**Variables and Formats:**  
• [Spectrum manager number (5.)](http://acct.wharton.upenn.edu/faculty/bushee/IIvars.html" \l "mgrno)  
• [Manager number version (1.)](http://acct.wharton.upenn.edu/faculty/bushee/IIvars.html#mc)  
• [Permanent key (5.)](http://acct.wharton.upenn.edu/faculty/bushee/IIvars.html#pky)   
• [Year (4.)](http://acct.wharton.upenn.edu/faculty/bushee/IIvars.html#yr)  
• [Type ($3.)](http://acct.wharton.upenn.edu/faculty/bushee/IIvars.html#typ)   
• [Transient/Quasi-indexer/Dedicated classification ($3.)](http://acct.wharton.upenn.edu/faculty/bushee/IIvars.html#tqd)  
• [Permanent Transient/Quasi-indexer/Dedicated classification ($3.)](http://acct.wharton.upenn.edu/faculty/bushee/IIvars.html#ptqd)  
• [Investment style classification ($3.)](http://acct.wharton.upenn.edu/faculty/bushee/IIvars.html#is)   
• [Permanent Investment style classification ($3.)](http://acct.wharton.upenn.edu/faculty/bushee/IIvars.html#pis)  
• [Growth style classification ($3.)](http://acct.wharton.upenn.edu/faculty/bushee/IIvars.html#gs)   
• [Permanent growth style classification ($3.)](http://acct.wharton.upenn.edu/faculty/bushee/IIvars.html#pgs)

**Institutional Investor Classification Data:  
Variable Definitions**  
*(Website updated on Jun 10, 2014)*

**Spectrum manager number**

|  |  |
| --- | --- |
|  | This is the fund manager number used by the Spectrum database, which WRDS labels as “mgrno”. |
|  | [*Return to data page*](http://acct.wharton.upenn.edu/faculty/bushee/IIclass.html) |

**Manager number version**

|  |  |
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|  | Spectrum recycles manager numbers. I assign a new version number every time there is more than a two quarter break in holdings information for a manager number. I use this information to help update the permanent key (see below). |
|  | [*Return to data page*](http://acct.wharton.upenn.edu/faculty/bushee/IIclass.html) |

**Permanent key**

|  |  |
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|  | For a few years, Spectrum assigned fund managers a permanent key to allow researchers to merge the 13F data with the mutual fund data. Spectrum has discontinued this data item, but I have used it as a basis to tie together the holdings history for fund managers that change manager numbers. My RAs and I have created permanent keys for managers that did not have them assigned by Spectrum and have updated them over time. Given this procedure, I cannot guarantee that these histories are 100% accurate. Please contact me if you find any errors in this assignment and I will update the dataset. |
|  | [*Return to data page*](http://acct.wharton.upenn.edu/faculty/bushee/IIclass.html) |

**Year**

|  |  |
| --- | --- |
|  | This is the calendar year of the classification. In classifying institutions, I compute averages across the four holdings reports for each calendar year. |
|  | [*Return to data page*](http://acct.wharton.upenn.edu/faculty/bushee/IIclass.html) |

**Type**

|  |  |
| --- | --- |
|  | This is the legal type of the institutional investor, using the following code:  BNK = bank trust (Spectrum type code 1) INS = insurance company (2) INV = investment company (3) IIA = independent investment advisor (4) CPS = corporate (private) pension fund (5) PPS = public pension fund (5) UFE = university and foundation endowments (5) MSC = miscellaneous (5)  As noted on the WRDS website, the type code variable on Spectrum is not reliable after 1998. I have taken the “reliable” Spectrum type codes and carried them forward in time for institutions still in existence after 1998. For new institutions, my RAs and I have attempted to assign a type code based on searches for information about the fund manager. In doing so, we have not attempted to distinguish between type code 3 and type code 4. In my research, I merge these two types into one group. In addition, we have taken the type code 5 group (“other”) and attempted to determine whether the fund manager was a private pension, public pension, or an endowment. All other institutions were classified as “miscellaneous”. Given this procedure, I cannot guarantee that these histories are 100% accurate. Please contact me if you find any errors in this assignment and I will update the dataset. |
|  | [*Return to data page*](http://acct.wharton.upenn.edu/faculty/bushee/IIclass.html) |

**Transient/Quasi-indexer/Dedicated classification**

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|  | This classification uses the following code:  DED = dedicated QIX = quasi-indexer TRA = transient  This classification is based on the one used in [Bushee (2001)](http://acct.wharton.upenn.edu/faculty/bushee/bb01.pdf) and [Bushee and Noe (2000)](http://acct.wharton.upenn.edu/faculty/bushee/bn01.pdf). Note that I changed my classification scheme after the [Bushee (1998)](http://acct.wharton.upenn.edu/faculty/bushee/bb98.pdf) paper by dropping the momentum variables to allow it to be used in more general situations. I extended those classifications by applying the factor loadings reported in those papers to the more recent data to compute factor scores, which I used to add the new data to the existing clusters. If a fund has no classification for a given year, it means that some of the data was missing, the fund has a small portfolio (i.e., fewer than four stocks that have available CRSP and Compustat data), or the fund has not been listed on Spectrum for two years. As a consequence of these restrictions, not all of the institutions have been classified using this approach. There are a large number of unclassified institutions in the past five years, primarily due to growth in the number of new fund managers. For a potential solution to this problem, please see the data item below. |
|  | [*Return to data page*](http://acct.wharton.upenn.edu/faculty/bushee/IIclass.html) |

**Permanent Transient/Quasi-indexer/Dedicated classification**

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|  | Using the permanent key variable we created, I find the modal classification for each permanent key and assign that classification to each year of data for the fund manager.  This approach potentially helps solve the following problems:   * Some fund managers, especially those that manage a large number of mutual funds, have classifications that frequently shift across years (the first-order autocorrelation in the classifications is generally around 0.8). This approach fixes the classification across time to the most common classification. * Because fund manager classifications can change, it is generally not a good idea to compute changes in holdings for a given type as the difference between the percentage ownership by the type in one period and percentage ownership by the type in a prior period. Such a measure would consider a fund that does not change its holdings, but does change its type, to be a change in holdings by the type. The permanent approach eliminates this potential problem. * As noted above, in the first two years of a fund's history, I cannot compute its classification. This approach allows me to fill in some of this missing data.   This approach has the following drawbacks:   * Some fund managers likely do change their trading orientation over time. Using the modal classification obscures such changes. * The modal classification is based on my permanent key, which may not be 100% accurate. A potentially safer way to compute this variable would be to take the modal classification across manager number and manager version number. Note: you do not want to compute the mode by manager number alone as this is recycled and may combine different managers in the measure.   I have tended to use this modal classification scheme in my work, but you should make your own call based on this trade-off. |
|  | [*Return to data page*](http://acct.wharton.upenn.edu/faculty/bushee/IIclass.html) |

**Investment style classification**

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|  | In [Abarbanell, Bushee, Raedy (2003)](http://acct.wharton.upenn.edu/faculty/bushee/abr03.pdf), we classified institutions based on investment styles or preferences for firm size and growth, using the following code:  LVA = Large Value style LGR = Large Growth style SVA = Small Value style SGR = Small Growth style  As discussed in that paper, this classification stems from a cluster analysis on a firm size factor and a value/growth factor. Please see the paper for more details. |
|  | [*Return to data page*](http://acct.wharton.upenn.edu/faculty/bushee/IIclass.html) |

**Permanent Investment style classification**

|  |  |
| --- | --- |
|  | This classification is based on the modal classification for each permanent key. See [above](http://acct.wharton.upenn.edu/faculty/bushee/IIvars.html#p)for more details. |
|  | [*Return to data page*](http://acct.wharton.upenn.edu/faculty/bushee/IIclass.html) |

**Growth style classification**

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|  | In [Bushee and Goodman (2007)](http://acct.wharton.upenn.edu/faculty/bushee/bg07.pdf), we classified institutions based on preferences for growth or value firms, using the following code:  GRO = Growth style VAL = Value style G&I = Growth & Income style (middle group)   As discussed in that paper, this classification stems from a cluster analysis on a value/growth factor. Please see the paper for more details. |
|  | [*Return to data page*](http://acct.wharton.upenn.edu/faculty/bushee/IIclass.html) |

**Permanent Growth style classification**

|  |  |
| --- | --- |
|  | This classification is based on the modal classification for each permanent key. See [above](http://acct.wharton.upenn.edu/faculty/bushee/IIvars.html#p)for more details. |
|  | [*Return to data page*](http://acct.wharton.upenn.edu/faculty/bushee/IIclass.html) |

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