

# UWO Endowment

## Evaluating Fund Managers: Part Art / Part Science

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Russell Investments Canada Limited

2013

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## The Investment Decision Hierarchy & Importance

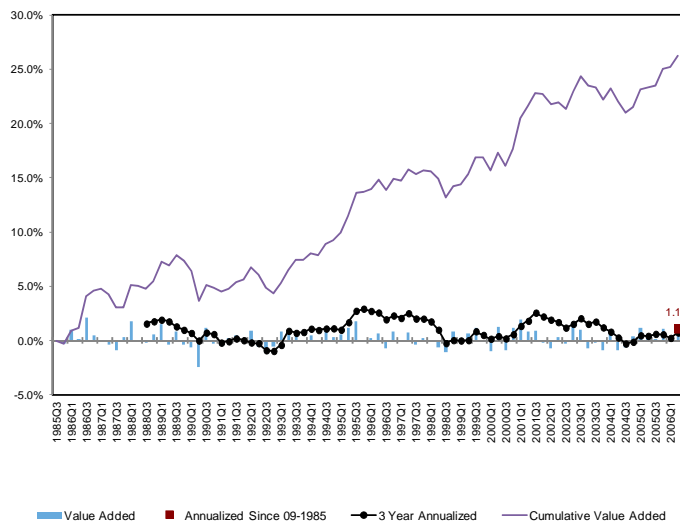
1. Governance/ risk management/ objective setting (effects 100% of the fund)
2. Asset Allocation
  - › (the 90% solution)
3. Asset Class Structures (varies by asset size & risk – usually below 50% of total diversified fund)
4. Manager search (varies by active / passive component)
5. Individual manager products (depends on # of managers but usually **less than 10%** of total fund)

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## Would You Hire this Manager?

Value added versus Russell 1000 Index  
Q4 1985 – Q2 2006

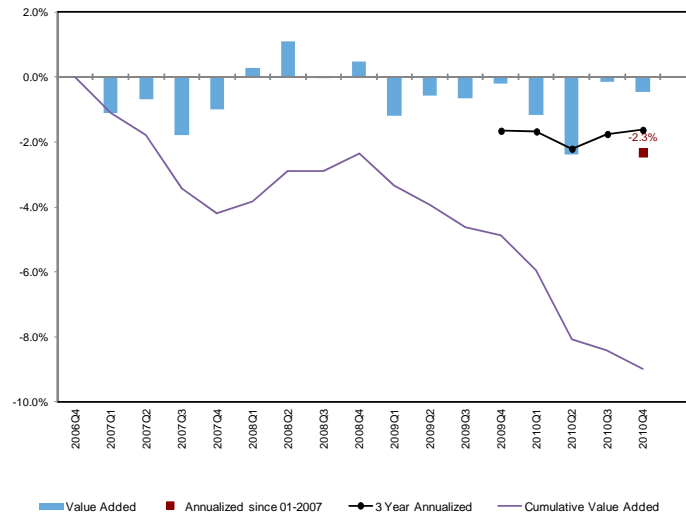


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## Would you Fire this Manager?

Value added versus Russell 1000 Index  
Q1 2007 – Q4 2010

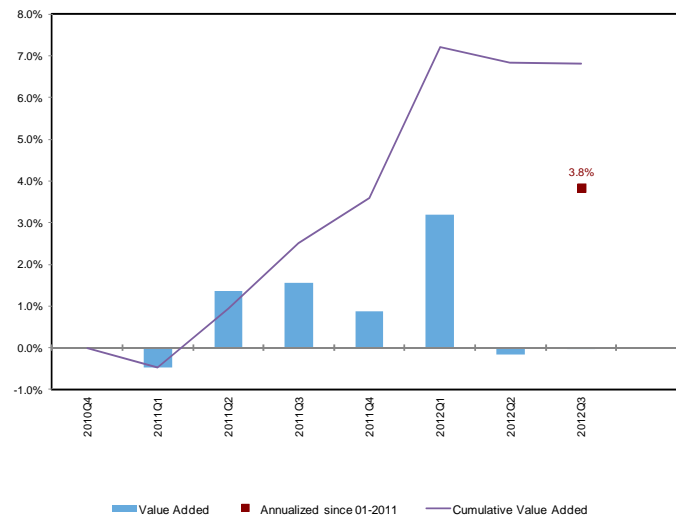


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## What You Would have Missed!

Value added versus Russell 1000 Index  
Q1 2010 – Q3 2012

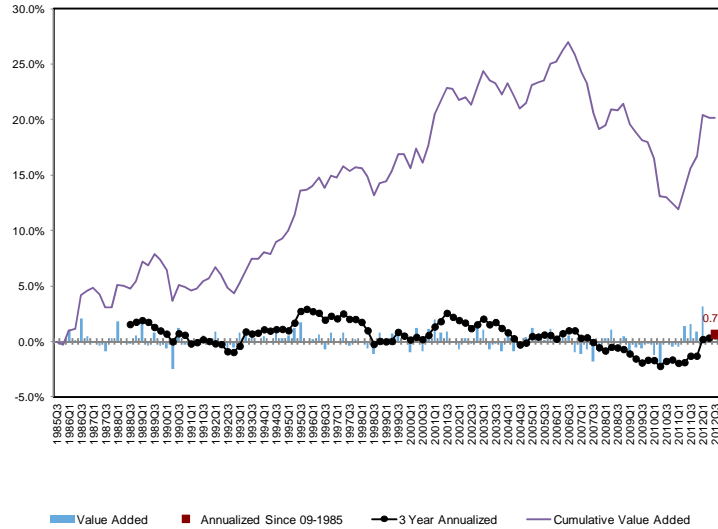


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## Because...It's All the Same Manager

Value added versus Russell 1000 Index  
Q4 1985 – Q3 2012



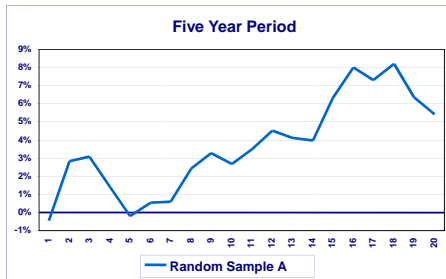
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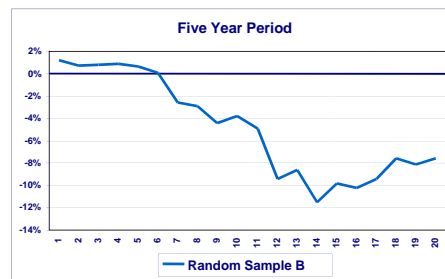
## Statistical Analysis - Example 1

Two Random Examples of Managers with 1% Alpha and 3% Tracking Error Over 5 Years

What Clients Expect



What Clients Frequently Get



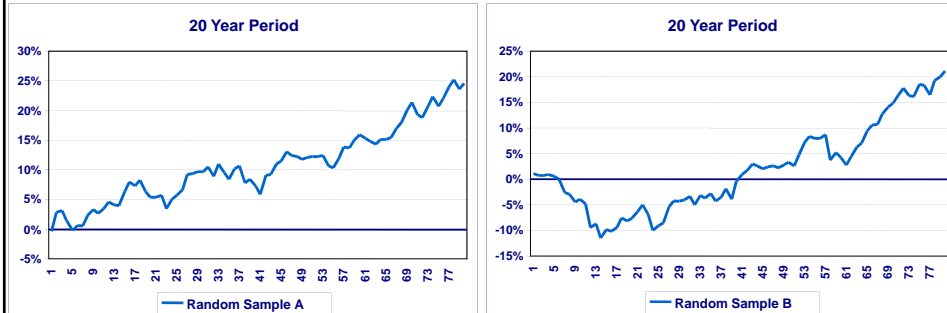
Short Term Performance is a Little More Random Than Most People Think!

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## Over the Longer Term (20 Years) Performance for Good Mgrs Generally Approaches Expectations

Performance of those same two managers over a longer time horizon



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## Statistical Analysis - Example 2

How long will it take statistically to discern if a manager can add value through skill?

	Realistic Value Added Objective	Target Value Added Midpoints	Minimum Time
Canadian Fixed Income	25 - 50 bps	38 bps	<b>16 years</b>
Canadian Equity	100 - 150 bps	125 bps	<b>17 years</b>
U.S. Equity	50 - 100 bps	75 bps	<b>157 years</b>
International Equity	150 - 200 bps	175 bps	<b>68 years</b>

### Conclusion:

Statistically, the performance numbers are unreliable in the normal investment committee evaluation period, which is generally less than 5 years.

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## Statistical Analysis - Example 3

Probability of a Skilled Manager (1% Alpha) Underperforming?

### Tracking Error

2%    4%    8%

1 Year	31%	41%	47%
<b>5 Years</b>	<b>14%</b>	<b>30%</b>	<b>43%</b>
10 Years	6%	23%	40%

Source: Zurich Scudder Research

### Conclusion:

**Good asset class strategies (with lower tracking error) have a higher probability of success in normal evaluation time periods!**

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## So How Long Can Poor Performance Last?

.....*Longer Than You Think*

### Actual Canadian Equity Performance Ending 2Q00

Annualized Returns

	VALUE	GROWTH	COMBINED	S&P/TSX COMPOSITE
1 YR	10.7	53.5	31.7	47.4
2YRS	4.2	20.2	12.7	19.4
3YRS	8.3	17.1	13.1	18.3
4YRS	13.0	19.5	16.6	21.2
5YRS	12.5	19.1	16.1	19.7

Annualized Excess Returns

	VALUE	GROWTH	COMBINED
1 YR	-36.7	6.0	-15.7
2YRS	-15.2	0.8	-6.7
3YRS	-10.1	-1.2	-5.2
4YRS	-8.2	-1.6	-4.6
5YRS	-7.2	-0.6	-3.6

Annualized Standard Deviation

	VALUE	GROWTH	COMBINED	S&P/TSX COMPOSITE
5YRS	13.1	20.0	14.5	18.4

Annualized Tracking Error

	VALUE	GROWTH	COMBINED
5YRS	14.5	4.1	6.4

Annualized Information Ratio

	VALUE	GROWTH	COMBINED
5YRS	-0.5	-0.1	-0.6

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**Conclusion: Fire the Managers!**



## Let's Roll The Clock Forward 2 Years

### Actual Canadian Equity Performance Ending 2Q02

#### Annualized Returns

	VALUE	GROWTH	COMBINED*	S&P/TSX COMPOSITE
1 YR	7.1	-13.9	-3.5	-6.1
2YRS	11.9	-20.4	-3.7	-15.0
3YRS	11.5	-1.0	6.9	2.1
4YRS	8.0	-2.2	4.1	0.7
5YRS	9.7	0.3	6.0	3.7

#### Annualized Excess Returns

	VALUE	GROWTH	COMBINED*
1 YR	13.2	-7.8	2.6
2YRS	27.0	-5.4	11.3
3YRS	9.4	-3.1	4.8
4YRS	7.3	-2.9	3.4
5YRS	6.1	-3.3	2.4
6YRS	5.0	-3.3	1.7
7YRS	3.8	-2.4	1.5

What You Missed

Note the entire 7 year period now looks good

#### Annualized Standard Deviation

	VALUE	GROWTH	COMBINED*	S&P/TSX COMPOSITE
7YRS	12.7	23.1	15.4	20.0

#### Annualized Tracking Error

	VALUE	GROWTH	COMBINED*
7YRS	15.9	5.4	7.2

#### Additional Costs of Terminations:

1. Consulting Search Fees
2. Transition Costs
3. Being Whipsawed

#### Annualized Information Ratio

	VALUE	GROWTH	COMBINED*
7YRS	0.1	-0.3	0.1

Conclusion: Even good managers can underperform for a prolonged period.

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## Cambridge Associates Studies 1999 & 2004

### Background

-NorthRoad Capital Mgmt documented Cambridge Associates universe data in an article "Broken Arrow"

### Methodology

- Cambridge Investment Associates Inc manager database
- They studied 10 year asset manager results for 47 managers in the first quartile as of 12/31/1999
- The study was repeated in 2004, with similar results

### Results

- 45 of 47 1<sup>st</sup> quartile managers spent at least one 3 year period underperforming more than 1/2 of its peers;
- 2/3's endured at least one 3 year period in the bottom quartile;
- 40% underperformed 90% of their competitors for three years;
- "An investor looking to identify a manager who can outperform over the next 10 years, may well find success among those who are not broken but merely out of favor; those with proven, talented decision-makers, a strong and consistent process and the discipline to maintain a clear and consistent philosophy, even when it is out of favor."

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## Rogers Casey 2010 Performance Persistence Study

### Background

-Rogers Casey regularly analyses the performance of traditional active managers

### Methodology

-Their Equest database of 2841 US equity managers and 1376 international managers and 1370 fixed income managers were used as of 12/31/2010

-They further narrowed the universe to managers with 10 years of data and separate accounts

-They analyzed the number of active managers who were 1<sup>st</sup> or 4<sup>th</sup> quartile performers from the previous 5 years (2001-2006) versus 1<sup>st</sup> or 4<sup>th</sup> quartile performers over the most recent 5 years (2006-2010)

### Results

-Rogers Casey believes **“selecting asset managers based on past performance, especially within the equity space, will lead to disappointing results for our clients. We recommend that investors adopt a forward-looking approach when selecting active managers.”**

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## Towers Watson 2012 “Firing an Investment Manager”

### Responses to Several Questions

-AlternativChronicle article documenting TowersWatson responses

#### Q1 –Is firing for underperformance a good idea?

-“Yes...if it occurs after a key portfolio manager has left or research reveals portfolio turnover has risen dramatically without a valid reason. Otherwise the performance might be just normal market gyration or the manager’s particular investment style. **In such cases it is prudent to just wait and see. A key question worth asking is whether the manager’s investment results are consistent with their investment process and skill? If yes, then again it’s premature to terminate.”**

#### Q4 –Are political factors a good reason to fire a manager?

-“Being a great client is just as important as hiring great investment managers for long term success. But **patience is a rare commodity** for plan sponsors who are in deficit and forced to react.”

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## 2012 “The Likelihood of ST Underperformance”

### Background

-An unpublished quantitative study of actual institutional manager performance

### Methodology (extensive)

-Analyzing outperforming large cap US core equity funds, net of fees, in the eVestment Alliance database from **March 1970 to December 2008**

-Reviewed shorter period underperformance for **525 successful products**

### Results

-“For funds with 20 years of outperformance, no fund (0%) outperformed in all shorter time periods of under 5 years therein;

-Not until 7 year sub-period outperformance are their results in funds that outperformed over the 20 year long term and the shorter term sub-periods and only 12.2% result in funds outperforming in both periods;

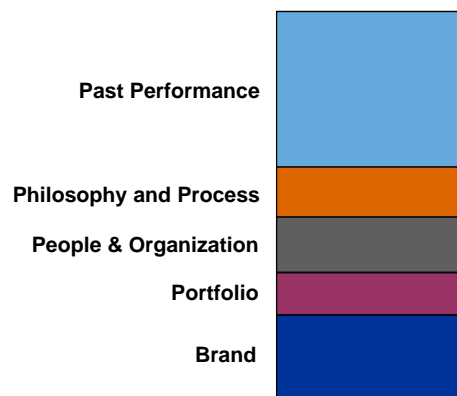
-The likelihood of experiencing at least one 10 year sub-period of underperformance, during a 20 year period of outperformance, is surprisingly high at 75%;

-**These results suggest that the risk to plan sponsors is quite high, if they take action based on short term underperformance, when other evidence suggests no change in the portfolio manager’s capability.”**

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## Conventional Approach to Manager Selection includes the 4 P’s



### The Problem:

**Investment Committees over-emphasize past performance**

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## What's Wrong with Conventional Models?

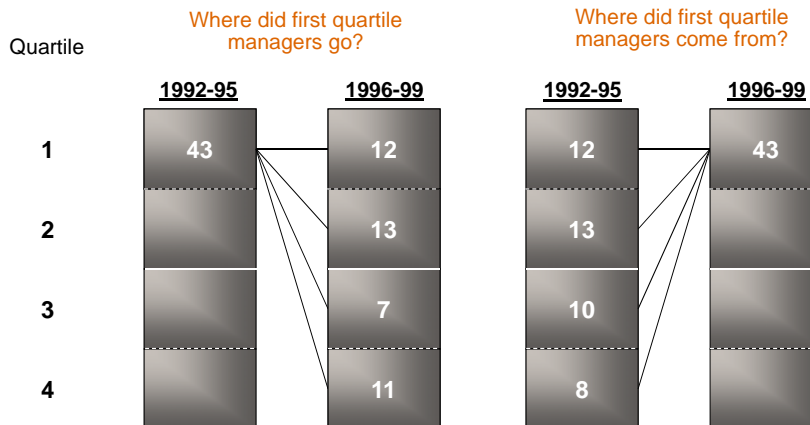
- › Past performance has limited predictive value
- › Significant “buy high, sell low” risk
- › Unaware of manager conditions while record was built
- › Evaluations may be biased and lack objectivity



Performance  
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## Why Screening Approaches Aren't Reliable



Universe consisted of 170 institutional managers in Russell's Growth, Market-Oriented, and Value universes with 8 years of history ending 1999.

Example: of the 43 managers in the top quartile for year 1992-1995, only 12 placed in the first quartile in years 1996-1999.

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## An Update on a Similar Persistence Study by S&P Dow Jones Indices 2012

### Background

-The Persistence Scorecard, released twice per year, tracks the persistency of top performers over consecutive yearly periods

### Methodology

-The clean, mutual fund universe used is composed of actively managed, domestic US equity managers, with no survivorship bias  
-The tracking report shows the percentage of top performing funds over subsequent, non overlapping, 3 and 5 year periods

### Results

-Of the 399 top performing funds in 2007, only 24.1% remain in the top quartile over the 5 year subsequent period ending 2012. Random expectations would expect 25%.  
-Very few funds manage to consistently stay at the top.  
-While top quartile repeat rates have been at or below the level one expects based on chance, there is consistency in death rates of bottom quartile funds. Across all market capitalization categories and all periods studied, 4<sup>th</sup> quartile funds had a much higher rate of being merged and liquidated.

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## Skill In Investment Management

If you can't use rate of return numbers because of the the long timeframe required what should you focus on?

Reasonable risk for the asset class group of managers versus the benchmark +

Consistency +

Excellent Research +

A good sound process =

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**Skill in Investment Management**

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## So What Does Work?

### Stock Selection

**Chartist**  
Price Resistance  
Breadth of Market Analysis  
PLUS  
**Fundamental**  
Balance Sheet Analysis  
Earnings Analysis  
etc.

### Manager Selection

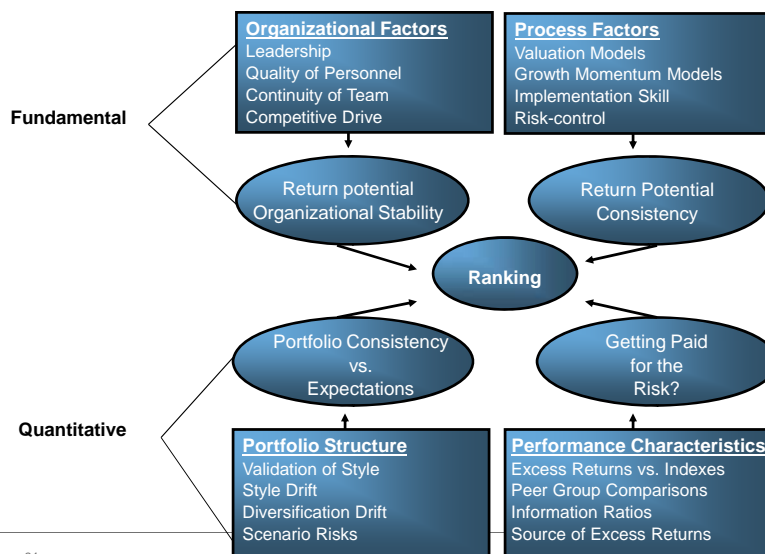
**Quantitative**  
Style Drift Analysis  
Scenario Risk Analysis  
etc.  
PLUS  
**Fundamental**  
Organization Characteristics  
Implementation Skill  
etc.

- › In-depth understanding of all financial markets
- › Identify characteristics that drive manager performance
- › Continuous ranking on those variables
- › Select managers with superior attributes

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## Selecting Superior Managers



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## Russell manager research beliefs

Successful investment processes have

- ✓ Talented & motivated people
- ✓ Clear philosophy
- ✓ Consistent investment approach
- ✓ Ability to implement decisions efficiently
- ✓ Organizational continuity

**Key: Investment managers need to have a competitive advantage**

- ✓ **Unique investment insight or process**

Can quantitative tools alone assess these qualities?

- ✓ The Answer: **No**

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## Skill For Each Manager

- An investment philosophy that is logical, intuitive, and revolves around exploiting market inefficiencies that should persist.
- An effective process that best allows a manager's information advantage to positively impact the portfolio.
- The manager's holdings are reasonably consistent with their style (portfolio characteristics, countries, sectors, style, capitalization, etc.) and process (buy/sell discipline and rationale);
- Organizational Stability: there are / will be **no adverse changes to the people or decision-making process or the firm** (takeovers);
- Always seeking to refine and improve the process and research;
- Highly motivated investment staff who have objectivity, humility and the desire to *win*.

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## Additional Factors that Seem to Help

- Size of assets under management (less is better)
- Skin in the game (interests are aligned)
- Smaller portfolio team with fewer products (focused)
- Young hungry firms, with experience (motivated)
- Excellent internal research (insight)
- High active share with lower TE (informed bets)
- Multi-manager structures with less correlated individual manager styles (diversity)

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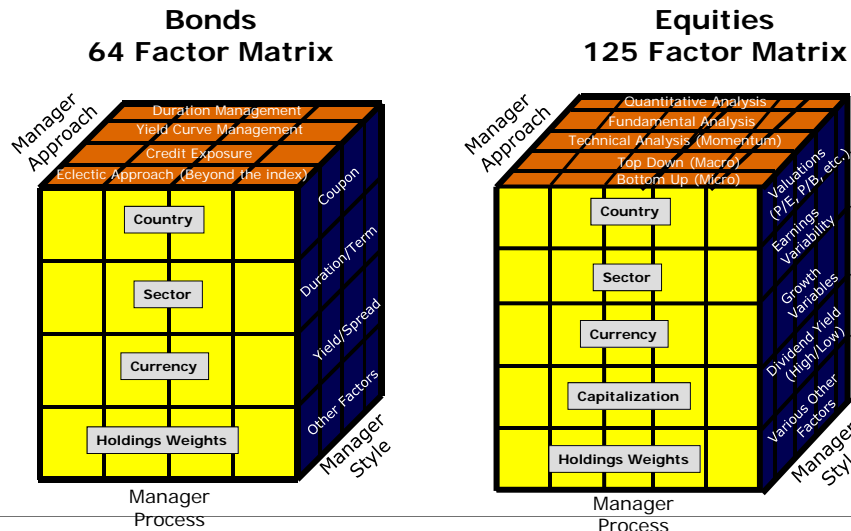
## Why do Good Managers Underperform?

- Style is out of favour** (a growth manager in a value market);
- The manager didn't buy a poor stock which is currently rising** (BreX, Nortel). It may take several years for the whole story to play out;
- The manager bought good stocks, but too early**, as they are out of favour or not yet recognized by the market (homebuilding stocks cheap valuations in 1998 were not recognized until major rate cuts in 2001);
- One time random events sideswipe the market** taking the focus off valuations (bad luck or noise, events such as September 11<sup>th</sup>, the GFC or the Mid East Crisis);
- The market is skewed in one direction due to **greed or fear** (food industry in a tech bubble).

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## Controlling Asset Class Risk: A Multi-Dimensional Process



## Two Global Equity Products Managed by the Same Firm for about 4 Years

- › Similarities
  - Similar investment process
  - Country constraints identical
  - Same research platform (122 analysts, 9 sector PMs & 58 regional PMs)
- › Differences
  - Large cap (not <\$5B cap) vs all cap, median cap similar (\$30B)
  - Individual position size .3% to 3.0% vs .5% to 5.0%
  - Different PMs

	VA to MSCI AC	Standard Deviation	Beta	Tracking Error
Large Cap	+5.7%	12.9	1.17	4.9
All Cap	+0.5%	13.0	1.19	5.0

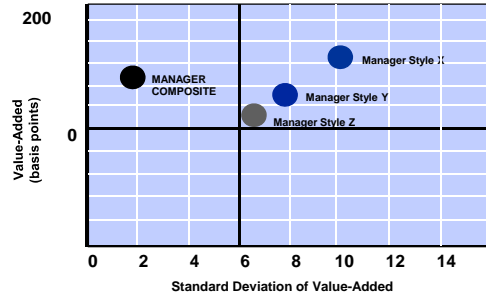
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## Prepare An Asset Class Strategy

- Specify \$AUM, beliefs, objectives, time horizons, expected added value, risk-constraints
- Articulate suitable investment strategy, including economic number of mandates and portfolio guidelines
  - At total fund level for balanced structures
  - At asset class level for specialty structures

When developing strategies:

- Value-added comes from picking managers
- Risk reduction comes from combining managers



**Without a clearly defined strategy consistent with your risk tolerance and objectives, the battle may be already lost!**

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## Requirements to Perform this Process Right:

- Superior due diligence founded in fundamental research; need to know what works / doesn't work.
- Ongoing research of a broad array of management styles, processes and asset classes.
- Excellent ongoing monitoring of individual managers and asset class holdings to control for risk;
- The ability to make changes **quickly** to the managers and their respective weightings to maintain alpha and limit risk.

**Resources and Patience!**

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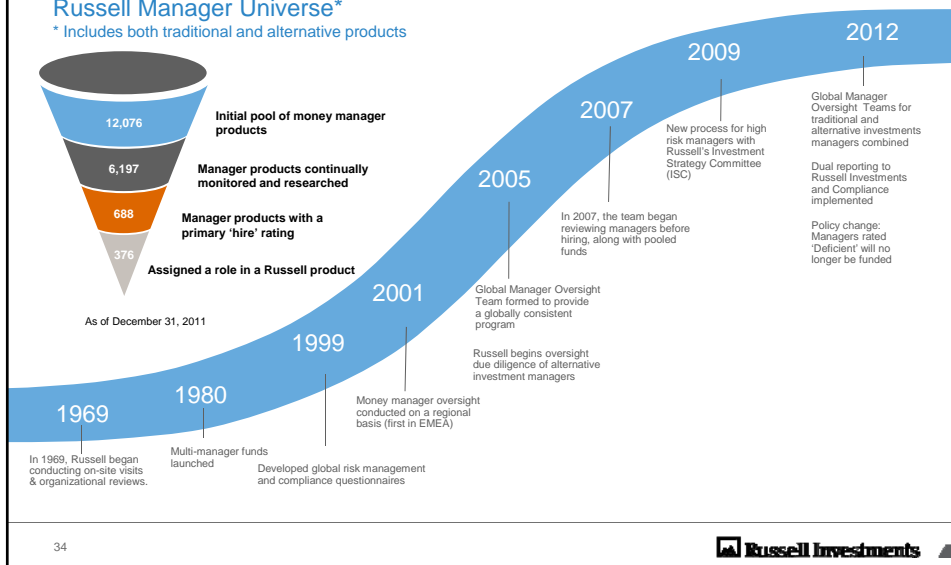
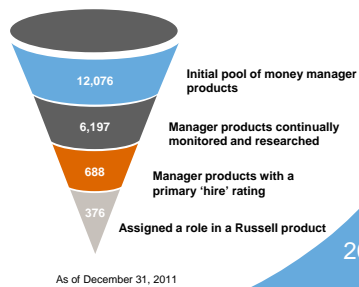


# Appendix

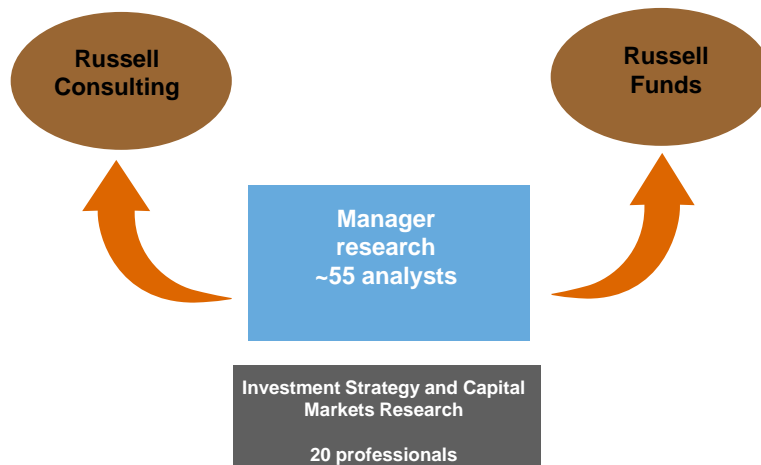
## Development of Global Manager Oversight & Due Diligence

### Russell Manager Universe\*

\* Includes both traditional and alternative products



## Russell's manager research team



These numbers are for the Russell global network (includes Pantheon estimates) and are estimated from August 2010 organizational charts. All other data as of June 2009.

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## We meet with more managers

An average of 20 research meetings a day<sup>1</sup>



1 Based on 2008 data.

2 More than one evaluation session may be held with a single managers and multiple products may be covered at one meeting.

3 Some firms may have more than one product. Roughly 5,200 products were researched.

4 “Buy rank” products with “4” ranking which is Russell’s highest ranking.

These numbers are total manager research for traditional and alternatives products for the Russell global network. Data is as of December, 2008.

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## The manager research process



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## The manager research process



### Run holdings and returns through quantitative tools

- › What tools do we use:
  - › **Factset**: Attribution
  - › **Barra Analytics**: Risk exposures
  - › **CPMS**: Portfolio Characteristics
  - › **Active Bets** (proprietary): Summarizes stock bets
- › Tools built on top of tools in Tacoma

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## The manager research process



### Qualitative assessment

- › Face-to-face meetings typically in teams
- › At least 2 hours long
- › 50 – 60 meetings in Canadian Equity each year
- › Over 5,200 products researched globally

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## The manager research process



### Qualitative assessment

- › Meet with the key decision makers AND analysts
- › Dig deep into their process!

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## The manager research process



### Our formal ranking system:

4	Hire (or buy)
3	Retain
2	Review
1	Terminate

All potential “hire” ranks go through Sounding Board scrutiny

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## The manager research process



### More on ranks

- › Based on value added potential
- › **NOT** based on past performance
- › Ranks within a universe
- › “Buy list”
  - › 17 buys out of 135 products (Canadian Equity)
  - › Analysts’ compensation tied to performance

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## The manager research process



### How often do we meet with managers?

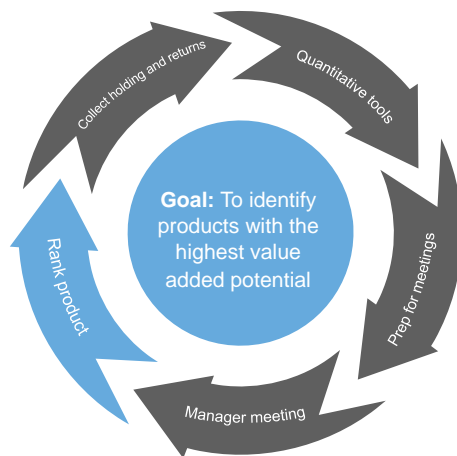
- Depends on their rank

4	Twice a year
3	Once a year
2	Every 18 months
1	No requirement

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## The manager research process



### Reasons for rank changes:

- › Comfort level with manager
- › Process changes
- › Organizational
- › Access issues
- › Change in competitive advantage

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## The manager research process



### Summary:

- › Blend of quantitative and qualitative
- › A mix of art and science

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## Russell manager research beliefs

### ✓ Because it takes:

#### **Experience**

*We ask the right questions*

#### **Manager access**

*We ask the right people*

#### **Teams of focused, specialist analysts**

*We understand the answers*

**AND the bottom line is...**

**✗It's NOT a black box**

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## Research categories

What do we focus on?

1. Investment staff
2. Organizational environment
3. Security selection
4. Research
5. Portfolio construction
6. Sell discipline
7. Implementation

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## Research categories

What do we focus on?

### Investment staff

- › Quality and experience?
- › Level of resources?
- › Unique investment insight?

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## Research categories

What do we focus on?

### Organizational environment

- › Breakdown of firm ownership?
- › Compensation?
- › Investment culture?

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## Research categories

What do we focus on?

### Security selection

- › Top down or bottom up?
- › Where do new ideas come from?
- › What factors do they focus on?

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## Research categories

What do we focus on?

### Research

- › How many analysts are there?
- › Is their coverage global?
- › Do they rely on sell-side research?

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## Research categories

What do we focus on?

### Portfolio construction

- › How is the portfolio constructed?
- › How do they decide on stock weights?
- › Are there any biases?

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## Research categories

What do we focus on?

### Sell discipline

- › How responsive are they?
- › What determines a sell?
- › What is their turnover?

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## Research categories

What do we focus on?

### Implementation

- › How are decisions made?
- › How do ideas get from analyst to pm?
- › How big are assets under management?

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## Conclusion

### Manager research and selection at Russell

- › Time
- › Resources
- › Thought

**Key: Completely independent views of managers!**

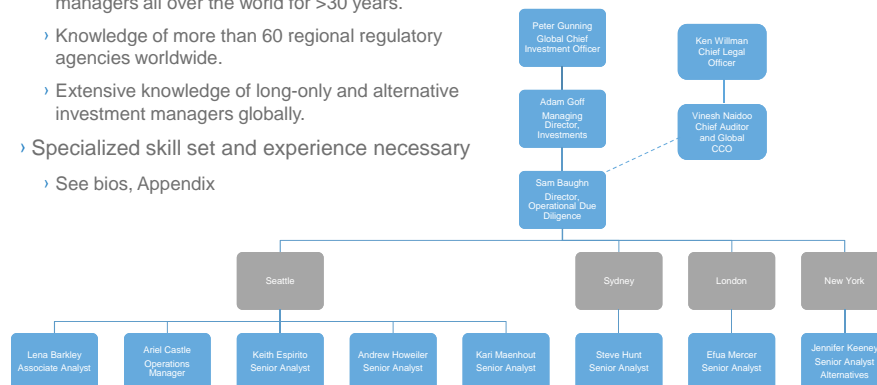
**TOP DUE DILIGENCE  
IN MANAGER RESEARCH  
2010 FUNDFIRE SURVEY**

Russell was voted tops in manager due diligence by participants in a 2010 *FundFire* survey of institutional sales professionals. *FundFire* survey participants singled out Russell for its pre-meeting preparation, thorough questioning and clear focus on risk management.

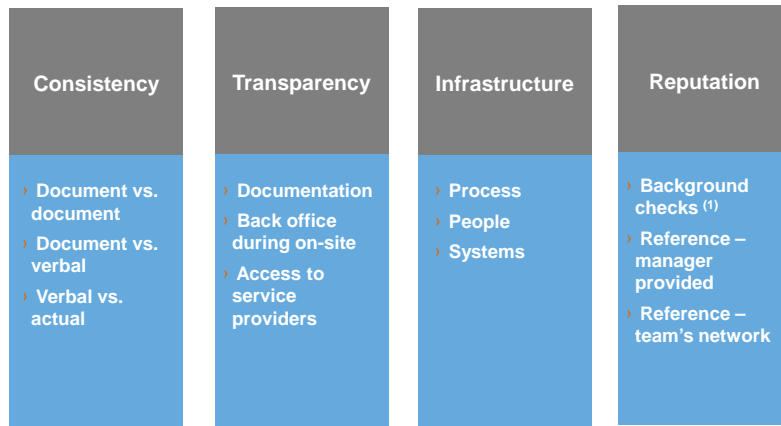
## Global Manager Oversight & Due Diligence Team

Dual reporting to Investment Research and Compliance

- › Global insight & best practices in local markets
  - › Russell has been hiring, firing and monitoring managers all over the world for >30 years.
  - › Knowledge of more than 60 regional regulatory agencies worldwide.
  - › Extensive knowledge of long-only and alternative investment managers globally.
- › Specialized skill set and experience necessary
  - › See bios, Appendix



## The four pillars of manager due diligence



All four pillars are critical to Russell's due diligence process *and* an investment manager's success with Russell.

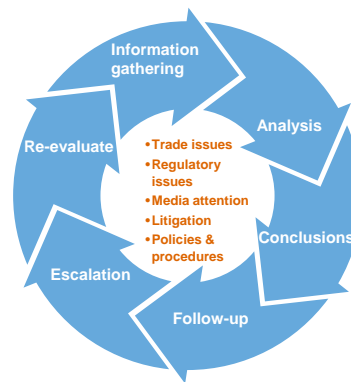
(1) Alternative products only

p.57



## Manager oversight review process

- › Initial questionnaire, document request and research
  - › On-site visit and document review
  - › Consultation with Russell's global experts in Compliance and Legal
  - › Assign risk ratings
  - › Recommendation to Russell Investment Strategy Committee
  - › Follow-up with manager
  - › Continuous questionnaire process
  - › On-going reviews
- 
- › Alternative Investments reviews include background checks, reference checks and third-party service provider verification



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## Manager oversight review process

- › Initial review
  - › Russell conducts on-site reviews of all managers prior to implementation in Russell funds or client accounts.
  - › Managers rated 'Deficient' are not hired
  - › Russell works with managers not rated 'Satisfactory' or 'Monitor' to improve.
- › Ongoing reviews
  - › Russell conducts ongoing reviews of all managers.
  - › Review schedule is based on perceived risk to Russell and clients; however, all managers are reviewed at least every two years (on-site or remotely).

### 1.0 FIRM / BUSINESS RISKS

- › ■■■■ Firm history / Ownership
- › ■■■■ Organizational structure
- › ■■■■ Business activities
- › ■■■■ Governance
- › ■■■■ IT and BCP

### 2.0 COMPLIANCE RISKS

- › ■■■■ Firm-wide monitoring
- › ■■■■ Compliance culture
- › ■■■■ Regulatory / Audits / Legal
- › ■■■■ Privacy / Personal info security

### 3.0 TRADING / OPERATIONAL RISKS

- › ■■■■ Trade process
- › ■■■■ Settlement / Reconciliation
- › ■■■■ Pricing policy and procedures
- › ■■■■ Trade / Operational errors
- › ■■■■ Best exec / Counterparty
- › ■■■■ Soft dollars

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 Russell Investments

## Manager oversight review process

### Fund reviews

- › Fund reviews
  - › Russell conducts on-site reviews of all alternative investments funds and desktop reviews of long-only pooled funds prior to implementation in Russell funds or client accounts.
  - › Funds rated 'Deficient' are not hired
  - › Russell works with managers of funds not rated 'Satisfactory' or 'Monitor' to improve.
  - › Funds are reviewed ongoing; reviews are conducted at least every two years (on-site or remotely).

### 4.0 FUND STRUCTURE

- › ■■■■ Legal structure
- › ■■■■ Governance
- › ■■■■ Third-party relationships
- › ■■■■ Fees and expenses
- › ■■■■ Subscription / Redemption terms
- › ■■■■ Investor details
- › ■■■■ Cash controls
- › ■■■■ NAV process
- › ■■■■ Portfolio

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 Russell Investments

## Recognized as an industry leader



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