

# **Who Owns America's Oil and Natural Gas Companies**

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## I. Introduction and Summary

Broad ownership of public corporations, economic researchers find, yields substantial economic and social benefits. One critical benefit is stronger economic growth. Investors seek out the highest returns available, adjusted for their levels of risk. Thus, the pressures from investors buying and selling shares based on the performance of companies force those companies to invest in the factors that help secure strong returns, including new plant and equipment, trained and knowledgeable personnel, and research and development. Broad ownership of firms also supports economic efficiency. The economy's overall efficiency depends, in important part, on easy access to capital by firms which can use it productively, and broad ownership of firms can provide much of that capital. Finally, and perhaps most important, broad ownership of corporations promotes social progress by enabling large numbers of people to benefit from the strong returns generated in an efficient, productive and growing economy.

These dynamics are especially pertinent today, given the growing public perception that most of the benefits produced by the American economy flow to a very small number of people. While we do not address here issues of income disparity, this study will analyze the distribution of ownership of the U.S. oil and natural gas industry. This industry has attracted particular attention in the current debate: U.S. oil and natural gas companies are not only critical to the economy's efficiency and strength; they also have experienced especially strong profits in recent years. Who owns the industry and benefits from those profits, therefore, is a matter of genuine importance and broad public interest.

As we will see, nearly half of the shares of U.S.-based oil and natural gas companies are held by public and private pension and retirement plans, including 401(k)s, and IRA's, and individual investors outside those plans own another 20 percent of the industry's shares. By contrast, as we will also see, corporate-management owns less than 3 percent of the oil and natural gas industry, including just one-half of one percent of the integrated oil and natural gas companies.

The benefits of this broad ownership have increased in recent years as the price of a barrel of oil has risen sharply, from \$58.41 in 2006 and \$93.05 in 2008 to \$101.66 per-barrel over the first nine months of 2011.<sup>2</sup> It is noteworthy that these increases followed more than a decade of generally low oil prices; and the higher prices in recent years have principally reflected a sharp and sustained expansion of worldwide demand for energy, led by China, India and other developing countries. This strong demand has pushed up worldwide oil prices. The resulting

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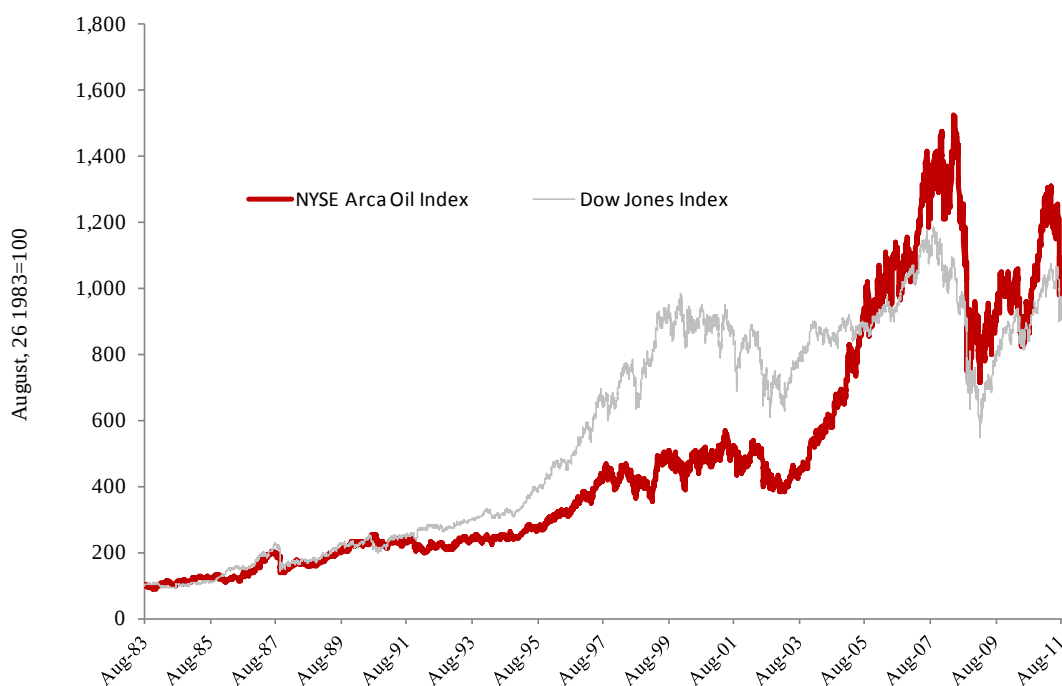
<sup>1</sup> This research for this study was supported by the American Petroleum Institute (API). All analysis and views expressed in the study are those solely of the authors.

<sup>2</sup> Energy Information Administration, 2011. On October 7, 2011, the weekly average FOB price \$94.37 per barrel.

higher prices have produced, in part, the strong returns of U.S. oil and natural gas companies, and benefits for their broadly distributed owners.

It is also notable that these recent, strong returns follow an extended period in which low oil prices produced returns for the U.S. oil and natural gas industry which lagged those of much of the rest of the American economy. Figure 1, below, tracks the daily prices of a leading index of U.S. oil and natural gas companies, the NYSE Arca Oil Index, compared to the Dow Jones Index, over the period from August 1983 to October 2011. As the graph shows, the daily prices of oil and natural gas companies generally tracked the returns of the overall economy and market from 1983 to 1991, significantly underperformed the economy-wide averages from 1991 to 2004, when oil prices were low, and have out-performed the Dow Jones Index only since 2005.

**Figure 1: Returns for the U.S. Oil Sector Compared to the Overall Economy:  
NYSE Arca Oil Index and Dow Jones Index,  
August 1983 - October 2011<sup>3</sup>**



As noted, this analysis shows that the ownership of the U.S. oil and natural gas industry is broadly distributed, with only very small portions of its shares held by corporate management.

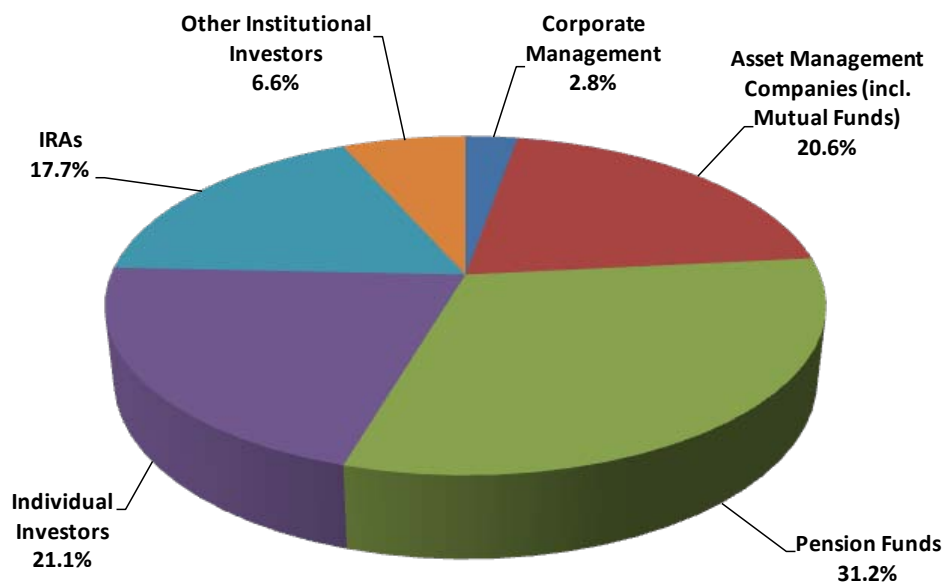
- Across all U.S.-based oil and natural gas companies, less than 3 percent of outstanding shares are held by the officers and board members of those companies. By contrast, nearly 50 percent of those shares are held by public and private pension plans, including

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<sup>3</sup> The NYSE Arca Oil Index (XOI) is a price-weighted index that measures the performance of the oil industry through changes in the prices of a cross section of widely-held corporations involved in the exploration, production, and development of petroleum.

401(k)s and IRAs. In addition, an additional 20 percent of those shares are owned by individual investors who manage their own holdings (and are not corporate management). The remaining 27 percent of shares are held by financial institutions and asset management companies.

**Figure 2. Ownership of U.S. Oil and Natural Gas Companies, 2011**



- The data also show that this general pattern holds across the three main oil and gas industry segments of the oil and natural gas sector:
  - Corporate management owns 0.5 percent of the shares of integrated oil and natural gas companies – compared to 42 percent owned by other personal investors who manage their own holdings; 47 percent owned or held by asset management companies; 3 percent owned and managed directly by pension plans, and 7 percent held or managed by other institutions.
  - Corporate management also owns less than 6 percent of the shares of non-integrated oil and natural gas companies – compared to 18.5 percent owned by other personal investors who manage their own holdings; nearly 76 percent held or owned by asset management companies; 3 percent owned and managed directly by pension plans, and 6 percent held or managed by other institutions.
  - Finally, corporate management owns 4 percent of the shares of oil and natural gas service companies -- compared to 23 percent owned by other personal investors who manage their own holdings; 63 percent owned or held by asset management companies; 4 percent owned and managed directly by pension plans, and 6 percent held or managed by other institutions.

- All told, individuals who are not corporate management own 70 percent of the U.S. oil and natural gas industry. Of the remaining 30 percent, institutions own 27.2 percent of the industry, and corporate management holds the remaining 2.8 percent.
- These data, along with previous analyses which we conducted,<sup>4</sup> also show that the ownership of oil and natural gas company shares is broadly middle-class. For example,
  - 21 percent of oil and natural gas shares are held in mutual funds: Mutual funds are held by 52.3 million American households, with a median annual income of \$80,000 in 2011.
  - 18 percent of oil and natural gas industry shares are held through IRAs: 48.6 million American households own one or more IRAs, and 80 percent of those IRA holders had annual incomes of \$70,000 or less in 2010.
  - 31 percent of oil and natural gas shares are owned by public or private pension plans, including 401(k)s (and excluding IRAs): These funds manage assets on behalf of 60.7 million households in some 145 million accounts, with an average value of less than \$55,000.

## II. Procedure and Analysis

In order to analyze who owns U.S. oil and natural gas companies, we break down the industry and analyze the distribution of ownership in each of its three major segments: 1) integrated oil and natural gas companies engaged in exploration, production, refining and transportation; 2) non-integrated oil and natural gas companies engaged in exploration, refining, and storage and transportation of refined products; and 3) oil and natural gas service companies engaged in manufacturing drilling rigs and equipment and providing industry services such as drilling, evaluation and completion of wells.

This analysis is drawn from ownership data provided to the SEC by all publicly-traded companies in the industry. We first organized this extensive data on the industry's shareholders into three broad groups: corporate management; institutional investors; and individual investors who trade for their own accounts and are not corporate management. An insider shareholder is an individual directly linked to a company as an owner, director or officer required to report any purchases or sales of shares in the company to the SEC (using Form 4).<sup>5</sup> As we will see, corporate management holds very small shares of these companies. By contrast, the largest holders as reported by the SEC are institutional investors. These are businesses that buy and sell securities for the accounts of other organizations or persons, as well as for their own accounts, and which hold total investments of at least \$100 million. Institutional investors include professional asset managers, which the SEC distinguishes on the basis of whether they also operate mutual funds. Institutional investors that do not operate mutual funds include hedge funds, private equity funds, public and private pension funds, insurance companies, endowment and foundations, banks and other financial institutions. The SEC data also distinguishes

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<sup>4</sup> Shapiro and Pham, 2006; and Shapiro and Pham, 2005.

<sup>5</sup> NASDAQ, 2011.

institutional investors by whether they directly manage their own assets, including their oil and gas company shares. This category includes some pension plans, although most pension plan shares are held and managed by other institutional investors. Therefore, the oil and gas company assets held by pension funds are divided between these two classes of institutional investors. Similarly, the oil and natural gas shares held in IRA and other individual retirement plans are divided between institutional investors and individual investors who are not also corporate management.

Our analysis is based on the SEC data in October 2011 on the ownership holdings of 173 oil and natural gas companies.<sup>6</sup> These 173 companies include 14 U.S.-based integrated oil and natural gas companies, 103 U.S. non-integrated oil and natural gas companies, and 56 U.S. oil and natural gas servicing companies. Foreign-based companies are not required to report holdings by their corporate management, and are not included in this analysis. Further, the number of U.S.-based oil and natural gas companies in each segment with available ownership data has increased significantly since 2007, when we last examined this issue. Our previous analysis covered 138 companies, including 12 U.S.-based integrated oil and natural gas firms, 74 U.S. non-integrated companies, and 37 U.S. service enterprises.<sup>7</sup>

The greatest challenge in analyzing the distribution of ownership across this industry involves disaggregating the holdings of institutional investors. To do so, we obtained 2011 data from the SEC's Edgar Online database for every oil and natural gas company traded on U.S. exchanges. Next, we divided the data on institutional investors into three groups. First, there were 656 asset management firms that offer mutual funds, such as Fidelity, Putnam or Citigroup. Second, there were 2,154 asset management firms without mutual funds which also manage assets for public and private pension funds, institutions and private investors. These include hedge funds, private equity funds, and other institutions. Third, there were 568 institutional investors that manage only their own assets, including the self-managed assets of 35 public pension funds, 28 private pension funds, 174 banks, 19 endowments and foundations, 58 insurance companies, and 254 other financial institutions. All told, the number of institutional investors holdings shares in U.S. oil and natural gas companies and covered in this study increased by more than 70 percent from 2007 to October 2011, from 1,971 to 3,378 institutions. Finally, to measure corporate-insider holdings of oil and natural gas companies, we consulted the SEC's Edgar Online database and the commercial Thomson Reuters database.<sup>8</sup> We calculated the holdings of individual investors who manage their own assets and are not corporate management by netting out institutional and corporate-insider holdings from total holdings.

Table 1, below, presents a basic analysis of who owns the shares of U.S. oil and natural gas companies. Nearly two-thirds of the industry's total shares, 66.0 percent, are held by institutional investors;<sup>9</sup> and 85 percent of those shares, or 56.1 percent of the total, are held by asset management companies, many of which manage the accounts of individuals. The remaining nearly 10 percent of oil and gas company shares held by institutional investors are

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<sup>6</sup> For more detailed descriptions of these ownership categories, see explanations for SEC Form 4 and Form 13f, U.S. Securities and Exchange Commission. 2011.

<sup>7</sup> Shapiro and Pham, 2007.

<sup>8</sup> Edgar-Online Database.

<sup>9</sup> Many institutional investors are managing accounts for individuals in the form of mutual funds, IRAs, 401(k)s and other private and public pensions funds.

owned and managed directly by pension plans and financial institutions. Almost all of the rest of the industry's shares – 31.2 percent – are held by individual investors who are not corporate management. Finally, corporate management owns 2.8 percent of the industry's shares.

As noted earlier, there are significant differences among the three major industry segments. Integrated oil and natural gas companies have the smallest portion of insider ownership at 0.5 percent and the largest portion owned by other individual investors at 41.9 percent. By contrast, the non-integrated and services segments have larger portions of shares held by institutional investors, 75.7 percent and 73.2 percent respectively, compared to less than 58 percent owned or managed by institutional investors in the integrated segment.

**Table 1: Ownership in the Oil and Natural Gas Industry and Its Major Segments, 2011**  
(Percentage of Outstanding Shares; weighted by market capitalization)<sup>10</sup>

|                                     | <b>Oil &amp; Gas Industry</b> | <b>Integrated Segment</b> | <b>Non-integrated Segment</b> | <b>Service Segment</b> |
|-------------------------------------|-------------------------------|---------------------------|-------------------------------|------------------------|
| <b>Corporate Management</b>         | <b>2.8%</b>                   | <b>0.5%</b>               | <b>5.9%</b>                   | <b>4.1%</b>            |
| <b>Institutional Investors</b>      | <b>66.0%</b>                  | <b>57.6%</b>              | <b>75.7%</b>                  | <b>73.2%</b>           |
| <i>Asset Management Firms</i>       | 56.1%                         | 47.1%                     | 66.9%                         | 63.3%                  |
| <i>With mutual funds</i>            | 33.3%                         | 28.0%                     | 38.1%                         | 39.4%                  |
| <i>Without mutual funds</i>         | 22.8%                         | 19.1%                     | 28.8%                         | 23.9%                  |
| <b>Pension Funds</b>                | <b>3.3%</b>                   | <b>3.3%</b>               | <b>2.7%</b>                   | <b>4.0%</b>            |
| <i>Public</i>                       | 2.4%                          | 2.6%                      | 2.2%                          | 2.3%                   |
| <i>Private</i>                      | 0.9%                          | 0.7%                      | 0.5%                          | 1.7%                   |
| <b>Insurance</b>                    | <b>0.9%</b>                   | <b>1.1%</b>               | <b>0.6%</b>                   | <b>0.6%</b>            |
| <b>Endowments/Foundations</b>       | <b>0.1%</b>                   | <b>0.1%</b>               | <b>0.1%</b>                   | <b>0.0%</b>            |
| <b>Banks</b>                        | <b>4.6%</b>                   | <b>5.1%</b>               | <b>4.0%</b>                   | <b>4.1%</b>            |
| <b>Other Financial Institutions</b> | <b>1.1%</b>                   | <b>0.9%</b>               | <b>1.4%</b>                   | <b>1.2%</b>            |
| <b>Individual Investors</b>         | <b>31.2%</b>                  | <b>41.9%</b>              | <b>18.5%</b>                  | <b>22.7%</b>           |
| <b>Total</b>                        | <b>100.0%</b>                 | <b>100.0%</b>             | <b>100.0%</b>                 | <b>100.0%</b>          |

The general outlines of industry ownership have not changed since our 2007 findings, although certain magnitudes have shifted. Corporate management continues to own small, single-digit shares of U.S.-based oil and natural gas companies. However, the share held by corporate management fell in the integrated oil and natural gas segment while rising in the other two segments. As noted earlier, corporate insider ownership also is much smaller for the major companies that dominate each segment, compared to the many smaller companies in each industry segment. Further, across all three segments, the share of ownership held by individual investors who are not corporate management has increased substantially since 2007. Consequently, even as institutional investors continue to hold two-thirds of all oil and natural gas company shares, their relative ownership has declined both across the entire industry and in each industry segment.

The categories of ownership reported by the SEC, especially the shares held by institutional asset managers, do not fully portray the broad nature of this ownership. As noted

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<sup>10</sup> These ownership shares are not simple averages but weighted within each segment for each company's market capitalization, which ranges from a low of \$2 million (Bayou City Exploration, Inc., an operations firm) to a high of \$356 billion (Exxon-Mobil, the largest integrated oil and natural gas company).

above, these asset management companies hold and manage oil and natural gas company shares for many types of owners. For example, the 3.3 percent of oil and natural gas company stock owned and managed directly by pension funds in 2011 represent only a small fraction of those plans' total holdings of industry shares. We calculate that 18.8 percent of the industry's shares are owned by private pension plans, including 401(k)s, and public pension plans hold another 12.4 percent of the industry's shares. These pension and retirement plans, therefore, own 31.2 percent of all oil and natural gas company shares. In addition, we estimate that individual IRA retirement accounts, nearly 57 percent of them managed by individual investors, hold another 17.7 percent of all industry shares. (See Figure 2, provided earlier)

We derived these estimates as follows. Private and public pension funds and IRAs currently hold \$15,397 billion in assets, including \$7,507 billion in equities. In mid-2011, the total market capitalization of U.S. oil and natural gas companies was \$1,370 billion or 8.9 percent of the total \$15,350 billion capitalization of all U.S. equity markets. If we assume that the equity holdings of U.S. pension plans and IRAs are distributed across industries in the same proportions as all equities, then 8.9 percent of pension plan and IRA equities are held in oil and natural gas companies. Therefore, these plans and IRAs hold some \$670 billion in oil and natural gas company shares, or 48.9 percent of those companies. (Table 2, below)

We can further break down this total based on the total equities held by each category. Of \$7,507 billion in equities held by public and private pension plans and IRAs, private pension funds hold 38.5 percent or \$2,891 billion, public pension funds hold 25.3 percent or \$1,899 billion, and IRAs hold 36.2 percent or \$2,717 billion. Therefore, we calculate that private pension plans hold \$258 billion in oil and natural gas company shares, or 18.8 percent of the industry's total ownership. Public pension plans hold an estimated \$169 billion in these shares, or 12.4 percent of the oil and natural gas industry. Finally, IRAs hold an estimated \$243 billion in oil and natural gas company shares or 17.7 percent of the industry.

**Table 2: Pension Funds and Retirement Account Holdings of U.S. Oil and Natural Gas Public Companies, 2011 (\$ billions)<sup>11</sup>**

|                              | <b>Total Pension and Retirement Plan Assets</b> | <b>Pension and Retirement Plan Equity Holdings</b> | <b>Holdings in Oil and Natural Gas Equities</b> | <b>Share of All Oil and Natural Gas Stock</b> |
|------------------------------|-------------------------------------------------|----------------------------------------------------|-------------------------------------------------|-----------------------------------------------|
| <b>Private Pension Funds</b> | \$6,346                                         | \$2,891 (38.5%)                                    | \$258                                           | 18.8%                                         |
| <b>Public Pension Funds</b>  | \$4,351                                         | \$1,899 (25.3%)                                    | \$169                                           | 12.4%                                         |
| <b>IRA's</b>                 | \$4,700                                         | \$2,717 (36.2%)                                    | \$243                                           | 17.7%                                         |
| <b>Total</b>                 | \$15,397                                        | \$7,507 (100.0%)                                   | \$670                                           | 48.9%                                         |

Further, the Investment Company Institute (ICI) reports that 48 percent of all IRA assets in 2010 were held in mutual funds, and 52 percent of those assets were managed directly by individuals. The ICI also reports that 51.5 percent of the assets in IRA accounts were invested in equities or equity funds. Based on these data, we estimate that IRA-account owners hold approximately 7.6 percent of all U.S. oil and natural gas company shares in mutual funds while

<sup>11</sup> Board of Governors of the Federal Reserve System, 2011. Investment Company Institute, 2011: The IRA Investor Profile Traditional IRA Investors' Asset Allocation 2007 and 2008; Standard & Poor's Indices.

managing directly another 10.7 percent of all U.S. oil and natural shares. Institutions hold 27.2 percent of those shares, directly or through asset management companies.

In summary, therefore, private and public pensions own approximately 31.2 percent of U.S. oil and natural gas companies, including 3.3 percent directly and 27.9 percent through asset managers including mutual funds. IRA account holders own another 17.7 percent of U.S. oil and natural gas companies, 10.1 percent directly and 7.6 percent through mutual funds. All told, therefore, individual investors who manage their investments own 31.2 percent of oil and natural gas companies, including through IRAs; IRA account holders own an additional 7.6 percent of the industry managed by mutual funds; public pension plans own another 12.4 percent of oil and gas companies; and private pension plans own 18.8 percent of the industry. Individuals who are not corporate management, therefore, own 70 percent of the U.S. oil and natural gas industry.<sup>12</sup> Of the remaining 30 percent, institutions own 27.2 percent of the industry, and corporate management holds the remaining 2.8 percent.

### **III. The Classes of Owners of the Oil and Natural Gas Industry**

Economic researchers have found that the composition of ownership in a company or industry can affect its performance, even as they disagree about the nature and strength of those effects. For example, some analysts argue that increased corporate management holdings can better align the management's interests with those of other shareholders and improve a company's financial performance.<sup>13</sup> Other researchers counter that large corporate management ownership can create an "entrenchment effect" in which corporate management promote their personal interests through stock purchases and transactions.<sup>14</sup> In the case of the oil and natural gas industry, the very small ownership shares of corporate management suggest that any positive or negative effects associated with large insider ownership have little if any impact on the performance or shares prices of those companies.

Oil and natural gas companies clearly have very broad-based public ownership, a quality generally associated with the potential for strong growth and returns.<sup>15</sup> Economists generally agree, for example, that companies with broad ownership have greater access to financing, which enables firms to expand their operations and geographical scope. Other studies have found that the impact of broad ownership on a company's growth and diversification enhances its ability to attract managers and other employees with specialized knowledge and skills.<sup>16</sup> Furthermore, as a company's ownership broadens, the larger numbers of stockholders demand more information, which in turn compels managers to improve a firm's efficiency and strategy.<sup>17</sup> Perhaps most important, broad public ownership can lower a company's cost of capital, which in turn promotes investment and growth.<sup>18</sup>

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<sup>12</sup> These individuals, while overwhelmingly American, also include foreign investors who hold oil industry shares through U.S. brokerages or asset managers.

<sup>13</sup> Hotchkiss and Strickland, 2003.

<sup>14</sup> Chakravarty and McConnell, 1999.

<sup>15</sup> Pagano and Roell, 1998.

<sup>16</sup> *Ibid.*

<sup>17</sup> Belkaoui and Pavlik, 1992.

<sup>18</sup> Lowry and Schent, 2002.

Among owners, institutions have received the most attention from researchers, because they manage or hold an estimated two-thirds of all shares in U.S. companies.<sup>19</sup> The enormous financial resources and economic reach of institutional investors are evident in their assets, in their average size, and the numbers of entities and accounts. Both individually and as a group, institutional investors have become more aggressive in recent years about reviewing the management performance and strategic decisions of the companies in which they invest, consistent with their responsibilities and incentives to secure the highest returns for their clients.<sup>20</sup> Some institutional investors also collaborate through organizations such as the Council of Institutional Investors, pooling their holdings for proxy votes and shareholder resolutions, as well as litigation, and exerting pressure on regulatory bodies to press for changes in underperforming firms and prevent corporate management from self-dealing.<sup>21</sup>

The structure of ownership of oil and natural gas companies can be portrayed in a variety of ways, including approaches that provide insight into the income distribution of those owners. While most institutional investors do not release information on the characteristics of those whose assets they manage, the data clearly show that these institutional investment entities hold a large share of U.S. oil and natural gas companies on behalf of middle-class Americans. For example, some 21 percent of industry shares are held through mutual funds, and the typical owner of mutual fund shares is a middle-class household. In 2011, some 52.3 million households, or 44.1 percent of all American households, owned mutual funds. Moreover, the median annual income of mutual funds owners in 2011 is \$80,000, including 7 percent of U.S. households with annual incomes below \$25,000.<sup>22</sup>

As noted above, we also found that 17.7 percent of oil and natural gas industry shares are held in individual retirement accounts (IRAs). In 2010, 48.6 million households, or 41.4 percent of all U.S. households, owned one or more IRAs. According to the most recent ICI data, 23.5 percent of IRA investors aged 25 or older have average annual incomes of less than \$45,000; 35.3 percent had average annual incomes of \$45,000 to \$70,000; 21.9 percent had average annual incomes of \$70,000 to \$100,000; and the remaining 19.3 percent had average annual incomes of \$100,000 or more.<sup>23</sup> In short, 80 percent of all IRA holders have annual incomes of \$100,000 or less. We also found that private and public pension funds, including 401(k)s that are mostly managed by asset management companies, hold approximately 31 percent of U.S. oil and natural gas company shares. While income data on the claimants to those pension plans are not available, they include some 145 million accounts for 60.7 million American households.<sup>24</sup> According to recent surveys by the U.S. Census Bureau and the U.S. Department of Labor, these private and public pension funds (including 401(k)s) held nearly \$7.9 trillion in total assets in 2008-09, or an average of less than \$55,000 assets per-pension account.<sup>25</sup>

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<sup>19</sup> Parthiban, Kochhar, and Levitas, 1998.

<sup>20</sup> Parthiban, Hitt, and Gimeno, 2001.

<sup>21</sup> Council of Institutional Investors.

<sup>22</sup> Investment Company Institute, 2011. Mutual fund owners also include 38 percent of households with annual incomes of \$100,000 or more.

<sup>23</sup> Investment Company Institute, 2011: The IRA Investor Profile – Traditional IRA Investors’ Asset Allocation, 2007 and 2008, ICI.

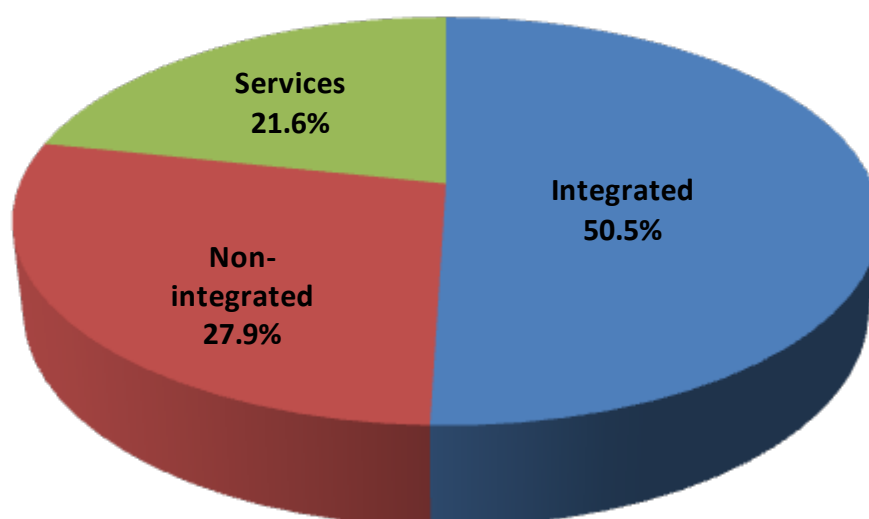
<sup>24</sup> Copeland, 2011.

<sup>25</sup> U.S. Census Bureau; U.S. Department of Labor, National Summary of State and Local Public Employee Retirement System Finances, Released October 2011; U.S. Department of Labor Employment Benefits Security Administration, Private Pension Plan Bulletin Historical Tables and Graphs, December 2010.

#### IV. The Distribution of Ownership by Industry Segments

Among the three segments of the oil and natural gas industry, integrated oil and natural gas companies account for more than half of the entire industry's market capitalization, followed by non-integrated companies and then service firms. This is significant in understanding the role of corporate management in the industry's ownership, because such corporate management holds much smaller ownership shares of the integrated oil and natural gas companies than in the other two industry segments. In 2011, integrated oil and natural gas companies accounted for 50.5 percent of the overall industry's total market value of nearly \$1.4 trillion, compared to non-integrated companies that accounted for nearly 28 percent of that total, and services-related companies which accounted for the remaining 21.6 percent. (Figure 3, below)

**Figure 3: Oil and Natural Gas Segments' Share of the Industry  
By Market Capitalization, 2011<sup>26</sup>**



##### ***Ownership in the Integrated Oil and Natural Gas Segment***

Our analysis collected SEC data on 14 domestic integrated oil and natural gas companies. The analysis found that corporate management holds just 0.5 percent of the total shares of the integrated oil and natural gas companies. (Table 3, below) Moreover, the analysis further found significant differences in this respect based on the size of the firms. Corporate management holds a much smaller ownership share of the three largest companies, averaging just 0.1 percent, compared to 6.7 percent for the other eleven, much smaller companies in this segment. As we will see, this general pattern is repeated in the other two segments. Furthermore, individual investors who are not corporate management hold 43.4 percent of the total ownership of the three large integrated companies, compared to just 20.9 percent share for the smaller integrated firms. Finally, institutions hold much smaller stakes in the three largest integrated oil and gas

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<sup>26</sup> Edgar-Online Database. Our dataset contains of 14 domestic integrated oil and natural gas companies, 107 domestic operations companies and 56 domestic services companies.

companies, at 56.5 percent, than in the eleven smaller companies at 72.4 percent. As noted earlier, large shares of the industry assets held by these institutions are ultimately owned by pension plans and IRA investors.

The share of three major integrated oil and natural gas companies owned by corporate management also has fallen sharply in recent years, from 0.5 percent of all outstanding shares in 2007 to 0.1 percent of those shares in 2011. While the remaining 11 integrated oil and gas companies account for less than seven percent of the segment's total market capitalization, the holdings by their corporate management increased over this period, from 3.9 percent of outstanding shares in 2007 to 6.7 percent in 2011. Shares of these smaller integrated companies held by individual investors also increased, from 15 percent of outstanding shares in 2007 to 20.9 percent in 2011. Institutional investors' holdings of these smaller companies, therefore, declined from 81.1 percent of outstanding shares in 2007 to 72.4 percent in 2011.

**Table 3: Distribution of Ownership of Integrated Oil and Natural Gas Companies,  
14 U.S.-Based Companies, 2011  
(Percentage of Outstanding Shares, Weighted for Market Cap)**

|                                     | <b>All Integrated Oil<br/>and Gas Companies</b> | <b>Three Major<br/>Companies</b> | <b>Eleven Smaller<br/>Companies</b> |
|-------------------------------------|-------------------------------------------------|----------------------------------|-------------------------------------|
| <b>Corporate Management</b>         | <b>0.5%</b>                                     | <b>0.1%</b>                      | <b>6.7%</b>                         |
| <b>Institutional Investors</b>      | <b>57.6%</b>                                    | <b>56.5%</b>                     | <b>72.4%</b>                        |
| <i>Asset Management Firms</i>       | 47.1%                                           | 45.9                             | 62.9                                |
| <i>With mutual funds</i>            | 28.0%                                           | 27.3                             | 37.6                                |
| <i>Without mutual funds</i>         | 19.1%                                           | 18.6                             | 25.3                                |
| <b>Pension Funds</b>                | 3.3%                                            | 3.3                              | 3.2                                 |
| <i>Public</i>                       | 2.6%                                            | 2.6                              | 2.6                                 |
| <i>Private</i>                      | 0.7%                                            | 0.7                              | 0.6                                 |
| <b>Insurance</b>                    | 1.1%                                            | 1.1                              | 0.7                                 |
| <b>Endowments/Foundations</b>       | 0.1%                                            | 0.1                              | 0.0                                 |
| <b>Banks</b>                        | 5.1%                                            | 5.2                              | 3.9                                 |
| <b>Other Financial Institutions</b> | 0.9%                                            | 0.9                              | 1.6                                 |
| <b>Individual Investors</b>         | <b>41.9%</b>                                    | <b>43.4%</b>                     | <b>20.9%</b>                        |
| <b>Total</b>                        | <b>100.0%</b>                                   | <b>100.0%</b>                    | <b>100.0 %</b>                      |

### ***Ownership in the Non-integrated Oil and Natural Gas Segment***

Our analysis of ownership in the non-integrated segment of the oil and natural gas industry covers 103 U.S.-based companies in 2011. (Table 4 below) Five companies accounted for more than 50 percent of the segment's total \$381.9 billion market capitalization in October 2011. As seen above for the integrated oil and natural gas companies, corporate management owns a smaller share of the large non-integrated companies, averaging 2.0 percent, than they do in the 98 smaller companies in this segment, at 9.8 percent. Across the segment, however, the holdings of corporate management increased in recent years, from 3.2 percent in 2007 to 5.9 percent in 2011.

The non-integrated segment has substantially greater institutional ownership, at 75.7 percent, than found among the integrated companies, at just 57.6 percent. The institutional holdings in the non-integrated segment, however, declined in recent years, from 81.4 percent in 2007 to the 75.7 percent level in 2011. Further, institutional investors hold a more substantial share of the five large non-integrated companies, at 81.9 percent, than among the 98 smaller ones at 69.4 percent. Asset management firms that operate mutual funds, and which include large holdings by pension plans and IRA account holders, account for most of this institutional ownership. These management firms hold 71.7 percent of the shares of the five large non-integrated companies and 62.0 percent of the shares of the 98 smaller companies. Finally, individual investors who are not corporate management increased their ownership share of this industry segment in recent years, from 15.4 percent of outstanding shares in 2007 to 18.5 percent in 2011. These individual investors also hold larger stakes in the smaller non-integrated companies, at 20.8 percent of shares, than their 16.1 percent stake in the big five companies in the segment.

**Table 4. Distribution of Ownership of Non-integrated Oil and Natural Gas Companies, 103 U.S.-Based Companies, 2011**  
(Percentage of Outstanding Shares, Weighted for Market Cap)

|                                     | <b>All Operations Companies</b> | <b>Five Major Companies</b> | <b>98 Smaller Companies</b> |
|-------------------------------------|---------------------------------|-----------------------------|-----------------------------|
| <b>Corporate Management</b>         | <b>5.9%</b>                     | <b>2.0%</b>                 | <b>9.8%</b>                 |
| <b>Institutions</b>                 | <b>75.7%</b>                    | <b>81.9%</b>                | <b>69.4%</b>                |
| <i>Asset Management Firms</i>       | 66.9%                           | 71.7                        | 62.0                        |
| <i>With mutual funds</i>            | 38.1%                           | 41.8                        | 34.3                        |
| <i>Without mutual funds</i>         | 28.8%                           | 29.9                        | 27.7                        |
| <b>Pension Funds</b>                | <b>2.7%</b>                     | <b>3.3</b>                  | <b>2.2</b>                  |
| <i>Public</i>                       | 2.2%                            | 2.6                         | 1.8                         |
| <i>Private</i>                      | 0.5%                            | 0.7                         | 0.4                         |
| <b>Insurance</b>                    | <b>0.6%</b>                     | <b>0.8</b>                  | <b>0.5</b>                  |
| <b>Endowments/Foundations</b>       | <b>0.1%</b>                     | <b>0.1</b>                  | <b>0.1</b>                  |
| <b>Banks</b>                        | <b>4.0%</b>                     | <b>4.7</b>                  | <b>3.2</b>                  |
| <b>Other Financial Institutions</b> | <b>1.4%</b>                     | <b>1.3</b>                  | <b>1.4</b>                  |
| <b>Individual Investors</b>         | <b>18.5%</b>                    | <b>16.1%</b>                | <b>20.8%</b>                |
| <b>Total</b>                        | <b>100.0%</b>                   | <b>100.0%</b>               | <b>100.0%</b>               |

### ***Ownership in the Oil and Natural Gas Service Segment***

Much as the other two segments of the U.S. oil and natural gas industry, five companies account for 63.6 percent of the segment's total market capitalization of \$296.5 billion, while the remaining 51 smaller corporations account for the other, roughly one-third of the service segment. (Table 5 below) Overall, corporate management holds a modest 4.1 percent share of the total ownership of this segment. Once again, the ownership stake of corporate management is far smaller among the five major companies in this segment, at just 0.4 percent, compared to the 10.7 percent share held by corporate management at the 51 smaller oil and natural gas service corporations. Overall, the holdings of corporate management in this industry segment have increased in recent years, from 3.2 percent of all outstanding shares in 2007 to 4.1 percent in

2011. All of these increases occurred among the 51 smaller service companies: The ownership stake of corporate management at the five major service companies fell from 1.5 percent of outstanding shares in 2007 to their 0.4 percent ownership share in 2011.

The share of oil and natural gas service companies held by institutional investors, 73.2 percent, is roughly comparable to the institutional investors' 75.7 percent share of the non-integrated segment. However, that share is substantially smaller than the 57.6 percent share of the integrated companies held by institutional investors. As found in the non-integrated segment, institutional ownership in the oil and natural gas services segment has declined in recent years, from 81.4 percent of outstanding shares in 2007 to their 73.2 percent stake in 2011. The current ownership stake of institutional investors in oil and natural gas service companies, however, is higher among the segment's five largest corporations, at 78.6 percent, than among the 51 smaller service corporations at 63.7 percent. Finally, individual investors who are not corporate management increased their ownership stake in the service companies in recent years, from 15.4 percent of total shares in 2007 to 22.7 percent in 2011. These individual investors held 21.1 percent of outstanding shares in the five major oil and natural gas service companies, compared to 25.6 percent of the share of the 51 smaller companies in this segment.

**Table 5: Distribution of Ownership of Oil and Natural Gas Services Companies, 56 U.S.-Based Companies, 2011**  
(Percentage of Outstanding Shares, Weighted for Market Cap)

|                                     | <b>All Service Companies</b> | <b>Five Major Companies</b> | <b>51 Smaller Companies</b> |
|-------------------------------------|------------------------------|-----------------------------|-----------------------------|
| <b>Corporate Management</b>         | <b>4.1%</b>                  | <b>0.4%</b>                 | <b>10.7%</b>                |
| <b>Institutions</b>                 | <b>73.2%</b>                 | <b>78.6%</b>                | <b>63.7%</b>                |
| <i>Asset Management Firms</i>       | 63.3%                        | 68.4                        | 54.3                        |
| <i>With mutual funds</i>            | 39.4%                        | 44.7                        | 29.9                        |
| <i>Without mutual funds</i>         | 23.9%                        | 23.7                        | 24.4                        |
| <b>Pension Funds</b>                | 4.0%                         | 2.9                         | 5.9                         |
| <i>Public</i>                       | 2.3%                         | 2.5                         | 1.9                         |
| <i>Private</i>                      | 1.7%                         | 0.4                         | 4.0                         |
| <b>Insurance</b>                    | 0.6%                         | 0.7                         | 0.4                         |
| <b>Endowments/Foundations</b>       | 0.0%                         | 0.0                         | 0.0                         |
| <b>Banks</b>                        | 4.1%                         | 5.4                         | 1.9                         |
| <b>Other Financial Institutions</b> | 1.2%                         | 1.2                         | 1.2                         |
| <b>Individual Investors</b>         | <b>22.7%</b>                 | <b>21.1%</b>                | <b>25.6%</b>                |
| <b>Total</b>                        | <b>100.0%</b>                | <b>100.0%</b>               | <b>100.0%</b>               |

## V. Conclusion

Our analysis of the SEC data on the ownership of U.S. oil and natural gas companies demonstrates that company management – corporate officers, senior executives and board members – have very small holdings in the companies they manage. This basic pattern of ownership holds across all three major segments. In all three of these industry segments, company management holds very small portion of their companies; and in all three segments, management ownership is much smaller still for the three-to-five largest companies.

Approximately two-thirds of the shares of these companies are held by institutional investors, especially asset management companies, predominantly on behalf of middle-class households who own oil and natural gas company shares through their mutual funds, pension funds and retirement accounts. All told, the owners of public and private pension funds, including IRAs and 401(k)s, along with individuals who manage their own investments and are not corporate management, account for 70 percent of the ownership of the U.S. oil and natural gas industry.

## **Appendix**

### **Oil and Natural Gas Companies by Segment (Alphabetical)**

#### **Integrated Oil and Natural Gas Companies**

Atlas Energy Resources, LLC  
Breitburn Energy Partners L.P.  
Calumet Specialty Products Partners, L.P.  
Chevron Corp  
Conocophillips  
Daleco Resources Corp  
Exxon Mobil Corp  
Gastar Exploration Ltd.  
Hess Corp  
Legacy Reserves L.P.  
Marathon Oil Corp  
Pioneer Southwest Energy Partners L.P.  
Postrock Energy Corp  
Questar Corp

#### **Non-integrated Oil And Natural Gas Companies**

Abraxas Petroleum Corp  
Adams Resources & Energy, Inc.  
Alon Usa Energy, Inc.  
Amerigas Partners L.P.  
Anadarko Petroleum Corp  
Apache Corp  
ATP Oil & Gas Corp  
Barnwell Industries Inc.  
Bayou City Exploration, Inc.  
Berry Petroleum Co  
BMB Munai Inc.  
BPZ Resources, Inc.  
Brigham Exploration Co  
Cabot Oil & Gas Corp  
Callon Petroleum Co  
Camac Energy Inc.  
Cano Petroleum, Inc.  
Chesapeake Energy Corp  
China North East Petroleum Holdings Ltd  
Cimarex Energy Co  
CKX Lands, Inc.  
Clayton Williams Energy Inc.  
Contango Oil & Gas Co

Continental Resources Inc.  
Credo Petroleum Corp  
Cubic Energy Inc.  
Delta Petroleum Corp  
Denbury Resources Inc.  
Devon Energy Corp  
Dorchester Minerals, L.P.  
Double Eagle Petroleum Co  
Dune Energy Inc.  
Eagle Rock Energy Partners L.P.  
Encore Energy Partners L.P.  
Endeavour International Corp  
EQT Corp  
EV Energy Partners, L.P.  
Evolution Petroleum Corp  
Far East Energy Corp  
Ferrellgas Partners L.P.  
Fieldpoint Petroleum Corp  
FX Energy Inc.  
Gasco Energy Inc.  
Geomet, Inc.  
Geopetro Resources Co  
Georesources Inc.  
Global Partners L.P.  
GMX Resources Inc.  
Harvest Natural Resources, Inc.  
HKN, Inc.  
Houston American Energy Corp  
Hyperdynamics Corp  
Inergy L.P.  
International Fuel Technology Inc.  
Isramco Inc.  
Kodiak Oil & Gas Corp  
Linn Energy, Llc  
Lucas Energy, Inc.  
Macquarie Infrastructure Co  
Magellan Petroleum Corp  
Magnum Hunter Resources Corp  
Martin Midstream Partners L.P.  
Mcmoran Exploration Co  
Mexco Energy Corp  
Miller Energy Resources, Inc.  
Murphy Oil Corp  
New Concept Energy, Inc.  
Newfield Exploration Co  
Noble Energy Inc.  
Occidental Petroleum Corp  
Panhandle Oil & Gas Inc.

Petroquest Energy Inc.  
Plains Exploration & Production Co  
Primeenergy Corp  
Pyramid Oil Co  
QR Energy, L.P.  
Rosetta Resources Inc.  
Sandridge Energy Inc.  
SM Energy Co  
SMF Energy Corp  
Southwestern Energy Co  
Star Gas Partners L.P.  
Stone Energy Corp  
Suburban Propane Partners L.P.  
Sunoco Inc.  
Synthesis Energy Systems Inc.  
Syntroleum Corp  
Targa Resources Partners L.P.  
Tengasco Inc.  
Trans Energy Inc.  
Transatlantic Petroleum Ltd.  
Triangle Petroleum Corp  
Ultra Petroleum Corp  
Vaalco Energy Inc.  
Valero Energy Corp  
Vanguard Natural Resources, Llc  
Venoco, Inc.  
Voyager Oil & Gas, Inc.  
Warren Resources Inc.  
Whiting Petroleum Corp  
Williams Companies Inc.  
World Fuel Services Corp  
Zion Oil & Gas Inc.

### **Oil and Natural Gas Service Companies**

American International Industries  
Atwood Oceanics Inc.  
Baker Hughes Inc.  
Basic Energy Services Inc.  
Blast Energy Services, Inc.  
Bolt Technology Corp  
Buckeye Partners, L.P.  
Cameron International Corp  
Dawson Geophysical Co  
Diamond Offshore Drilling Inc.  
Dril-Quip Inc.

Ecosphere Technologies Inc.  
Enbridge Energy Partners L.P.  
Energy Services Of America Corp  
Flotek Industries Inc.  
Genesis Energy L.P.  
Geokinetics Inc.  
Global Geophysical Services Inc.  
Global Industries Ltd  
Halliburton Co  
Helix Energy Solutions Group Inc.  
Helmerich & Payne Inc.  
Hercules Offshore, Inc.  
Holly Energy Partners L.P.  
IHS Inc.  
Kinder Morgan Management Llc  
Liandi Clean Technology Inc.  
Lufkin Industries Inc.  
Magellan Midstream Partners L.P.  
Matrix Service Co  
Mcdermott International Inc.  
Mitcham Industries Inc.  
Natural Gas Services Group Inc.  
Noble Corp  
Nustar Energy L.P.  
Nustar Gp Holdings, Llc  
Oceaneering International Inc.  
Parker Drilling Co  
Patterson Uti Energy Inc.  
Phi Inc.  
Pioneer Drilling Co  
Plains All American Pipeline L.P.  
Powersecure International, Inc.  
Rowan Companies Inc.  
Royale Energy Inc.  
Rpc Inc.  
Schlumberger Ltd  
Semgroup Corp  
Sunoco Logistics Partners L.P.  
Superior Energy Services Inc.  
Tesco Corp  
Tetra Technologies Inc.  
Transmontaigne Partners L.P.  
Union Drilling Inc.  
Weatherford International Ltd  
Willbros Group, Inc.

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