

Asset Management im Wandel der Zeit

Markus Leippold
Basler Fondsforum
January 17, 2013



University of Zurich
Department of Banking and
Finance

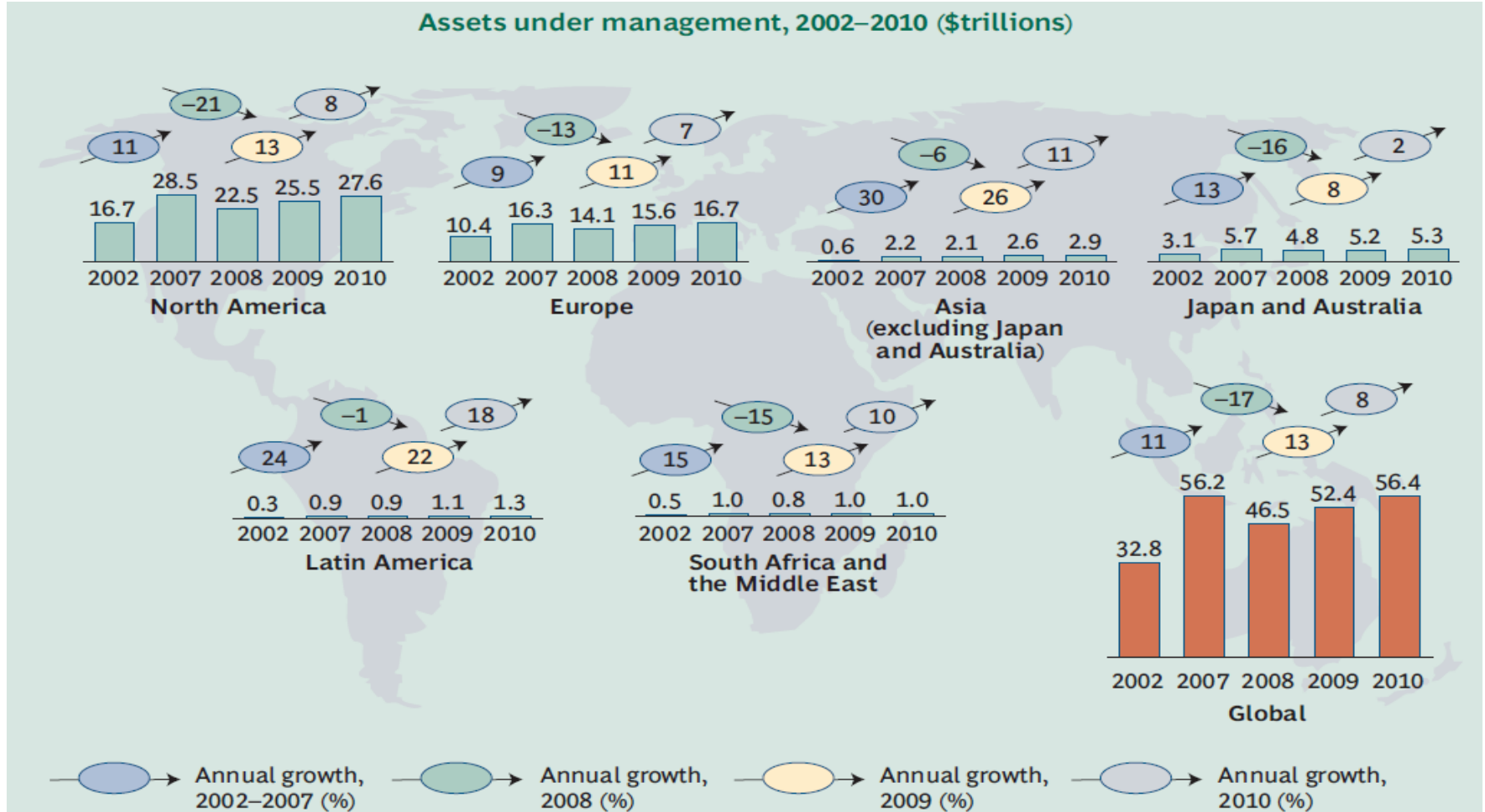


- I. A Snapshot of the Industry
- II. Key Trends in Asset Management
- III. A Brief History Of (Academic) Ideas
- IV. Ask the right questions! - Examples from Academia.



Good news first: global AuM seems to recover from the crisis

An overview from the BCG Study, 2011:



Sources: BCG Global Asset Management Market Sizing database, 2011.

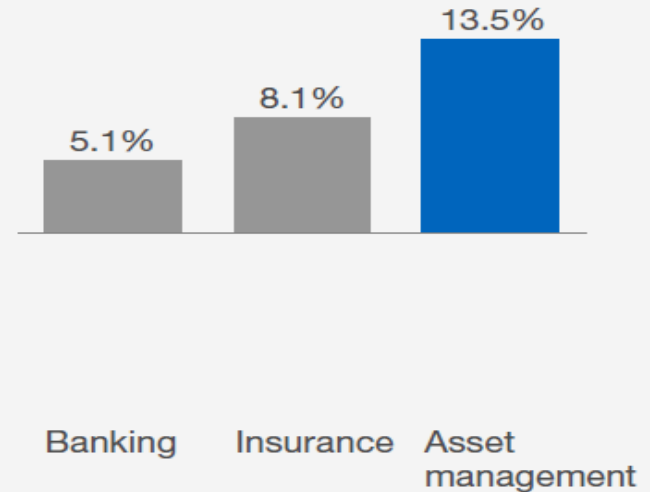
Attractiveness remains

Asset management industry's relative growth:

- In 2011, post-crisis recovery in the global asset management industry stalled despite macroeconomic shocks.
- Fundamental structural changes are altering patterns of growth and profitability across the globe.
- Growth currents in asset management are highly concentrated in specific regions, client segments and asset classes.

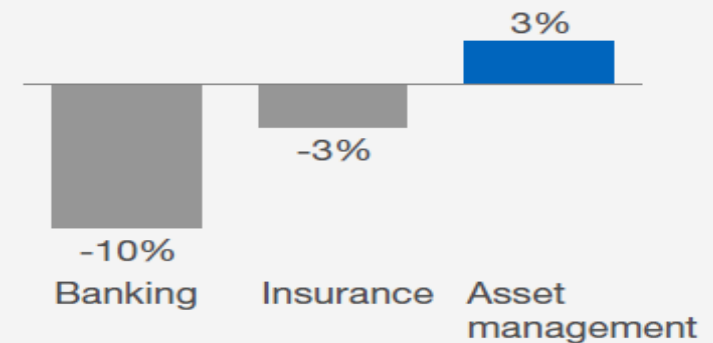
Healthy returns (ROAE)¹

2011



Robust expected profit growth

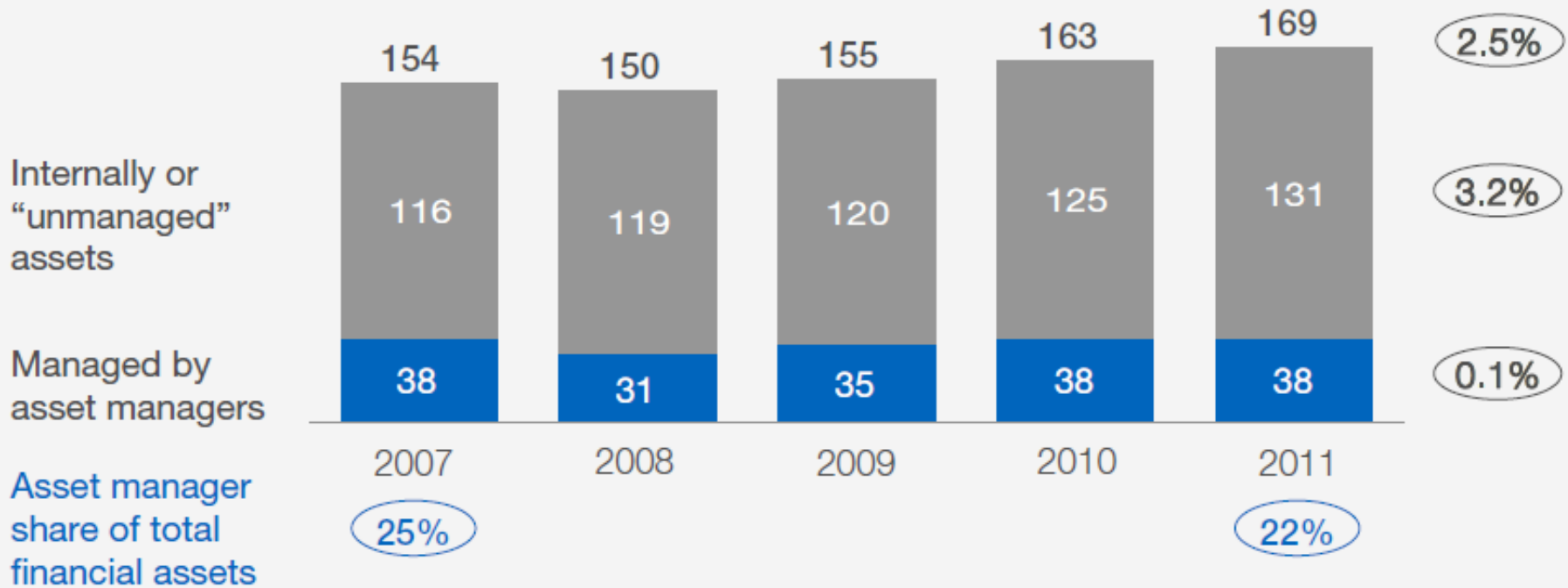
Implicit growth over the next 3-5 years



....but there are signs of warnings!

Total global financial assets 2007-2011

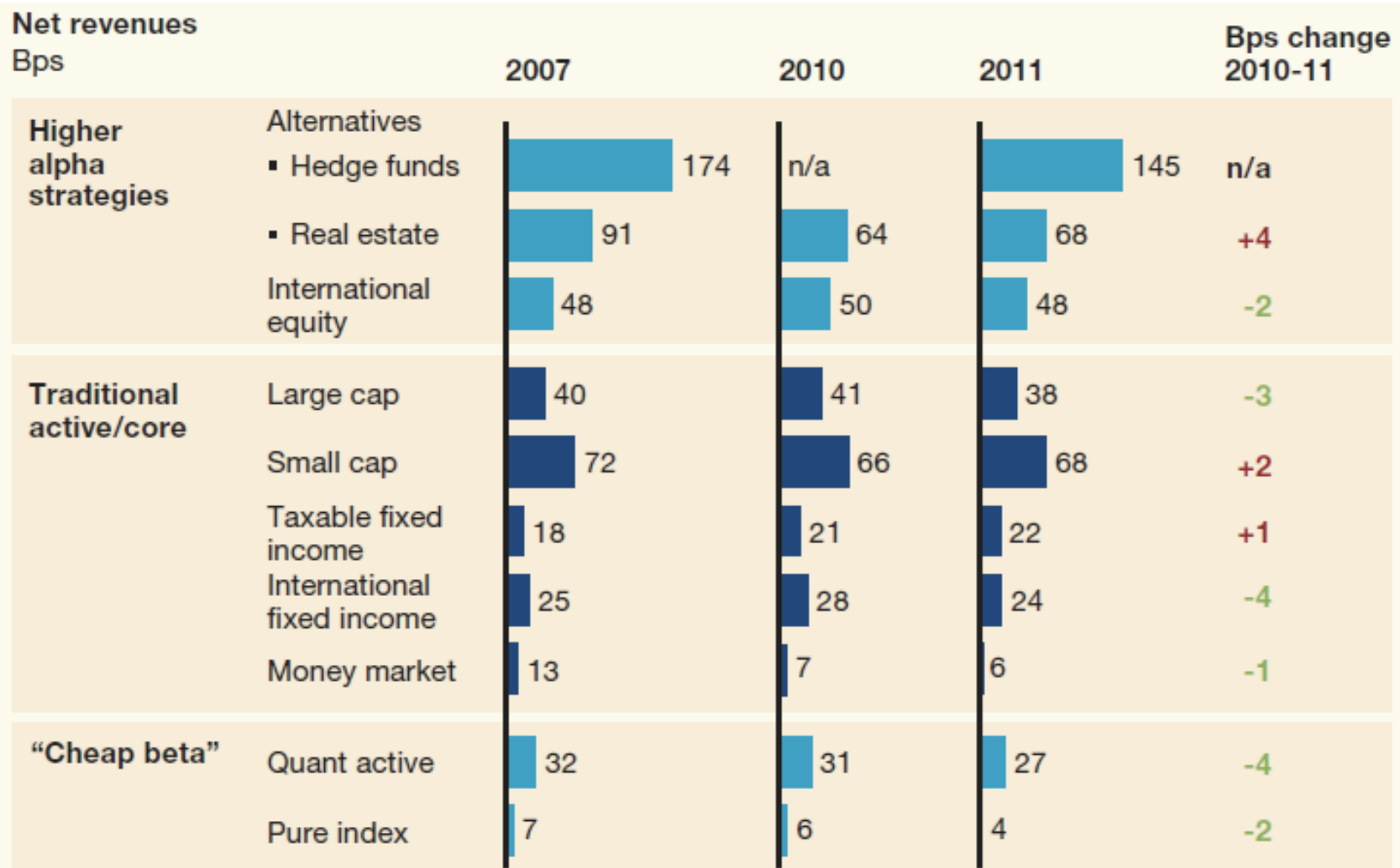
EUR trillions, year-end



SOURCE: McKinsey Global Asset Management Database



Prices for most institutional products decline, while...



Note: Not all asset classes listed

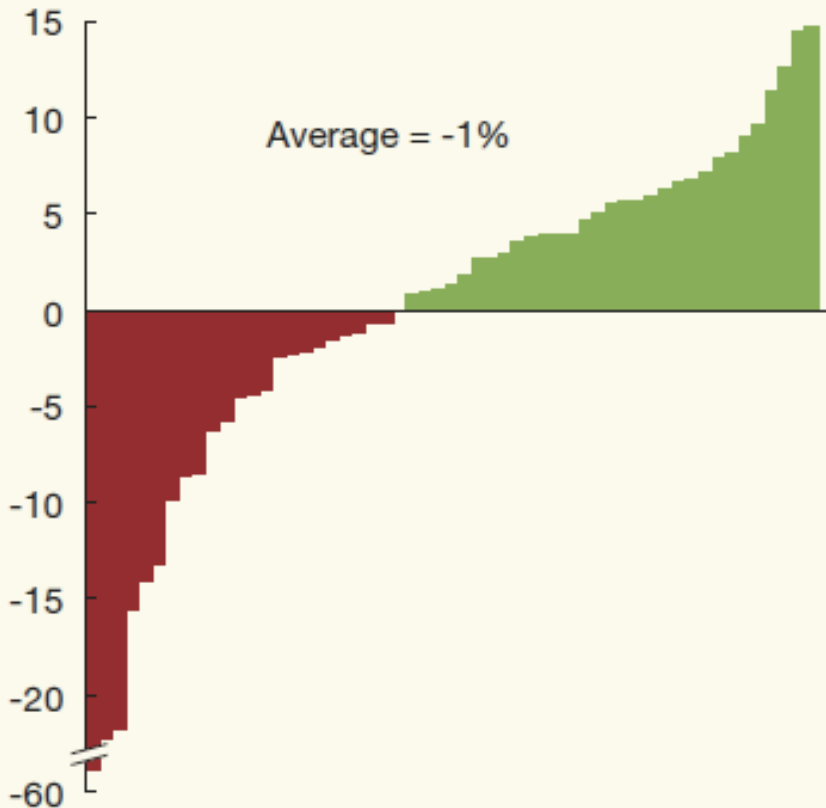
Source: 2012 McKinsey North American Asset Management Benchmarking Survey



...operational leverage turned negative, with rising costs!

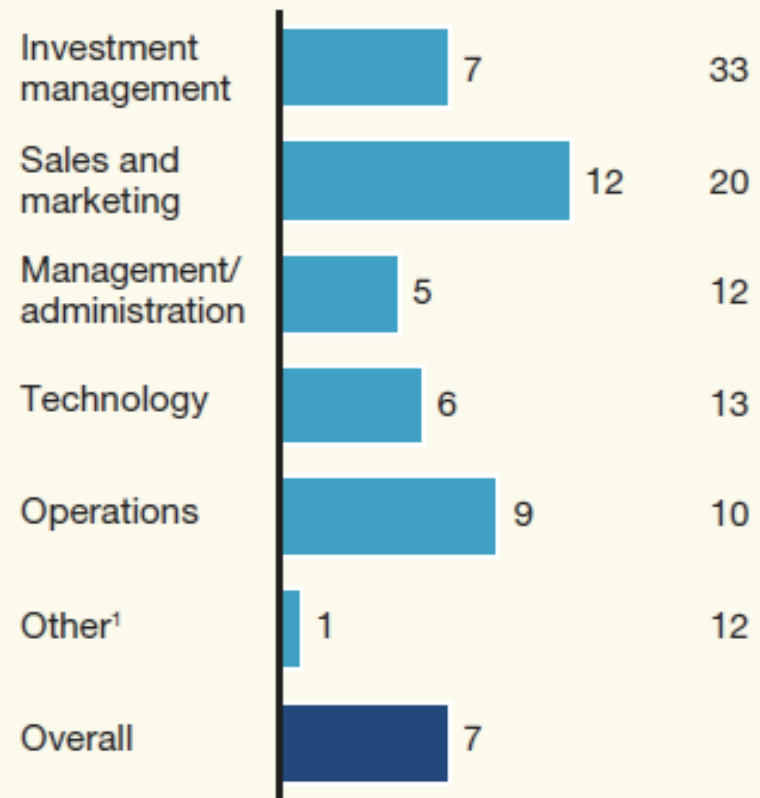
Percent change, 2010-11

Operating leverage
(change in revenues versus costs)



Change in costs by function

Percent of cost base

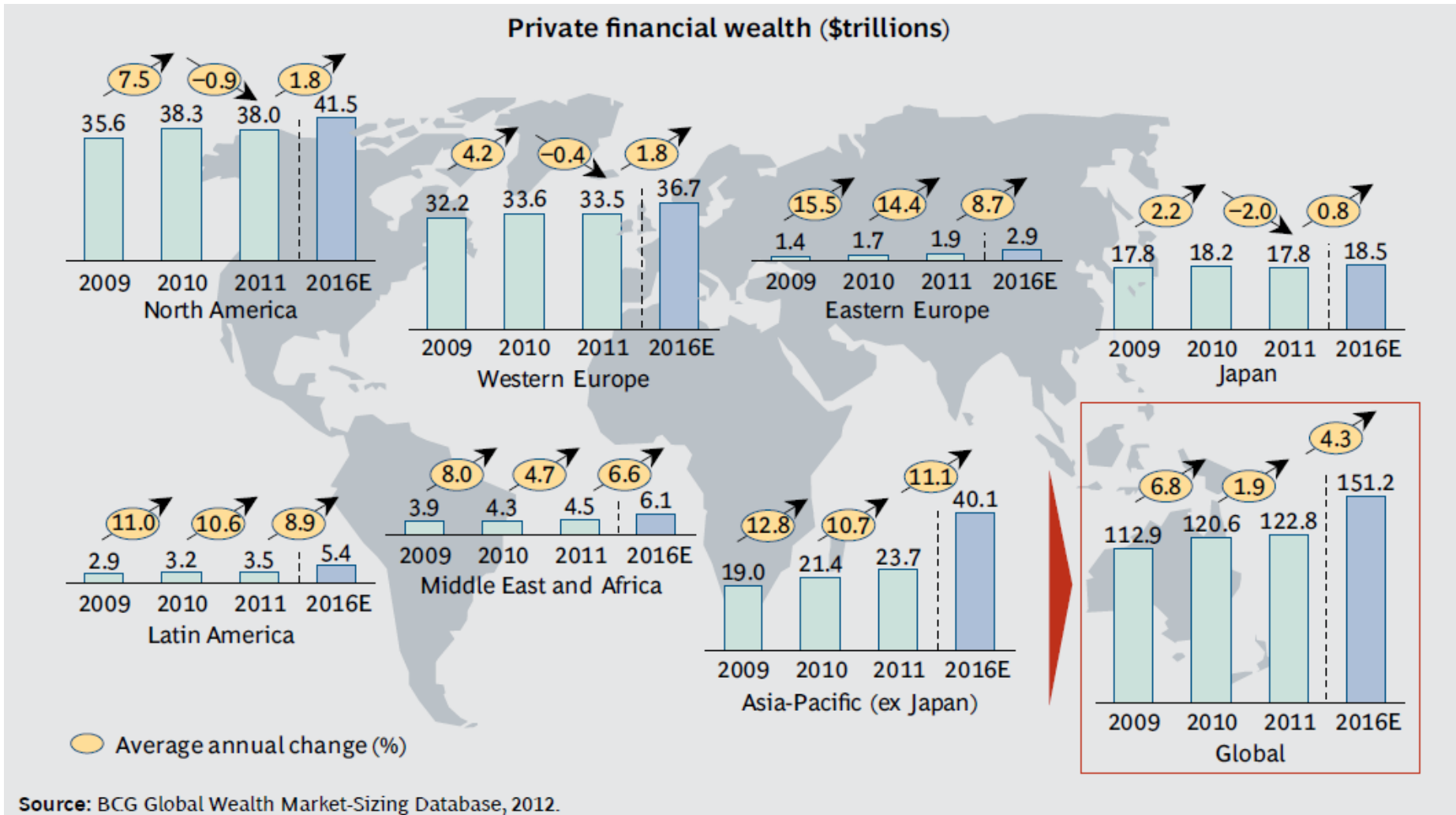


¹ Includes occupancy, legal, non-sales-related T&E, and other general expenses (e.g., insurance, temp)

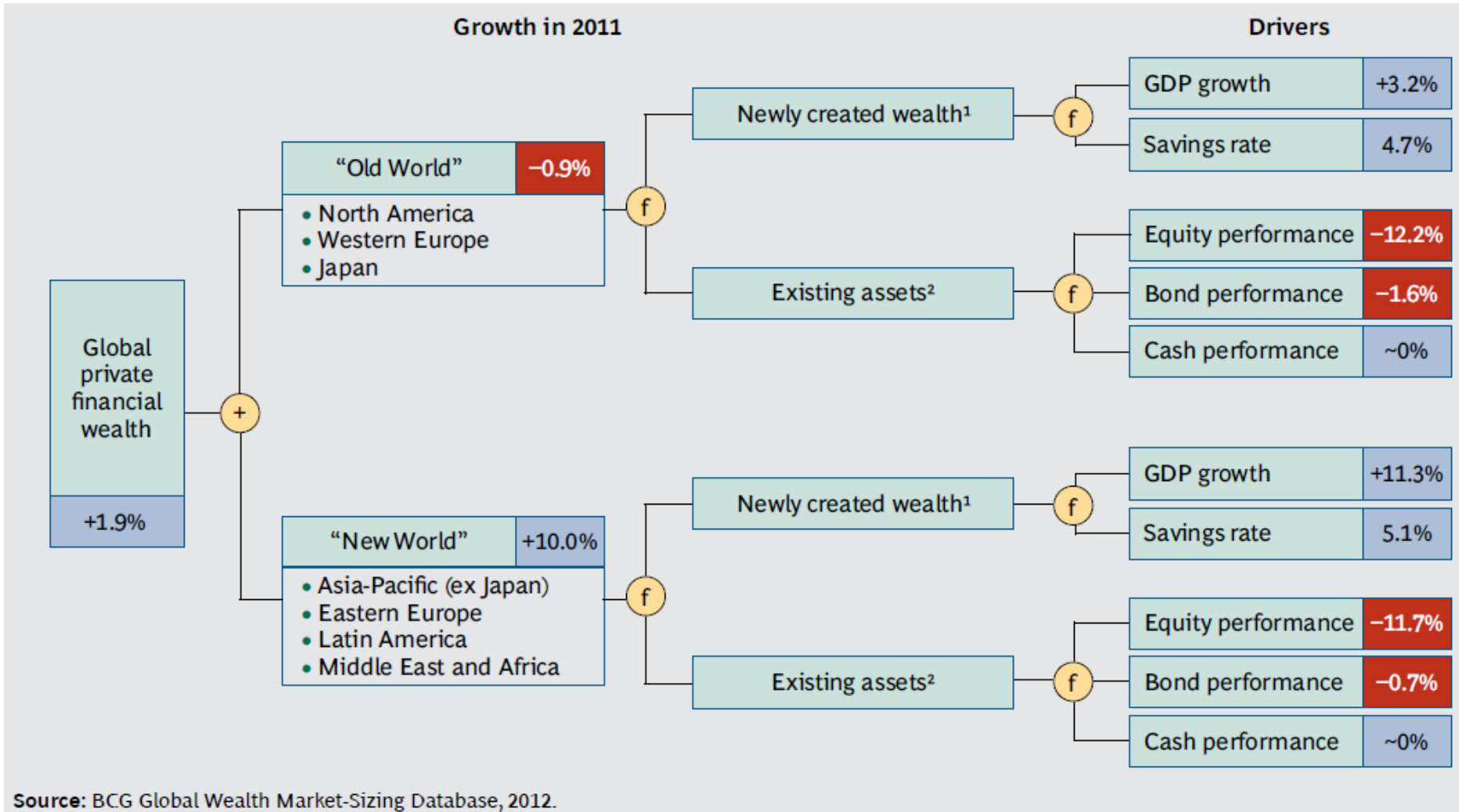
Source: 2012 McKinsey Asset Management Benchmarking Survey



Also, growth of global wealth is slowing down...



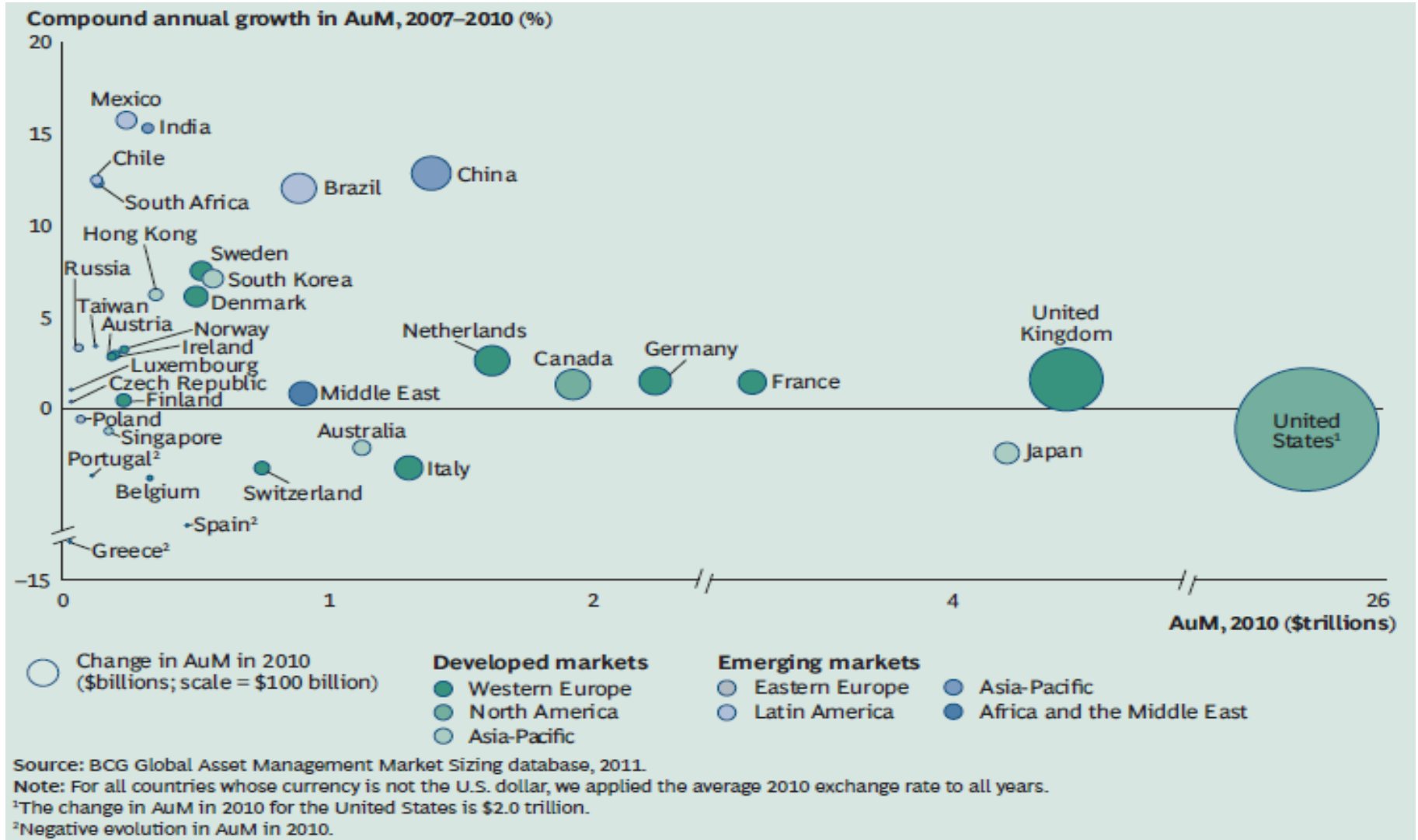
...while global growth feeds on the new world's success



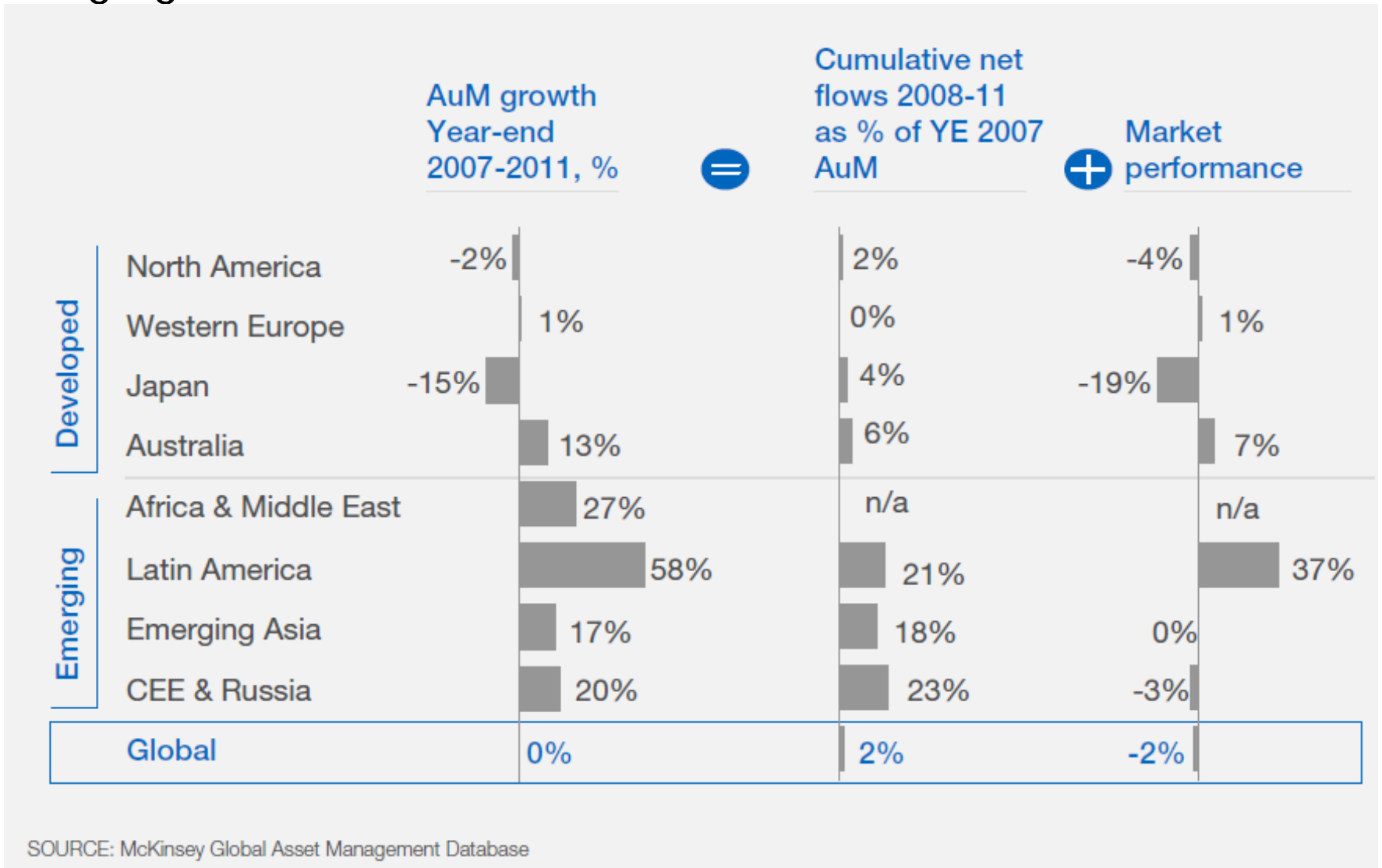
- I. A Snapshot of the Industry
- II. Key Trends in Asset Management
 - I. *Regional differences in the global village*
 - II. *Product landscape evolves*
 - III. *Regulation and Risk Management*
 - IV. *Swiss Agenda*
- III. A Brief History Of (Academic) Ideas
- IV. Ask the right questions! - Examples from Academia.



Regional differences in AUM growth 2007-11

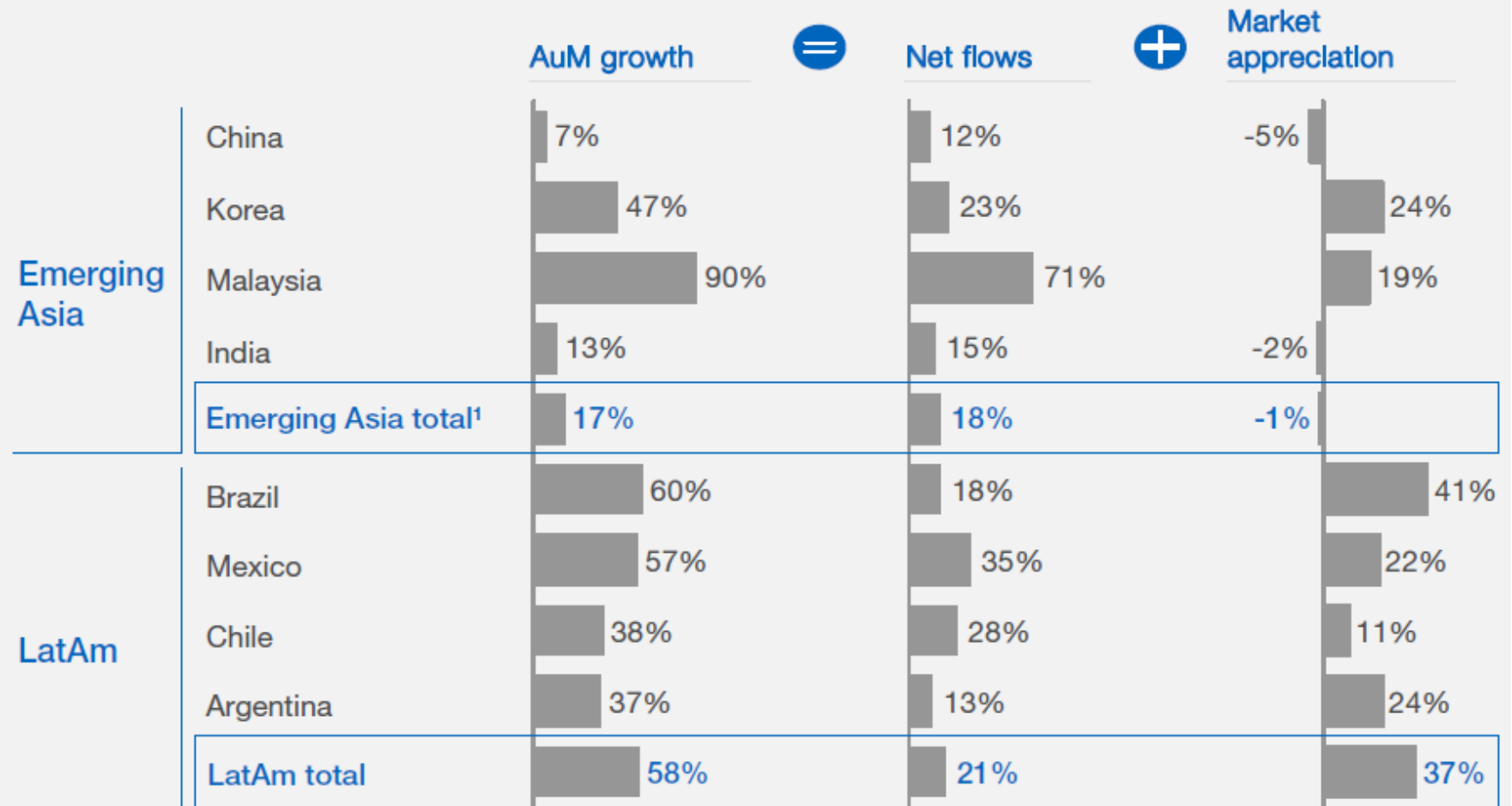


Emerging markets on the rise!



Emerging markets - a closer look...

Emerging markets AuM growth and net flows by country, 2007–2011

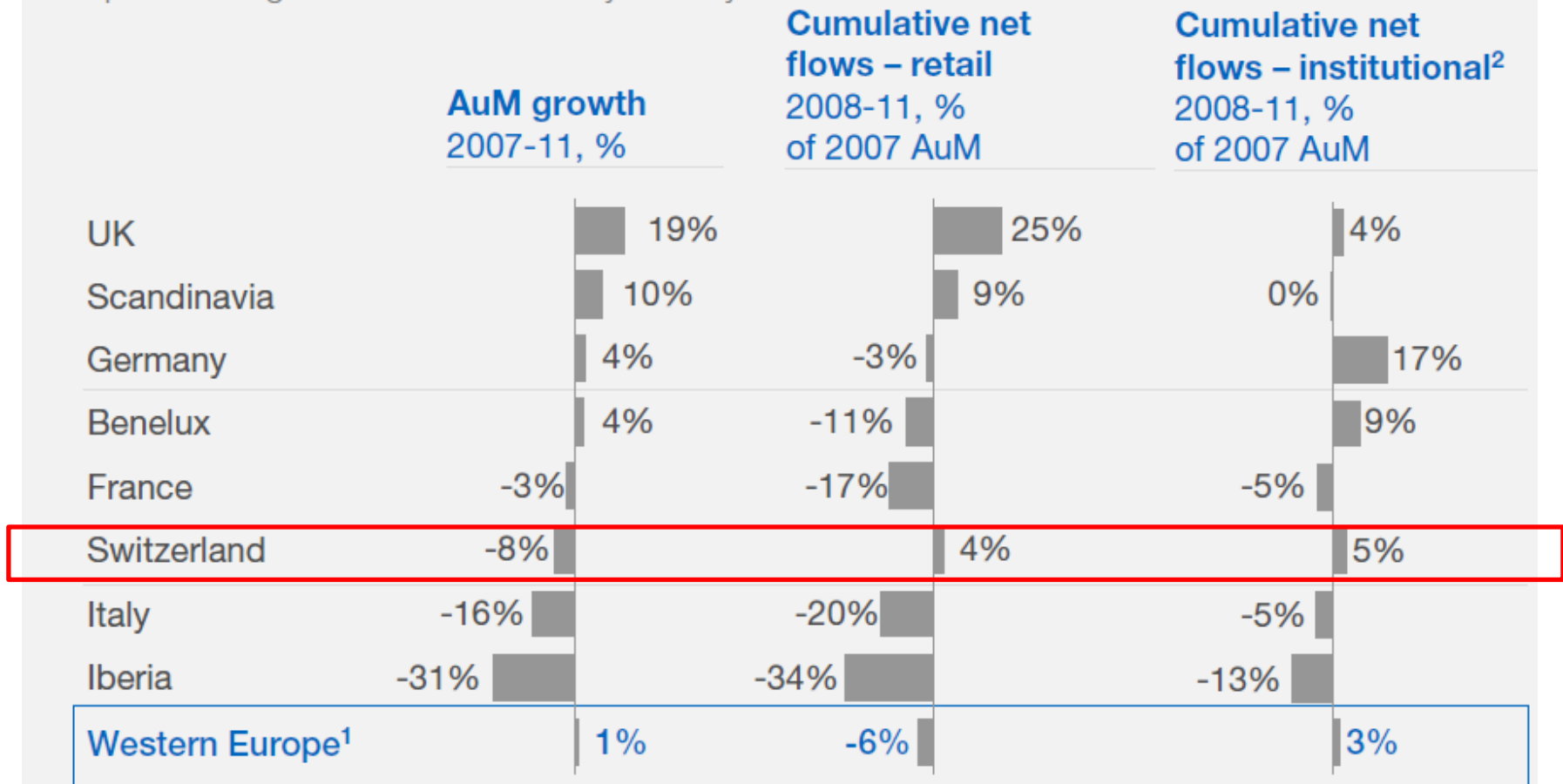


¹ Includes countries not shown above

SOURCE: McKinsey Global Asset Management Database

What about Europe? - negative, with high variability

European AuM growth and net flows by country



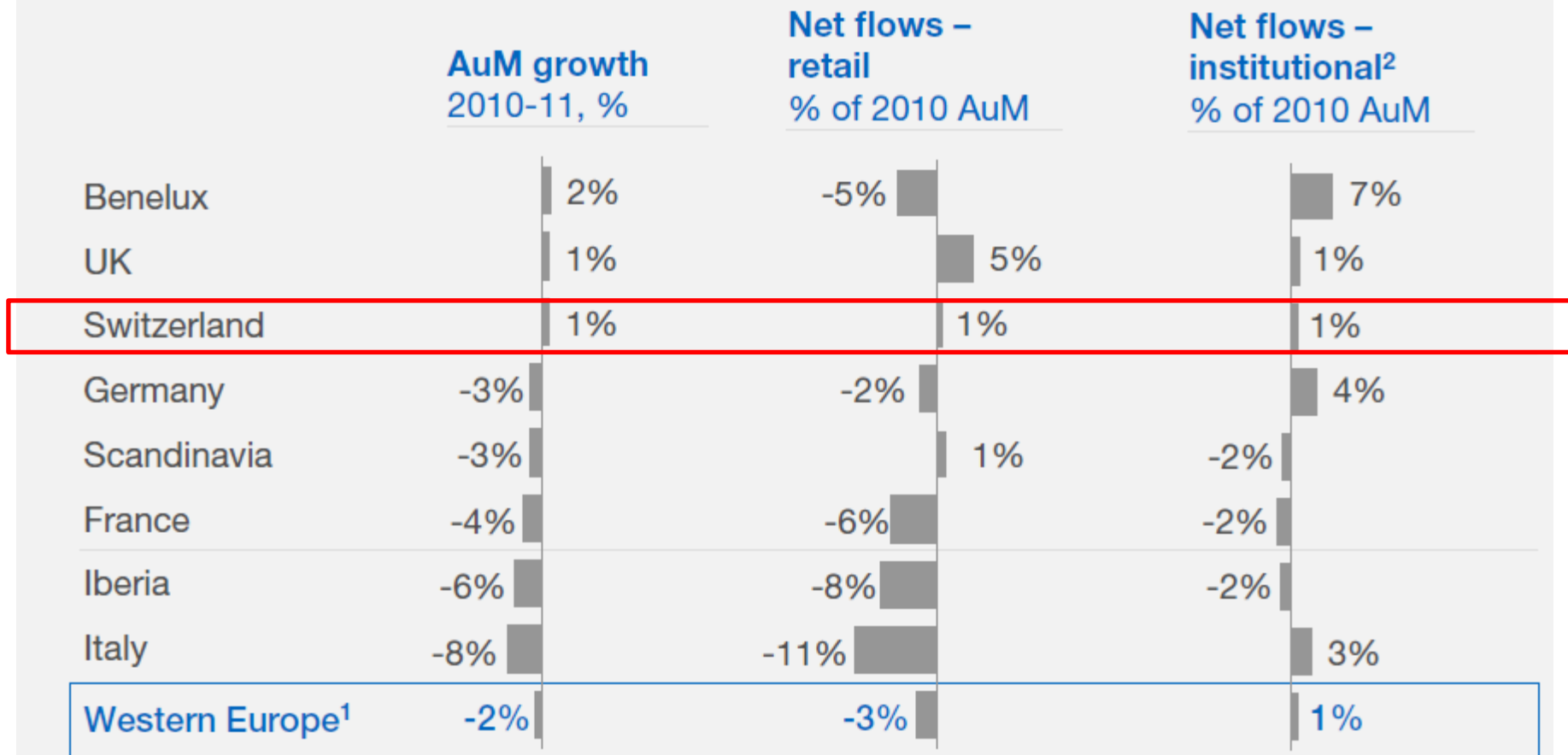
¹ Includes other countries not shown above

² Including DC

SOURCE: McKinsey Global Asset Management Database

Negative growth for Europe - 2010/11

European AuM growth and net flows by country



¹ Includes other countries not shown above

² Including DC

SOURCE: McKinsey Global Asset Management Database

I. A Snapshot of the Industry

II. Key Trends in Asset Management

- I. *Regional differences in the global village*
- II. *Product landscape evolves*
- III. *Regulation and Risk Management*
- IV. *Swiss Agenda*

III. A Brief History Of (Academic) Ideas

IV. Ask the right questions! - Examples from Academia.



Strong growth in bonds, emerging market equity, and solutions

Net sales of mutual funds by strategy (\$billions)

United States

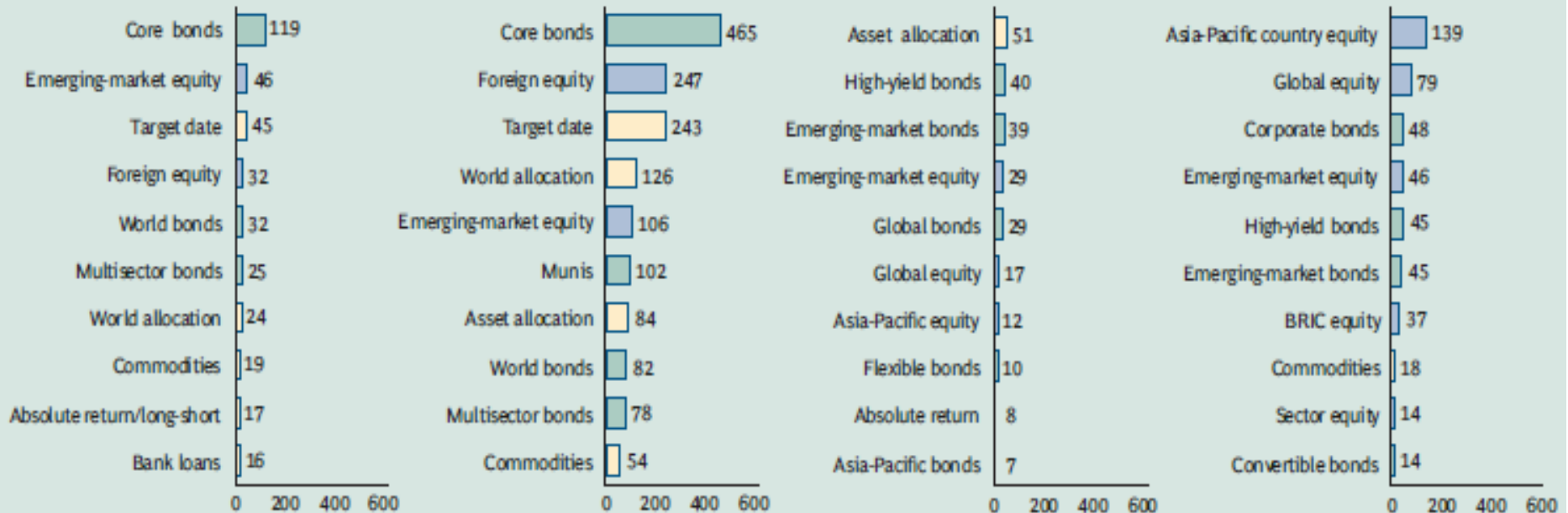
Europe

2010

2005-2010

2010

2005-2010

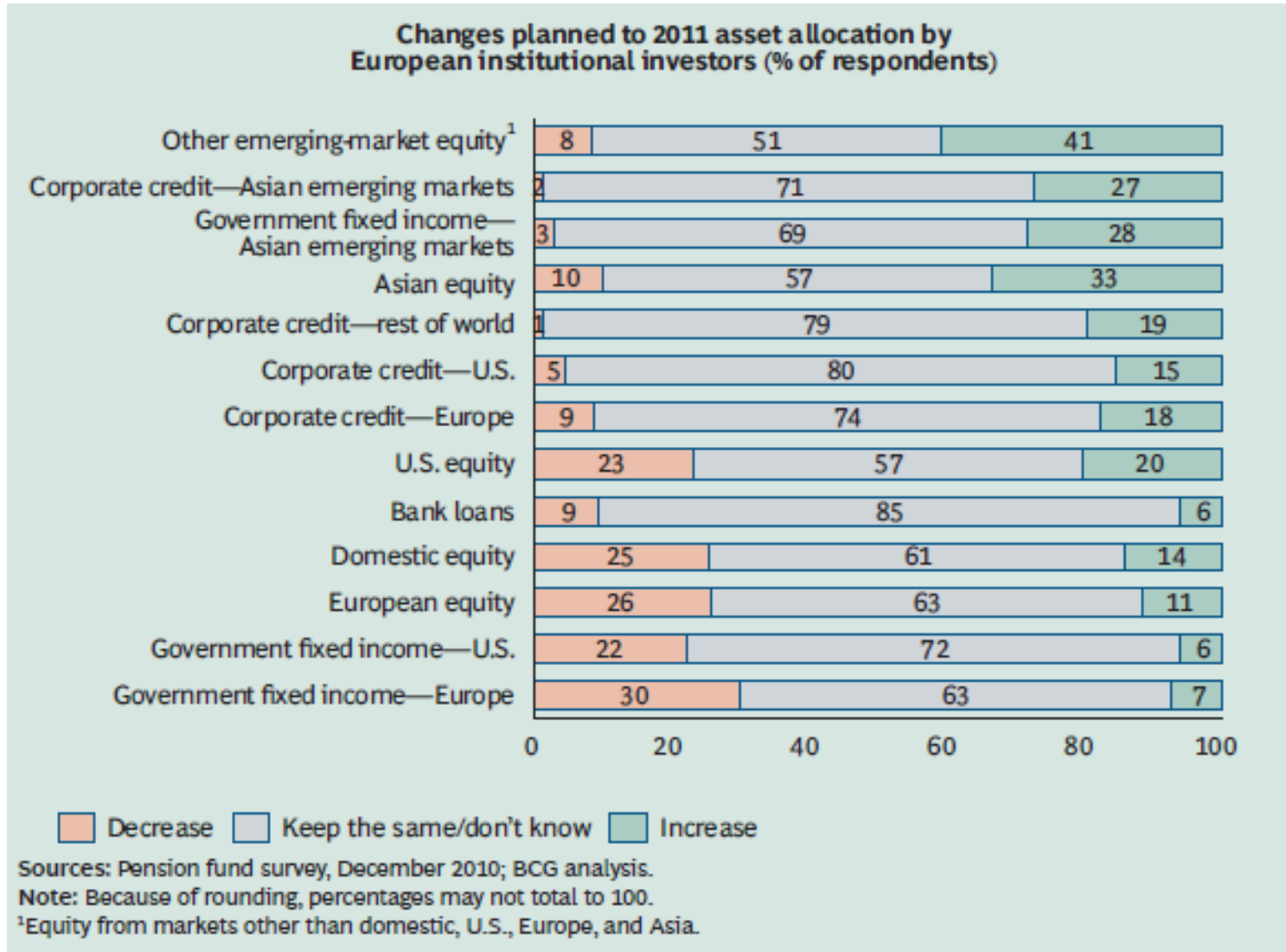


Equity Bond Other

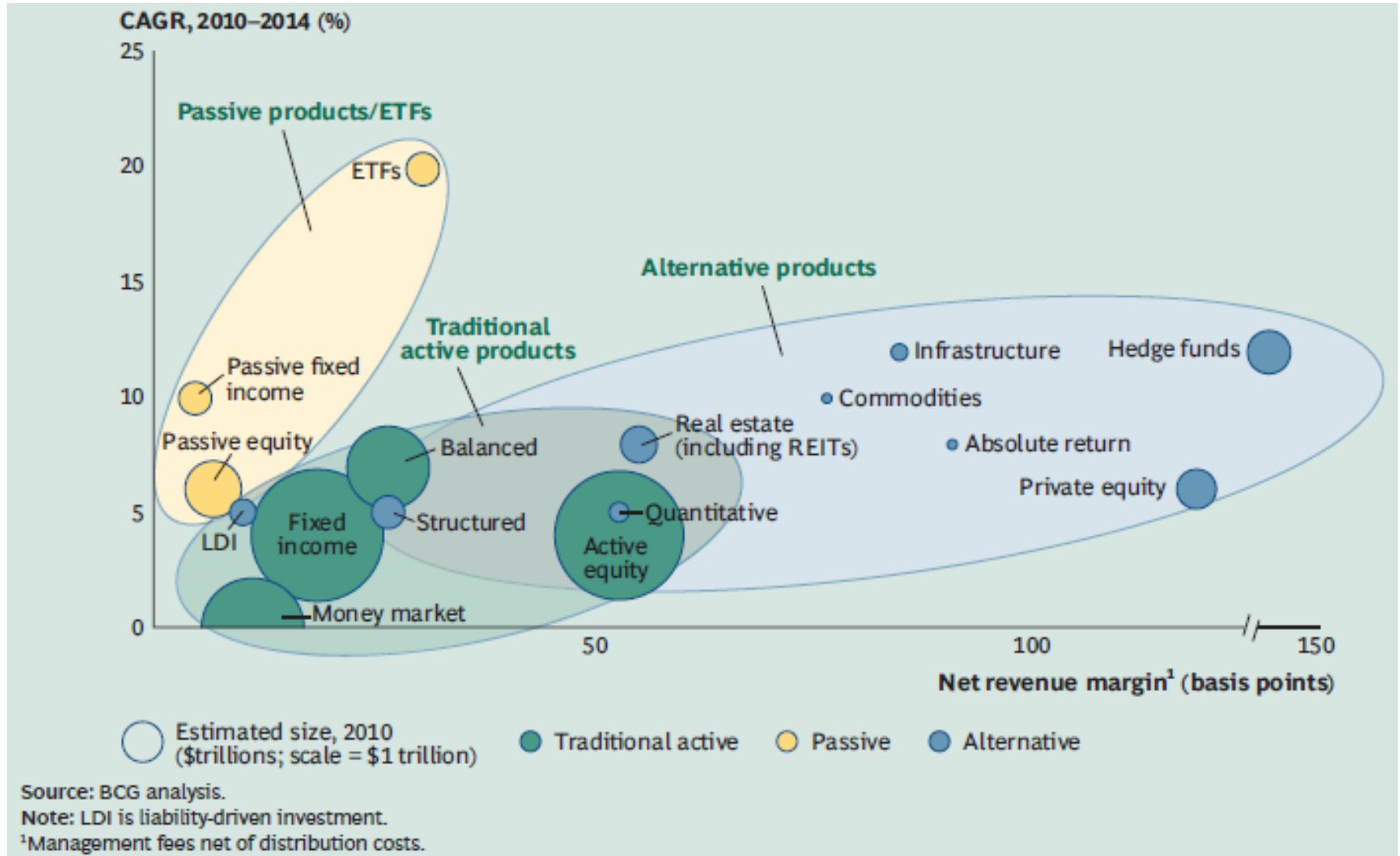
Sources: Morningstar; BCG analysis.



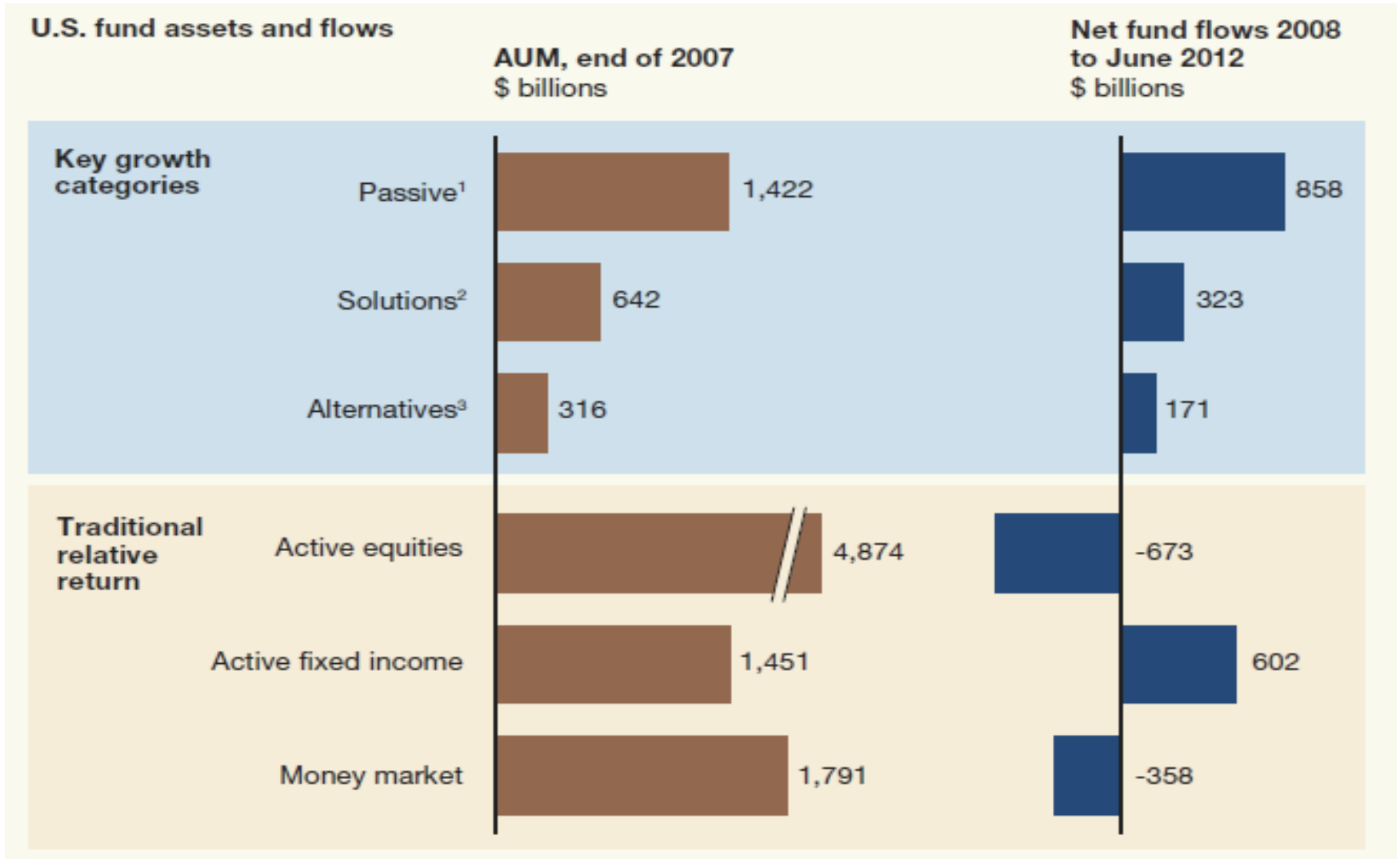
Asset allocation goes east!



Passive grows while active gets less attractive



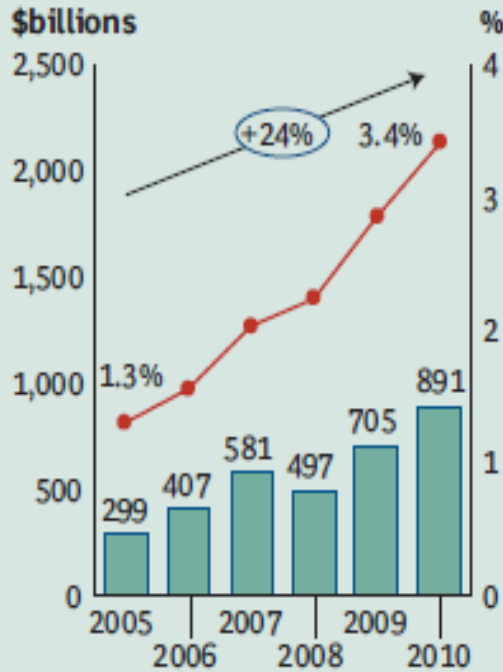
Net flows from traditional relative return to passive!



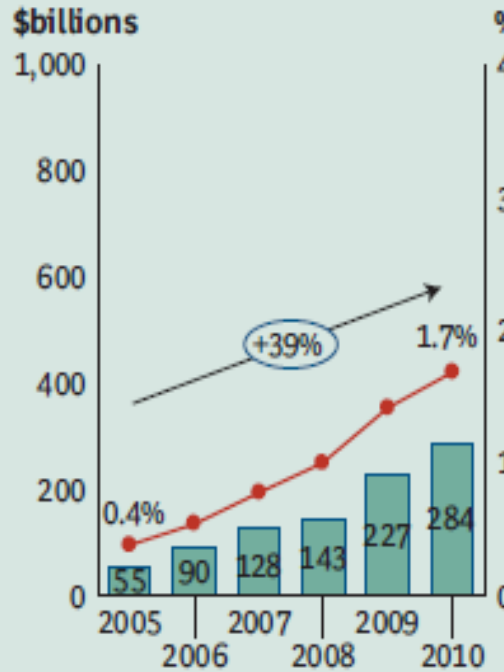
ETFs on the rise

Amount and share of ETFs in AuM

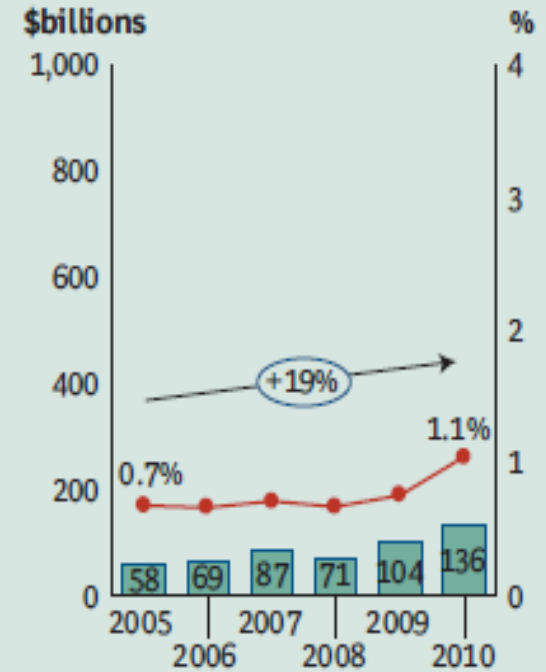
United States



Europe



Rest of the world



■ AuM in ETFs (\$billions)
 ● ETF share of total AuM
 CAGR

Sources: BlackRock research; BCG Global Asset Management Market Sizing database, 2011; BCG analysis.

I. A Snapshot of the Industry

II. Key Trends in Asset Management

- I. *Regional differences in the global village*
- II. *Product landscape evolves*
- III. *Regulation and Risk Management*
- IV. *Swiss Agenda*

III. A Brief History Of (Academic) Ideas

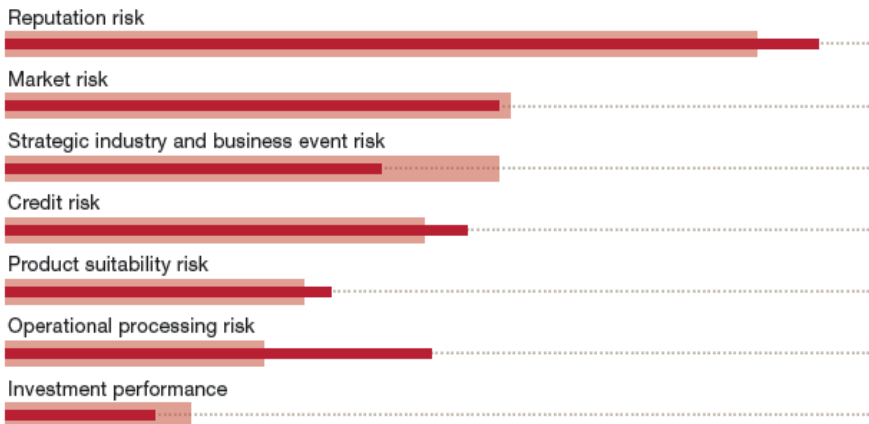
IV. Ask the right questions! - Examples from Academia.



The role of regulation and risk management

Risk management

- Risk management rises up the corporate agenda
- Financial crisis has raised question about the effectiveness of risk management.
- Economic uncertainty, convergence of risk factors, and regulatory changes add to the complexity of risk management.
- Top concerns are (PWC Study):



Regulation

- Regulation becomes a strategic and operational issue
- Of main concern is the need to manage the impact of new regulations and the increased intensity of supervision.
- Responding to this change in circumstances requires stronger risk management frameworks, standards, tools, and data.
- Regulatory supervision along with the cost of risk management and the potential for direct regulatory intervention represent rising implied costs on wealth managers.

Regulation

On the positive side:

- Regulation may help to increase transparency
- It may help to increase cross-border competition
- It may permit quicker and more straightforward approval processes
- It may introduce reporting standards
- It may help to ban retrocession payments to distributors of certain asset-management products

On the negative side:

- Regulation may create an administrative overkill
- It may distort heavily the efficient allocation process in financial markets (short-selling bans)
- It may alter the attractiveness of certain asset classes (Solvency II)
- It may support false believe in risk models and ratings (Basel II/III)
- New regulations may affect asset managers profitability and investor returns

I. A Snapshot of the Industry

II. Key Trends in Asset Management

- I. *Regional differences in the global village*
- II. *Product landscape evolves*
- III. *Regulation and Risk Management*
- IV. *Swiss Agenda*

III. A Brief History Of (Academic) Ideas

IV. Ask the right questions! - Examples from Academia.



Largest off-shore center, but its lure being challenged

Private financial wealth held in offshore centers, 2011 (\$trillions)

| Origin of offshore wealth | Destination of offshore wealth | | | | | | | | Regional total |
|---------------------------|--------------------------------|----------------|----------------------------|------------|----------------------|-------------------------|----------------------------|--------------------|----------------|
| | Switzerland | United Kingdom | Channel Islands and Dublin | Luxembourg | Caribbean and Panama | Hong Kong and Singapore | United States ¹ | Other ² | |
| North America | -0.04 | 0.12 | 0.11 | | 0.39 | -0.05 | -0.00 | -0.02 | 0.7 → |
| Western Europe | 0.93 | 0.15 | 0.51 | 0.36 | 0.13 | 0.14 | 0.12 | 0.22 | 2.6 ↘ |
| Eastern Europe | 0.09 | -0.05 | -0.04 | -0.03 | -0.03 | | | -0.03 | 0.3 → |
| Asia-Pacific | 0.23 | 0.26 | 0.14 | -0.06 | 0.16 | 0.76 | 0.20 | 0.10 | 1.9 ↗ |
| Latin America | 0.25 | -0.03 | -0.03 | -0.01 | 0.25 | | 0.24 | 0.05 | 0.9 → |
| Middle East and Africa | 0.56 | 0.33 | 0.21 | -0.04 | 0.06 | 0.06 | 0.04 | 0.22 | 1.5 ↗ |
| Booking center total | 2.1 → | 0.9 ↗ | 1.0 ↘ | 0.5 ↘ | 1.0 ↗ | 1.0 ↗ | 0.6 ↘ | 0.6 ↘ | 7.8 → |

→ = Change in 2011

Source: BCG Global Wealth Market-Sizing Database, 2012.

Implications for Switzerland

In Search for an Asset Management Strategy

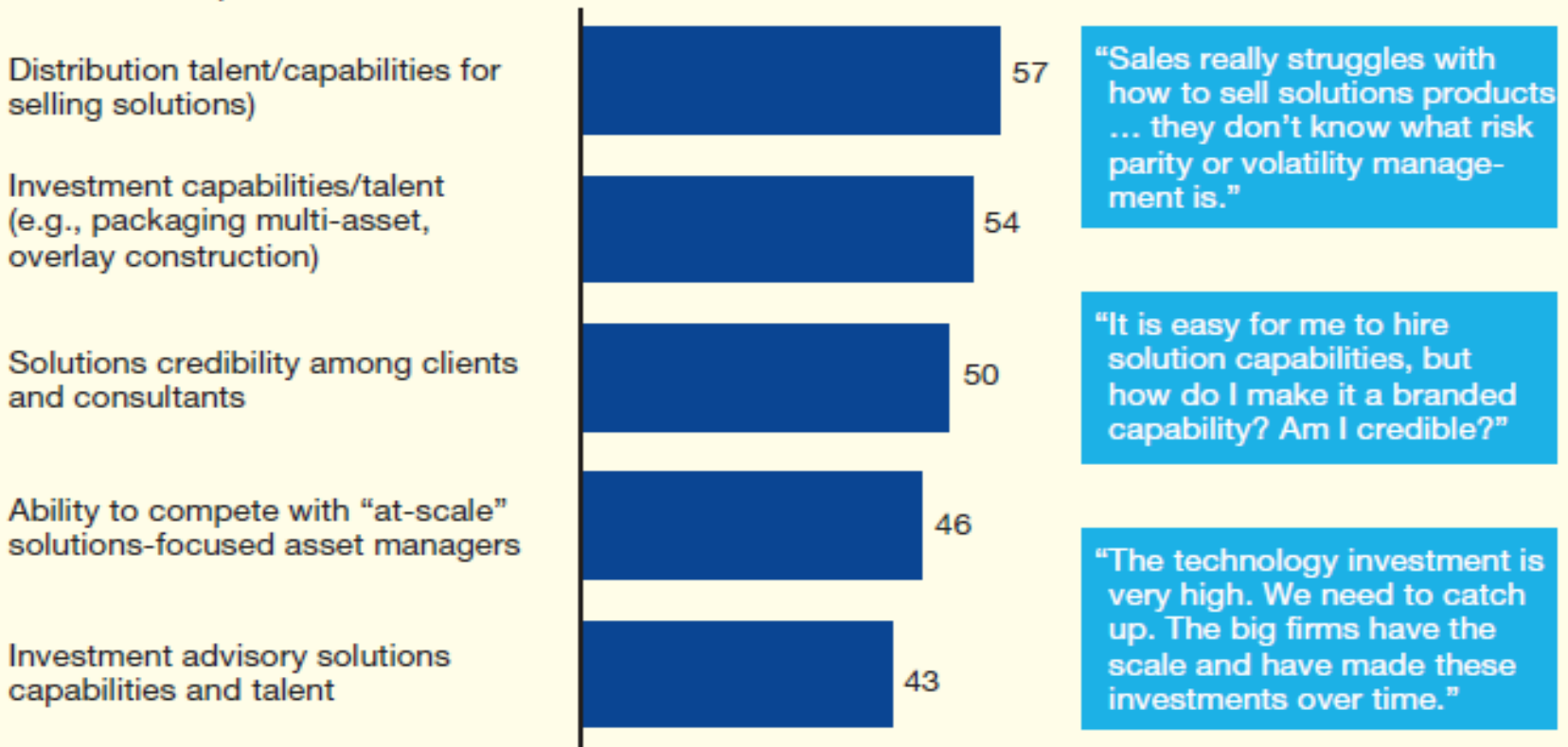
- Given its importance for the Swiss economy and the financial market, asset management (AM) as part of wealth management is not highly developed in Switzerland
- Wealth management advantages may erode in the future
- AM initiative must target at
 - Defining standards for the Swiss AM industry in terms of governance, best practice, code of ethics, etc.
 - Imposing an adequate regulatory framework (as a sign of quality)
 - Offering an appropriate legal framework adapted to business needs (e.g., access to foreign markets, taxes, etc.)
 - Improving education in asset management through universities or similar institutions (CFA, AZEK, etc.)

Given the trend to solutions and outcome-oriented products:

- Asset managers face capability and credibility challenges in living up to their promises

Challenges faced in offering investment solutions and outcome-oriented products

Percent of respondents



Source: 2012 McKinsey North American Asset Management Benchmarking Survey

- I. A Snapshot of the Industry
- II. Key Trends in Asset Management
- III. A Brief History Of (Academic) Ideas**
- IV. Ask the right questions! - Examples from Academia.

The more you know about the past, the better you are prepared for the future.

Theodore Roosevelt



The Dawn of A New Area

- 1889** Efficient markets were clearly mentioned in a book by **Gibson** entitled *The Stock Markets of London, Paris and New York*. Gibson wrote that when “shares become publicly known in an open market, the value which they acquire may be regarded as the judgment of the best intelligence concerning them.”
- 1900** **Bachelier**, published his PhD thesis, *Théorie de la Spéculation*. He also deduced that “The mathematical expectation of the speculator is zero”, 65 years before Samuelson (1965) explained efficient markets in terms of a martingale. Bachelier’s work was way ahead of his time and was ignored until it was rediscovered by Savage in 1955.
- 1923** **Keynes** stated that investors on financial markets are rewarded not for knowing better than the market what the future has in store, but rather for risk bearing.
- 1925** **Macauley** observed that there was a striking similarity between the fluctuations of the stock market and those of a chance curve which may be obtained by throwing a dice.
- 1933** **Cowles** analyzed the performance of investment professionals and concluded that stock market forecasters cannot forecast.

Physics Envy and Emergence of «Efficient Markets»

- 1952** Markowitz diversifies (in a mathematical way).
- 1964** Bill Sharpe published his Nobel prize-winning work on the CAPM.
- 1965** Fama defines an “efficient” market for the first time, in his landmark empirical analysis of stock market prices that concluded that they follow a random walk.
- 1968** Jensen evaluates the performance of mutual funds and concludes that *“on average the funds apparently were not quite successful enough in their trading activities to recoup even their brokerage expenses.”*
- 1969** Fama, Fisher, Jensen and Roll undertook the first ever event study (although they were not the first to publish), and their results lend considerable support to the conclusion that the stock market is efficient.
- 1970** The definitive paper on the efficient markets hypothesis is Fama’s *“Efficient capital markets: A review of theory and empirical work”*. A market in which prices always “fully reflect” available information is called “efficient”.
- 1973** Malkiel first publishes the classic *“A Random Walk Down Wall Street”*. As of today, there have been 9 editions.

Some Cracks in the Wall: Anomalies and Puzzles

- 1978** Ball wrote a paper which revealed consistent excess return after public announcements of firms' earnings (**announcement effect**).
- 1979** Shiller shows that the volatility of long-term interest rates is greater than predicted, a theme that reappeared in Shiller (1981) and LeRoy-Porter (1981) for the stock market (**excess volatility**).
- 1980** Grossman and Stiglitz show that it is impossible for a market to be perfectly informationally efficient, since information is costly.
- French observed that the average return to S&P stocks was reliably negative over weekends (**weekend effect**).
- 1981** Banz and Reinganum showed that small-capitalization firms on NYSE earned higher average returns than is predicted by the CAPM (**size effect**).
- 1983** Keim and Reinganum showed that much of the abnormal return to small firms occurs during the first two weeks in January (**turn-of-the-year effect**).
- Basu (1977, 1983) noted that firms with high E/P ratios earn positive abnormal returns relative to the CAPM (**value effect**).

Rationalists, Anomalists, Behavioralists, ...

1985 Mehra and Prescott find *the* puzzle: **The Equity Premium Puzzle**.

De Bondt and Thaler discovered that stock prices overreact; evidencing substantial weak form market inefficiencies. This paper marked the start of behavioral finance.

1993 Jegadeesh and Titman found that recent past winners (portfolios formed on the last year of past returns) out-perform recent past losers (**momentum effect**).

1994 Metcalf and Malkiel find that portfolios of stocks chosen by experts do not consistently beat the market.

1999 Lo and MacKinlay publish A **Non**-Random Walk Down Wall Street.

2000 Shiller publishes *Irrational Exuberance*.

2003 Schwert shows that when anomalies are published, practitioners implement strategies implied by the papers and the anomalies subsequently weaken or disappear.

2005 Malkiel shows that professional investment managers do not outperform their index benchmarks and provides evidence that by and large market prices do seem to reflect all available information.

et cetera

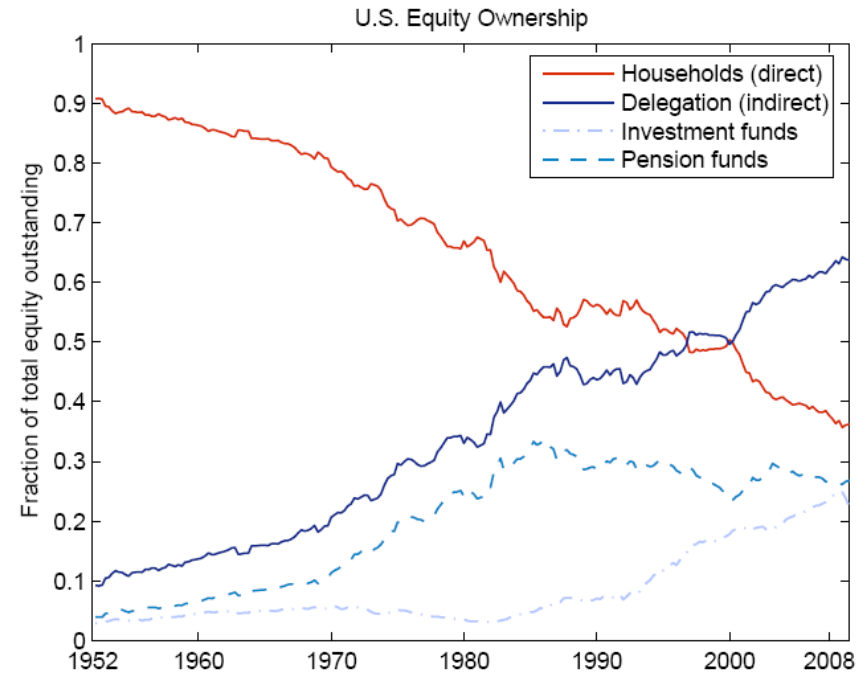


- I. A Snapshot of the Industry
- II. Key Trends in Asset Management
- III. A Brief History Of (Academic) Ideas
- IV. Ask the right questions! - Examples from Academia.**
 - I. The Economic Impact of the Asset Management Industry
 - II. The Crux with Statistics



Institutions and rules - an example

- We observe a structural shift in investment discretion from private households to institutional investors:
 - 1950: 90% of corporate equity held directly by individuals.
 - 2008: 60% of corporate equity held by institutions (**delegation**)
- Investment objectives of institutional investors differ from those of private individuals.
- Importance of **benchmarking** is closely related to institutional investors.
- Benchmarking may have extensive implications on risk premia.



How do delegation and benchmarking affect the cross-section of returns?

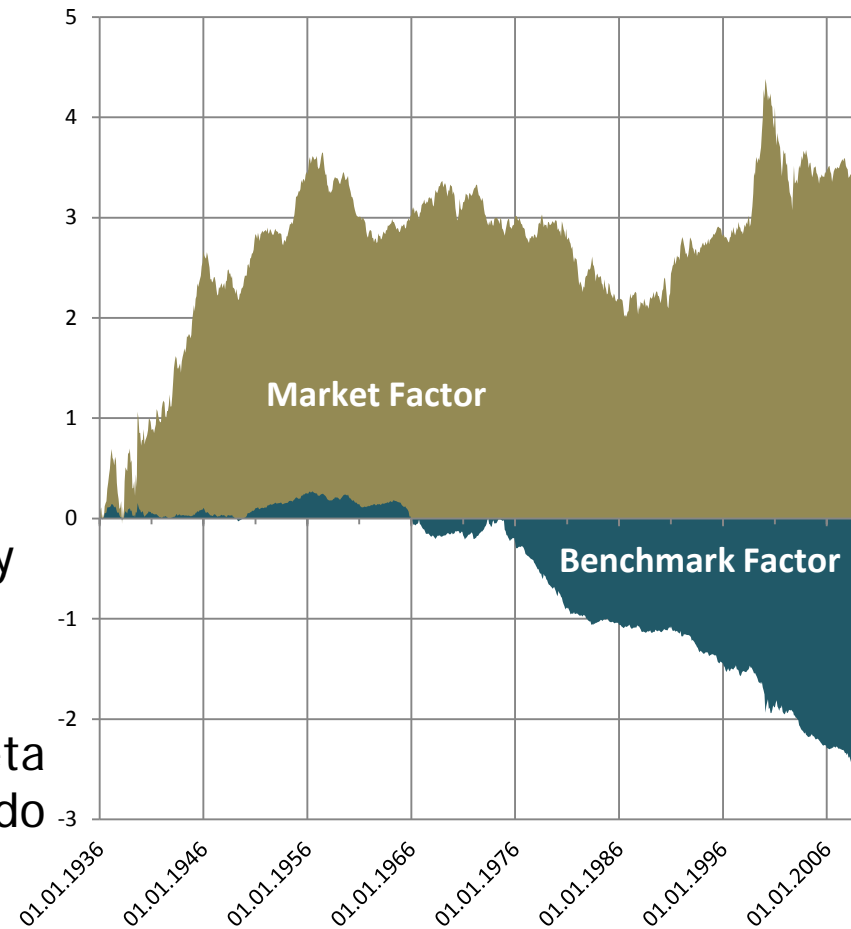
Leippold and Rohner (2012), „Equilibrium Implications of Delegated Asset Management Under Benchmarking“, Review of Finance.

Academic Examples - Impact of Asset Management Industry

Institutions and rules - an example (con'd)

Findings:

- Institutional investors and their preferences matter for asset pricing.
- Delegation leads to a more informative price system and lower expected returns.
- Benchmark risk is a priced risk factor.
- In the empirical analysis, we find:
 - Stocks with high RIO exhibit significantly lower returns than do stocks with low RIO;
 - Large-cap stocks with a high residual beta exhibit significantly lower returns than do stocks with low residual betas.



Implications? ...More than you think!

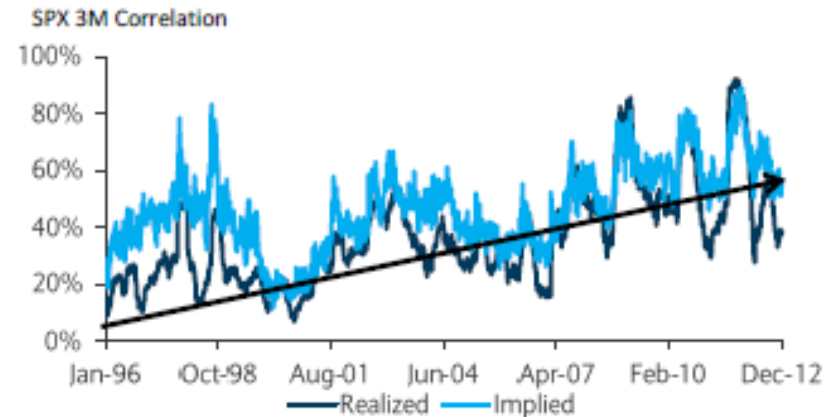
The impact of the emergence of the ETF market

- Current medium-term volatility in SPX is now at the bottom end of their “new normal” period.
- Average market-cap weighted single stock implied volatility has already reached 2006 levels
- Index volatility is relatively higher because of higher implied correlation being priced by the market.
- The decade-long secular uptrend in correlation appears to be driven by the growth in index and ETF products.

Single stock vols already at pre-2007 lows



Secular increase in correlation



- I. A Snapshot of the Industry
- II. Key Trends in Asset Management
- III. A Brief History Of (Academic) Ideas
- IV. Ask the right questions! - Examples from Academia.**
 - I. The Economic Impact of the Asset Management Industry
 - II. The Crux with Statistics



Do anomalies survive? *or*: Academics as Gravediggers?

- Anomalies do not conform with the predictions of accepted models of asset pricing and may serve as starting point for active management.
- However, many of the well-known anomalies in the finance literature do not hold up in different sample periods.
- The **size effect** and the **value effect** seem to have disappeared after the papers that highlighted them were published.
- The **weekend effect** and the **dividend yield effect** also seem to have lost their predictive power after the papers that made them famous were published.
- The **small-firm turn-of-the-year effect** became weaker in the years after it was documented in the academic literature, although there is some evidence that it still exists.
- Likewise, the evidence that stock market returns are predictable using variables such as **dividend yields** or **inflation** is much weaker in the periods after the papers that documented these findings were published.

Data mining - an example

"There are three kinds of lies: lies, damned lies, and statistics."

-- *Benjamin Disraeli*

"Data Snooping and the Global Accrual Anomaly" - Leippold/Lohre (2008a)

- Accrual gives room for earnings management and may trigger adverse earnings moves in the future.
- (Naive) investors fixate on current earnings. Profitable trading strategy: Go long in low accrual companies and short in high accruals companies (Sloan, 1996).

Accounting for multiple hypothesis testing, the "accrual anomaly" as a global phenomenon disappears.

"The Dispersion Effect in International Stock Returns" - Leippold and Lohre (2008)

- Not just the mean, but the "dispersion" of earnings forecasts may contain additional valuable information.
- Diether, Malloy, and Scherbina (2002) find evidence for anomalous dispersion returns by shorting high-dispersion stocks and going long low dispersion stocks. They contend:

Accounting for multiple hypothesis testing, the "dispersion anomaly" as a global phenomenon disappears.

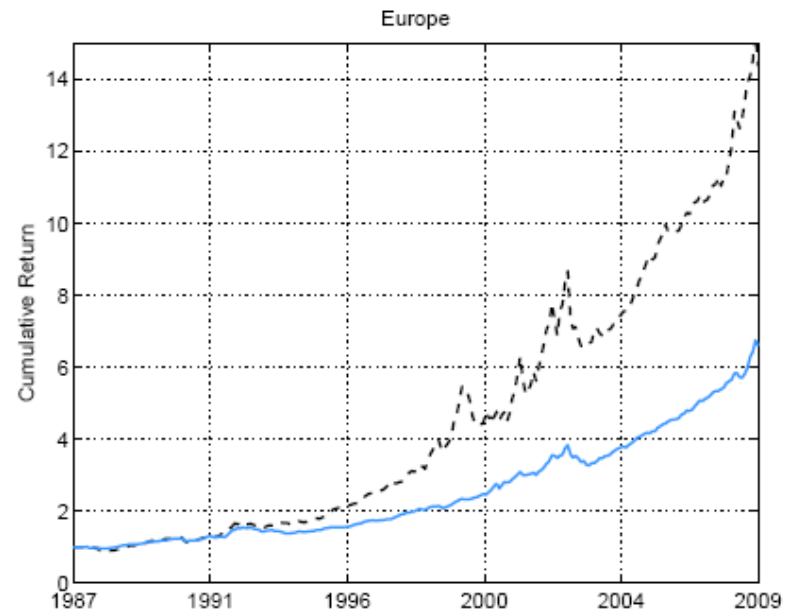
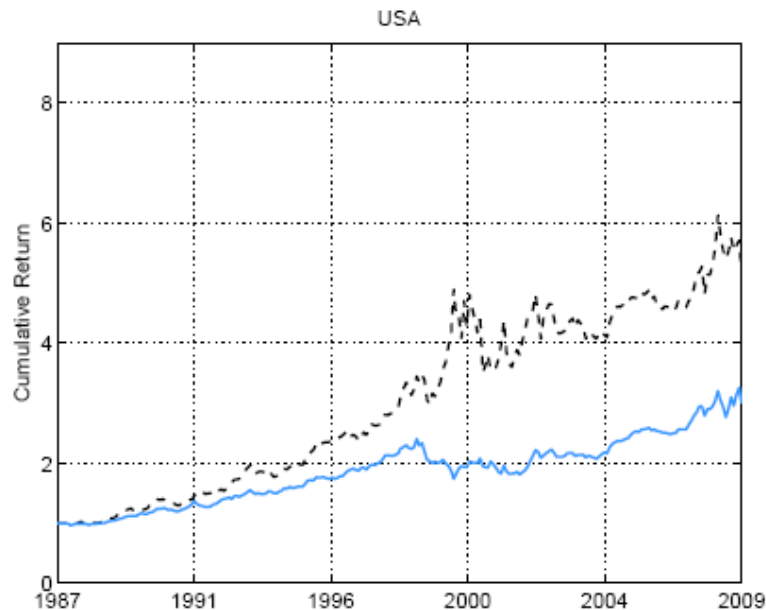


Data mining - an example

“International Price and Earnings Momentum” - Leippold/Lohre (2008c)

- Price and earnings momentum are constantly defying market efficiency around the globe
- Price Momentum (Jegadeesh and Titman, 1993): Buy winners and sell losers.
- Earnings Momentum (Chan, Jegadeesh, Lakonishok, 1996): Buy positive and sell negative earnings revisions

Accounting for multiple hypothesis testing, the international momentum puzzle prevails.



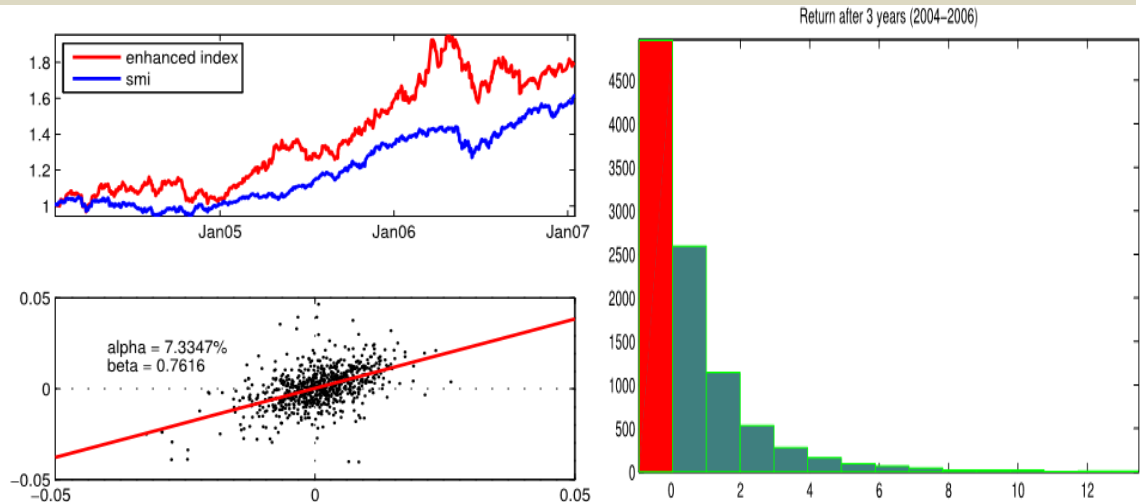
Where does Alpha come from?

The Arithmetic of Active Management (Sharpe, 1991)

- If active and passive management styles are defined in sensible ways, it must be the case that:
 - Before costs, the return on the average actively managed dollar will equal the return on the average passively managed dollar; and
 - After costs, the return on the average actively managed dollar will be less than the return on the average passively managed dollar.

A Simple Thought Experiment

- Invest in a 30/130 strategy with the SMI as underlying
- Weights are changed randomly
- Out of 10'000 simulated funds, 53% turn out to be „skilled“ investors.



The bad thing about luck *or*:

...What academic nightmares are made of!

- Return is (more or less) straightforward to measure, risk is not! Adjust your performance measures for serial correlation and heteroscedasticity.
- Most performance measures have serious deficiencies!
 - Sharpe ratios are easily sharpened.
 - Alpha is „just“ the intercept of a linear regression under the assumption of Gaussian errors.
 - How active is your active manager?
- Beware the data snooper!
- It's hard to separate skill from luck. Multiple hypotheses testing methods may help!
- Finance is not Physics! In Finance, we have not only to deal with sparse data „by nature“ and last but not least, we have to deal with humans!



Chance favors only the
prepared mind

Louis Pasteur