

# **Factor Attribution Summary**

Portfolio: VA\_StonyBrook\_McKinley

**Period:** 1999-12-31 to 2011-11-30

Market Portfolio: None

Risk Model: WW21AxiomaMH

Frequency: Monthly

**Returns Scaling:** Cumulative

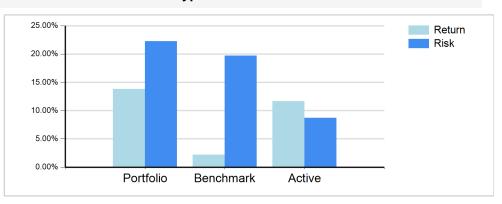
Benchmark: Russell Global

Base Currency: USD

Risk Type: Predicted Risk

### **Summary**

|           |         | ,       |      |        |
|-----------|---------|---------|------|--------|
|           | Return  | Risk    | IR   | T-Stat |
| Portfolio | 13.81 % | 22.24 % |      |        |
| Benchmark | 2.17 %  | 19.71 % |      |        |
| Active    | 11.64 % | 8.73 %  | 1.33 | 4.60   |



### **Return Decomposition**

|               |          |          | Return Decomposition | Risk   | IR    | T-Stat |
|---------------|----------|----------|----------------------|--------|-------|--------|
| Active Return |          |          | 11.64 %              | 8.73 % | 1.33  | 4.60   |
|               | Specific |          | 9.03 %               | 4.21 % | 2.15  | 7.41   |
|               | Factor   |          | 2.61 %               | 7.65 % | 0.34  | 1.18   |
|               |          | Style    | 2.85 %               | 5.46 % | 0.52  | 1.80   |
|               |          | Country  | -1.24 %              | 4.03 % | -0.31 | -1.06  |
|               |          | Industry | 1.08 %               | 2.06 % | 0.52  | 1.81   |
|               |          | Currency | -0.32 %              | 1.89 % | -0.17 | -0.58  |
|               |          | Local    | 0.30 %               | 0.35 % | 0.85  | 2.95   |
|               |          | Market   | -0.06 %              | 0.38 % | -0.17 | -0.59  |

### **Contributors to Active Return by Style**

| Style                     | Contribution | Avg Wtd Exp | HR      | IR    |
|---------------------------|--------------|-------------|---------|-------|
| Medium-Term Momentum      | 3.25 %       | 0.3586      | 68.53 % | 2.06  |
| Value                     | 1.74 %       | 0.1902      | 69.93 % | 2.61  |
| Size                      | 1.05 %       | -0.7964     | 55.24 % | 0.23  |
| Short-Term Momentum       | 0.71 %       | 0.0117      | 44.76 % | 0.73  |
| Liquidity                 | 0.60 %       | 0.1267      | 57.34 % | 0.76  |
| Leverage                  | 0.13 %       | 0.0104      | 55.24 % | 1.03  |
| Exchange Rate Sensitivity | -0.03 %      | 0.0632      | 44.76 % | -0.05 |
| Growth                    | -0.09 %      | 0.1142      | 48.25 % | -0.37 |
| Volatility                | -4.53 %      | 0.4525      | 35.66 % | -1.36 |
| Total                     | 2.85 %       |             |         |       |

### **Contributors to Active Return by Country**

| Country        | Contribution | Avg Wtd Exp | HR      | IR   |
|----------------|--------------|-------------|---------|------|
| United Kingdom | 0.61 %       | 6.78 %      | 55.24 % | 0.54 |
| Indonesia      | 0.30 %       | 0.85 %      | 60.84 % | 1.02 |
| Netherlands    | 0.15 %       | -0.81 %     | 61.54 % | 1.06 |
| Switzerland    | 0.12 %       | -1.99 %     | 56.64 % | 0.72 |
| Italy          | 0.08 %       | -0.81 %     | 56.64 % | 0.74 |
| Brazil         | 0.07 %       | 0.89 %      | 44.76 % | 0.21 |
| France         | 0.06 %       | -1.45 %     | 51.75 % | 0.28 |
| Morocco        | 0.05 %       | 0.08 %      | 51.05 % | 0.89 |
| Peru           | 0.05 %       | 0.24 %      | 55.24 % | 0.61 |
| Canada         | 0.05 %       | 1.08 %      | 46.85 % | 0.16 |
| Germany        | 0.05 %       | -1.11 %     | 58.74 % | 0.27 |
| Finland        | 0.04 %       | 0.34 %      | 54.55 % | 0.36 |
| Norway         | 0.04 %       | 0.52 %      | 55.24 % | 0.37 |
| Spain          | 0.04 %       | -0.81 %     | 53.85 % | 0.31 |

# **Contributors to Active Return by Country**

| Country              | Contribution | Avg Wtd Exp | HR      | IR    |
|----------------------|--------------|-------------|---------|-------|
| Chile                | 0.03 %       | 0.26 %      | 50.35 % | 0.37  |
| Poland               | 0.03 %       | 0.23 %      | 61.54 % | 0.34  |
| Denmark              | 0.03 %       | 0.20 %      | 55.24 % | 0.41  |
| Austria              | 0.02 %       | 0.24 %      | 51.05 % | 0.50  |
| Colombia             | 0.02 %       | 0.03 %      | 43.36 % | 0.48  |
| Czech Republic       | 0.02 %       | 0.21 %      | 59.44 % | 0.74  |
| Russian Federation   | 0.02 %       | -0.36 %     | 42.66 % | 0.18  |
| United Arab Emirates | 0.01 %       | -0.03 %     | 30.19 % | 0.61  |
| India                | 0.01 %       | -0.44 %     | 47.55 % | 0.05  |
| Israel               | 0.01 %       | -0.10 %     | 44.06 % | 0.13  |
| Portugal             | 0.00 %       | -0.13 %     | 52.45 % | 0.26  |
| Hungary              | 0.00 %       | 0.00 %      | 55.24 % | 0.24  |
| Argentina            | 0.00 %       | -0.02 %     | 50.35 % | 0.22  |
| New Zealand          | 0.00 %       | 0.13 %      | 56.64 % | 0.10  |
| Egypt                | 0.00 %       | -0.05 %     | 32.87 % | 0.20  |
| Jordan               | 0.00 %       | -0.01 %     | 19.81 % | -0.03 |
| Luxembourg           | 0.00 %       | -0.01 %     | 41.96 % | -0.16 |
| Venezuela            | 0.00 %       | 0.00 %      | 12.26 % | -1.14 |
| Iceland              | 0.00 %       | -0.03 %     | 50.00 % | -0.07 |
| Pakistan             | 0.00 %       | -0.01 %     | 24.48 % | -0.44 |
| Belgium              | 0.00 %       | -0.03 %     | 51.75 % | -0.07 |
| Malaysia             | -0.01 %      | 1.26 %      | 49.65 % | -0.03 |
| Turkey               | -0.02 %      | -0.02 %     | 41.26 % | -0.29 |
| Thailand             | -0.02 %      | 0.27 %      | 45.45 % | -0.14 |
| Sweden               | -0.02 %      | -0.86 %     | 46.15 % | -0.20 |
| Mexico               | -0.03 %      | 0.29 %      | 51.75 % | -0.26 |
| Ireland              | -0.04 %      | 0.23 %      | 48.25 % | -0.36 |
| South Africa         | -0.05 %      | 1.49 %      | 53.15 % | -0.13 |

# **Contributors to Active Return by Country**

| Country            | Contribution | Avg Wtd Exp | HR      | IR    |
|--------------------|--------------|-------------|---------|-------|
| Australia          | -0.05 %      | 1.37 %      | 48.95 % | -0.21 |
| Hong Kong          | -0.08 %      | 0.39 %      | 53.85 % | -0.36 |
| Taiwan             | -0.08 %      | -0.25 %     | 47.55 % | -0.29 |
| Singapore          | -0.11 %      | 0.27 %      | 53.85 % | -0.44 |
| Japan              | -0.12 %      | -0.57 %     | 45.45 % | -0.15 |
| China              | -0.22 %      | 3.89 %      | 55.94 % | -0.17 |
| Philippines        | -0.23 %      | 0.93 %      | 46.15 % | -0.59 |
| Greece             | -0.44 %      | 1.42 %      | 43.36 % | -0.98 |
| United States      | -0.78 %      | -17.53 %    | 48.25 % | -0.52 |
| Korea, Republic of | -0.87 %      | 1.52 %      | 46.85 % | -0.50 |
| Total              | -1.24 %      |             |         |       |

### **Contributors to Active Return by Industry**

| Industry                               | Contribution | Avg Wtd Exp | HR      | IR   |
|--|--------------|-------------|---------|------|
| Metals & Mining                        | 0.62 %       | 4.82 %      | 65.73 % | 0.87 |
| Diversified Telecommunication Services | 0.23 %       | -2.99 %     | 61.54 % | 0.64 |
| Internet Software & Services           | 0.23 %       | -0.61 %     | 57.34 % | 1.43 |
| Media                                  | 0.20 %       | -2.10 %     | 67.13 % | 1.34 |
| Computers & Peripherals                | 0.13 %       | -1.43 %     | 49.65 % | 0.58 |
| Commercial Banks                       | 0.10 %       | -6.58 %     | 52.45 % | 0.28 |
| Thrifts & Mortgage Finance             | 0.09 %       | 0.08 %      | 56.64 % | 0.48 |
| Capital Markets                        | 0.08 %       | -1.56 %     | 53.15 % | 0.57 |
| Health Care Equipment & Supplies       | 0.08 %       | 0.64 %      | 52.45 % | 0.63 |
| Machinery                              | 0.08 %       | 1.50 %      | 60.84 % | 0.63 |
| Trading Companies & Distributors       | 0.08 %       | 1.16 %      | 59.44 % | 0.69 |
| Communications Equipment               | 0.07 %       | -0.25 %     | 53.85 % | 0.17 |
| Insurance                              | 0.06 %       | -2.25 %     | 58.04 % | 0.36 |

# **Contributors to Active Return by Industry**

| Industry                                       | Contribution | Avg Wtd Exp | HR      | IR    |
|--|--------------|-------------|---------|-------|
| Multiline Retail                               | 0.06 %       | -0.13 %     | 51.75 % | 0.78  |
| Software                                       | 0.06 %       | 0.20 %      | 55.24 % | 0.37  |
| Health Care Providers & Services               | 0.05 %       | -0.05 %     | 56.64 % | 0.83  |
| Construction & Engineering                     | 0.05 %       | 1.41 %      | 55.94 % | 0.52  |
| Marine   | 0.04 %       | 0.55 %      | 56.64 % | 0.38  |
| Containers & Packaging                         | 0.04 %       | 0.32 %      | 51.75 % | 0.77  |
| Hotels, Restaurants & Leisure                  | 0.04 %       | 0.26 %      | 51.75 % | 0.43  |
| Specialty Retail                               | 0.03 %       | 2.04 %      | 55.94 % | 0.14  |
| Office Electronics                             | 0.03 %       | 0.56 %      | 53.15 % | 0.45  |
| Construction Materials                         | 0.03 %       | 0.94 %      | 53.85 % | 0.45  |
| Transportation Infrastructure                  | 0.03 %       | 0.29 %      | 57.34 % | 0.89  |
| Auto Components                                | 0.03 %       | 1.12 %      | 46.85 % | 0.26  |
| Aerospace & Defense                            | 0.03 %       | 0.25 %      | 53.15 % | 0.24  |
| Consumer Finance                               | 0.02 %       | -0.14 %     | 50.35 % | 0.37  |
| Internet & Catalog Retail                      | 0.02 %       | -0.07 %     | 47.55 % | 0.22  |
| Energy Equipment & Services                    | 0.02 %       | 0.50 %      | 49.65 % | 0.09  |
| Diversified Financial Services                 | 0.01 %       | -1.03 %     | 51.05 % | 0.20  |
| Household Durables                             | 0.01 %       | 1.01 %      | 47.55 % | 0.10  |
| Building Products                              | 0.01 %       | 0.33 %      | 47.55 % | 0.29  |
| Gas Utilities                                  | 0.01 %       | -0.16 %     | 50.35 % | 0.26  |
| Wireless Telecommunication Services            | 0.00 %       | -1.00 %     | 47.55 % | 0.03  |
| Air Freight & Logistics                        | 0.00 %       | -0.28 %     | 52.45 % | -0.01 |
| Multi-Utilities                                | 0.00 %       | -0.81 %     | 57.34 % | -0.01 |
| Distributors                                   | 0.00 %       | 0.54 %      | 36.36 % | -0.06 |
| Water Utilities                                | -0.01 %      | -0.04 %     | 48.25 % | -0.59 |
| Health Care Technology                         | -0.01 %      | 0.08 %      | 41.96 % | -0.27 |
| Electronic Equipment, Instruments & Components | -0.01 %      | 1.46 %      | 45.45 % | -0.06 |
| Independent Power Producers & Energy Traders   | -0.01 %      | -0.03 %     | 43.36 % | -0.49 |
|  |              |             |         |       |

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# **Contributors to Active Return by Industry**

| Industry                                 | Contribution | Avg Wtd Exp | HR      | IR    |
|--|--------------|-------------|---------|-------|
| Road & Rail                              | -0.01 %      | 0.75 %      | 45.45 % | -0.10 |
| Textiles, Apparel & Luxury Goods         | -0.02 %      | 0.77 %      | 51.05 % | -0.18 |
| Industrial Conglomerates                 | -0.02 %      | -1.06 %     | 46.15 % | -0.16 |
| Diversified Consumer Services            | -0.02 %      | 0.09 %      | 48.25 % | -0.27 |
| Food & Staples Retailing                 | -0.02 %      | -1.08 %     | 51.75 % | -0.24 |
| Commercial Services & Supplies           | -0.02 %      | 0.55 %      | 43.36 % | -0.47 |
| Paper & Forest Products                  | -0.02 %      | 0.42 %      | 50.35 % | -0.24 |
| IT Services                              | -0.02 %      | 0.24 %      | 51.05 % | -0.47 |
| Personal Products                        | -0.02 %      | -0.04 %     | 44.06 % | -0.75 |
| Food Products                            | -0.03 %      | 0.41 %      | 45.45 % | -0.34 |
| Life Sciences Tools & Services           | -0.03 %      | 0.22 %      | 44.06 % | -0.58 |
| Real Estate Investment Trusts (REITs)    | -0.03 %      | -0.81 %     | 44.06 % | -0.39 |
| Household Products                       | -0.04 %      | -1.04 %     | 53.85 % | -0.34 |
| Chemicals                                | -0.04 %      | 0.34 %      | 48.95 % | -0.32 |
| Professional Services                    | -0.04 %      | 0.50 %      | 44.06 % | -0.51 |
| Electrical Equipment                     | -0.05 %      | 1.19 %      | 51.75 % | -0.27 |
| Tobacco                                  | -0.06 %      | -0.42 %     | 43.36 % | -0.60 |
| Automobiles                              | -0.06 %      | -0.72 %     | 41.26 % | -0.55 |
| Semiconductors & Semiconductor Equipment | -0.06 %      | 0.86 %      | 51.05 % | -0.10 |
| Electric Utilities                       | -0.06 %      | -1.23 %     | 53.15 % | -0.55 |
| Leisure Equipment & Products             | -0.07 %      | 0.41 %      | 52.45 % | -0.90 |
| Airlines                                 | -0.08 %      | 0.57 %      | 44.06 % | -0.59 |
| Beverages                                | -0.09 %      | -0.65 %     | 37.76 % | -1.12 |
| Biotechnology                            | -0.09 %      | 2.78 %      | 41.96 % | -0.22 |
| Real Estate Management & Development     | -0.10 %      | 2.18 %      | 45.45 % | -0.55 |
| Pharmaceuticals                          | -0.21 %      | -4.60 %     | 46.15 % | -0.44 |
| Oil, Gas & Consumable Fuels              | -0.22 %      | -1.23 %     | 41.96 % | -0.40 |
| Total                                    | 1.08 %       |             |         |       |

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# **Contributors to Active Return by Currency**

| Currency | Contribution | Avg Wtd Exp | HR      | IR    |
|----------|--------------|-------------|---------|-------|
| CNY      | 0.19 %       | 3.89 %      | 55.24 % | 1.82  |
| BRL      | 0.10 %       | 0.89 %      | 53.85 % | 0.40  |
| CAD      | 0.08 %       | 1.08 %      | 53.85 % | 0.26  |
| EUR      | 0.05 %       | -3.14 %     | 48.95 % | 0.06  |
| PLN      | 0.04 %       | 0.23 %      | 44.76 % | 0.80  |
| MYR      | 0.03 %       | 1.26 %      | 53.85 % | 0.47  |
| NOK      | 0.02 %       | 0.52 %      | 53.85 % | 0.19  |
| CZK      | 0.02 %       | 0.21 %      | 48.25 % | 0.46  |
| CLP      | 0.02 %       | 0.26 %      | 45.45 % | 0.31  |
| IDR      | 0.02 %       | 0.85 %      | 45.45 % | 0.16  |
| TWD      | 0.02 %       | -0.25 %     | 58.04 % | 0.32  |
| MXN      | 0.01 %       | 0.29 %      | 49.65 % | 0.17  |
| PEN      | 0.01 %       | 0.24 %      | 51.75 % | 0.21  |
| DKK      | 0.00 %       | 0.20 %      | 44.76 % | 0.07  |
| HUF      | 0.00 %       | 0.00 %      | 44.76 % | 0.25  |
| MAD      | 0.00 %       | 0.08 %      | 47.55 % | 0.19  |
| THB      | 0.00 %       | 0.27 %      | 41.96 % | 0.11  |
| ARS      | 0.00 %       | -0.02 %     | 27.97 % | 0.23  |
| PKR      | 0.00 %       | -0.01 %     | 16.78 % | -0.69 |
| ISK      | 0.00 %       | -0.03 %     | 41.51 % | -0.09 |
| NZD      | 0.00 %       | 0.13 %      | 51.75 % | -0.02 |
| HKD      | 0.00 %       | 0.39 %      | 49.65 % | -0.36 |
| EGP      | 0.00 %       | -0.05 %     | 13.29 % | -2.08 |
| ILS      | 0.00 %       | -0.10 %     | 47.55 % | -0.24 |
| COP      | -0.01 %      | 0.03 %      | 39.16 % | -0.32 |
| TRY      | -0.01 %      | -0.04 %     | 35.37 % | -0.30 |
| RUB      | -0.01 %      | -0.36 %     | 28.67 % | -0.26 |
| SEK      | -0.01 %      | -0.86 %     | 48.95 % | -0.13 |

### **Contributors to Active Return by Currency**

| Currency | Contribution | Avg Wtd Exp | HR      | IR    |
|----------|--------------|-------------|---------|-------|
| PHP      | -0.02 %      | 0.93 %      | 51.75 % | -0.28 |
| SGD      | -0.02 %      | 0.27 %      | 41.26 % | -0.47 |
| INR      | -0.02 %      | -0.44 %     | 37.06 % | -0.57 |
| KRW      | -0.03 %      | 1.52 %      | 52.45 % | -0.08 |
| AUD      | -0.03 %      | 1.37 %      | 51.05 % | -0.10 |
| CHF      | -0.09 %      | -1.99 %     | 51.05 % | -0.39 |
| ZAR      | -0.09 %      | 1.49 %      | 49.65 % | -0.30 |
| JPY      | -0.20 %      | -0.57 %     | 48.25 % | -0.33 |
| GBP      | -0.33 %      | 6.78 %      | 48.25 % | -0.21 |
| Total    | -0,29 %      |             |         |       |

### **Contributors to Active Return by Local**

| Local          | Contribution | Avg Wtd Exp | HR      | IR   |
|----------------|--------------|-------------|---------|------|
| Domestic China | 0.30 %       | 0.47 %      | 55.94 % | 0.85 |
| Total          | 0.30 %       |             |         |      |

### **Contributors to Active Return by Market**

| Market        | Contribution | Avg Wtd Exp | HR      | IR    |
|---------------|--------------|-------------|---------|-------|
| Global Market | -0.06 %      | -2.01 %     | 41.96 % | -0.17 |
| Total         | -0.06 %      |             |         |       |

### **Contributors to Active Return by Sectors**

| Sectors                    | Contribution | Avg Wtd Exp | HR      | IR   |
|----------------------------|--------------|-------------|---------|------|
| Materials                  | 0.63 %       | 6.84 %      | 60.84 % | 0.79 |
| Information Technology     | 0.42 %       | 1.04 %      | 55.94 % | 0.56 |
| Telecommunication Services | 0.24 %       | -3.98 %     | 61.54 % | 0.50 |
| Financials                 | 0.23 %       | -10.11 %    | 55.94 % | 0.39 |

### **Contributors to Active Return by Sectors**

| Sectors                | Contribution | Avg Wtd Exp | HR      | IR    |
|------------------------|--------------|-------------|---------|-------|
| Consumer Discretionary | 0.22 %       | 3.23 %      | 53.15 % | 0.48  |
| Industrials            | 0.08 %       | 7.71 %      | 55.24 % | 0.19  |
| Utilities              | -0.07 %      | -2.28 %     | 53.15 % | -0.38 |
| Energy                 | -0.20 %      | -0.72 %     | 46.85 % | -0.33 |
| Health Care            | -0.21 %      | -0.93 %     | 43.36 % | -0.38 |
| Consumer Staples       | -0.25 %      | -2.81 %     | 41.96 % | -1.00 |
| Total                  | 1.08 %       |             |         |       |

### **Contributors to Specific Return (Top 10 Assets)**

| Identifier | Name                         | Contribution | Avg Active Wgt |
|------------|------------------------------|--------------|----------------|
| 220195     | CAEMI MIN E METAL            | 1.34 %       | 0.20 %         |
| 019520     | CHLORIDE GROUP               | 0.43 %       | 0.73 %         |
| 016029     | CML MICROSYSTEMS             | 0.31 %       | 0.45 %         |
| 213420     | DOLLAR THRIFTY AUTOMOTIVE GP | 0.26 %       | 0.10 %         |
| 699000     | JARDINE INTL MOTOR           | 0.24 %       | 0.13 %         |
| 017415     | CAPITAL & REGIONAL           | 0.24 %       | 0.50 %         |
| 236269     | GEAC COMPUTER LTD            | 0.22 %       | 0.15 %         |
| 242976     | HUMAN GENOME SCIENCES INC    | 0.20 %       | 0.06 %         |
| 241631     | HOLLYWOOD ENTMT CORP         | 0.19 %       | 0.12 %         |
| 012021     | IDEAL SHOPPING DIR           | 0.18 %       | 0.07 %         |
| Total      |                              | 3.32 %       |                |

#### **Contributors to Specific Return (Bottom 10 Assets)**

| Identifier | Name               | Contribution | Avg Active Wgt |
|------------|--------------------|--------------|----------------|
| 673873     | RENOWN INCORPORATE | -0.14 %      | 0.14 %         |
| 026684     | DEVELOPMENT SECS   | -0.13 %      | 0.52 %         |
| 695757     | ILUKA RESOURCES    | -0.11 %      | 0.29 %         |

# **Contributors to Specific Return (Bottom 10 Assets)**

| Identifier | Name                | Contribution Avg Active Wgt |
|------------|---------------------|-----------------------------|
| 235937     | GALEY & LORD INC    | -0.11 % 0.08 %              |
| 218607     | CALLON PETE CO DEL  | -0.11 % 0.08 %              |
| 217508     | CAPITOL BANCORP LTD | -0.10 % 0.17 %              |
| 017858     | CARR'S MILLING IND  | -0.10 % 0.94 %              |
| B01CP2     | GAMESA CORP TECNO   | -0.10 % 0.15 %              |
| 003742     | ALIZYME             | -0.09 % 0.40 %              |
| 677634     | SANRIO CO LTD       | -0.09 % 0.12 %              |
| Total      |                     | -0.87 %                     |