I. Executive Summary

The current full liability of the New Jersey pension fund is estimated to be approximately $118 billion of which $28 billion is unfunded (2007). In order to make up this gap, either higher contributions from state employees and/or the state government, or very significant investment returns are needed. After significant review and research, we believe that the management structures that once served the system need to be seriously re-examined by the Legislature and the Governor. Currently the State Investment Council, which mainly deals with investment policy, is composed of unpaid individuals with significant experience in asset management who give of their time and effort. The state is fortunate in being able to attract such people. Now, however, the extreme volatility of the market, the difficulties being faced by non-American markets, the loss of major players in the financial industry, and the much more intrusive role of the government in the market all have led to an environment we have not seen before. The pension fund has absorbed substantial losses, and the media now is paying significant attention to stories such as the state’s failed investment in Lehman Brothers and its increased allocation to a BlackRock fund to stave off forced liquidations. We believe these issues need to be studied and dealt with dispassionately.

It is our view that the investment process undertaken by the Fund management must be made still more transparent. Conflicts need to be avoided. The responsibilities of the Director of the Division of Investments, the staff, consultants and the State Investment Council need to be more clearly defined. The state needs to invest more in upgrading the investment resources available to the director while creating a new tier of trained and experienced asset managers. We believe that there should be an allocation of assets to outside managers who have skills or niches outside of what state government can achieve internally. We also believe that there must be a genuine recognition of what various levels of investment risk can achieve over the long run, and how that influences levels of benefits and contributions. Finally, we believe that there needs to be a clear recognition that the long-run perspective for investment returns is far longer than that of any gubernatorial administration, and that adjustments to contributions based on swings in markets, positive or negative, must be avoided.

The Investment Council relies heavily on a staff of dedicated professionals who are responsible for enormous investments in the portfolio. As in many public systems, the compensation for staff members is low considering the vast scope of their responsibilities.² It is not desirable that these managers be
restricted by the state employment system; rather they should have expectations and rewards that are more in line with other public investment agencies and private endowments. The state should examine an enhanced compensation package for the staff. Employment policies should be amended to pay for — and value — ongoing professional training. The staff also needs help. It needs greater depth in its personnel ranks to analyze and perform due diligence on the ever changing criteria involved in investment policy.

Lastly, the major unions who have so much at stake in the process and in the general solvency of the state government should be more willing to support the prudent and flexible use of outside asset managers by the State Investment Council and the staff. The selection of managers should be given great care, free of conflict and very transparent. It should also fit into a well defined and coordinated asset allocation process. There will be higher costs in managing this portfolio than in the past — but in the end these investments are critical to the state’s future.

We believe that in the wake of the losses experienced in the pension system recently, the state must re-examine the system, a process that has begun with the Senate Budget and Appropriation Committee’s meeting on November 24, 2008. The recommendations in this report are meant to focus positively on steps to be taken.

This report will focus on some background as well as the investment process, which is coming under such scrutiny today. For previous Hall Institute articles on the topic of New Jersey’s state pensions, visit our website at www.hallnj.org. We welcome other input, and future Hall Institute studies on the pension issue will be forthcoming.

II. History

Prior to the string of collapses on Wall Street at the end of the summer of 2008, the State of New Jersey was still slowly recovering from a $20 billion depreciation in the pension fund from between 2000 and 2003, when the market value of the pension fund fell from $85.9 billion to $64.2 billion. By the end of 2007, the pension fund was back up to $86.5 billion. As of mid-November of this year, the market value of New Jersey’s assets was estimated at $61 billion. The recent and ongoing perils of financial markets and the overall economy have devastated New Jersey. Unfortunately, the damage has been done, and the only thing to do now is to re-evaluate the manner in which the assets are managed going forward and how that relates to the future liabilities and contribution going forward. The bright side is that this time of economic disaster has provided many new opportunities where excess return can be generated with less risk going forward. It is up to the Investment Council and all stakeholders to work together to achieve this goal.
The root of the current problems is not across the river in New York, but rather can be traced back to before 2000 and the Pension Revaluation Act (L.1992, C.41), which was enacted by the state in 1992. Critics charge that, faced with a challenge during the recession of the early 1990s, Governor James Florio contributed to the situation when he applied a speculative innovation to the New Jersey pension system. The purpose of the Pension Revaluation Act of 1992 was to raise money to balance the FY 1993 budget and pay off unfunded cost-of-living adjustments applied to New Jersey pensions in the 1970s. By supplanting the market value (8.75 percent interest rate assumption) for the book value (7 percent interest rate assumption) of pensions, the Florio Administration was able to recalculate $769 million to be applied to that end. This strategy of revaluing pensions to market values is now known to have at least one major drawback: it lowered overall state and local contributions to the pension fund. In addition, using the enhanced market value can be problematic in as much as “the valuation at a moment in time can diverge substantially from the price the asset will command when it will be needed to meet pension liabilities.” Governor Florio’s revaluation served the purpose of balancing the budget and thus indirectly treated the pension as a fiscal buffer. Other programs were not sufficiently cut before pensions were tapped; Governor Florio’s innovation proved to be short term, rather than a special strategic or bookkeeping strategy. Critics argue that the policy was questionable and may have paved the way for the series of unfortunate and similar policy decisions that prevailed during the next administration. Governor Florio, however, argues that the movement to market value was actuarially sound, transparent, and similar to what business does.

Having made promises to cut taxes for New Jerseyans during the 1993 campaign, Governor Christine Todd Whitman was forced to seek money in 1994 to try to balance the budget early in her tenure as governor. To this end, Treasurer Brian W. Clymer claimed to have found in the pension fund $1.3 billion extra that been underestimated during the prior administration. Thus, the Pension Reform Act of 1994 (PRA) (L. 1994, C.62), “reduced state and local employer pension contributions to the plan by $547.4 million and $936.8 million for fiscal years 1994 and 1995, respectively.” Specifically, the bill marked a shift in the actuarial funding methodology or the way pension liability is assessed, from the entry age normal (EAN) method to the projected unit credit (PUC). The EAN allocates the pension based on a standardized percent of the payroll during that period distributing the pension cost over the period between the employee’s entry into and retirement from the system. The PUC is overly complex, which may in part be responsible for the problems that would follow the Governor into 1997.

Owing to the shift in assessment methodology, Governor Whitman was, for the moment, able to deliver on her campaign promises to cut taxes, though her

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*EAN is the cost of full benefits for each participant spread as a level amount each year from year of hire to year of retirement. Cost reassigned to fixed period after 10-30 years; PUC is the current actuarial value of a member’s future retirement benefits and spread out over years as pensionable income.
great political triumph was soon characterized by some critics as nothing but “smoke and mirrors.”

The year 1995 saw American markets achieve dizzying and remarkable increases in wealth. The technology boom of the mid to late 1990s, the so-called “dot-com bubble,” was a period of great excitement and of emerging industries and ideas; both were sold at this time with wild abandon and often bought with venture capital.

A year after Governor Whitman’s first tax break, the surplus “found” during the assessment methodology shift was really a serious underestimation of New Jersey’s pension contribution obligations. The minimum contribution that Governor Whitman had lowered with the PRA caused a situation wherein “the gap between assets and future payments had risen from $800 million in FY 1993 to $4.7 billion in FY 1995; put another way, assets represented only 89 percent of the pension benefit funding level in the latter year, as opposed to 98 percent in the former year.” The sudden market enthusiasm and the even more sudden need to set the budget right coalesced into a new bill, the Pension Security Plan (PSP) (L. 1997, C. 115) which issued a bond of $2.75 billion, still “the largest bond issue in history” in order to close the gap between the book value and soaring liability. At the time, the bill was contested by a small coalition of Democrats who filed a lawsuit against the state, insisting that the bond issue should be passed by voters as a referendum. In addition, Moody’s Investors Service warned that the increasingly large list of New Jersey’s obligations was earning the state a “negative outlook.” This made borrowing more difficult and expensive for the state as it increased the perceived likelihood, in the eyes of some lenders, that the state would default.

However, Governor Whitman’s plan paid off initially. The market soared during the latter years of the 1990s and the market value of New Jersey pensions, like many other equity-based investments, peaked in 2000 reaching more than $85 billion. This was just before plummeting to $74 billion by June of 2001, and then to just under $66 billion in 2002 when Governor Whitman left the governorship and the pension problem to Acting Governor Donald DiFrancesco. In “Pension Liability vs. Market Value” (Appendix 3), it is clear that had assets been diversified in FY 1999, the state may have had a surplus and New Jersey could have avoided the last few years of fiscal crisis.

The Whitman Administration was able to influence the investment of pensions in the turbulent technology market because at the time most investors were convinced that these assets were sure to pay off for New Jerseyans. It was rational to invest there and therefore prudent to act upon that reason. Said differently, the proposal for a bond issue and the purchase of common stocks, at the time, was credible enough to be considered a prudent investment, though in 1995 there was no actual “prudent investor” criterion in New Jersey law. In New Jersey, the Governor with the consent of the Senate appoints the council members. This process is very different in New York and California. In New
York State, there is a sole trustee (comptroller) who is independently elected. In California there is an investment board, an independently elected comptroller and a treasurer. The Governor has some representatives but no control.

Complicating matters, unfunded liability also reached high levels at this time as liability more than doubled from $3.1 billion in 1998 to $7.6 billion in 2000.\(^{19}\) The PSP in 1997 resulted in either a partial reduction or total elimination “in the State’s and local employer’s otherwise required normal contributions to the plan for FY 1997 through FY 2003.”\(^{20}\) Also, content enough to supersede contributions and rely heavily on technology driven market growth to finance all pension liabilities, the policies under the Whitman administration made no major efforts to diversify the pension fund’s allocations. In that sense, it joined many in riding the technology boom. \(^{21}\) In fact, technology made up about 32 percent of the domestic common stock allocations in New Jersey in 2000 — about the same percentage as the overall market capitalization of the U.S. stock market. The question of course is what should be the real overall allocation to common stocks vs. other asset classes. The short term market is influenced by booms and busts that can influence judgments of the pension system. In 2000, New Jersey’s five largest international common stock investments were fairly concentrated in information technology: Nokia (AB) Oy, Ericsson (Lm) Tel., Alcatel, Vodafone Group, Nortel Networks Corp. In 2000, IT made up 23 percent of international allocations. Domestic equity represented 50 percent of the total portfolio allocations; international, 18 percent.\(^{22}\)

Some critics argue that it was natural, though not very wise, for the New Jersey’s investment division to have kept the state’s funds invested in booming technology stocks during the late 1990s and early part of the new millennium. It might have been better, however, to “move into newer asset classes, such as private equity and real estate” in order to better distribute risk.\(^{23}\) Ironically, the lack of investment diversity created a peculiar situation wherein, had Governor Whitman not halted contributions to pensions at this time, the damage in 2000 might have been even more severe than was realized. The state might have then lost not only regular pension assets and the bond of $2.7 billion, but also five years of regular pension contributions to the market.

Aggravating the situation, the state in 2001 granted a broad 9.12 percent increase in benefits for current and retired state employees just before the November elections.\(^{24}\) In tandem with the busting of the dot-com bubble, this change significantly increased the amount of New Jersey’s unfunded liability. In 2002, state pension contributions were less than 9 percent; in 2006, the state was contributing as much as 16 percent of the budget to pensions, and assets represented only 79 percent of future liabilities.\(^{25}\) The state contributed nothing to the pension funds in 2002 and a minimal amount in 2006 (pursuant to the 1997 bond sale and the phase-in by the McGreevey Administration).

In FY 2001, New Jersey’s returns from pension assets were negative, -10.4 percent; FY 2002 followed suit, -9 percent. New Jersey had been making a slow
recovery. The slowness of the recovery is due, in great part, to the decision of Governor James McGreevey’s Administration to enact a contribution “phase-in” in FY 2004, L. 2003, c.108. Though the phase-in policy was contributory, and therefore more positive than Governor Whitman’s extreme policy of halting contributions all together, this low level of effort continued to increase the state’s unfunded accrued liability by pushing off normal contribution levels until 2008.26 A look at New Jersey’s history produces an example of the way the real financial consequences of this marriage of politics and investment are absorbed by taxpayers—a violation of the traditional logic of investment and return. The Manhattan Institute’s Nicole Gelinas and E.J. McMahon better articulated this disjunction, calling it an “asymmetry” between politics and investment in a policy brief about a New York bill (A.7597):

Public-sector workers don’t take on any investment risk inherent in their own pension fund—taxpayers do. If the [investment manager] invests poorly, taxpayers must pump new cash into the fund, because the constitution guarantees a promised level of benefits to current and future retirees. [...] any potential reward from potentially higher returns will be shared with public-sector workers, in the form of enhanced pension benefits. The dynamic is an object lesson in the perils of fiscal and political asymmetry.27

State employees now pay up to 5.5 percent in contributions, but their pensions are entitlements. Police and fire people pay substantially more in contributions. Union representatives on the board are there to oversee the process, protect the unionized staff members, and be cognizant of the relationship between the state’s collective bargaining and the terms and conditions of pension rights and benefits which have changed over the last decade—usually becoming more generous.

III. State Investment Criteria

To “centralize all functions relating to the purchase, sale or exchange of securities for the state’s diverse funds under experienced and professional judgment,” P.L. 1950, c. 270 established a New Jersey Division of Investment, a nine member council, as well as the Director of the Division as the sole overseer and executor of “investment, or reinvestment of moneys of, and purchase, sale or exchange of any investments or securities” for the State of New Jersey’s pensions. The duties of the council, pursuant to the 1950 legislation, include the formulation and establishment of investment policy and “from time to time amend, modify or repeal such policies as it may deem proper, which shall govern the methods, practices or procedures for investment, reinvestment, purchase, sale or exchange transactions to be followed by the Director of the Division of Investment established hereunder.”28 Also, all investment proposals from the office of the Director of the Division of Investment were to be regulated by the Treasurer, or by the Investment Council and council members on whose behalf the investment is made.
Four of the nine original council seats were dedicated to representatives of state employees, prison officers, teachers, and police and firemen; the remaining five were to be appointed by the governor based upon investment and finance experience. In 2007 the council was enlarged to 13 seats, four of which are still representatives of the four original agencies legislated in 1950. The two seats added in 2007 are appointed by the Governor from a list of candidates chosen by the AFL-CIO and the New Jersey Education Association. The current council of 13 governors over and represents the interests of seven public pension systems and meets 11 times a year in order to review and discuss new policy and to monitor pension performance. The 13 member council (See appendix 1) is responsible for nominating candidates for director, one of whom is then appointed by the Treasurer.

The power to invest is ultimately left to the discretion of the director who allocates the fund pursuant to the investment policy set by the council. As a measure of accountability, the original legislation requires every director to deposit a bond of $100,000 with the Treasurer upon appointment. The Treasurer or the client agency can reject the director’s proposal as long as that rejection is issued in 48 hours. Until 1997, no actual “prudent investment” policy was in place. The “Prudent Investor Act of 1997” that passed into law during Governor Whitman’s administration basically eclipsed and loosened the prior standards for investment by shifting all power to execute investment decisions to the Director. As of P.L. 1997 c. 26, the director is held in all investment activity to the broad notion of prudence called the “prudent person” or, properly, the prudent investor standard. New Jersey’s notion of prudence takes the “whole portfolio” into account and sees all investments as holistic and instrumental in the investment process, which should be attentive to “diversity, minimiz [ing] risk and improv[ing] returns.”

In contrast to the prudent investor policy adopted by New Jersey in 1997, statutory lists of prudent investments – used in several other municipalities - require “the establishment of express quantitative limits on the types of assets in which pension funds may be invested.” Though statutory lists and prudent investor policies are popularly considered to be stark opposites, they are not actually mutually exclusive. This is evidenced by New Jersey’s hybrid approach to investment. New Jersey’s quantitative allocation limits (See appendix 2) originate in the Investment Council though they might conceivably be legislated in a meeting of elected officials who represent taxpayers. Quantitative limits are not the only factors involved in the investment decisions of the director; recommendations made by the council also positively influence New Jersey’s portfolio.

In 2004, Orin Kramer – who had become Investment Council Chair in 2003 — maintained that reforming New Jersey’s portfolio in order to avoid similar allocation constellations was among the most important of the council’s objectives:
For the three-year period ending in 2002, New Jersey significantly under-performed relative to other pension funds or institutional funds. During the prior three-year period, it significantly outperformed. Historically the risk-adjusted returns are below average. The reason for changing is not that you had three years that under-performed, it’s that there was too much risk in the portfolio.\textsuperscript{32}

In other words, great risk can lead to higher gains, but also substantial losses. It seems that the chair’s goal was to decrease the risk of the portfolio. Was this associated with a decrease in expected return, or was there an expectation that return could be generated with less risk? This is critical because if lower risk implies lower return, then the gap must be made up by increased contributions from employees, employers, or state revenues dedicated for this purpose. The pension fund can not simply take more risk with the hope of achieving higher yields. This approach leaves the fund vulnerable to the cyclical booms and busts of volatile markets. The fundamental question is whether the return expectations in the portfolio are appropriate for the liabilities over the long run, and if not, is there the political will to match it with contributions or adjustments in benefits. Or is the fund taking on excessive risk to try to keep contributions lower? It seems the fund has begun to move in the right direction with attempts to reduce risk.

Diversification is the key to managing risk. In terms of portfolio management, allocation is a more significant determinant of return than securities selection. In 2007, the target allocation of investments produced by the council was thus:

**Total Equities Target: 55.7 percent.**

*Includes domestic equities, 30.7 percent; international equities in developed markets, 22.5 percent; and international equities in emerging markets, 2.5 percent.*

**Total Fixed Income Target: 31 percent.**

*Includes U.S. fixed income, 25 percent; U.S. high yield, 3 percent; and Treasury Inflation-Protected Securities (TIPS), 3 percent.*

**Alternative Investment Target: 10.3 percent.**

*Includes private equity, real estate and hedge funds, as well as commodities and other real assets.*

**Cash Target: 3 percent.\textsuperscript{33}**

The asset allocation targets are further refined through a process of indexing or targeting a list of benchmarks. The Division of Investment
cites the following as reliable sources for the development of sound investment plans:

*Standard & Poor’s Composite 1500 Index* for domestic equities;

*The Morgan Stanley Capital International-Europe, Australia and Far East Index (MSCI EAFE ex-Prohibited securities)* for international equities;

*A blend of the Lehman U.S. Government/Credit and Lehman Long Government/Credit indices* for domestic fixed-income;

*The HFRI Fund of Funds Composite Index* for hedge funds and the *National Council of Real Estate Investment Fiduciaries Property Index, NPI, plus 100 basis points for real estate*; and

*90-day Treasury Bill performance for cash.*

In essence, analysts should be guided by sound investment with extensive research, and portfolio managers’ reliance should be balanced between stock indexes like that quoted above, and active management of the account. According to Director William Clark, New Jersey’s assets are currently distributed among 17 managers, and each manager is responsible for approximately $4.7 billion. Director Clark has described the division’s investment as a balance of “top down” or macro-economic management performed by Investment Council members, and “bottom up” or the micro-economic management performed by individual analysts and managers throughout the investment process. However, it seems that the number of staff is too few, and potentially ill-equipped for such great responsibilities. Clark has mentioned that pension funds in most states use outside managers in order to make up staffing shortfalls.

Some critics have questioned why invest state pension funds in uncertain markets or in troubled financial institutions like Lehman Brothers. Why not just put them in treasury bonds? As to why New Jersey does not use a less-risky strategy of investing the pension fund in treasury bonds, the answer is that treasury bonds alone cannot produce enough revenue to meet the level of pension liabilities. Simply put, the state cannot afford a very low risk strategy that produces too little in the way of return. However, we have just seen what a large allocation to the stock and corporate bond markets can do.

Pension liability is a fairly fixed or unmoving calculation of cost-of-living, salary, inflation, etc. Because the New Jersey pension fund is so large, it is difficult to increase returns substantially in a very short period of time. Contributions in that time must be either invested and committed to other bonds or stretched over the benefits paid out to employees who retire in the meantime.

**IV. State Investment Strategy**
Having defined distinct challenges facing the problematic intersection of government pensions and investment, any reform effort should attempt to meet these challenges and better manage the risk of the pension fund’s investment portfolio. A simple solution might be to choose a less volatile means of gaining sufficient return, though, as noted in earlier sections of this report, the most stable investment strategies fail to fund even a minimum level of New Jersey’s increasing pension liability. Also, there are statutory reforms that need to be enacted to ensure that any future returns, modest or large, are governed by sound fiduciary reasoning. That is, “prudent” investment should mean minimizing risk, rather than maximizing gains. One complication is that in a more diversified portfolio, if one class of asset allocation yields below expectations, then even more burden falls on the other categories.

Pension fund returns should be first applied to liability, and surpluses should be left to accrue, perhaps, in less lucrative and lower risk investments until formally allocated.

As transparency should shape all processes of government, especially those involving the investment and distribution of public money, the Division of Investment should not only strive to make the details of the investment process more available but also more accessible. However, as the transparency of publicly traded stock means more risk:

- Allocation percentages should always be overtly available to New Jerseyans prior to the proposal’s passage, as it is with any other legislative issue.
- New instruments of analysis should be developed and made available for the purpose of accessing gains in low risk investments and respecting the nature of private equity funds.

The current Director of New Jersey’s pension fund, William Clark, has recognized the need for a reform in the investment process. The new management has, in many ways, enacted the most important reforms discussed in this report, including an exploration of private equity, an emphasis on risk, and the importance of diversification, which has been achieved through the increasing use of smaller allocations and investment in systemically diverse foreign markets, most especially Western Europe, Japan, Canada, and Australia.

In 2007, the New Jersey State Division of Investment (SDI) under the State Department of Treasury released a year-end report to detail the activities of New Jersey’s pension portfolio and to offer a forward-looking outlook on the recovery of New Jersey’s unfunded pension liability. The State Division of Investment, having won the Wall Street Hall of Fame Award for 2008, optimistically reported that diversity, flexibility, and foreign investment would mark its strategy going into the next fiscal year.
The SDI claims that a strategy of alternative investment will save New Jersey pensions from various market pitfalls such as those that befell the pension fund when too much of its assets were allocated to common equities during the dot-com build up. The SDI reports that it was wary of the mortgage boom that began as a consequence of dot-com fall out, and therefore avoided too many risky investments in unstable mortgages. The SDI offers the observation that when compared to similar investment portfolios in other and similar states, those who diversified “into other asset classes, have significantly out-performed New Jersey on a risk-adjusted basis over five-, 10- and 15- year periods – and that performance was attributable to superior asset allocation policies.” The SDI has therefore applied this observation to the allocation process.

Among the changes made to the way pensions are managed, the State Investment Council (SIC) or the policy arm of the SDI, recommended an emphasis on international investments and, likewise, a lowered emphasis on domestic investment. This policy change is intended to reduce risk by investing in markets ruled by forces that are characteristically different from domestic or American markets—or at least were in late 2008. By investing in emerging overseas markets, not only do investments offset somewhat the recent and ongoing uncertainties of U.S. markets, but there is also a greater chance of growth as new industries and countries have recently begun a period of strong development. The accumulation of assets in non-North American nations is substantial.

Another important reform to New Jersey pension policy is the SIC’s recommendation that there be less emphasis on public equity funds—which is responsible for the majority of New Jersey’s investments—and more emphasis on private equity funds, “the only new asset class in the portfolio expected to outperform public equities over the long-term.” Real estate was considered, and hedge funds “as a means to generate positive returns that have a low correlation to public equities” were also perceived to be promising new asset classes to add to New Jersey’s portfolio.

In line with the migration from public equities to private equity funds and hedge funds, the SDI notes, “In recognition of the fact that the plan’s liabilities are long-term in nature, we’ve sought to extend the duration (i.e. the average maturity) of the fund’s fixed income portfolio from roughly five to more than ten years.” However, without taking on significant credit risk, bonds lock in yields that are below the expectation of the overall fund. So that drag on performance must be made up somewhere.

The pension fund, being so large, is perhaps too much temptation for politicians. The former liquidity and concentration of New Jersey’s investments was dangerous in this regard. Pensions, being money entrusted to the state by the public, must be protected from this kind of danger. Ultimately, New Jersey’s new financial strategy moves some of its investment into less liquid equity funds,
though greater commitment is still not as binding or unproductive as investing in bonds with fixed rates of interest.

Since they are guaranteed by the state, individual pensioners are never in absolute danger of losing their assets. The pension fund, however, is vulnerable. Therefore, the competent management of pensions is more of a protection for taxpayers, who often must unfairly foot the bill. With an effort to keep and increase the transparency of the investment process and increased contributions, the New Jersey pension fund may one day have a surplus—at which point New Jersey taxpayers may benefit.

V. Changing Strategies

Historically, the pension fund was invested largely in common stocks and bonds. In 1991, the Investment Council authorized investment in international stock and bonds; from 1995 to 1999, New Jersey's pension plan returned an average of 27.96 percent per year, ranking it among the top of all public pension funds in that period. But after 2001, the value of the fund dropped by $14 billion in just two years, and because the pension fund was not significantly diversified, it suffered extensively when the stock market declined during the dot-com bubble burst. The McGreevey Administration wisely made a movement toward diversification into alternative investments. In recent years, the two major unions—the CWA and the NJEA—opposed moving management of these funds from in-house employees to outsiders. That outsourcing would allow less volatile returns as the assets would be under the constant care of private equity, hedge fund, and real estate managers who are thought to “add value” and performance to the portfolios they manage by delivering absolute versus relative performance. One complication to investing with these managers is transparency as private equity and hedge fund managers often keep information about their clients and portfolios confidential.

In general, the Investment Council did transfer funds to private equity and hedge funds, and to some real estate investments. The Council summarizes the changes, which began in 2003:

- A significant reduction in the allocation in domestic equities to reduce risk, which slightly increases the allocations in international equities, partially those in so called emerging market countries.
- Initiating investments in private equity.
- Initiating investments in real estate.
- Initiating investments in hedge funds.
- Initiating an inflation sensitive portfolio.
- Extend plan’s liabilities from five to more than ten years.

That policy shift was indeed a correct one. The movement has been from two to five to seven classes of investments. Some have compared New Jersey to New York and California. The major advantages that California and New York State
have are they were more diversified earlier, and have a more robust and better-compensated staff, which has access to many more sources of information and tools to make investment decisions and allocations. Staff in New Jersey have to submit to a difficult and inefficient procedure just to buy the information tools that they need to perform due diligence, to go to conferences in order to upgrade their work skills, and even to travel to New York City to attend investment prospecting meetings.\textsuperscript{46}

In making decisions, the State Investment Council exercises its own policy judgment subject to state statutes and regulations from the state Treasury department that limit discretion.\textsuperscript{47} The ethics code that governs the Treasury Department also applies to the Investment staff.

This small staff (only about 70 people) should be managing the managers, not making allocation decisions itself. But this is complicated by a recent Supreme Court decision, which curtailed the delegation of investment decisions to non-state entities.\textsuperscript{48} Although they are responsible for enormous amounts of funds, very few people in each division or area of the investment section have sufficient staff and analysts.\textsuperscript{49} These middle managers and assets managers need to have performance expectations and a reward structure that matches more closely the best of the other public funds and the better private endowments. The state has reached a point where these positions can no longer be bound by of the benefits and entitlements of the regular personnel system. Unions as well as taxpayers have, of course, substantial vested interests in the huge pension fund in New Jersey. There is still substantial criticism in union ranks of the investment policies of Governor Florio and especially Governor Whitman. But the current staffing and resources may create a situation in which too much risk is taken, since many staffers do not have time, staff, or the computer systems to follow the large number of securities already in the portfolio – or perhaps deserving to be added to the portfolio.\textsuperscript{50}

\textbf{VI. Transparency in the Public System}

While the state avoided owning any Freddie Mac or Fannie Mae common stock, there has been much criticism of the decision to invest 1.5 percent of the fund’s then assets in the stock of Lehman Brothers just weeks before the company filed for bankruptcy. Director Clark argues that there was no such knowledge of the imminent failure of Lehman, and Lehman stock traded above $28 a share on the day of the New Jersey purchase.\textsuperscript{51} In the wake of the investment decision and the subsequent total loss of the money invested, a number of sources familiar with the New Jersey State Investment Council’s decision to invest in Lehman Brothers were asked why one would make this sort of investment. In conducting the research for this report, we found that in fact there were two different investments in Lehman—a second one after its problems became even more apparent. Asked for an explanation as to how this happened, our sources offered these responses: New Jersey wasn’t the only investment fund to make that mistake, and the New Jersey fund was guided by the so-called
“discipline of the market” where Lehman stock was still being traded. One critic, however, has argued that New Jersey was knowingly taking part in a bailout strategy for Lehman.\textsuperscript{52} Though Director Clark vigorously insists that the decision to invest in Lehman was made by his staff in accordance with normal investment procedure,\textsuperscript{53} not by the Investment Council, some newspaper columnists and politicians charge\textsuperscript{54} that Investment Council members had links to the failed Wall Street investment bank. Several members of the Investment Council were previously employed by Lehman (See appendix 1). This report includes biographical sketches of the public members of the council.

Some of our sources argue that the Lehman management opportunity was offered to a select few people. However, still others believe that the investment was made without the appropriate due diligence. Director Clark, however, argues that it was not a private placement investment but was in public stock.\textsuperscript{55}

One of the sources for confusion is the role of the Investment Council and the role of the director. Our research indicates that the Investment Council sets the asset allocation policy for the overall portfolio, as shown on pages 14 and 15. The director is also required to seek board approval for investments over $50 million in the alternative decisions. So the Lehman investment would be part the common stock allocation designated by the council -- and completely left to the judgment of the staff and the director. Thus despite its size, it would not require board approval because it was not an alternative investment. However, an investment like this could very well have been conducted on a "private" basis in which it may not fit under the existing allocation. Could it have been done as a private investment in a public company or as some type alternative investment where potentially there could have been more due diligence undertaken? In these tumultuous times, we believe a review of responsibilities and greater transparency are warranted. Furthermore, it is our understanding that the investment in Lehman was accompanied by a decrease in other correlated financial institution investments that subsequently experienced significant losses. As a result, the loss in Lehman, though making headlines, did not take place in a vacuum. The overall loss to New Jersey would have been greater if the state had not decreased its investments in these other correlated financial institutions at the same time it was investing in Lehman. The real destruction of the value of the fund comes from the asset allocation to common equities, and to some extent corporate bonds.

Those close to the workings of the SIC argue that the council makes only policy decisions, with its staff making and allocating the investments. But in fact, in the Fall of 2008, the Newhouse newspapers reported that the decision to discuss the investment of $94 million in an attempt to assist hedge fund BlackRock was made by the SIC. Apparently not all members of the council agreed with the decision. CWA member Jim Marketti worried about compounding the state’s losses: "It's worked out differently than was originally proposed. The investments they made were paying 85 cents on the dollar, now they're worth 65 cents on a dollar. Now they're trying to sell us on the grounds
that 65 cents is a great investment." Mr. Marketti has expressed concern that the state is throwing good money after bad. We point to a distinction in that the investment may very well lose money, but that is not necessarily throwing good after bad. The real question is whether the allocation is the best allocation of capital given what the investment council and staff knows at the time. And if it is, then the investment should be made. If not, the capital should be allocated somewhere else. The chair of the Council, Orin Kramer, has said that the bank loans that BlackRock invests in are much safer than common stock. This statement is true, but how do they fit into the overall asset allocation? Are they in place of the common stock allocation, or are they an increase in the hedge fund allocation? And if so, should the fund further reduce common equities to add more of the safer bank loans? State Treasury spokesman, Tom Vincz, predicted the investments would get a 20 percent return. We believe that the Investment Council and staff should, and likely will, reconsider the overall asset allocation given the enormous dislocations in the markets.

Later news stories led to some more criticisms and complexities. The Senate President, Richard Codey, questioned why $49.5 million was put in the hedge fund on October 17 — an amount barely under the $50 million threshold that requires a review by the State Investment Council. Then on October 31, the state invested another $94 million in BlackRock. BlackRock had asked its investors, including the New Jersey fund, to increase stakes by 36 percent so it could avoid selling some of its holdings. At first BlackRock said it would accept $49.5 million in October, and then wait until the Investment Council meeting in mid November for the rest. But BlackRock subsequently insisted it needed the full amount by October 31, requiring an emergency meeting. In September 2007, New Jersey had invested its first $400 million when the loans were trading at 90 cents on the dollar; the loans are now trading at 70 cents on the dollar.

Senator Codey argued that an investment of that size needed to be reviewed, but the Investment Council and Treasury officials disagreed. Governor Corzine indicated that he opposed the Legislature getting involved in examining investment policies and allocations.

The issue of transparency has become even more confusing as illustrated in this case. The Executive Director and the council spokespeople have vigorously insisted that the basic 1950 law’s division of responsibilities is being honored. The Executive Director manages the fund; the council sets policy but stays out of particular investment decisions. But surely from the statements of Mr. Marketti it appears that members of the council thought they were being asked to approve the allocation. Despite the BlackRock allocations, Investment Director Clark and Vincz have still maintained that the council does not technically approve investments of any size. Vincz maintains, “This is procurement, it’s not an approval process. It’s a presentation process so they are aware of it and there is transparency with the public as well."
Too often public funds, especially large ones as in New Jersey’s case, do not exercise enough good due diligence in terms of research, analysis, and critical judgments when it comes to making investment decisions. We urge that the administration and the Legislature examine other large state pension funds and also private endowments of colleges, universities, and museums. In the New York Times of April 15, 2009, in an article dealing with investing in hedge funds Director William Clark remarked, “Clearly, it did not work out as well as we had hoped, and expected. You cannot deny that as a general asset class, it didn’t deliver what investors were led to believe.” Union representative on the Board, Jim Marketti, concluded that the state fund has not moved cautiously enough into hedge funds. “If we had invested it in the mattress, we would have done better,” he concluded. But Orin Kramer defended the investments, saying hedge funds did better than the stock market. “But even in 2008, hedge funds reduced volatility and were better places to be than these stocks [referring to auto companies, banks and home building companies].”

VII. Conclusion

This is the first in a series of Hall Institute papers on the investment of state pension funds. It was conducted as a first response to the debate that has intensified given the well publicized investment in Lehman and BlackRock and the ensuing criticisms. As always, the Institute welcomes debate on this topic and on any of our conclusions. We believe this will be a significant topic in the months to come. It needs to be studied thoughtfully, and we hope that it can be done in a bipartisan manner without sensationalism driven by politics. That is not to say that there are not reasonable criticisms, sharp differences in opinions, or significant changes that should be made.

The strategy for the investment of the New Jersey state pension fund is now a hybrid in which some of the fund investments are made directly by the staff, while some are allocated to outside managers. The investments made internally are primarily in stocks, bonds and cash consistent with the asset allocation direction of the SDI. The investments allocated to outside managers are in alternative investments, specifically hedge funds, real estate and private equity.

From history, New Jersey has learned that public money should not be surrendered to the will of current market trends, which are often characterized by cyclical booms and busts. Likewise, investment policy should certainly emphasize risk management and “prudence,” not just expected return. As public markets are at the mercy of a capricious and unfocused multitude of personal interests, it may not be considered “prudent” to invest large amounts of New Jersey’s important pension contributions in them. However, then the contribution and benefit structure needs to be re-examined. Or since New Jersey’s investments are merely a wealth accumulation tool with objectives that are long term in nature, there should be a long term focus on what the real expected return of various asset classes are and how that fits into the long term objectives of the fund. They should therefore not be surrendered to politicians and council members with
limited tenures and goals that are too often short-sighted. This history is especially apparent in New Jersey where six governors, beginning with and including Governor Florio, have served relatively short tenures. Only one Governor of the six, Governor Whitman, was elected to a second term.

Asset management is the most competitive business in the world, so competitive that a great deal of academic literature as well as many practitioners believe it is impossible to beat the market, and therefore investors should give up and just index. If the fund were to index, then it would be a very low cost operation and the key to its success would be based on the allocation of capital which is decided by the Investment Council. Under this scenario, the staff probably could be reduced to purely administrative positions given that indexing does not require any top down or bottom up analysis but simply investing in all the components of the index or outsourcing to an index manager at very low cost. This is a theoretically acceptable way to manage a portfolio. However, we must understand that over the long run, this has two risks:

- The return may not be great enough to keep up with the benefits provided, and therefore contributions will have to be increased. Given the allocation that the Investment Council currently has, it is unlikely that it can keep up with the benefits provided.

- The long run returns may be quite different than the short run returns in markets that have booms and busts. The real danger here is that during booms the state has a tendency to neglect contributions because of a feeling of security that quickly evaporates during bear markets and cycles like the one we are in now.

So any decision to deviate from indexing is based upon the belief that active management will produce returns that are superior to the index. Regardless of whether this is done internally or externally, it will cost more than indexing. We believe that active management is important for a large pension fund because, if done properly, active management can produce outsize returns with lower risk. We also believe there is the potential for success using internal as well as external managers. However we are not convinced that New Jersey has the appropriate framework.

Our conclusion is that the fund should be actively managed through the use of both internal and external managers. But there must be some conditions. First, for internal active management, there must be the necessary tools, people and process. We believe this can be improved in New Jersey. This includes research, technology, computer systems and the appropriate personnel similar to the private sector. Second, there must be coordination between what is managed inside and what is managed outside. Too many funds have “buckets” of different types of investment and different consultants and outside management for each bucket. Unfortunately the different sectors are interrelated and correlated and sometimes this may not be coordinated. Use of outside managers is appropriate
for many strategies where there is a specific niche, or expertise that is too prohibitive to be built internally. Then the use of external managers is justified. However, it is incumbent upon the fund itself to have some transparency into the risk of each manager’s strategy so that it can be factored into the overall portfolio risk of the fund. This includes allocation of underlying assets as well as leverage.

This approach creates a dilemma for a public fund where there is resistance to paying what one could earn in the private sector, and a similar reluctance to pay outside managers. However, how else can a fund compete? The Institute notes the fact that there are some public and endowment positions which are filled with the best personnel earning far less than they could make in the private sector. These institutions are fortunate to have the “philanthropy” of such public servants. However, such positions still must have the support and prestige needed to attract such a people. We believe New Jersey has attracted some very good people, but should focus on further creating and enhancing an environment where the best people want to work, or continue to work, and where they have the tools necessary for success.

As for recent headlines, we do not have any bias given the loss in Lehman Brothers. We believe that it was done with the best of intentions and hopes, and we understand that investments lose money. However we believe that questions dealing with the process and transparency are legitimate. But many of the criticisms are not quite accurate.

It has been said by Director Clark that there was reliance on the market pricing as valuation for Lehman Brothers. What seems not to be reported is that since this was an investment in a public equity and qualified under the 55 percent common stock allocation set by the council, it was actually replacing other financial sector stocks that were sold at the time. Those financial stocks had they remained in the portfolio would have lost a significant amount, maybe close to as much as the Lehman investment lost. So the net to the portfolio may not have been that significant. Of much greater importance is the overall risk embedded in the common stock portfolio.

However, an alternative view is that Lehman was a investment. And such investments may be appropriate for the pension funds if the analysis can be done and if it has a compelling risk reward. A one off investment in a struggling brokerage firm may be a good investment, but it is not clear how it fits into the asset allocation direction of the SDI. Clearly it is a common equity, but it is unique enough that it may be inconsistent with the 55 percent common equity bucket using the S&P as an index. But, if it is looked at similar to a private investment, truly evaluating such an investment can only be done by taking non-public information and doing an analysis that a private equity firm may do. We do not believe New Jersey has allocated enough resources to this analysis. We also are not privy to how the investment was sourced. There have been suggestions that there are conflicts, but we have no evidence of that.
Recently, there was also a newsworthy investment in BlackRock. Given the turmoil in the market, additional equity was invested to stave off margin calls. Clearly margin calls and forced selling are not to the advantage of the owner, but there is always the risk that good money goes after bad. We see no evidence that the investment in BlackRock was not appropriate. However, the negative press and public perception could have been avoided by a more transparent process. There seems to be some confusion as to what the role of the Investment Council was. It seemed to be involved in BlackRock but not in Lehman. This is the part of the process that remains unclear and needs to be clearer to avoid questions and criticisms.

In late November, it was reported that the pension fund invested in two other hedge funds with amounts of $49.5 million each. This is the area where we have some concern. Is $49.5 million the appropriate allocation? Why not $60 million? Or $25 million? If it is a compelling investment, was it limited because of an arbitrary rule? This we find to be inappropriate. There can be investments of $25 million that have far more risk than investments of $100 million. So why the arbitrary cutoff of $50 million? We believe that the SDI should be involved in any investment that is not typical of the fund and has unique risks, not just the size. As with BlackRock, we believe during these difficult times the atmosphere is ripe for doubts and bad publicity. Making investments just under some arbitrary number is food for criticism that is not helpful to anyone. We believe this rule should be reconsidered and the role of the council more clearly defined.

Finally, in regard to the issue of conflicts, we believe that one must be careful about conflicts of interest and the only way to give comfort is for accountability, transparency and fair judgment of performance against appropriate benchmarks.

New Jersey is suffering along with the rest of the world in this debacle. However, there are incredible opportunities to take advantage of this situation for the future. We believe that to do this, decisions must be rational and not emotional. Most importantly, the return will be determined by the asset allocation mix. We believe this needs to be studied and potentially adjusted given all the dislocations in the market. Then there must be an analysis of the expected return over long periods and a comparison to the long run liabilities of the fund. There must be significant attention paid to the contributions that will be needed to fund any shortfalls. Taxpayers bear responsibility and they should be represented. Finally, any reductions in contributions, as recently suggested by the Governor, should be done in conjunction with a long run plan for funding the liabilities. This approach requires a great deal of coordination and research, so it is critical for all of the components to be harmonized.

The Hall Institute is hopeful that our examination of New Jersey’s pension investment system leads to debate and discussion that will improve the process. We look forward to working cooperatively with all interested parties and stakeholders to ensure that this most important goal is attained.
APPENDIX 1

Council Member Biographies

Orin S. Kramer, Chair
General Partner
Boston Provident, L.P.

Orin Kramer is a General Partner of Boston Provident LP. He also serves as Chairman of the New Jersey State Investment Council. He was previously associated with the management consulting firm of McKinsey & Company; the law firm of Simpson Thacher & Bartlett; and the White House Domestic Policy Staff under President Carter.

Jonathan Berg, Vice Chair
Representing
Public Employees’ Retirement System

Jonathan Berg has been employed by the New Jersey Department of Environmental Protection since April of 1979. He is a graduate of Richard Stockton State College (now known as Richard Stockton College of New Jersey), class of 1979, and holds a B.S. in Environmental Science. He has been an elected member of the Executive Board of Communications Workers of America (CWA) Local 1034 for 5 consecutive 3-year terms as Vice-President, Higher Level Supervisory Unit. His last term expires December 31, 2008.

Erika Irish Brown

Former Senior Vice President of Diversity Lateral Recruiting of Lehman Brothers, Inc., Erika Irish Brown chairs the Investment Council's Diversity Committee, a committee formed for the purpose of providing continual evaluation of the Council's regulations and policies to promote diversity in broker and manager relationships. Ms. Brown has worked as Senior Vice President for Business Development of Black Entertainment Television (BET) through Viacom; Director of the Bedford Stuyvesant Restoration Corporation.
Maj. Marshall C. Brown
Representing
State Police Retirement System

W. Montgomery Cerf
Managing Director
Barclays Capital

Former Managing Director at Lehman Brothers, Inc. Currently Managing Director of Barclay’s Capital. Former managing director in charge of North American institutional sales, marketing and investor relations at Lehman Brothers until December 2006. Mr. Cerf is currently managing director and senior banker at JPMorgan.

Jose R. Claxton
Director
Latigo Partners, L.P.

James Clemente
Representing
Teachers’ Pension and Annuity Fund

Susan Ann Crotty
Managing Director
Tremont Capital Management

Mark Kandrac
Representing
Police & Firemen’s Pension Fund Board

Mr. Kandrac represents the Police & Firemen’s Pension Fund Board and is currently Platoon Captain of the Hamilton Township Fire District No.2.

James C. Kellogg
President
J.C. Kellogg Foundation

James Kellogg is President of the Community Foundation of New Jersey, was a partner in the law firm of Townley and Updike based in Manhattan, was a member of the Finance Committee for Meridian Health Systems, former board member of The Prudential Insurance Company of America, past President of Children’s Specialized Hospital in Mountainside, former board member of New Jersey Housing and Mortgage Finance Agency, the Council of the Woodrow
Wilson School at Princeton University and the Scholarship Fund for Inner City Children and served on the Committee of Financial Affairs and Physical Plant of the Bloomfield College Board of Trustees. He graduated from Princeton University and Harvard Law School.

Douglas A. Love, PhD  
Chief Investment Officer  
*Ryan Labs, Inc.*

Dr. Love is Chief Investment Officer at Ryan Labs, Inc., New York; was the Founder and former Chairman of Buck Investment Services; has been a consultant to the PBGC and World Bank; has participated in Financial Accounting Standards deliberations; served as Chairman of the Employee Benefits Research Institute; has been project manager for the Council of Economic Advisors for the White House; and was a member of the Grace Commission. Dr. Love has taught at both New York University and Rutgers business schools. He has a BME from Cornell University, an MBA from New York University and a PhD in Economics from Columbia University.

Vacant  
Representing  
New Jersey State AFL-CIO

Vacant  
Representing  
The New Jersey Education Association
APPENDIX 2

The following is a list of asset allocation regulations released in a treasury report from 2000:

STATE INVESTMENT COUNCIL
REGULATORY POLICY DECISION FOR THE PENSION FUNDS

- Equity investment must be no more than 70 percent of the portfolio, including both international and domestic equities.

- International investment is limited to 22 percent of the portfolios, including both international stocks and bonds.

- International investment in both stocks and bonds is limited to countries that have at least one AA sovereign rating.

- All international investments may be hedged through currency transactions.

- Equity real estate investment is limited to 10 percent of the portfolio; however, investment in this area is restricted to REITs due to regulatory limitations.

- Unlimited investment is permitted in securities of U.S. Government and designated agencies. CMOs are limited by internal policy.

- Investment in domestic corporate bonds is limited to companies with a rating of Baa/BBB or better.

- Investment by the pension funds in mortgages is defined as pools of certain specified government agencies, with one regulation permitting investment in pools of conventional mortgages with specific credit guidelines.

- Investments in municipal bonds, commercial paper, repurchase agreements, certificates of deposits, bankers acceptances, etc. are all permitted by specific regulations that specify high credit standards and conservative investment limits.

- All investments in any one security are limited to a portion of the security issue, and thus all investments require co-investment ensuring diversification and market pricing.
Appendix 3

Pension Liability vs. Market Value

Y-Axis in $ billions


Liability  Market
Pensions Invested in Treasury Bonds at a Rate of 7.25 Percent

At a fixed return of 7.250 percent, pensions still fail to meet liability by 15.4 billion.
LIST OF WORKS CITED

1 Research for this report on the history of the New Jersey pension system and all personal interviews were conducted by Michael P. Riccards, Executive Director of The Hall Institute of Public Policy.

2 Personal interview A.

3 Personal interview C.

4 Personal interview D.


9 Personal Interview G

10 Ibid. of 7.

11 In Division of Public investment report "Smart Growth Impact":

(b) A flat five percent pension rate of contribution was enacted by P.L. 1994, [c.62] c. 62 for all employees enrolled on or after July 1, 1994. For members enrolled prior to July 1, 1994 whose previous full rate of contributions was six percent or more, the five percent contribution rate became effective on July 1, 1995. For members enrolled prior to July 1, 1994 whose previous full rate of contributions was less than six percent, their rate of contributions became four percent on July 1, 1995 and then five percent on July 1, 1996. Effective January 1, 1998 the rate of contribution became four and one half percent. Contributions are currently 5.5 percent.

12 Division of Investment “Disclosure Funding Accounting” April, 2007; At this time, the State not only lowered employer contributions to pension liability but also lowered state aid to employers, which further exacerbated the rising level of unfunded liability.


14 Ibid. of 7.

15 Ibid. of 7.

16 Ibid. of 7.

Roland M. Machold was nominated to the position of State Treasurer by Gov. Whitman in 1999 after having retired in 1998 from the position of Director of the New Jersey State Division of Investment for 23 years. The nomination from Governor Whitman allowed him to succeed Treasurer James A. DiEleuterio.

Ibid of 5.

Ibid. of 5.

New Jersey Division of Investment, "Annual Report for Fiscal and Calendar Year 2007", June 30, 2007: "New Jersey opted to stay the course and hold its asset allocation constant, rather than move into newer asset classes, such as private equity and real estate. With the bursting of the “internet bubble” in late 2000-2001, the S&P 500 lost 12.8 percent and 16.5 percent for the periods from July 1, 2000-June 30, 2001 and July 1, 2001-June 30, 2002, respectively."

"New Jersey Report for Fiscal year 2000." Investment Section, Division of Pensions and Benefits.

Ibid. of 7.

Ibid. of 7.

Ibid. of 7; William Clark Memo, Nov 11, 2008.

Ibid. of 7.


J. Alan Nelson, “The Prudent Person Rule: A Shield for the Professional Trustee” Baylor University Law Review, (Fall 1993): Nelson’s is an interesting article follows the national trend of prudent investor legislation and responds to the often ambiguous usage of “prudent person” where “prudent investor” is meant. The prudent investor is one of determining “whether the trustee’s primary responsibility is to safeguard the rest of the trust or to generate income.” Most relevant to the dilemma of prudency in New Jersey where it was generally accepted that the latter, the generation of income, was the purpose of prudence. Briefly, the author moves through the various faces of this slippery standard of prudence.


Ibid. of 20

Ibid: One source called this practice “veiled indexing.”

Personal Interview C

Ibid. of 20.
The authors of this paper have investigated the question of politically driven divestment from foreign markets. In the past, administrations in New Jersey have prohibited investment in Northern Ireland, South Africa, and Darfur. Based upon our investigations and interviews, the differences in yield as a result of political divestment from foreign markets are unclear; William Clark Memo, Nov 11, 2008.

Ibid. of 20.

Ibid of 20.

Ibid. of 20.

Ibid of 20.

Ibid of 20.

Ibid. of 21.

Personal interview A & D

Ibid of 20.

Personal interview A

Personal Interview A,C,D,E

Personal Interview A,C,D,E

Personal interview A

Personal interview A


Personal interview D

Personal interview E


