More Efficient Event Studies
Comment on Shah 2014

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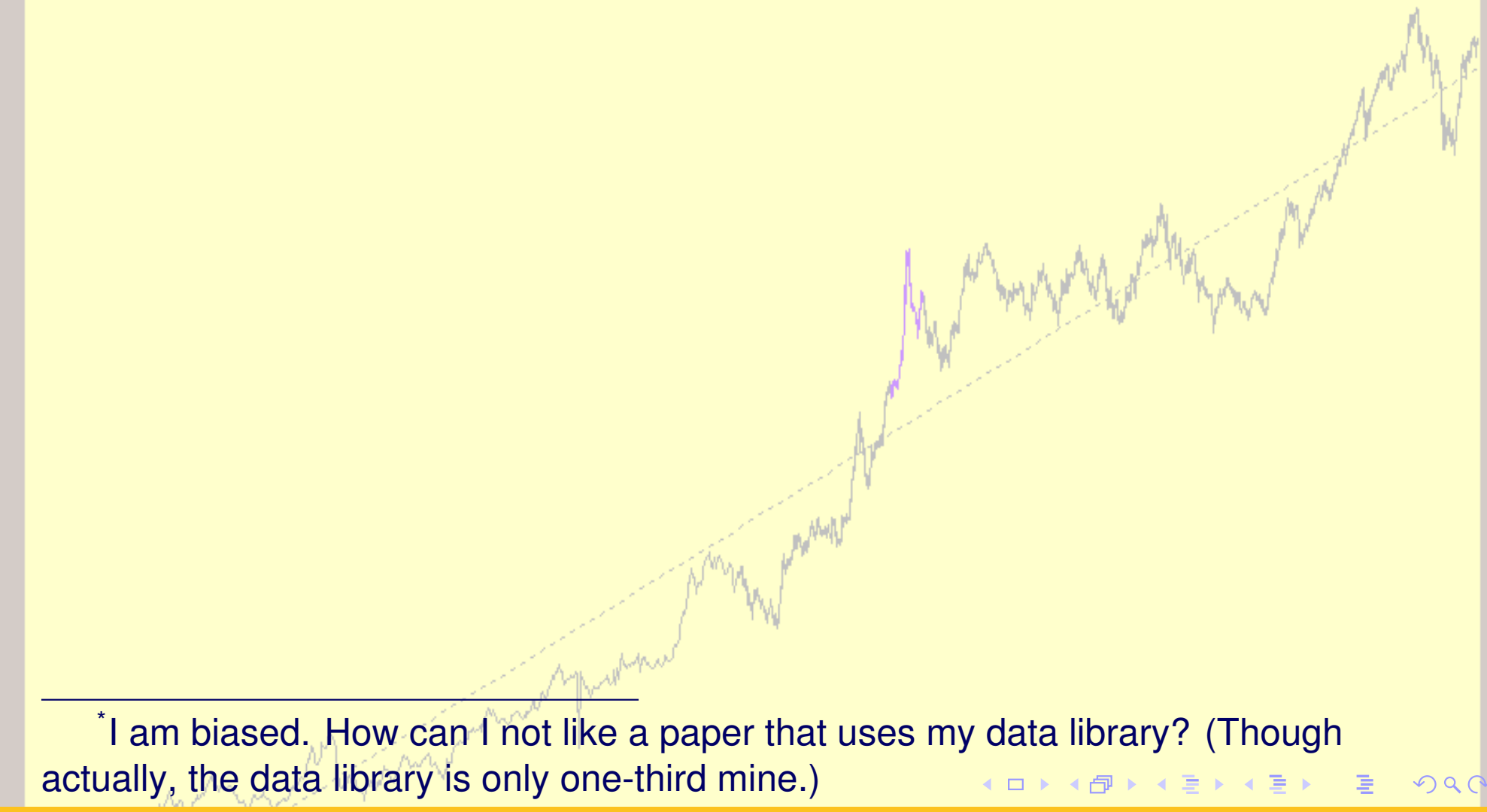
Indian Institute of Management, Ahmedabad

We need more efficient event studies



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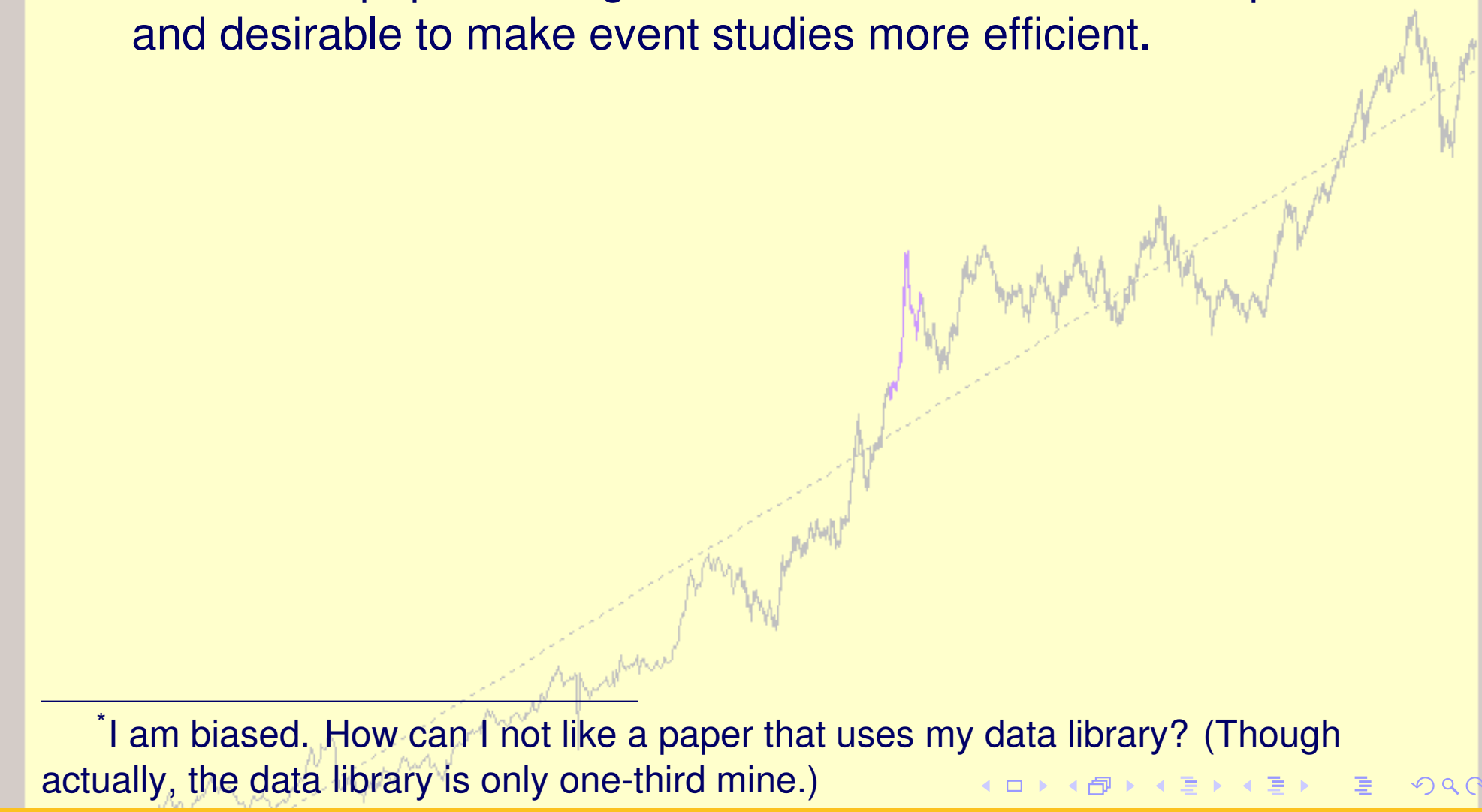

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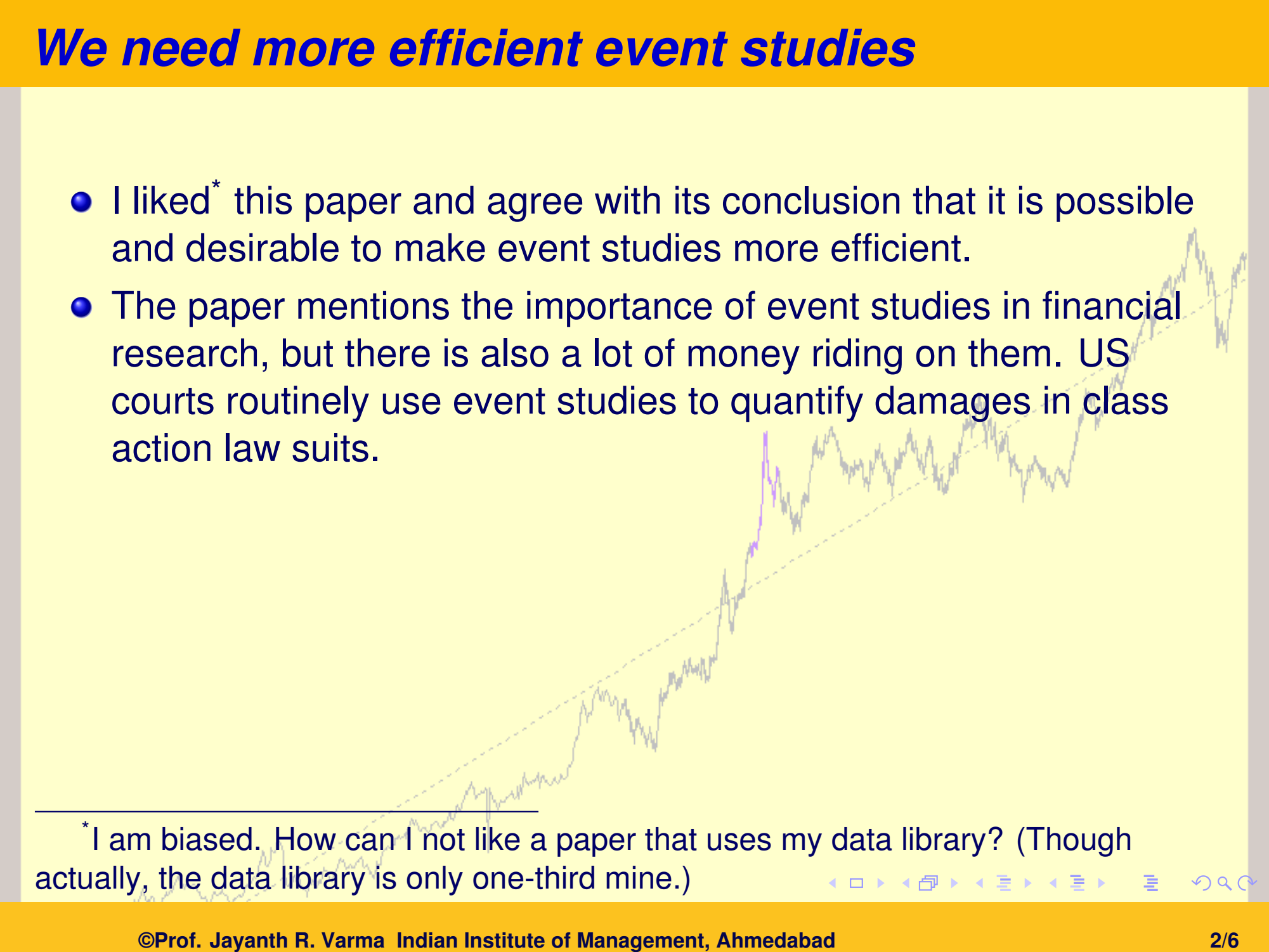

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- Yet the event study methodology is a sort of fossilized technology. Modern event studies are not radically different from the methodology of B&B or FFJR half a century ago.

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- Yet the event study methodology is a sort of fossilized technology. Modern event studies are not radically different from the methodology of B&B or FFJR half a century ago.
- If anything, there is some regress: $\beta = 1$ is a popular approximation.

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- For example, suppose that the security market line is flat (or even negative) so that the CAPM is useless as a pricing model. Suppose also that the R^2 in a regression of stock returns on the market index is 0.55. The market model is a good tool for an event study.
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- Similarly, industry factors are valid in an event study (if the event is not industry wide).

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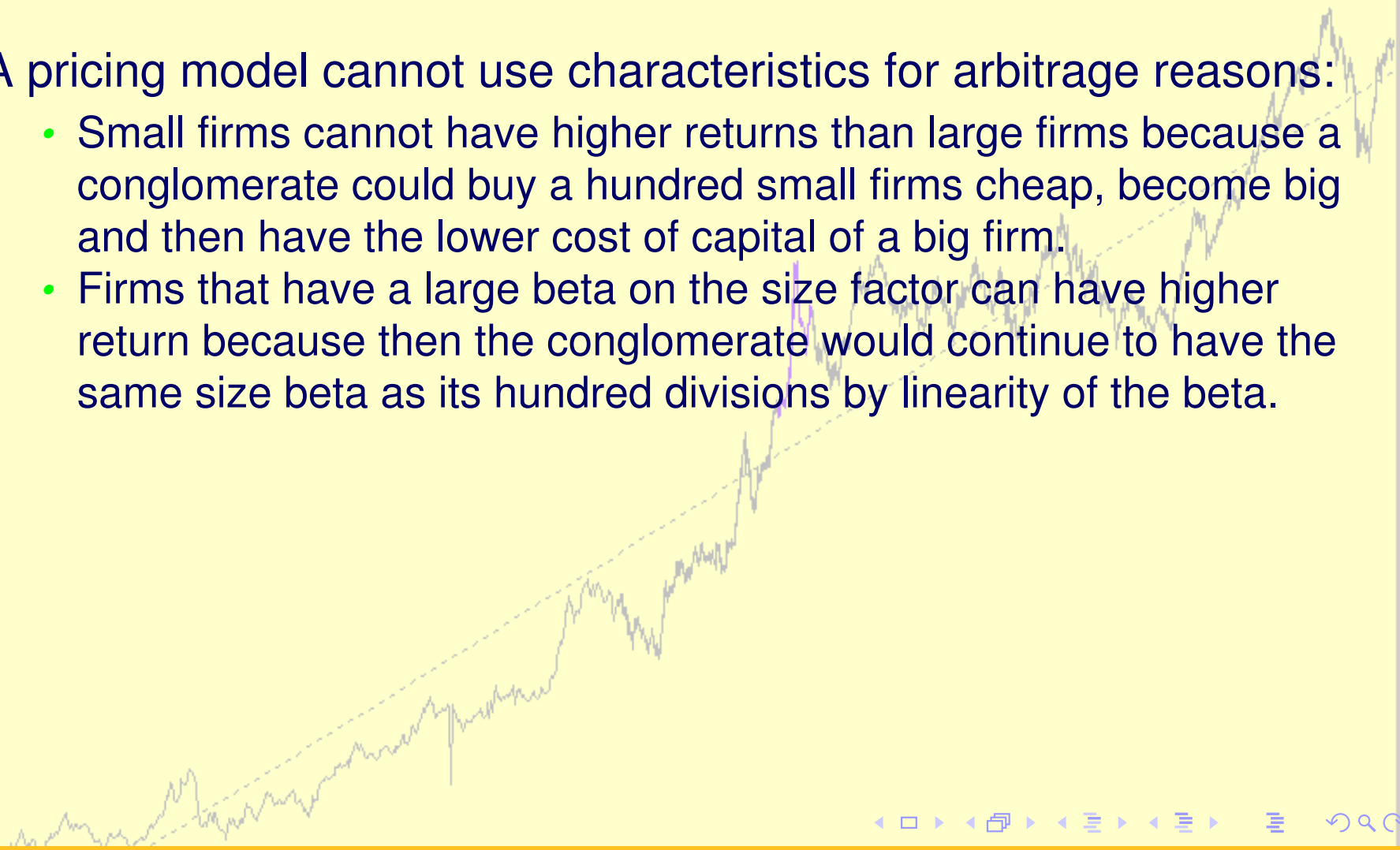
  - Small firms cannot have higher returns than large firms because a conglomerate could buy a hundred small firms cheap, become big and then have the lower cost of capital of a big firm.
  - Firms that have a large beta on the size factor can have higher return because then the conglomerate would continue to have the same size beta as its hundred divisions by linearity of the beta.



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- But event studies can use characteristics. We are predicting, and not computing a equilibrium.

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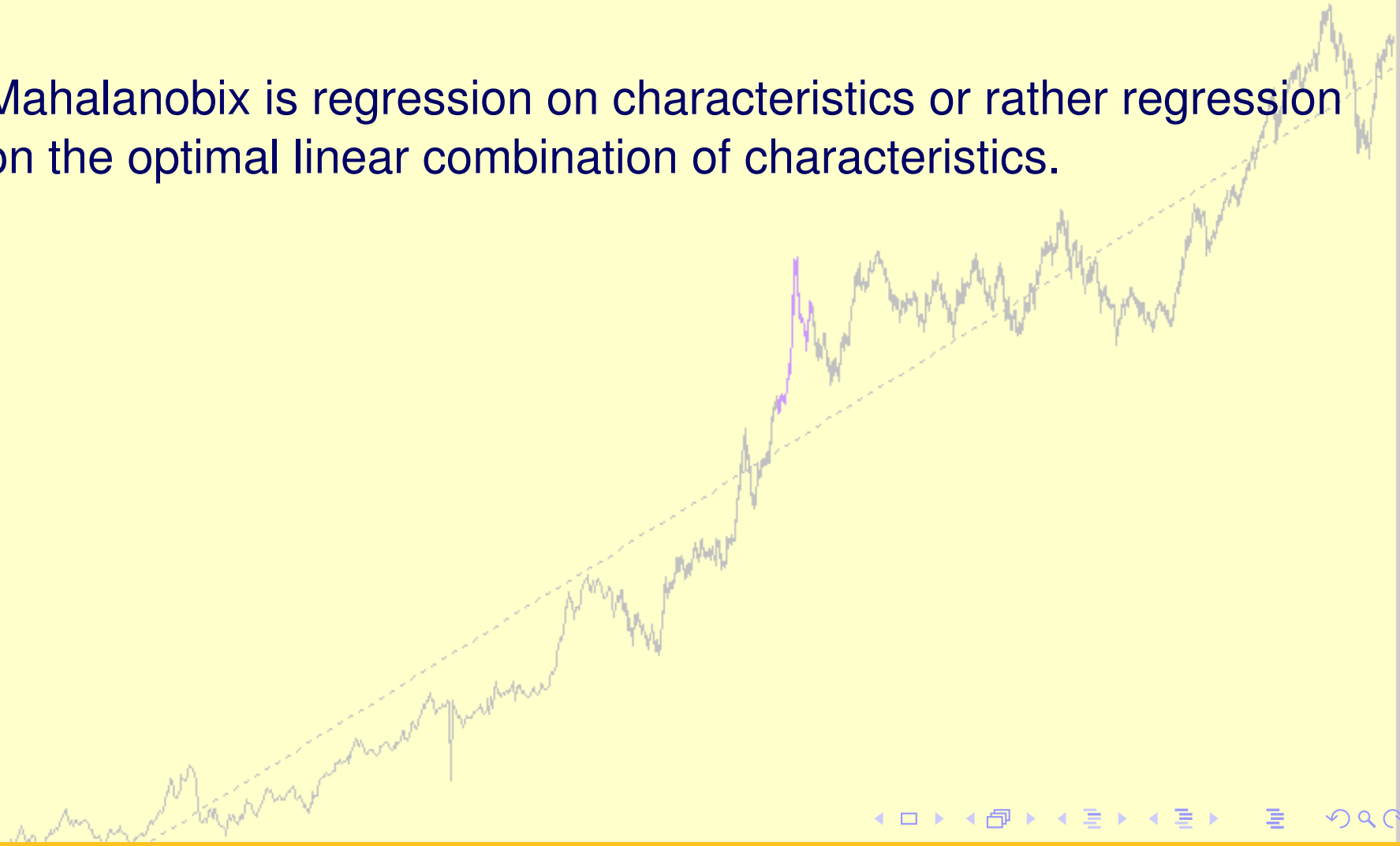

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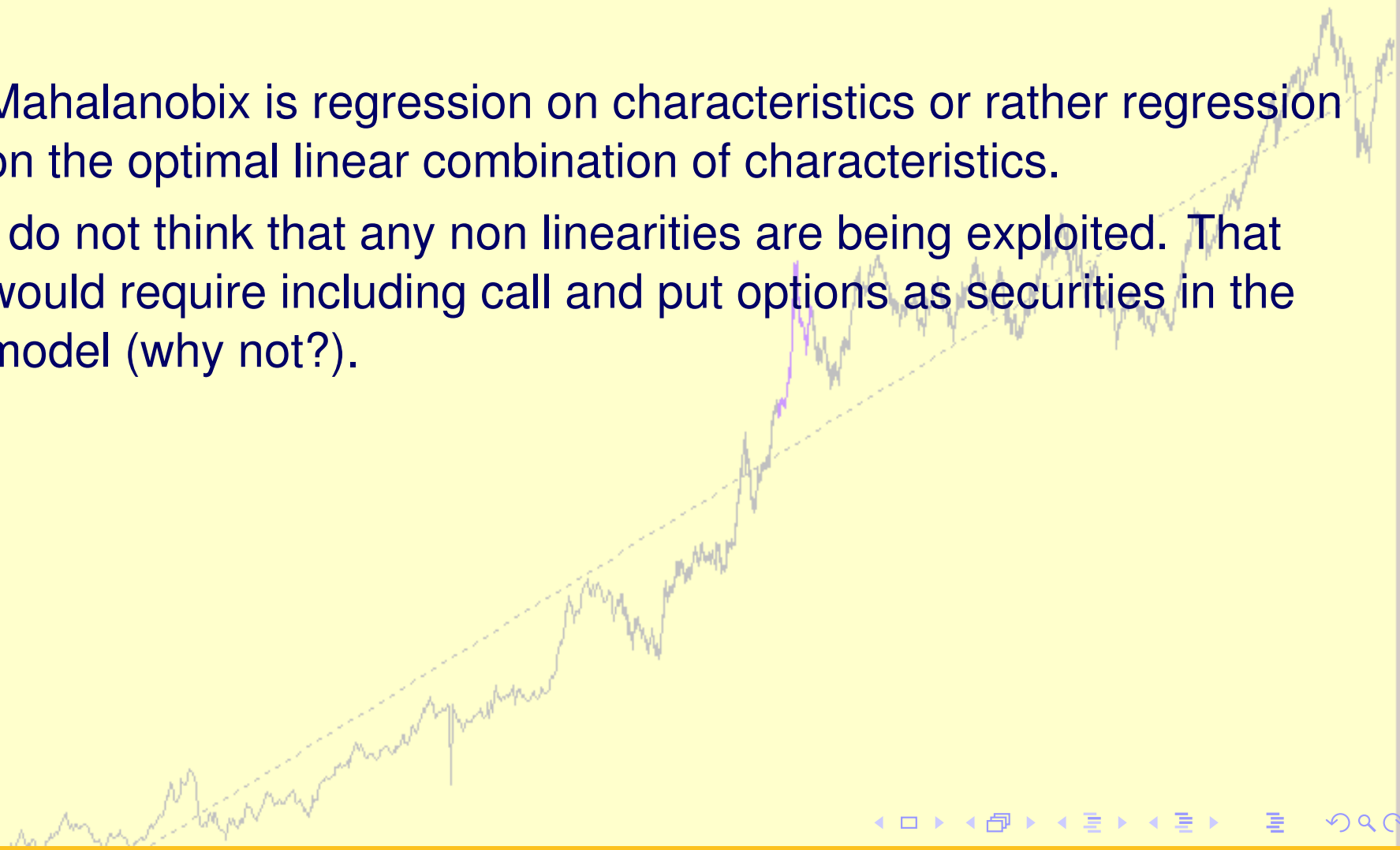

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- I do not think that any non linearities are being exploited. That would require including call and put options as securities in the model (why not?).
- Minor point (typo?): the optimal Counter Factual does not require $\beta_{i,CF} \to 1$. It requires $R^2_{i,CF} \to 1$.

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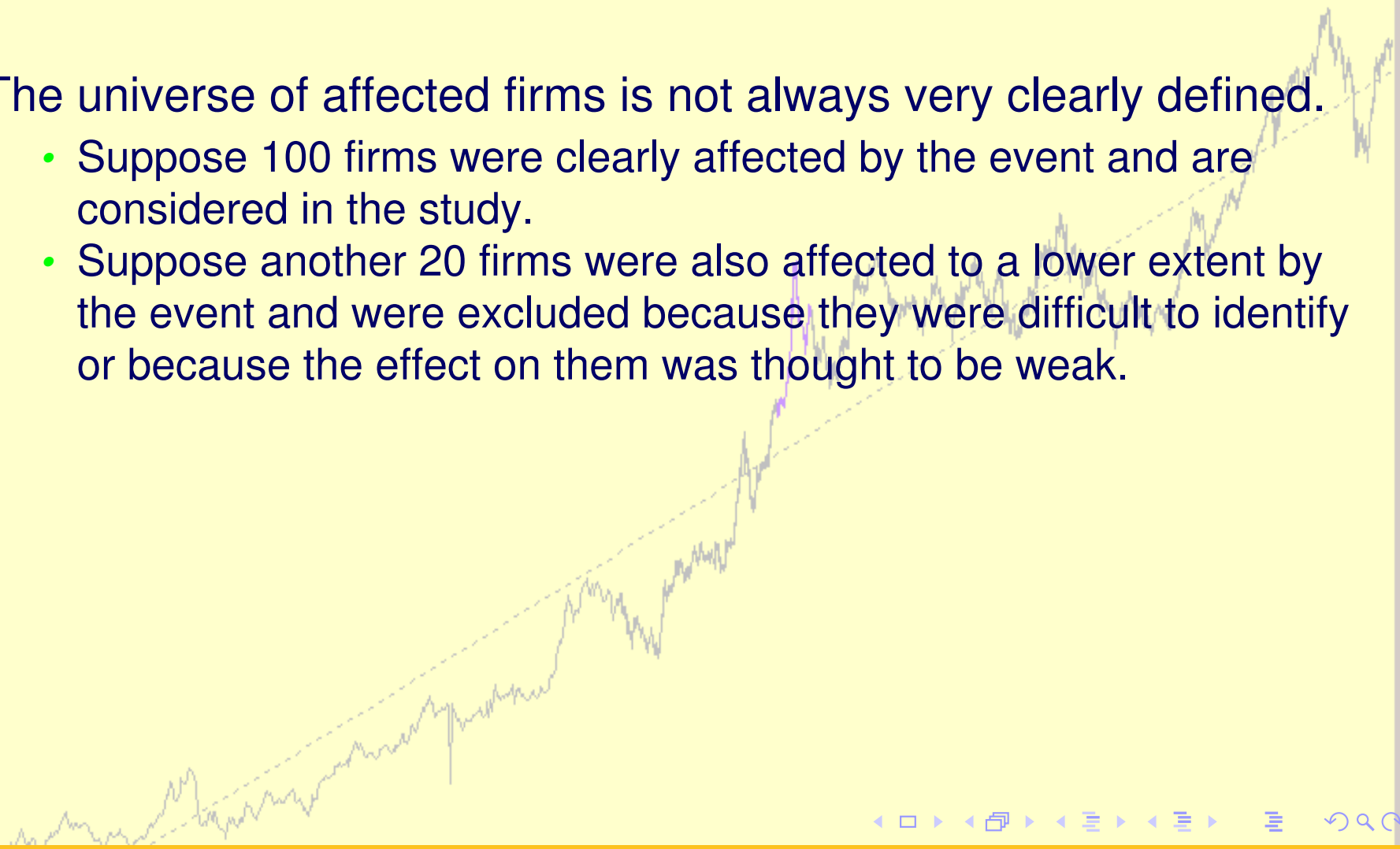
  - Suppose another 20 firms were also affected to a lower extent by the event and were excluded because they were difficult to identify or because the effect on them was thought to be weak.



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- In this case, the Counter Factual includes 20 (weakly) event affected firms as well.