

# A constantly rebalanced portfolio

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Portfolio:  $\mathbf{a} = (a_1, \dots, a_m)$



# Growth of wealth under a constantly rebalanced portfolio

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Stock price relatives:  $\mathbf{X} = (X_1, \dots, X_m)$



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| ... | ...  | ...                                   | ...                 |
| $n$ | $\mathbf{X}^{(n)}$                                 | $S_n = S(\mathbf{X}^{(n)})$           | $W_n = W_{n-1} S_n$ |