



Performance Risk Advisors

Plan Sponsor Example:

Custom Tracking Error Report
Multi-Asset Portfolio

This plan sponsor is concerned primarily with relative performance. Tracking error vs. the benchmark is more important than absolute levels of risk.

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Principal

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SUMMARY

- Tracking error from asset allocation is approximately 1.8% for the total portfolio.
 - Category 1a has a small tracking error from the overweight to xxxxx.
 - Category 1b has significant tracking error to the benchmark; yyyyyyy is the largest contributor.
 - Category 2 has tracking error of 1.9% from an underweight to aaaaaa and overweight to bbbbbbb.
 - As desired, Category 3 has a large tracking error to the policy benchmark.
- Specific active managers have reasonably large tracking error, but the diversification effect creates a small combined tracking error.
- The combination of active management and asset allocation creates tracking error of approximately 1.8% for the total portfolio.
 - In some cases active management and asset allocation are pulling in the same direction and there's little diversification effect between the two forces (Category 2).
 - In other cases, asset allocation and/or active risk cancel each other out (DDDDD in Category 3 vs. Underweight bbbbbbb and Active Risk in Category 2).

Tracking Error Analysis	Asset Weights	Active Managers	Asset Weights And Managers
Total Portfolio	1.8	.8	1.8
Category 1	3.3	1.2	3.5
Category 1a	0.8	1.5	1.4
Category 1b	9.7	2.2	9.7
Category 2	1.9	1.0	2.6
Category 3	11.0	1.7	11.4



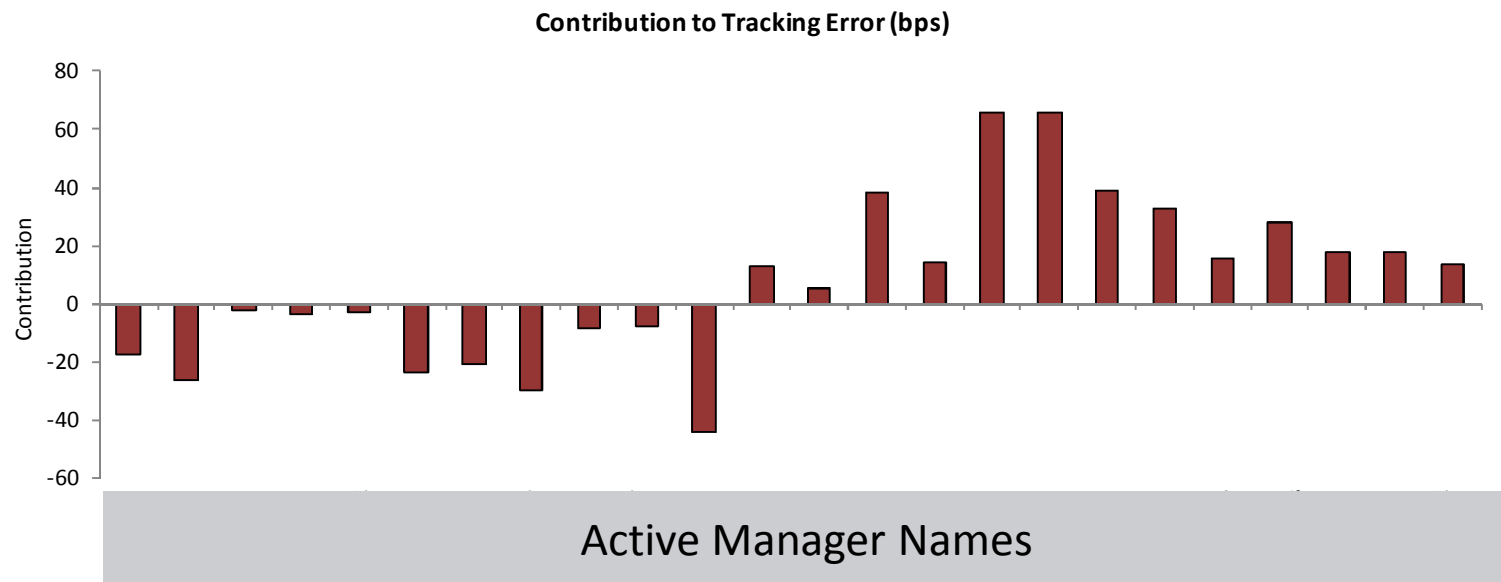
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FULL IMPLEMENTATION – TOTAL PORTFOLIO VS. POLICY BENCHMARK

(Includes Asset Allocation and Active Managers)

Tracking Error Analysis	Active vs. Benchmark
Total Portfolio	1.8
Category 1	3.5
Category 1a	1.4
Category 1b	9.7
Category 2	2.6
Category 3	11.4



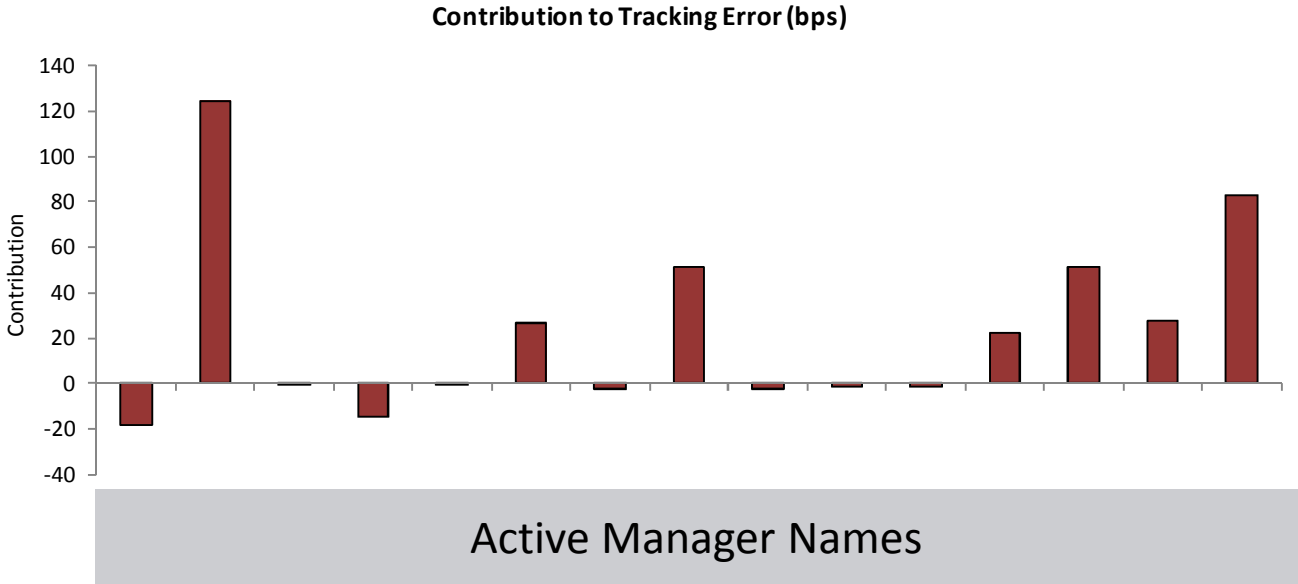
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FULL IMPLEMENTATION – CATEGORY 1 VS. BENCHMARK

(Includes Asset Allocation and Active Managers)

Tracking Error Analysis	Active vs. Benchmark
Total Portfolio	1.8
Category 1	3.5
Category 1a	1.4
Category 1b	9.7
Category 2	2.6
Category 3	11.4



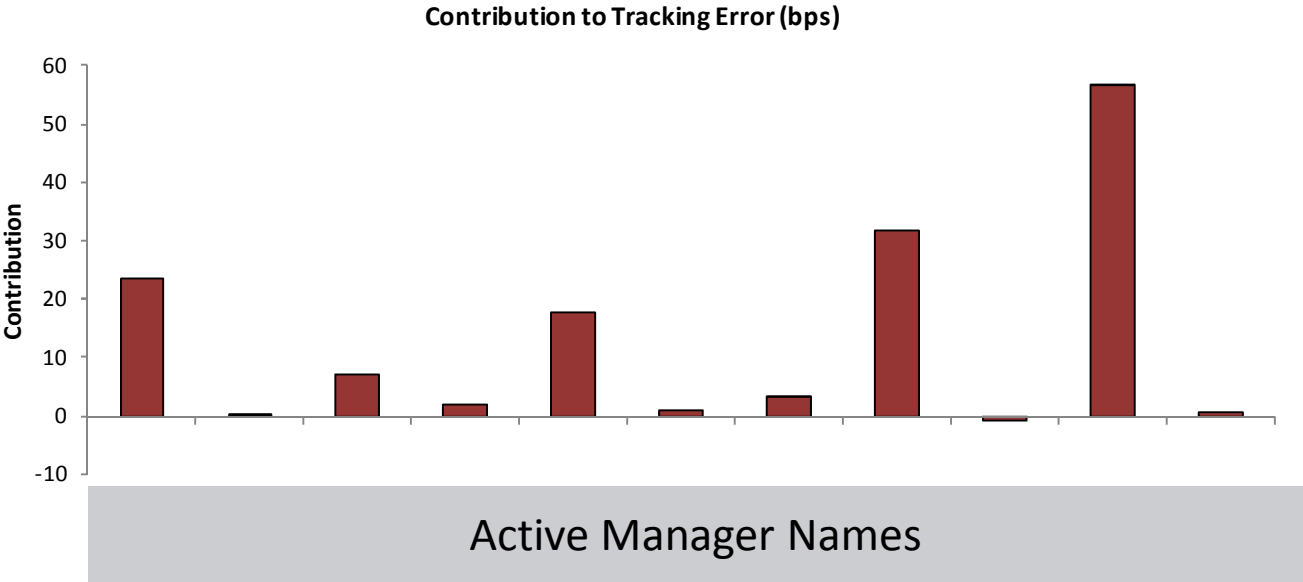
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FULL IMPLEMENTATION – CATEGORY 1A VS. BENCHMARK

(Includes Asset Allocation and Active Managers)

Tracking Error Analysis	Active vs. Benchmark
Total Portfolio	1.8
Category 1	3.5
Category 1a	1.4
Category 1b	9.7
Category 2	2.6
Category 3	11.4



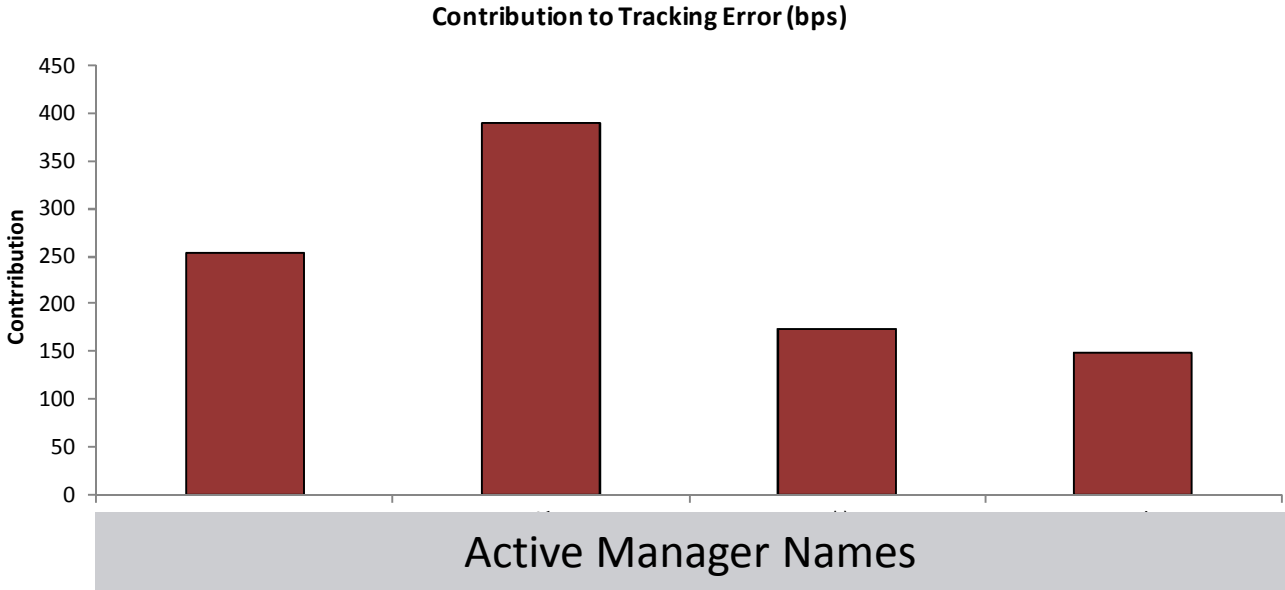
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FULL IMPLEMENTATION – CATEGORY 1B VS. BENCHMARK

(Includes Asset Allocation and Active Managers)

Tracking Error Analysis	Active vs. Benchmark
Total Portfolio	1.8
Category 1	3.5
Category 1a	1.4
Category 1b	9.7
Category 2	2.6
Category 3	11.4



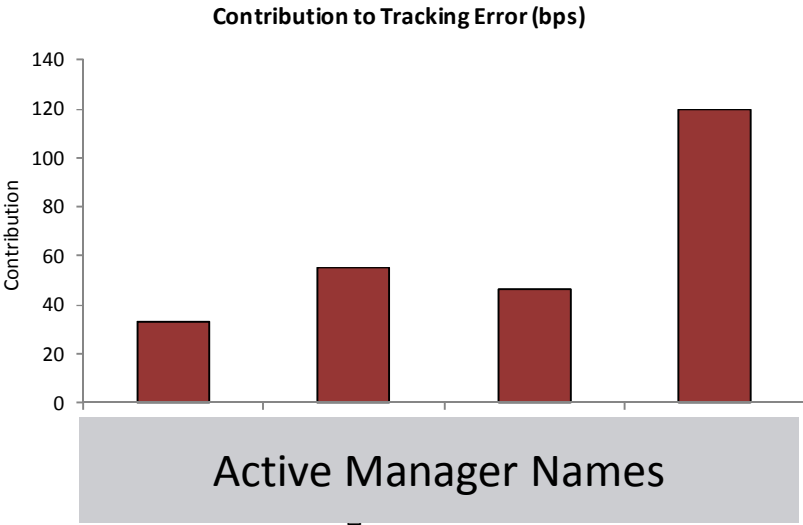
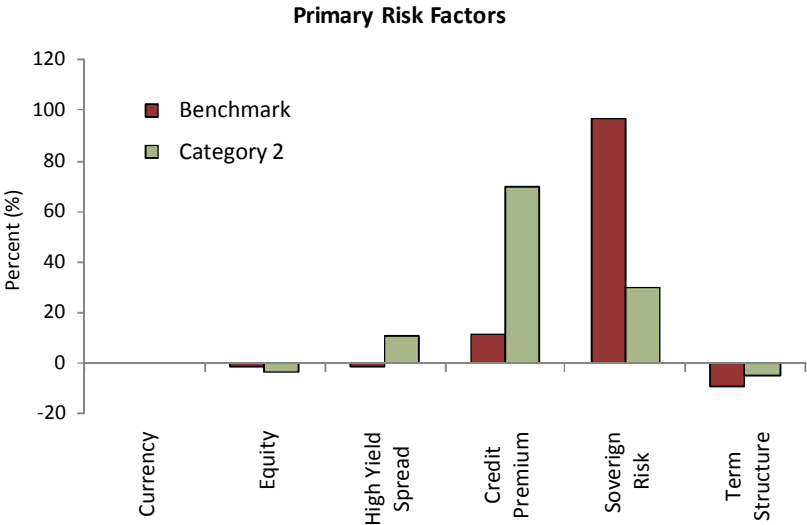
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FULL IMPLEMENTATION – CATEGORY 2 VS. BENCHMARK

(Includes Asset Allocation and Active Managers)

Tracking Error Analysis	Active vs. Benchmark
Total Portfolio	1.8
Category 1	3.5
Category 1a	1.4
Category 1b	9.7
Category 2	2.6
Category 3	11.4



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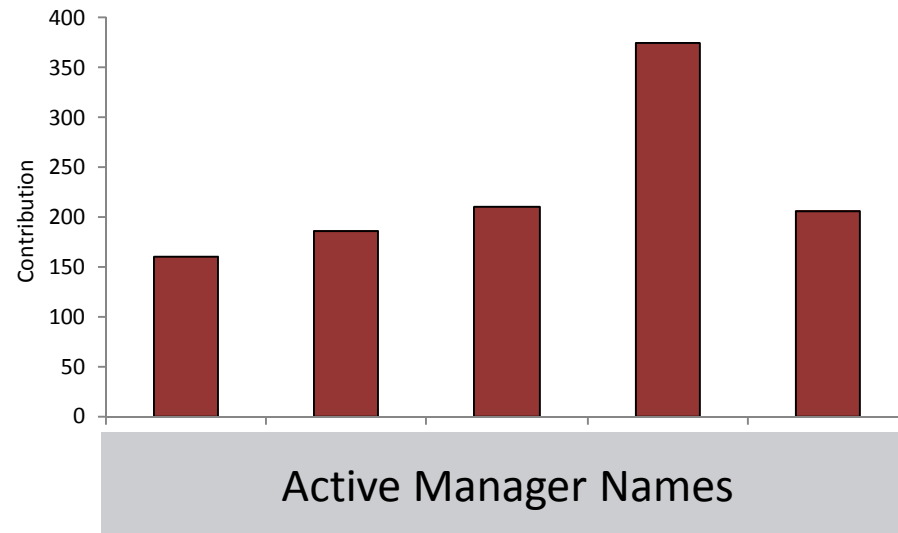
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FULL IMPLEMENTATION – CATEGORY 3 VS. BENCHMARK

(Includes Asset Allocation and Active Managers)

Tracking Error Analysis	Active vs. Benchmark
Total Portfolio	1.8
Category 1	3.5
Category 1a	1.4
Category 1b	9.7
Category 2	2.6
Category 3	11.4

Contribution to Tracking Error (bps)



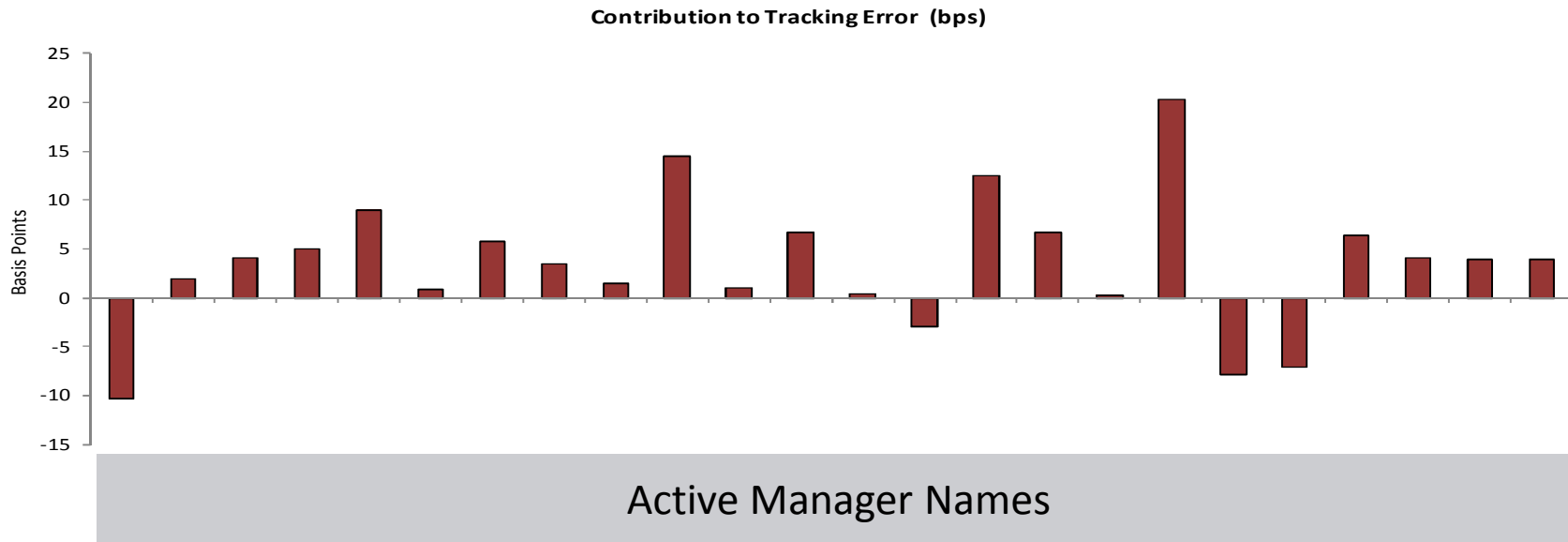
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ACTIVE – TOTAL PORTFOLIO VS. CURRENT WEIGHTS

(Active Manager Tracking Error)

Tracking Error Analysis	Active vs. Benchmark
Total Portfolio	0.8
Category 1	1.2
Category 1a	1.5
Category 1b	2.2
Category 2	1.0
Category 3	1.7



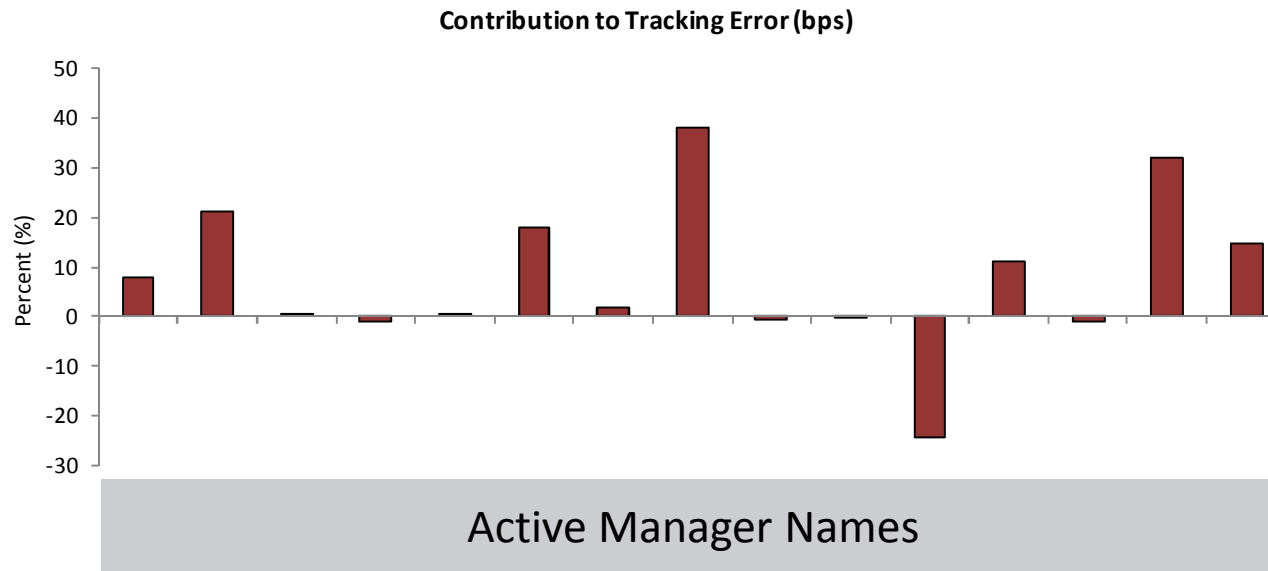
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ACTIVE – CATEGORY 1 VS. CURRENT WEIGHTS

(Active Manager Tracking Error)

Tracking Error Analysis	Active vs. Benchmark
Total Portfolio	0.8
Category 1	1.2
Category 1a	1.5
Category 1b	2.2
Category 2	1.0
Category 3	1.7



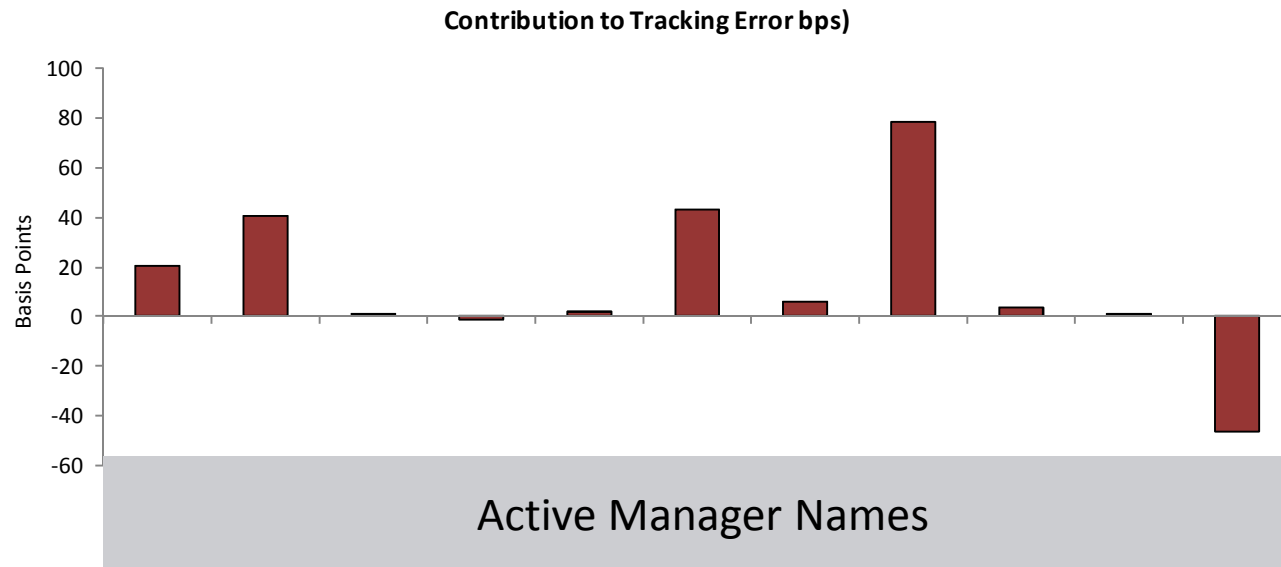
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ACTIVE – CATEGORY 1A VS. CURRENT WEIGHTS

(Active Manager Tracking Error)

Tracking Error Analysis	Active vs. Benchmark
Total Portfolio	0.8
Category 1	1.2
Category 1a	1.5
Category 1b	2.2
Category 2	1.0
Category 3	1.7



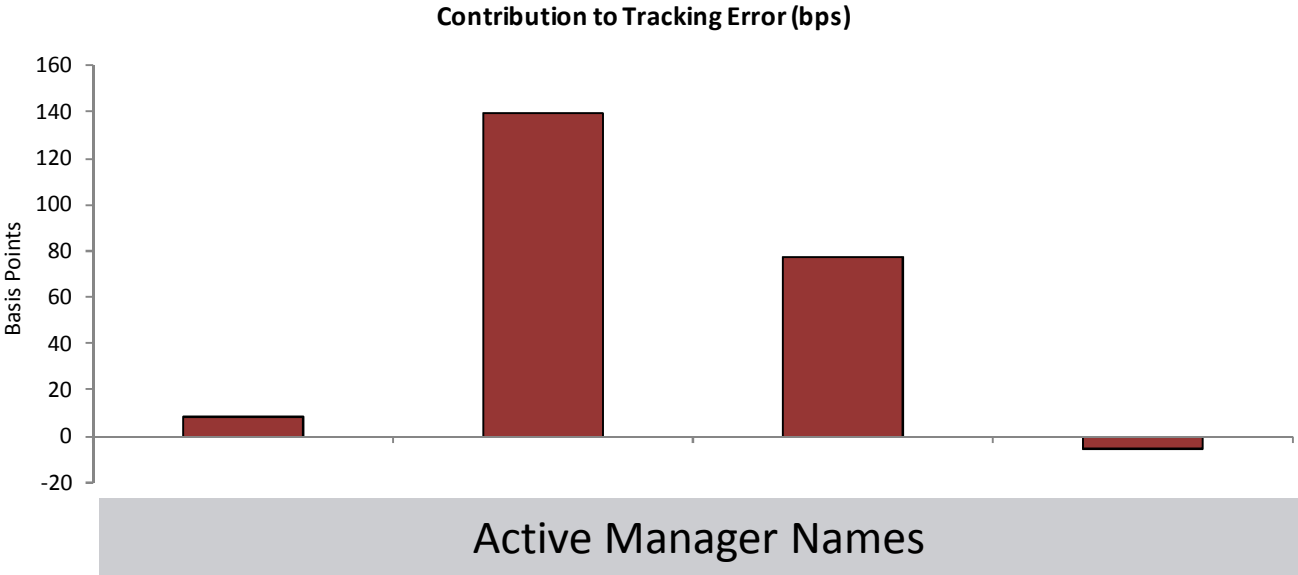
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ACTIVE – CATEGORY 1B VS. CURRENT WEIGHTS

(Active Manager Tracking Error)

Tracking Error Analysis	Active vs. Benchmark
Total Portfolio	0.8
Category 1	1.2
Category 1a	1.5
Category 1b	2.2
Category 2	1.0
Category 3	1.7



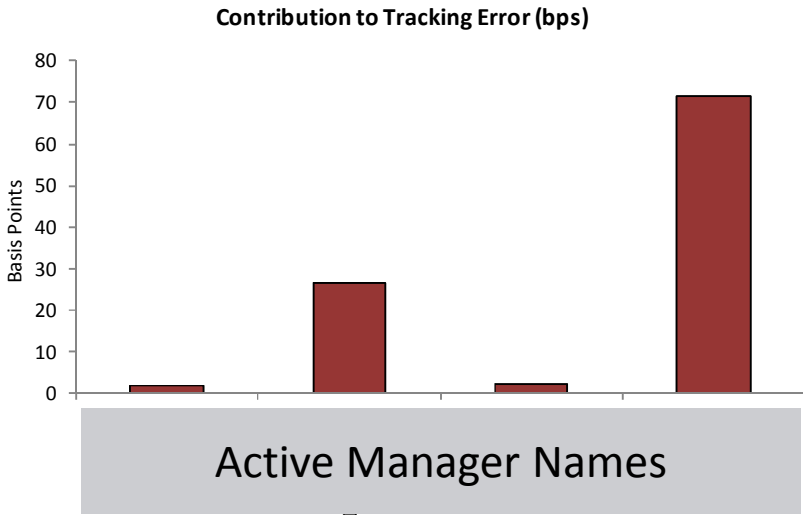
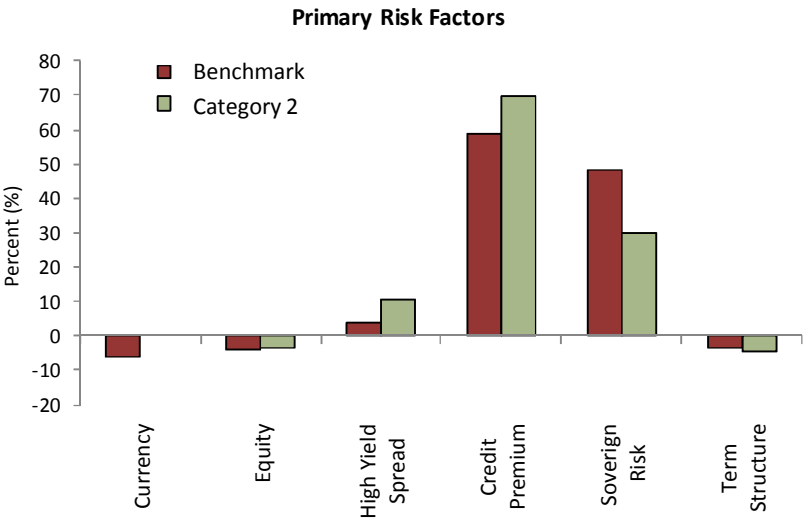
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ACTIVE – CATEGORY 2 VS. CURRENT WEIGHTS

(Active Manager Tracking Error)

Tracking Error Analysis	Active vs. Benchmark
Total Portfolio	0.8
Category 1	1.2
Category 1a	1.5
Category 1b	2.2
Category 2	1.0
Category 3	1.7



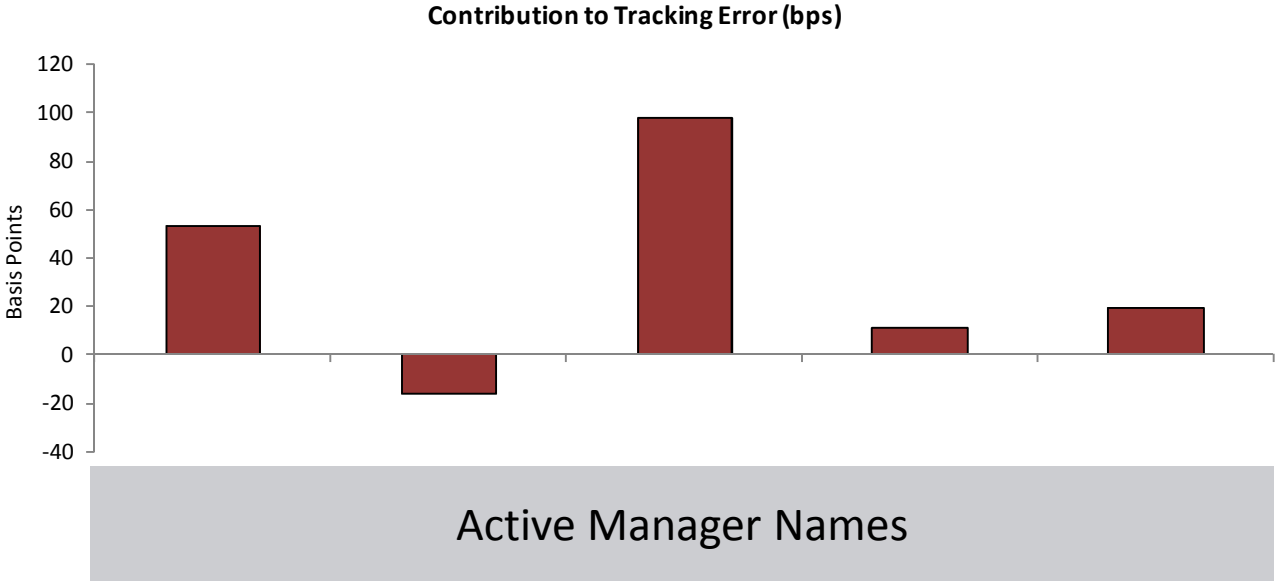
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ACTIVE – CATEGORY 3 VS. CURRENT WEIGHTS

(Active Manager Tracking Error)

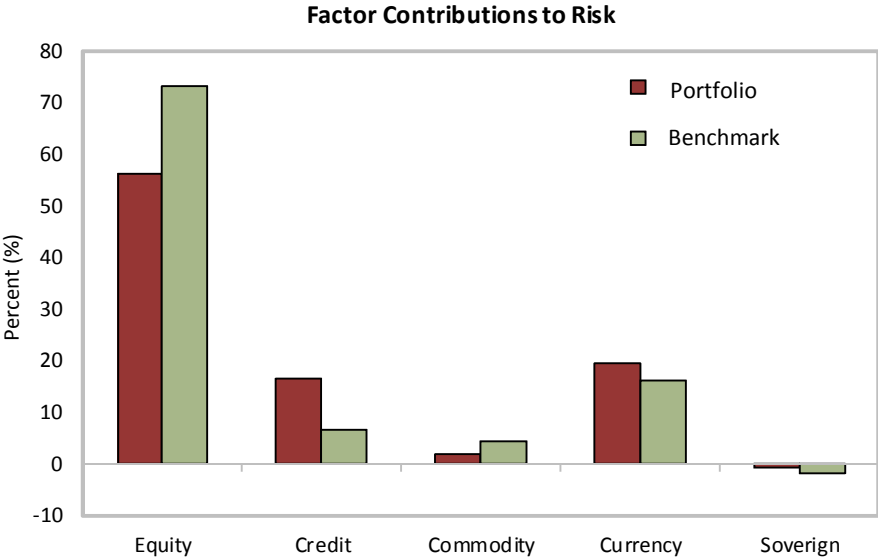
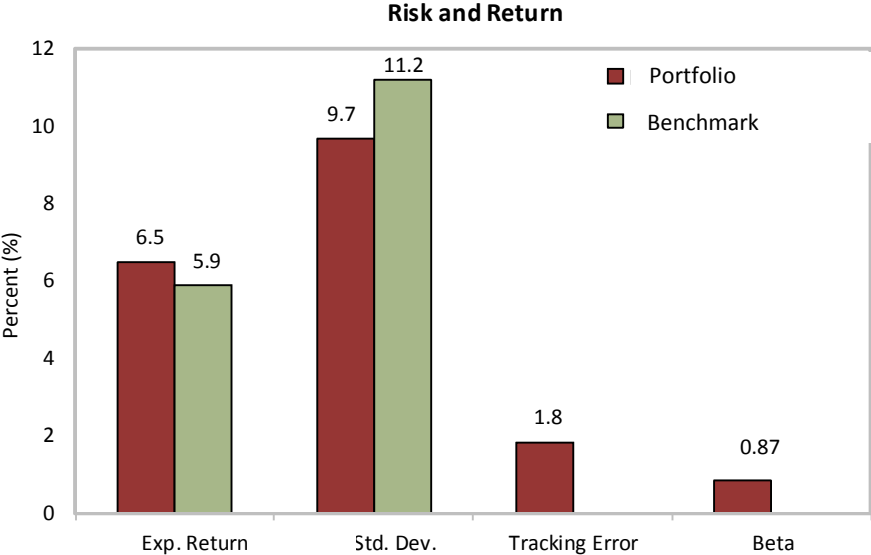
Tracking Error Analysis	Active vs. Benchmark
Total Portfolio	0.8
Category 1	1.2
Category 1a	1.5
Category 1b	2.2
Category 2	1.0
Category 3	1.7



ASSET CLASSES – CURRENT WEIGHTS VS. BENCHMARK

(Tracking Error from Asset Allocation)

Tracking Error Analysis	Current Wts. vs. Benchmark
Total Portfolio	1.8
Category 1	3.3
Category 1a	0.8
Category 1b	9.7
Category 2	1.7
Category 3	11.5



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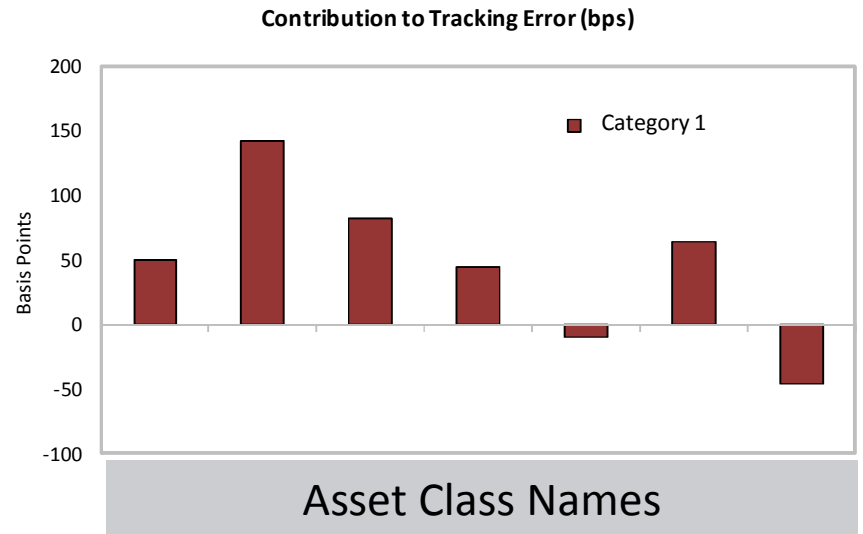
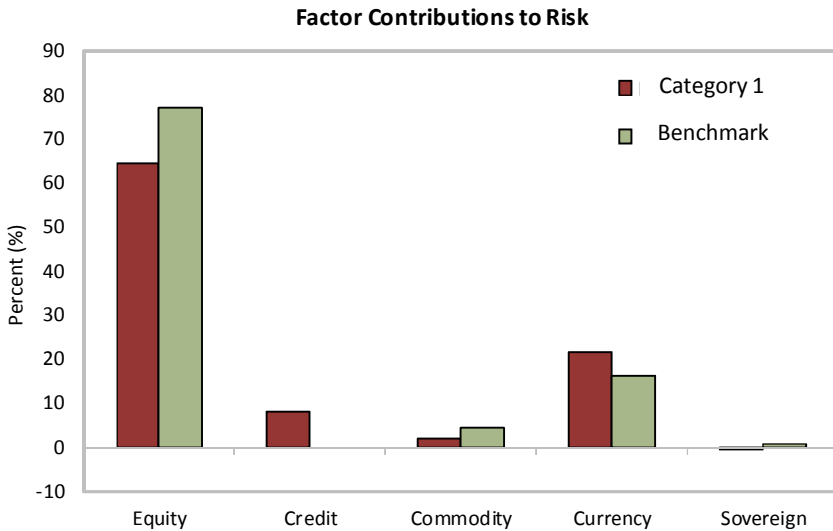
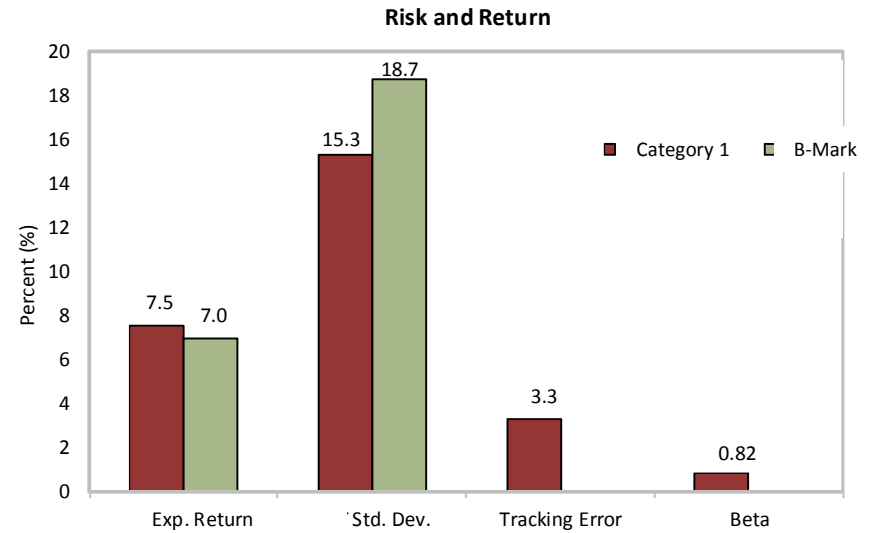
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ASSET CLASSES – CATEGORY 1 VS. BENCHMARK

(Tracking Error from Asset Allocation)

Tracking Error Analysis	Current Wts. vs. Benchmark
Total Portfolio	1.8
Category 1	3.3
Category 1a	0.8
Category 1b	9.7
Category 2	1.7
Category 3	11.5

Custom Tracking Error Report Multi-Asset Portfolio



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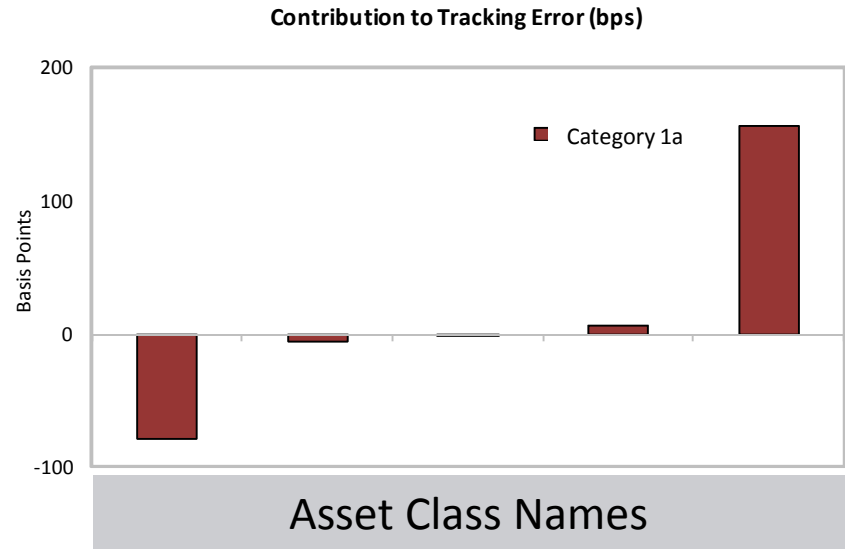
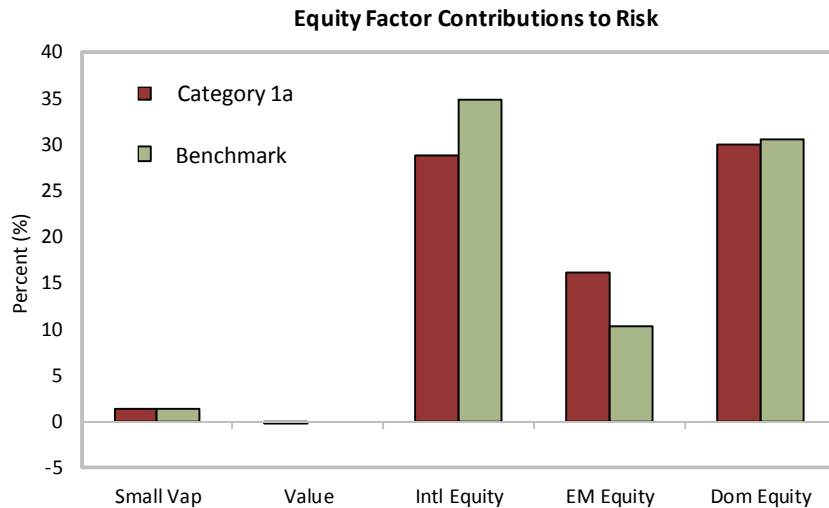
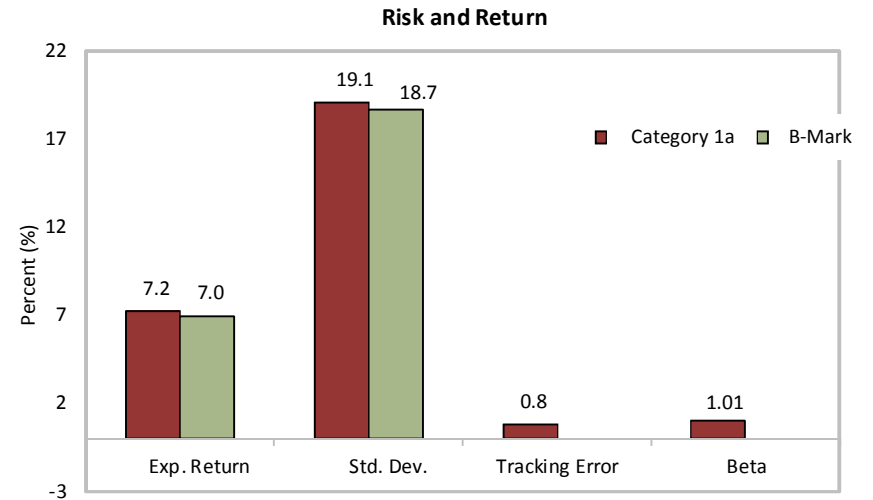
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ASSET CLASSES - CATEGORY 1A VS. BENCHMARK

(Tracking Error from Asset Allocation)

Custom Tracking Error Report
Multi-Asset Portfolio

Tracking Error Analysis	Current Wts. vs. Benchmark
Total Portfolio	1.8
Category 1	3.3
Category 1a	0.8
Category 1b	9.7
Category 2	1.7
Category 3	11.5



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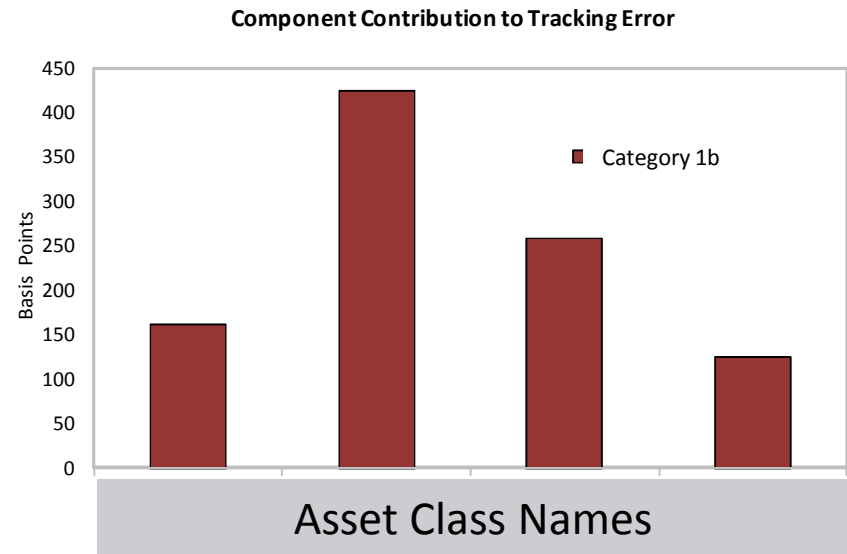
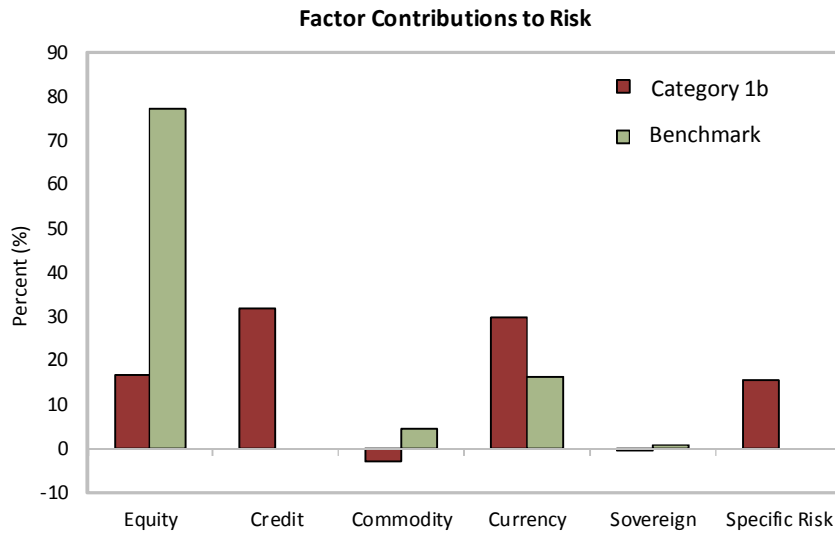
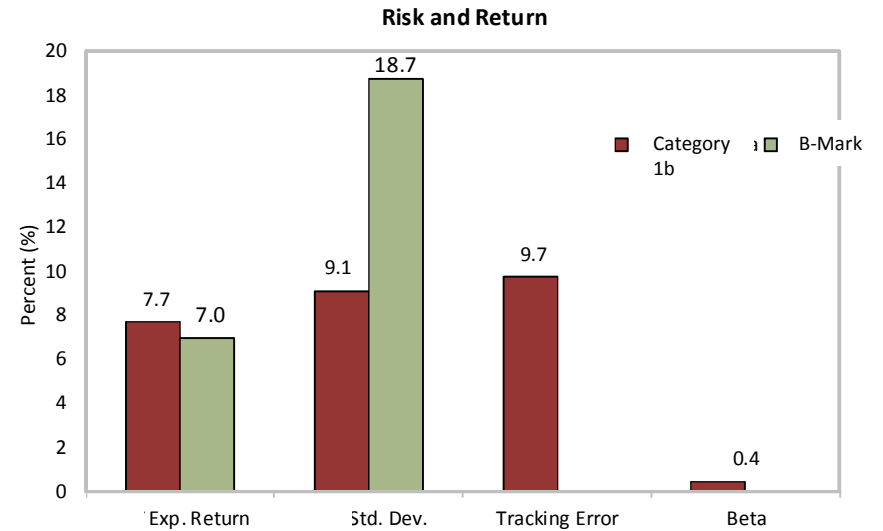
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ASSET CLASSES - CATEGORY 1B VS. BENCHMARK

(Tracking Error from Asset Allocation)

Custom Tracking Error Report
Multi-Asset Portfolio

Tracking Error Analysis	Current Wts. vs. Benchmark
Total Portfolio	1.8
Category 1	3.3
Category 1a	0.8
Category 1b	9.7
Category 2	1.7
Category 3	11.5



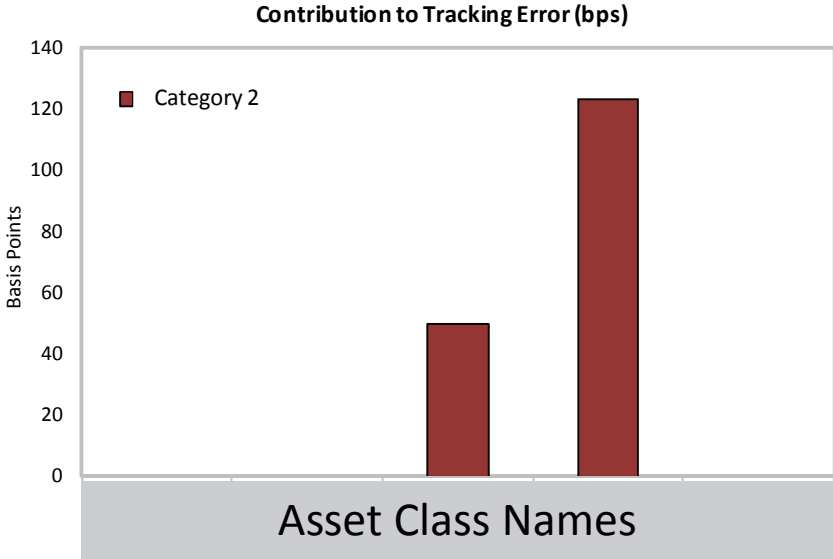
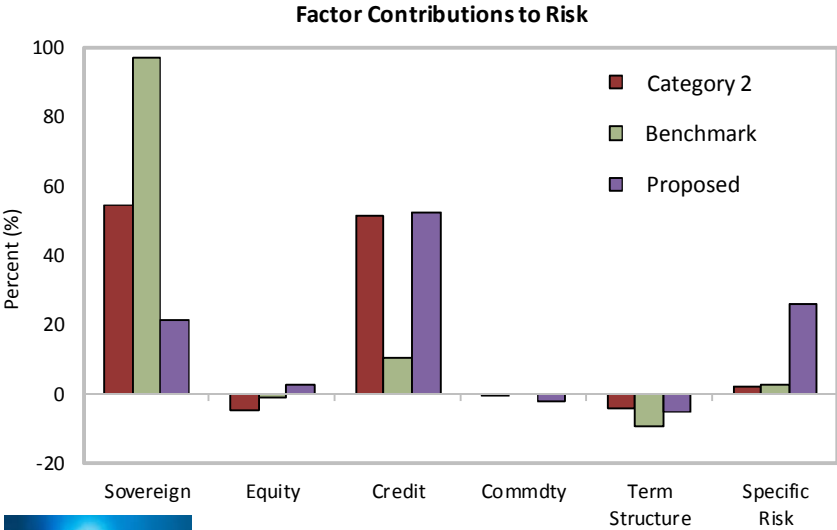
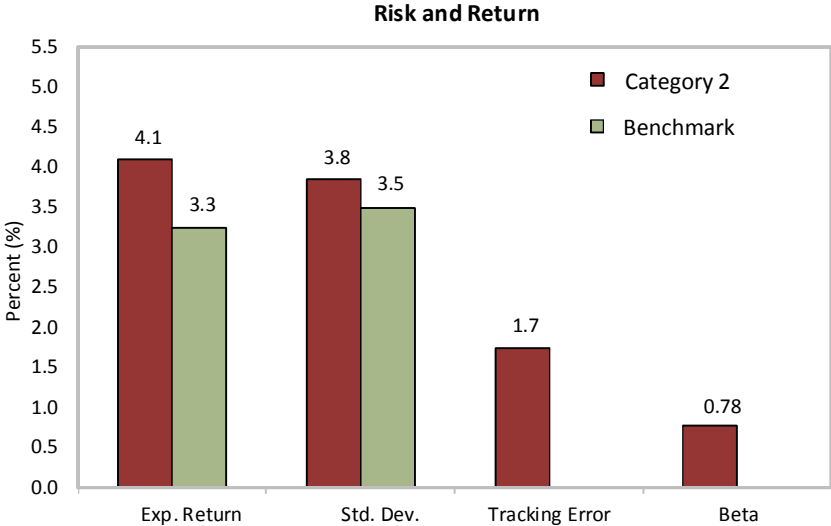
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PLAYBOOK BETA – CATEGORY 2 VS. BENCHMARK

(Tracking Error from Asset Allocation)

Tracking Error Analysis	Current Wts. vs. Benchmark
Total Portfolio	1.8
Category 1	3.3
Category 1a	0.8
Category 1b	9.7
Category 2	1.7
Category 3	11.5



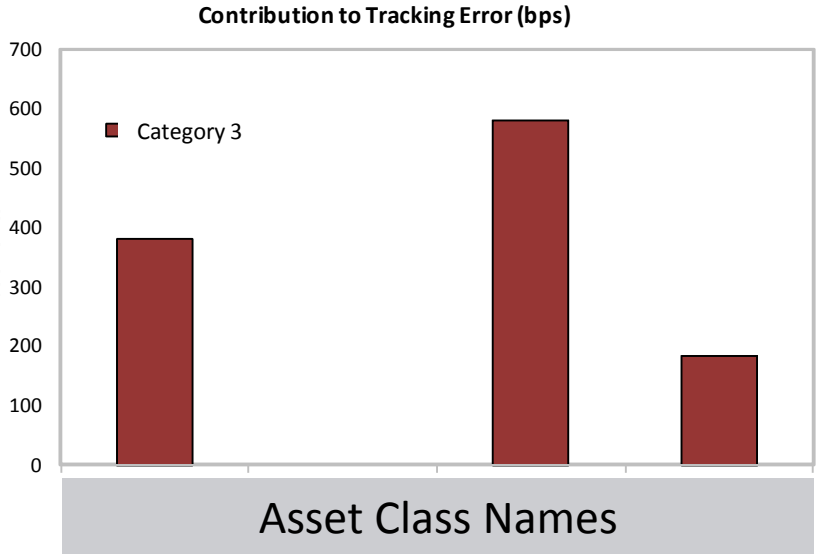
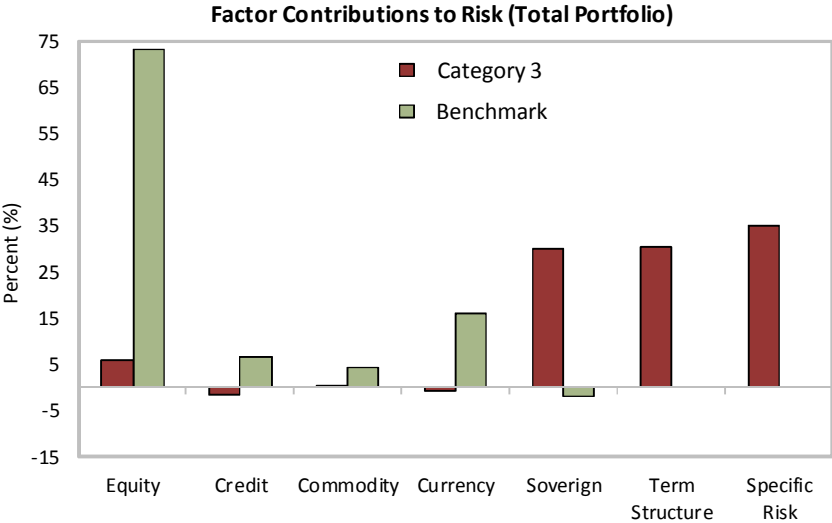
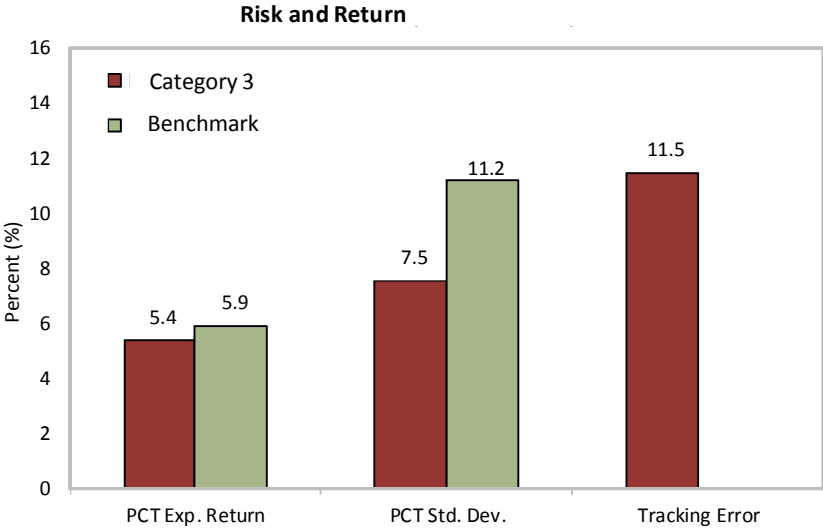
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ASSET CLASSES – CATEGORY 3 VS. BENCHMARK

(Tracking Error from Asset Allocation)

Tracking Error Analysis	Current Wts. vs. Benchmark
Total Portfolio	1.8
Category 1	3.3
Category 1a	0.8
Category 1b	9.7
Category 2	1.7
Category 3	11.5



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