards relative to the company's record of performance.

The Putnam funds' proxy voting guidelines are evolutionary. The Trustees continue to refine the Putnam funds' guidelines to further influence governance practices of the companies owned by the Putnam funds. Regardless of how the guidelines and standards evolve over time, however, the Trustees believe that while rules are a necessary condition for good governance, they are not sufficient. Rules alone will not create the culture of good governance that our market system needs if it is to provide the extraordinary benefits of which it is capable. Consequently, as we vote proxies, we will be more concerned with what boards do than with what they say they do.

Sincerely,

Kenneth R. Leibler, Chair of the Trustees