Investment styles and the CAPM

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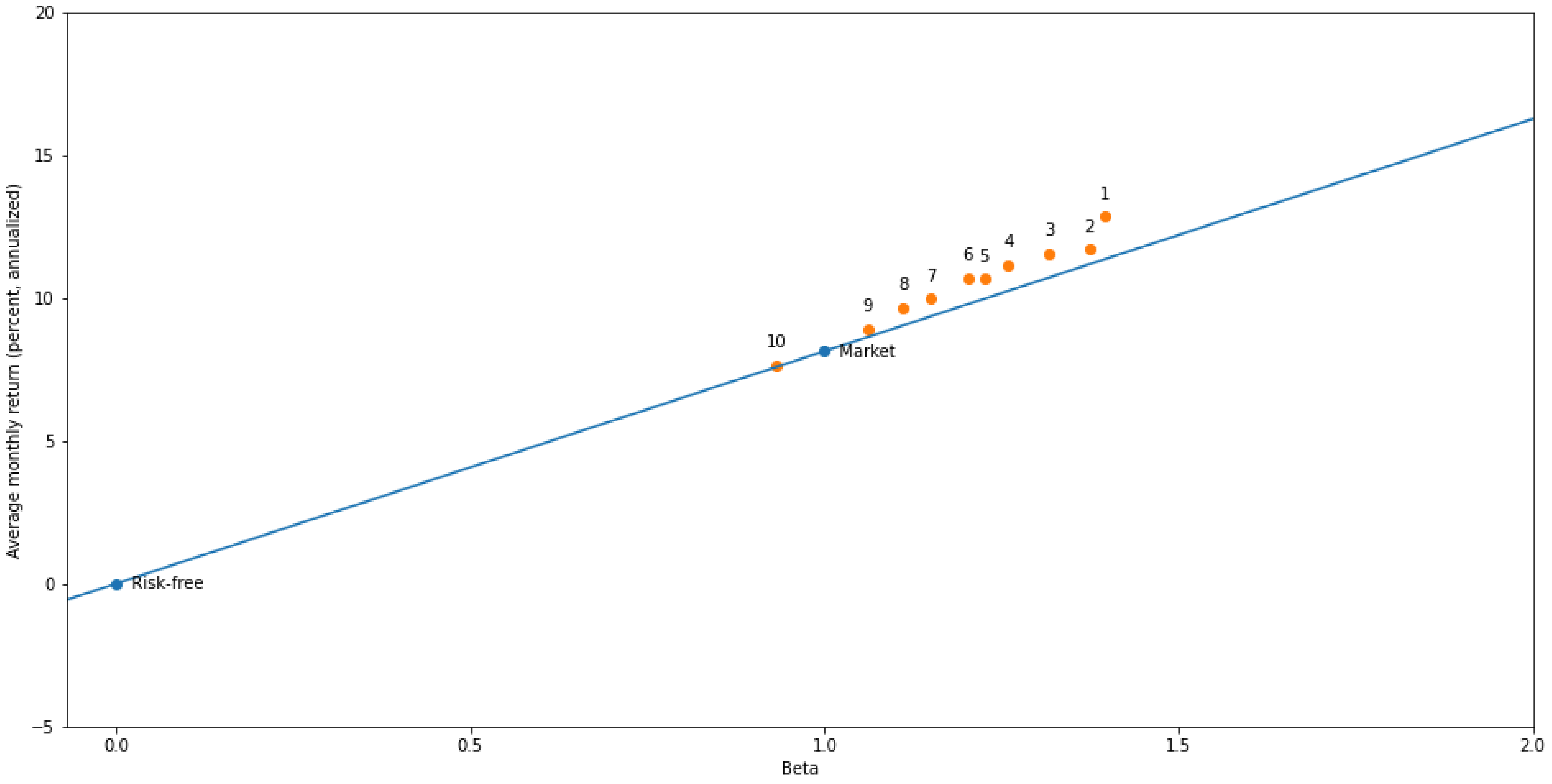
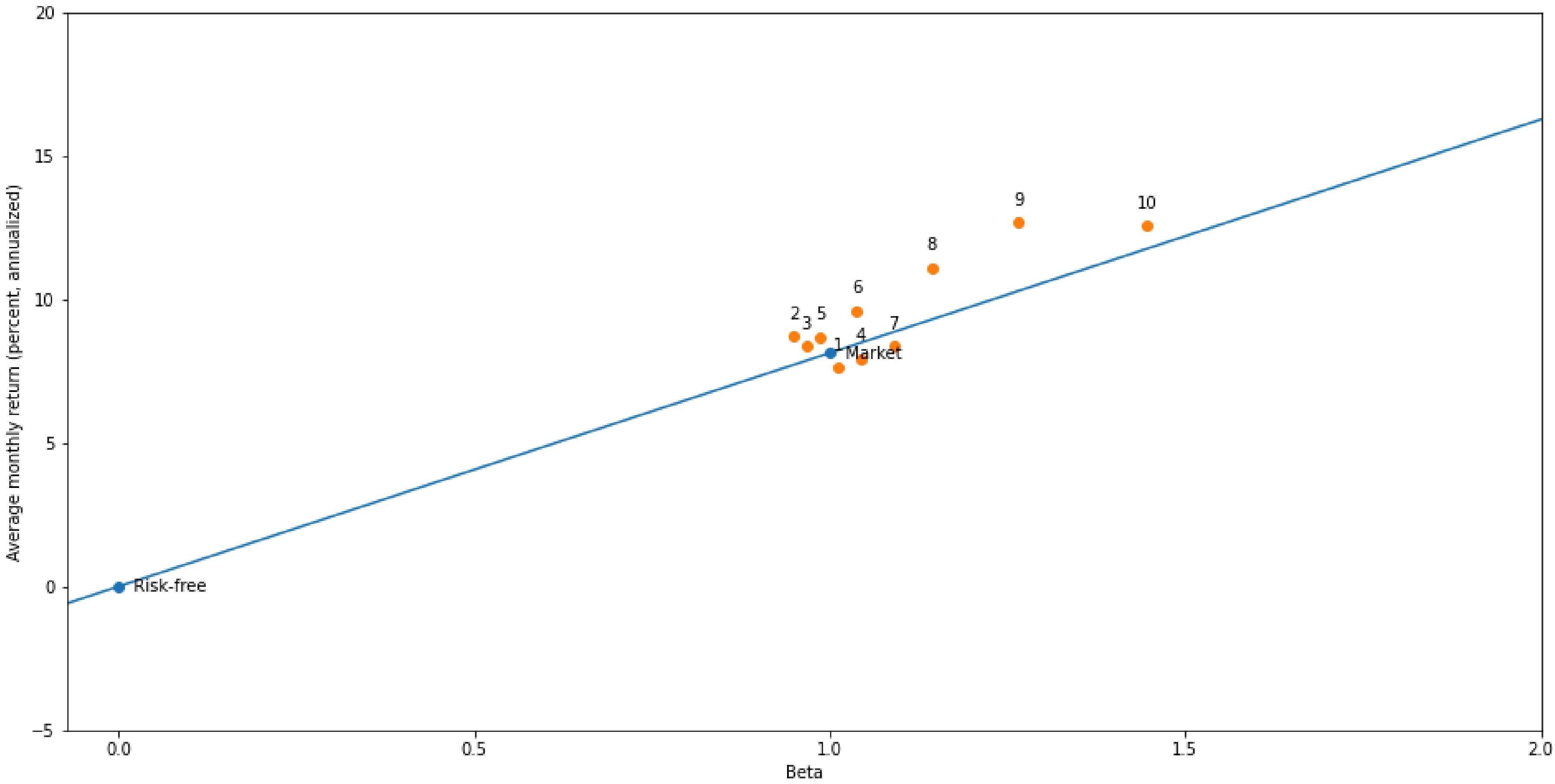
Portfolios formed on size, 1926-2023



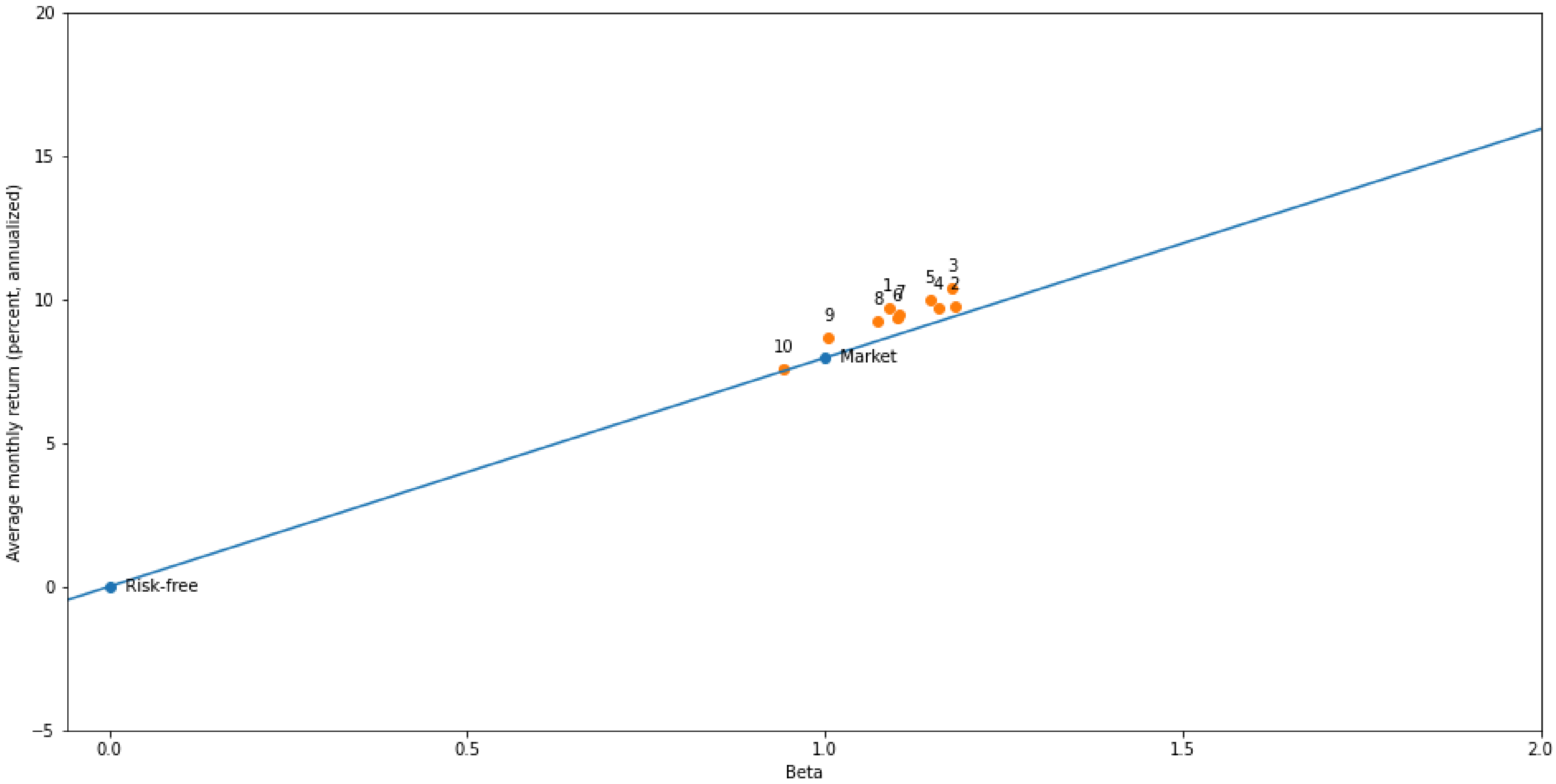
Portfolios formed on value, 1926-2023



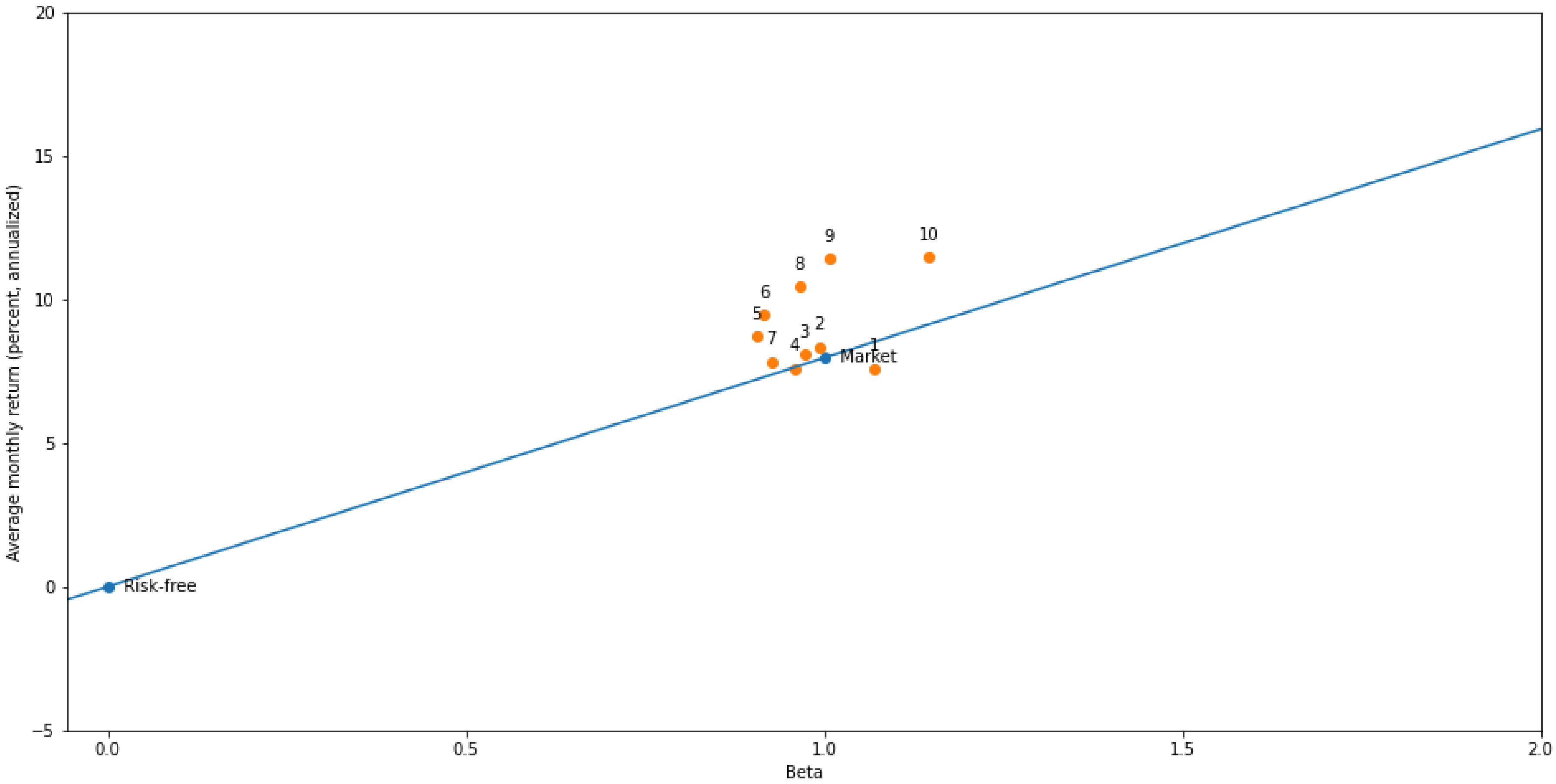
Notes on the historical evidence

- In these figures, size and value strategies seem to offer returns that are roughly fair according to the CAPM. This evidence would not encourage us to depart from a passive strategy.
- However, the early part of this sample includes the Great Depression and the second world war. Many researchers omit these times, and start the analysis in the 1950s.
- It's not clear whether this is theoretically ideal or not. In the next figures, we look at how this changes things.

Portfolios formed on size, 1950-2023



Portfolios formed on value, 1950-2023



Notes on the figures using 1950–2023

During this shorter time period, returns to value-sorted portfolios did not follow the CAPM.

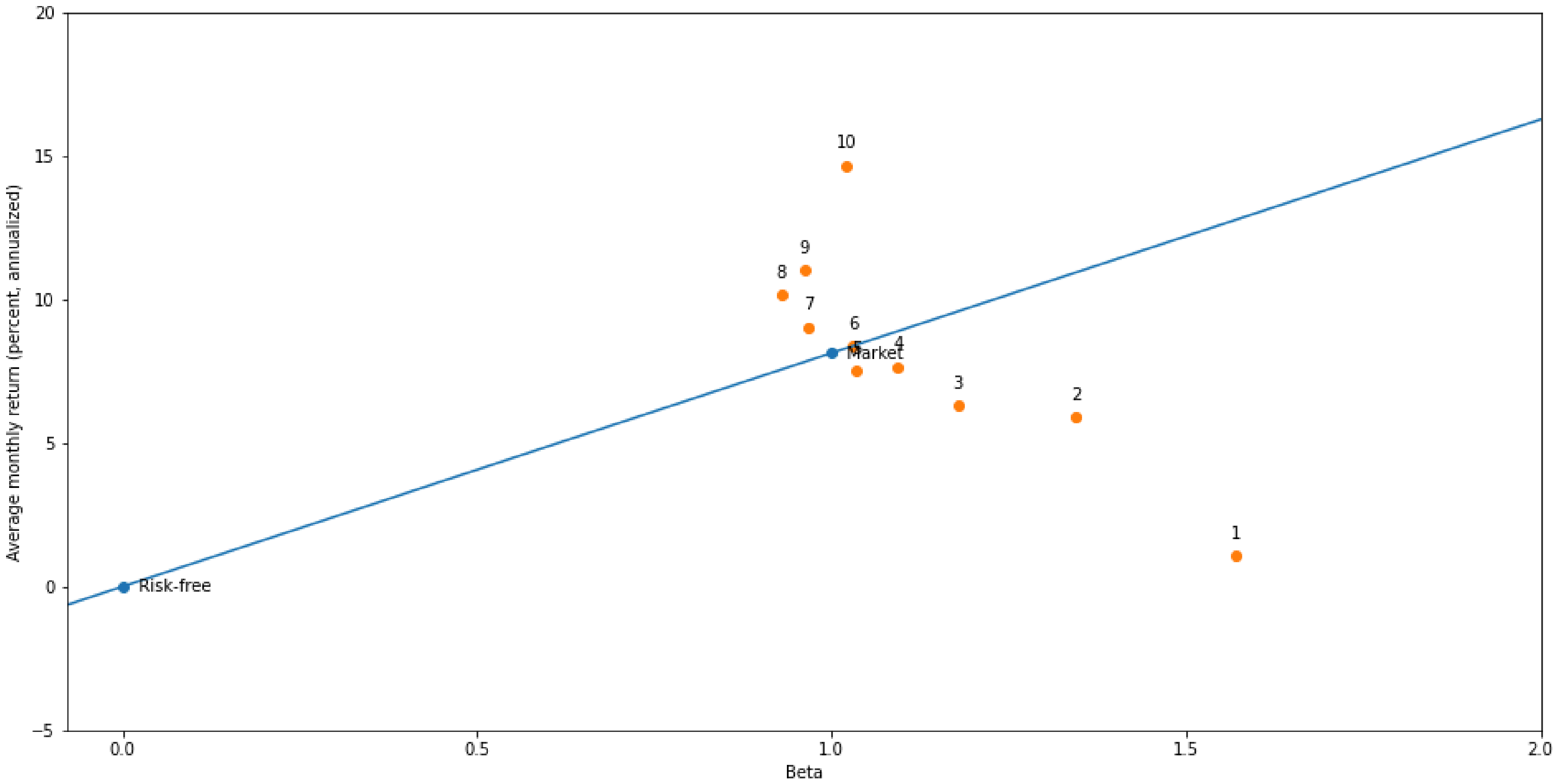
This suggests opportunities that one could have exploited.

Specifically: Value stocks (those with high BM ratios) offered higher return, with similar beta, to growth stocks. (Compare portfolios #8, 9, 10 with #1, 2, 3.)

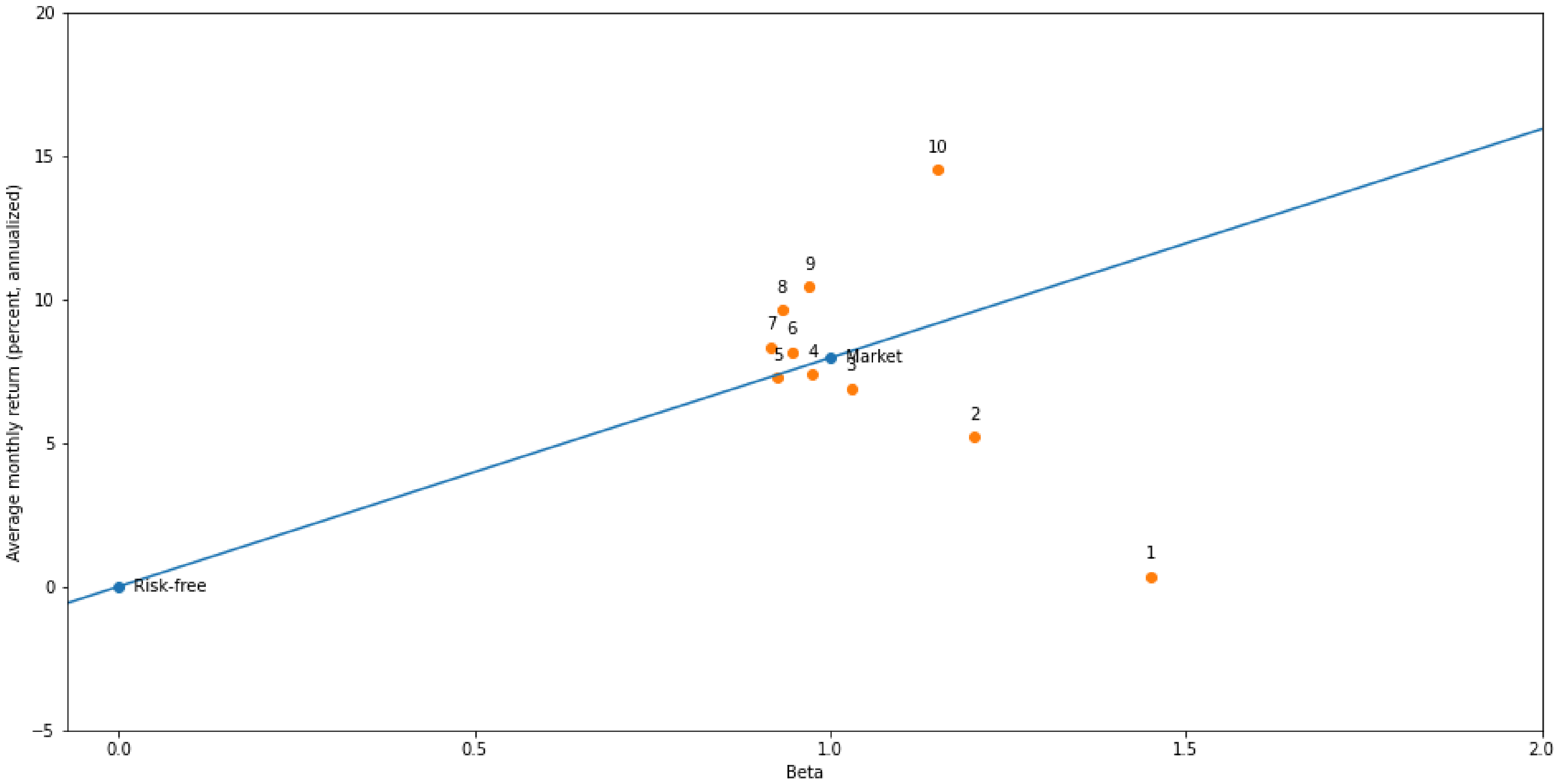
This basic pattern is called the value premium.

Next: Similar conclusion for portfolios sorted on momentum.

Portfolios formed on momentum, 1926-2023



Portfolios formed on momentum, 1950-2023



Notes on value and momentum premiums

By sorting stocks on value and momentum, you could have found portfolios in the past, that would have offered higher returns without taking on more market risk (beta).

In academic literature, these style-based return are called factors. I will use this term going forward.

In response to this evidence, the factor investing industry has grown to meet investor demand for value- and momentum-focused strategies, and to find new factors.

Critical questions to ask about factor-based strategies

- What kind of risk do these strategies require you to bear?
  - The figures just showed average returns and betas.
  - This does not mean you can earn steady, reliable returns.
  - In fact, to earn the averages reported in the prior figures, you had to endure many times of very poor returns.
- How feasible is it to implement these strategies?
  - In the past, how close could you have come to actually achieving the returns in the prior figures?
  - In the future, how reliably can you do what the strategies describe, and how expensive will that be?

Next step: Better ways to track factor returns

A first step is just to have a better way to track factor performance.

- So far we've been focused on simple graphs of average return against beta. But these only give us a limited perspective on the performance of an investmen strategy.
- The biggest limitation is that these graphs just show average performance over a long horizon. They don't tell us how much short-term fluctuation the strategy might exhibit relative the long-run average.
- In Module 3, we will build indexes of investment performance that address this issue. The basic idea will be to study the spreads between the returns of different portfolios.

Many strategies just repackage well-known factors

Many popular investment strategies are tightly connected to well-known factor strategies like size, value, or momentum.

- An EW index tilts heavily towards small and value stocks.
- Stocks that get added to an index are momentum stocks.

If you know this, you have a better perspective on what is really “new,” and what is not, when you evaluate a new strategy.

- Don’t overpay for something that is already easily available!
- Again, Module 3 will explore this issue in detail.