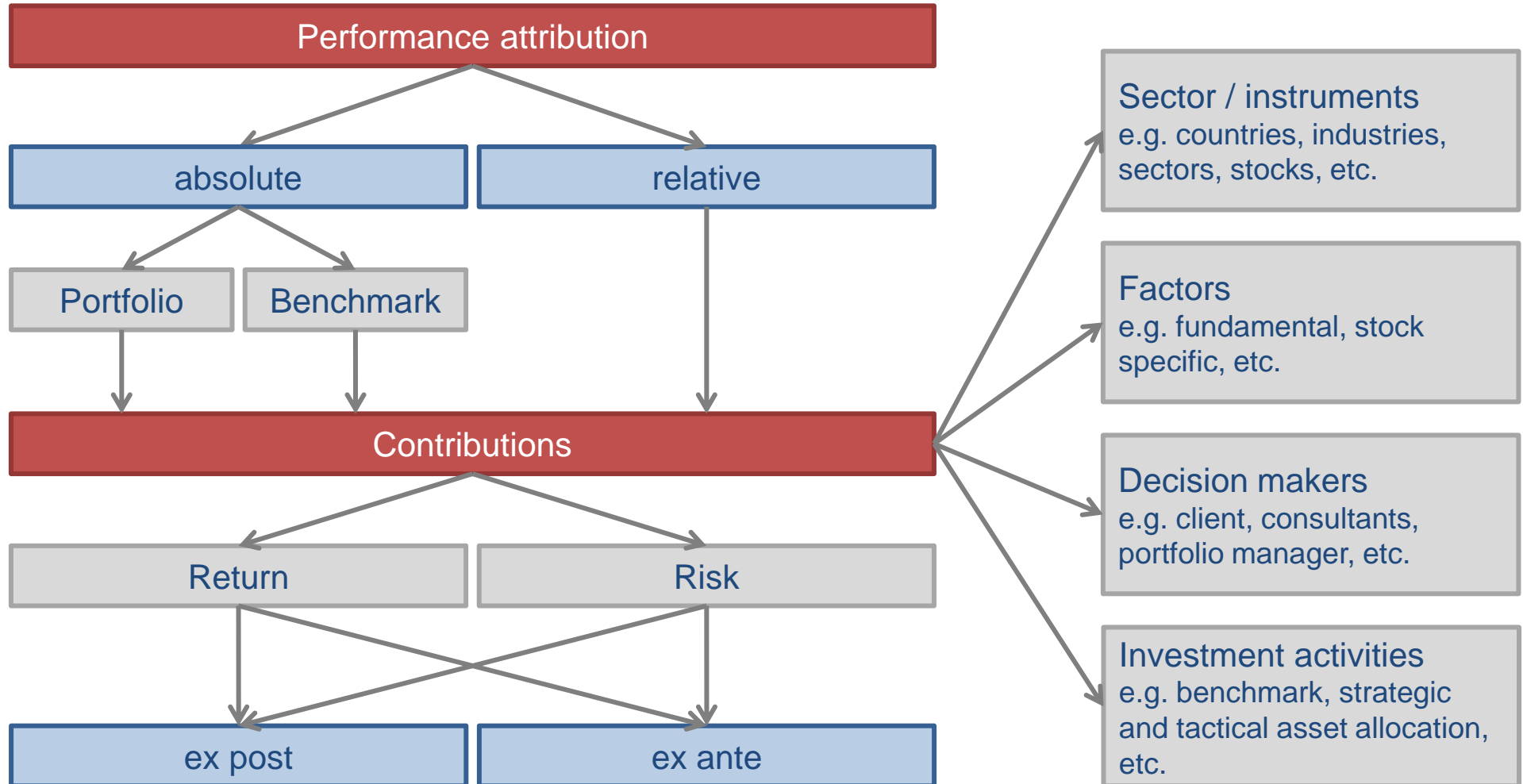


Pitfalls in performance attribution

Date: November 2011
Produced by: Dr. Stefan J. Illmer

Performance attribution – The big picture



Performance analysis – Sensitivity and consequences

Performance analysis is very difficult to be set up in an appropriate way and because performance:

- May be a result from several obvious and less obvious decisions.
- May be originated from several obvious and less obvious decision makers.
- May be a result of a more or less interlaced investment management process.
- Can vary over time.

Misstating or misinterpretation of the historical performance may lead to erroneous or even wrong decisions as they:

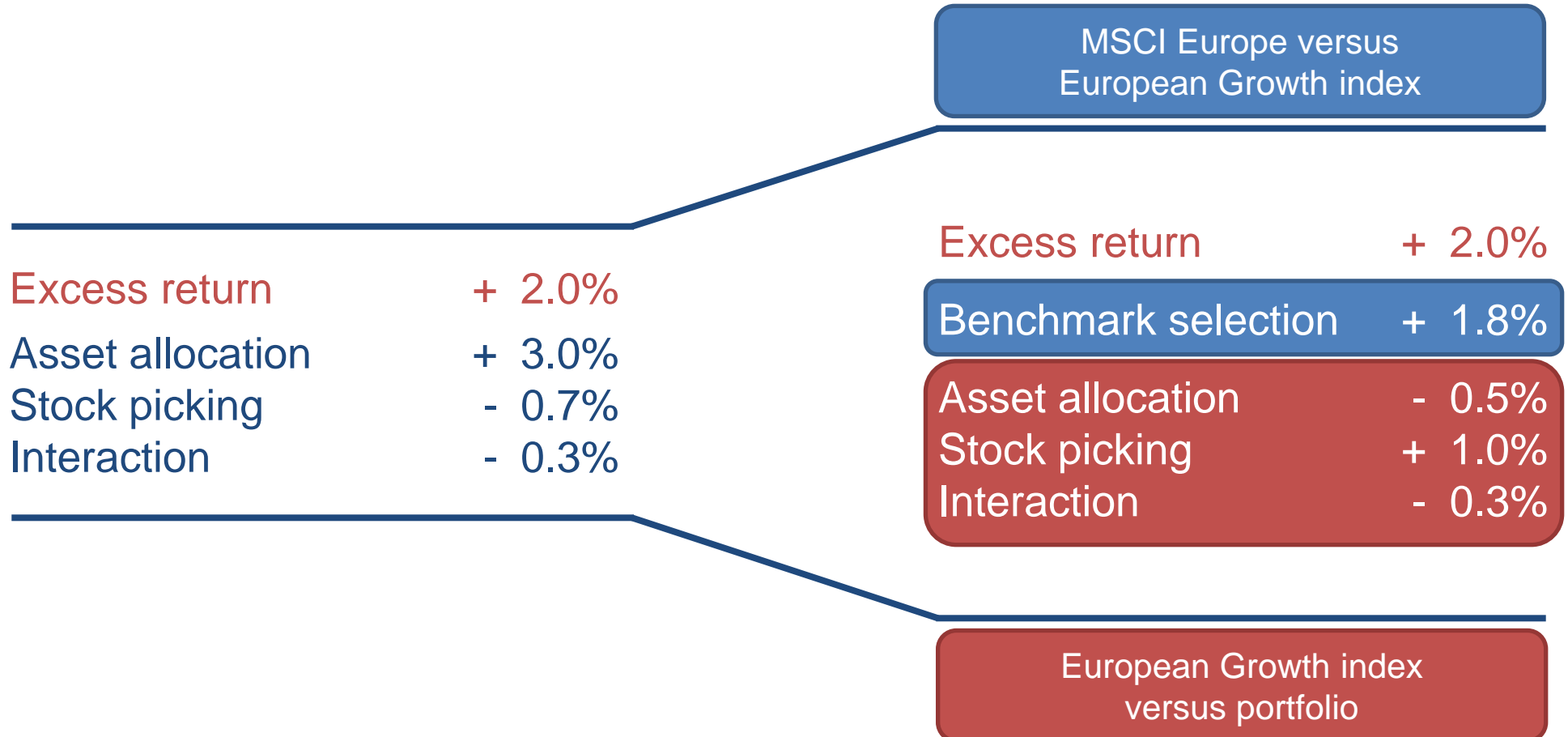
- Assess the quality of the decision makers.
- Give decision-oriented feedback into the decision making process.

=> Investment reporting should consider these issues and therefore should contain appropriate disclosures.

Are all steps of the decision making process reflected?

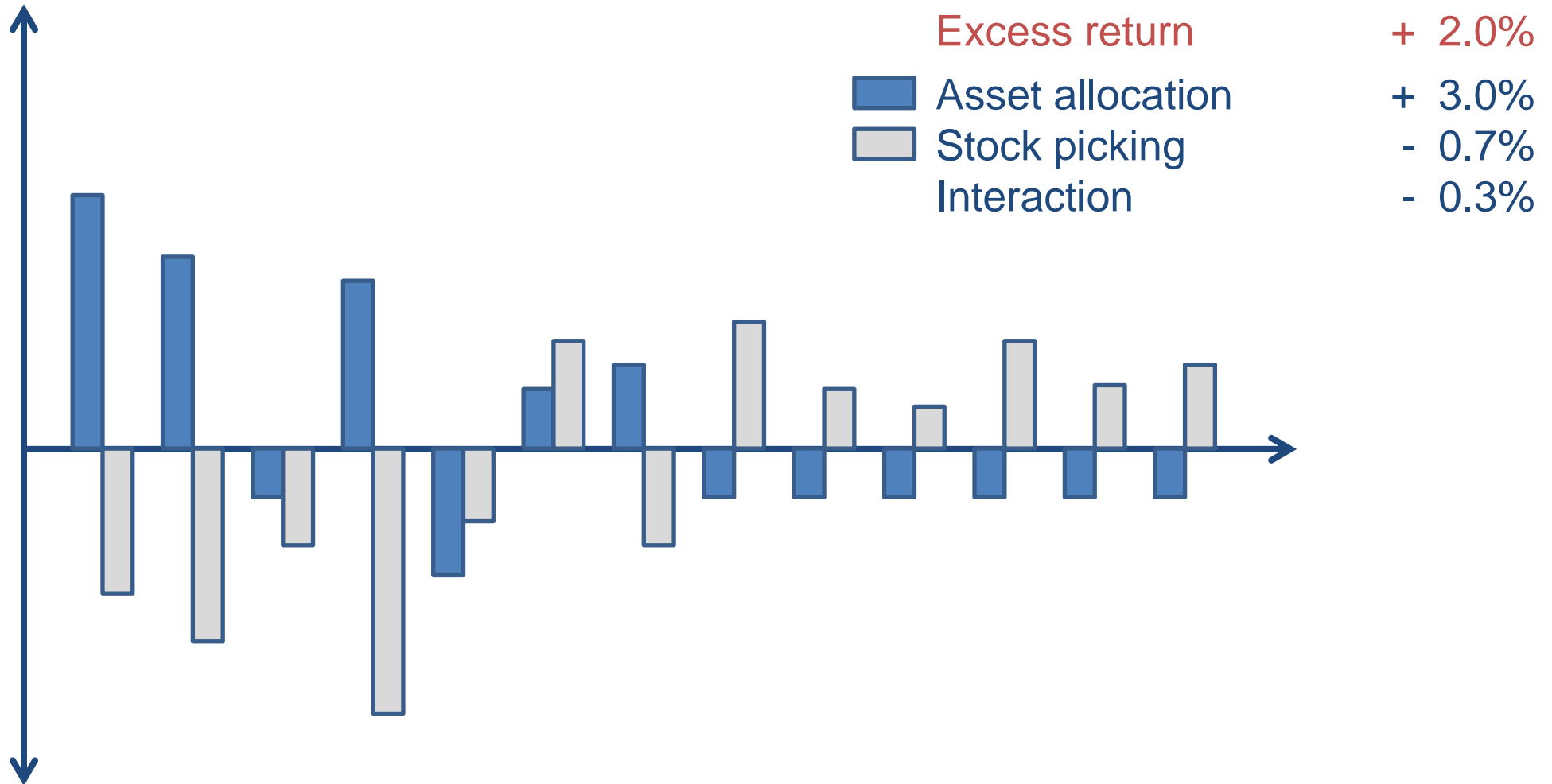
Excess return	+ 2.0%	Excess return	+ 2.0%
Asset allocation	+ 3.0%	Benchmark selection	+ 0.3%
Stock picking	- 0.7%	Asset allocation team	+ 1.0%
Interaction	- 0.3%	FI-specialist	- 0.5%
		EQ-specialist	+ 0.8%
		Stock picking	+ 0.7%
		Interaction	- 0.3%

Is a product or an asset manager under review?



Does the management effects vary over time?

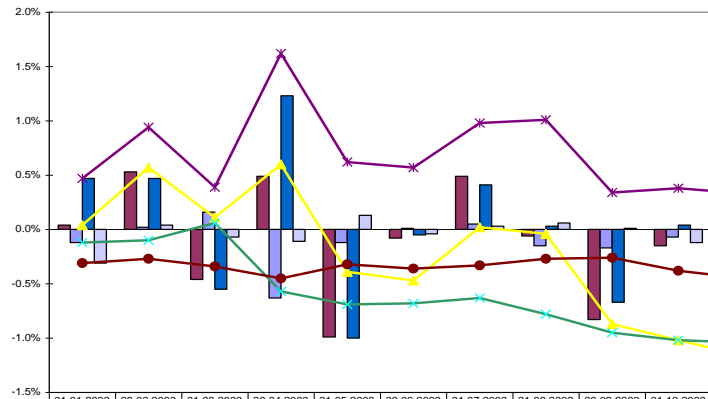
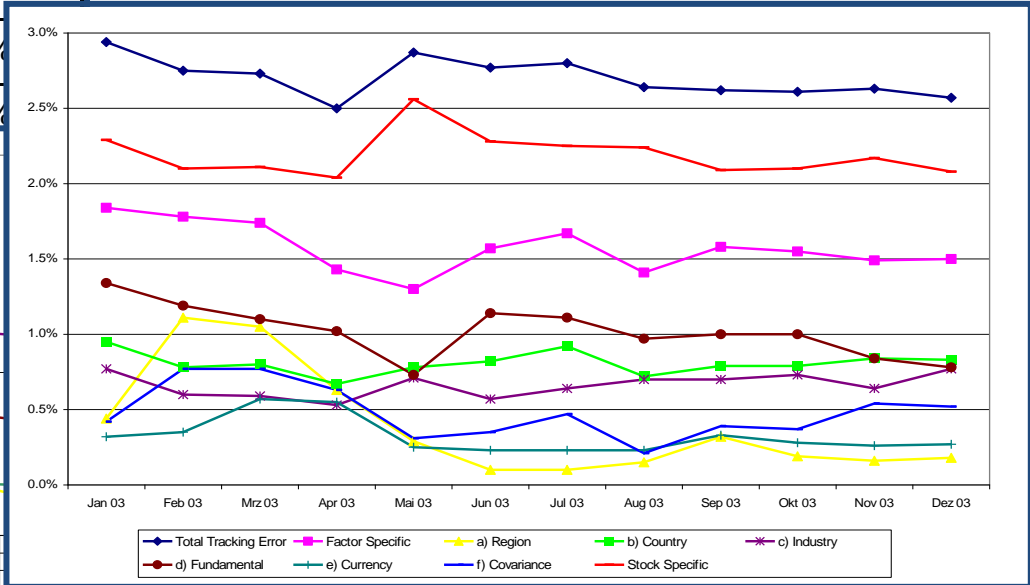
(1/2)



Does the management effects vary over time?

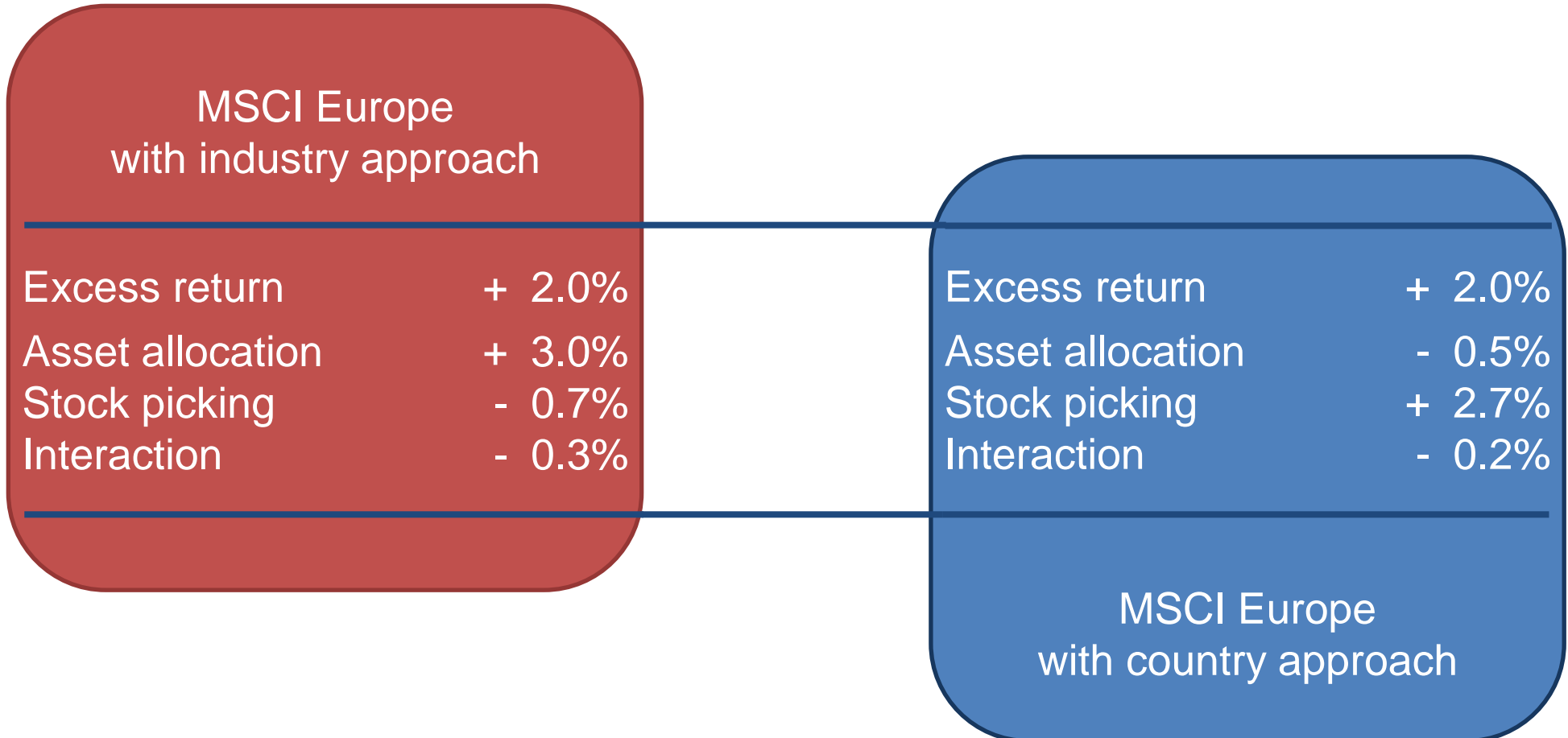
(2/2)

Risk Model : Global	Portfolio	Tracking Error
Total Risk (ex-ante)	18.81%	2.57%
Factor Specific Risk	18.66%	1.50%
- Region	11.50%	0.18%

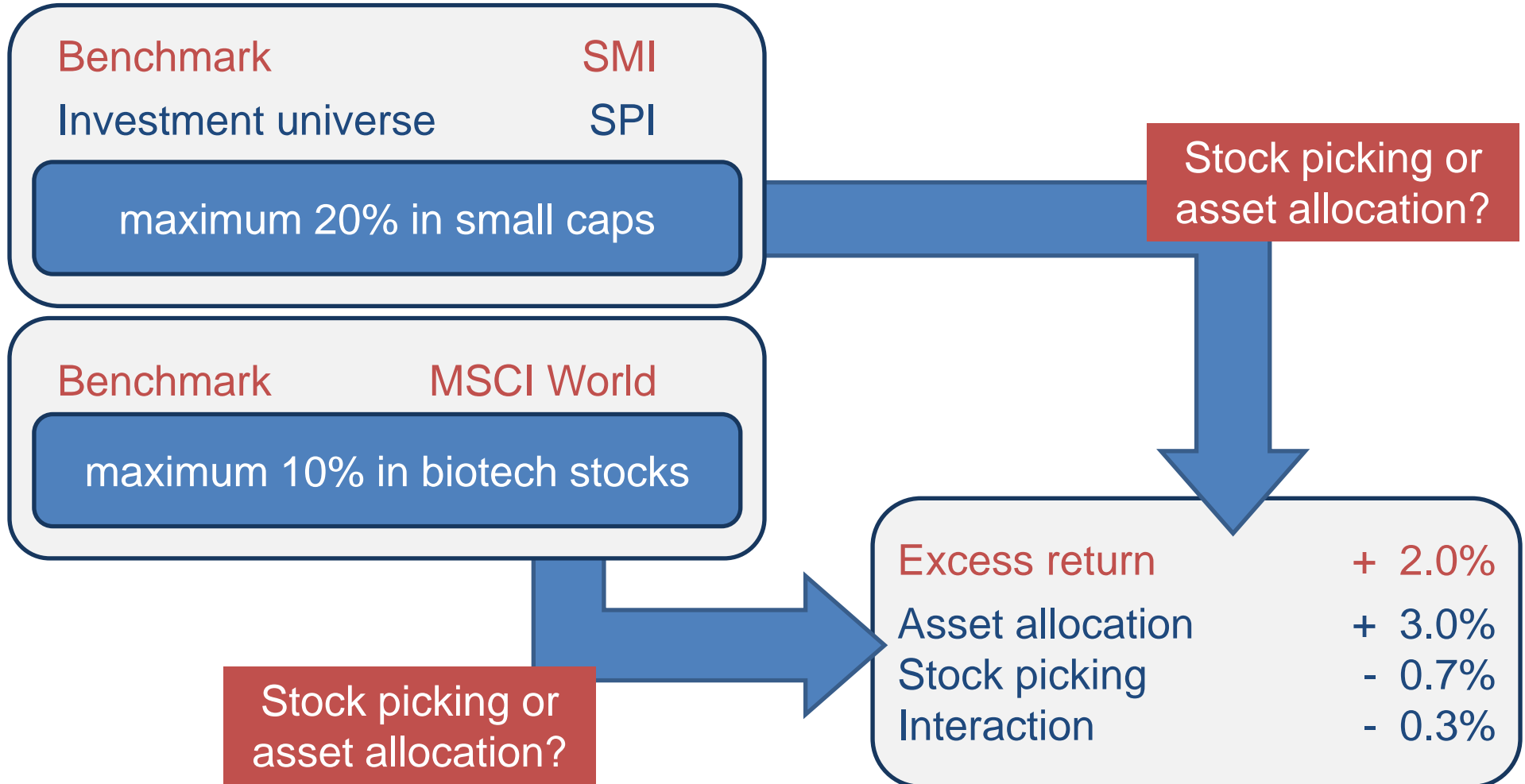


	31.01.2003	28.02.2003	31.03.2003	30.04.2003	31.05.2003	30.06.2003	31.07.2003	31.08.2003	30.09.2003	31.10.2003		
Total Monthly	0.04%	0.53%	-0.46%	0.49%	-0.99%	-0.08%	0.49%	-0.06%	-0.83%	-0.15%	-0.05%	-0.18%
Asset Allocation Monthly	-0.12%	0.02%	-0.16%	-0.63%	-0.12%	0.01%	0.05%	-0.15%	-0.17%	-0.07%	-0.07%	-0.04%
Stock Picking Monthly	0.47%	0.47%	-0.55%	1.23%	-1.00%	-0.05%	0.41%	0.03%	-0.67%	0.04%	-0.07%	-0.04%
Interaction Monthly	-0.31%	0.04%	-0.07%	-0.11%	0.13%	-0.04%	0.03%	0.06%	0.01%	-0.12%	-0.07%	-0.04%
Total Cumulated	0.04%	0.57%	0.11%	0.60%	-0.39%	-0.47%	0.02%	-0.04%	-0.87%	-1.02%	-1.16%	-1.30%
Asset Allocation Cumulated	-0.12%	-0.10%	0.06%	-0.57%	-0.69%	-0.68%	-0.63%	-0.78%	-0.95%	-1.02%	-1.04%	-0.96%
Stock Picking Cumulated	0.47%	0.94%	0.39%	1.62%	0.62%	0.57%	0.98%	1.01%	0.34%	0.38%	0.33%	0.15%
Interaction Cumulated	-0.31%	-0.27%	-0.34%	-0.45%	-0.32%	-0.36%	-0.33%	-0.27%	-0.26%	-0.38%	-0.45%	-0.49%

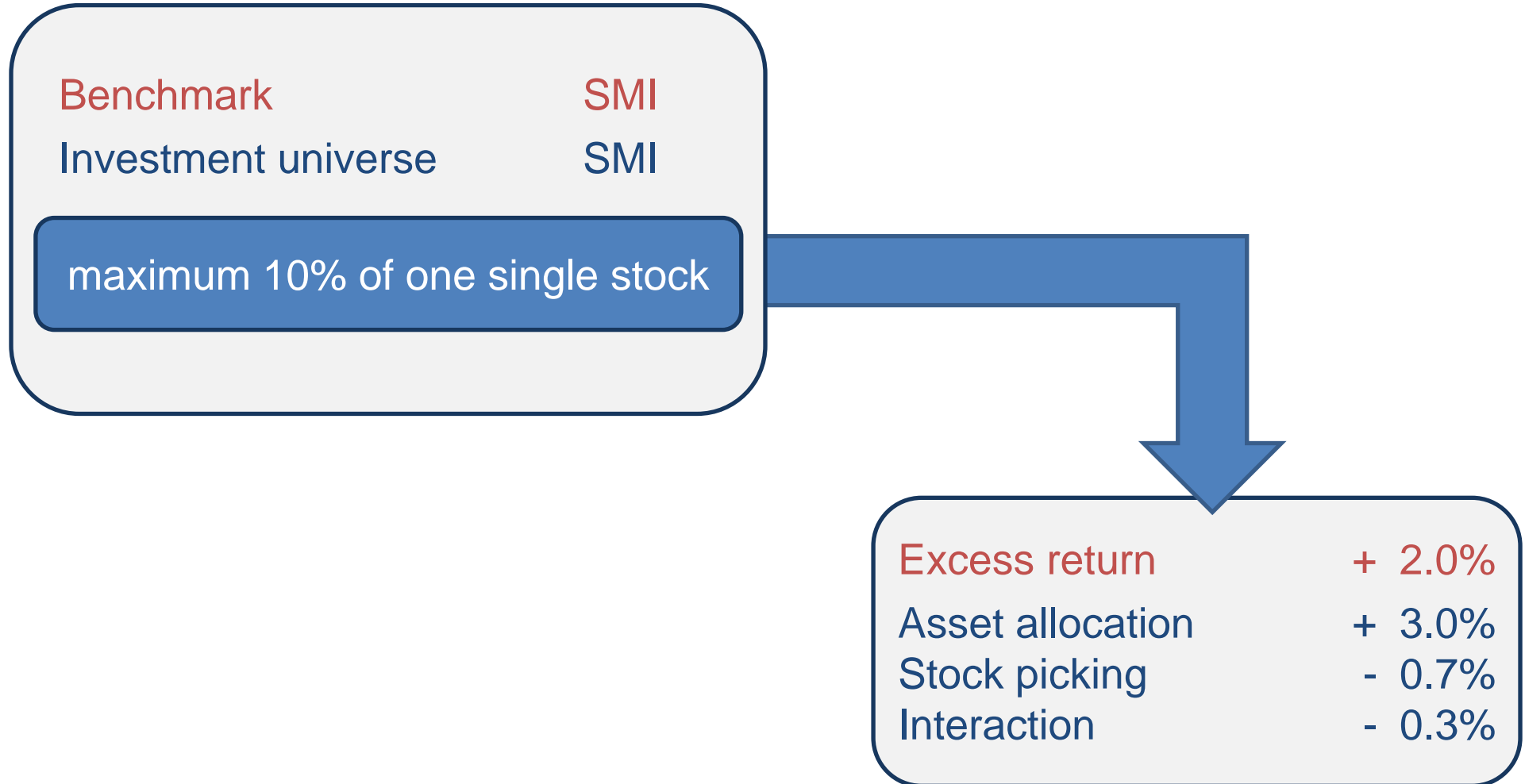
Is the investment style reflected correctly?



Is each decision in the investment process reflected?



How are the results influenced by the guidelines?



Conclusion

The following rules ensure a meaningful performance discussion:

- Reflect each step of the investment process.
- Reflect each decision in the investment process.
- Mirror the investment style correctly.
- Analyze the impact of the investment guidelines.
- Define whether a certain product or an asset manager has to be assessed.
- Analyze the variation of the management effect over time.
- Analyze the impact of leverage.
- Etc.

Transparency within the performance analysis

**GIPS
compliant
performance
presentation**

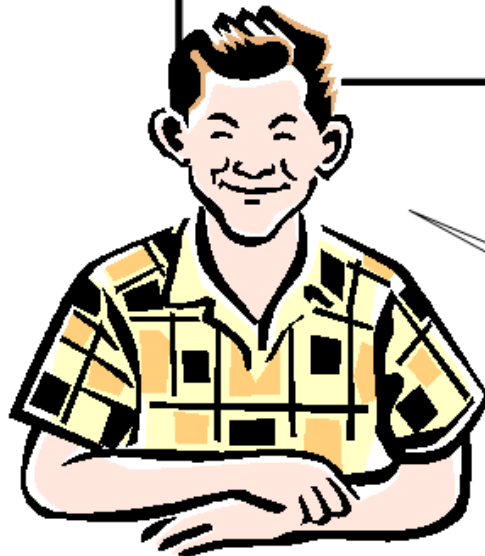
Performance Presentation Standards Report						
Composite Benchmark	Equities Switzerland SPI active Mandates Swiss Performance Index (Y) in CHF		Inception Date	01 Jan 1997		
	Total Return (%)	Benchmark Return (%)	Number of Portfolios	Composite Dispersion (%)	Total Assets at End of Period (trillions)	Percentage of Firm Assets (%)
YTD Mar 08	4.3	4.1	19	0.1	1,331.2	1.2
2001	-22.4	-22.0	18	0.4	1,242.8	1.2
2000	11.8	11.9	15	0.0	1,407.7	1.3
1999	10.4	11.7	13	1.0	1,169.3	1.3
1998	14.5	15.4	12	2.4	935.3	1.4
1997	59.0	55.2	11	1.3	836.2	1.7

CREDIT SUISSE ASSET MANAGEMENT Switzerland
Equities Switzerland SPI active Mandates Composite
Accompanying Notes

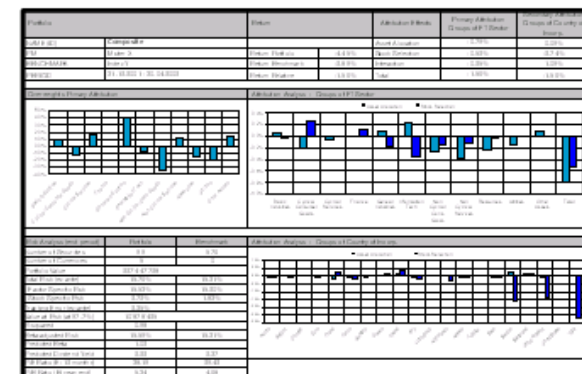
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Benchmark
This composite has a customized benchmark. The details are not shown in the above report file. However, the full details are available on request. Sources of foreign exchange rates may be different.



And what
about the
attached
attribution
report?



Contact details and disclaimer

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