

FLEETING LIMIT ORDERS

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The modern limit order book

- Traders enter priced bids and offers
- The book of bids and offers is visible
- A trade will occur when:
 - ▣ Price of a new buy order \geq lowest ask
 - ▣ Price of a new sell order \leq highest bid

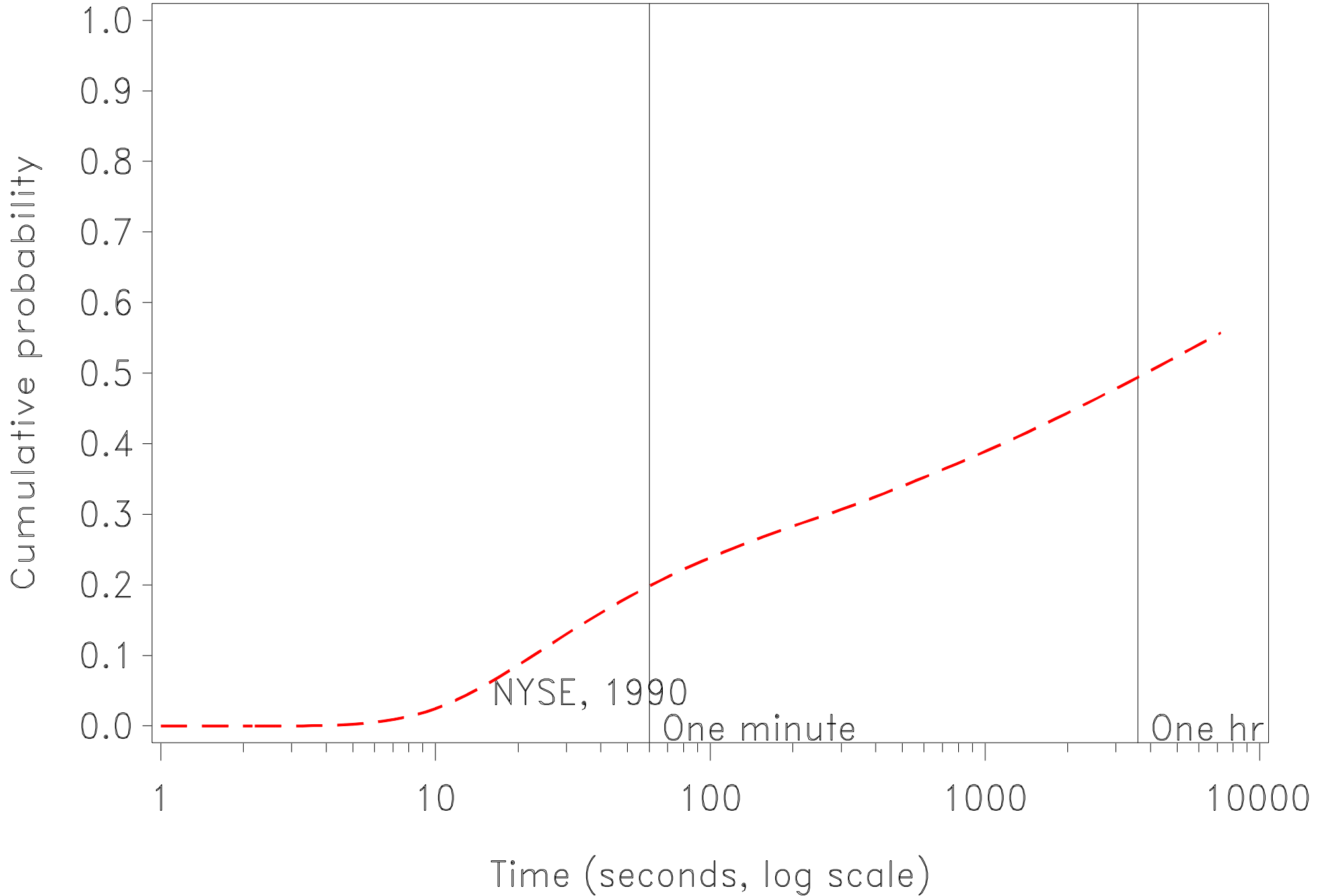
Make or Take? A buyer can ...

- Take:
 - ▣ Get an immediate fill by paying the ask
- Make [a market]:
 - ▣ Put in a limit buy order priced lower than the ask
 - If order executes, will get better price
 - But order may not execute

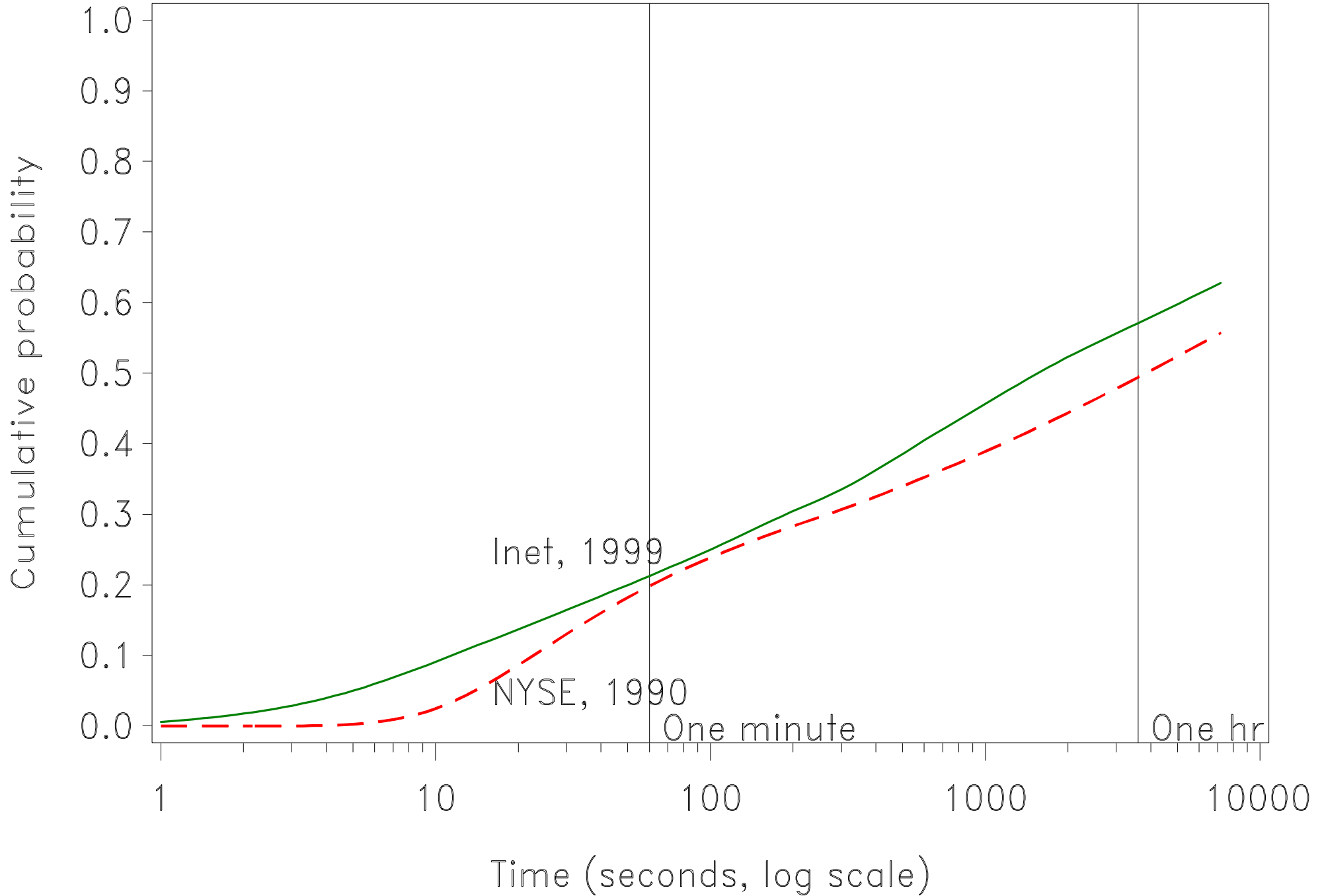
What's the chance my limit order will execute?

- Three data samples
 - ▣ NYSE limit orders 1989-1990 (TORQ)
 - ▣ Inet limit orders, 1999
 - ▣ Inet limit orders, 2004

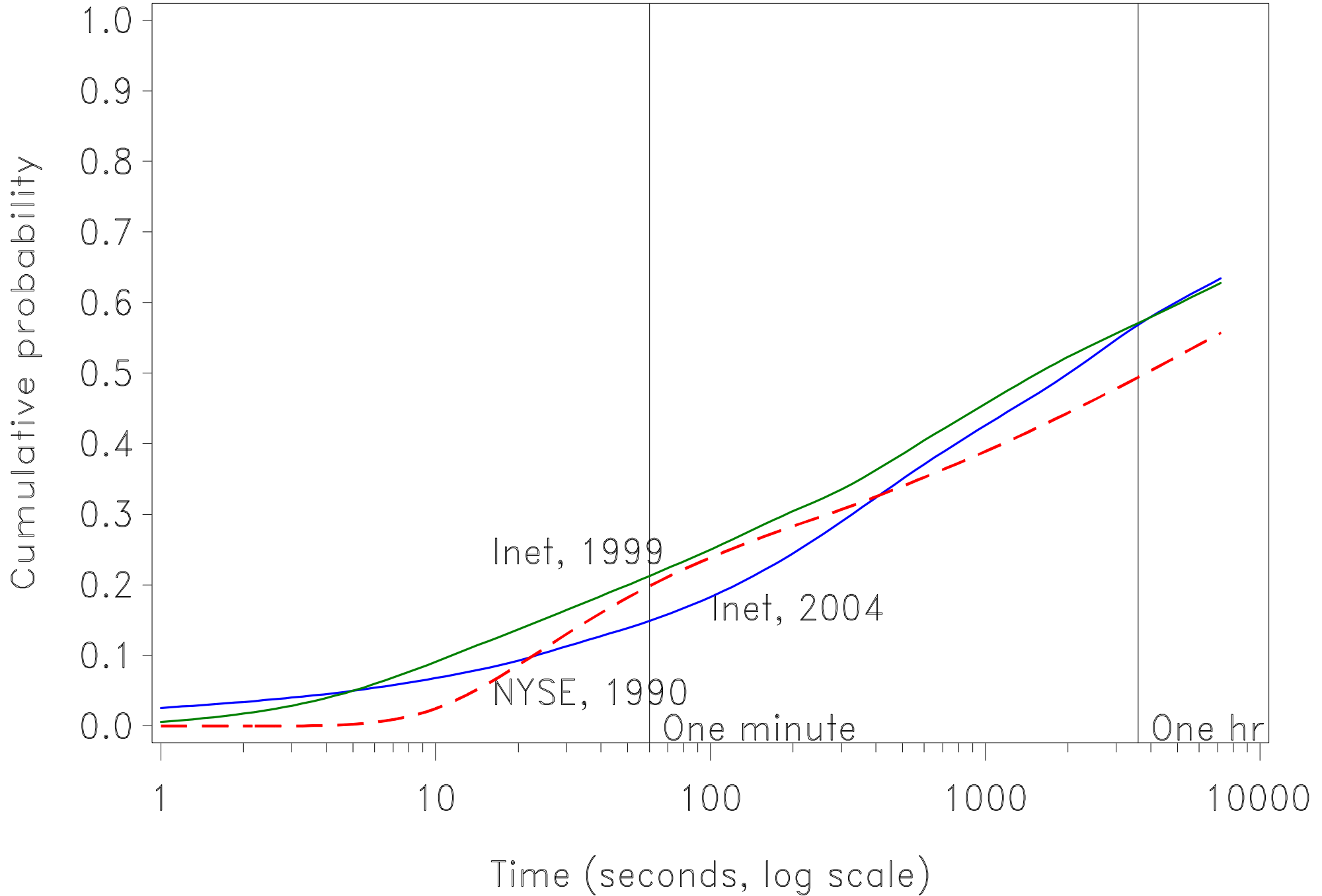
Limit Order Execution Probability



Limit Order Execution Probability



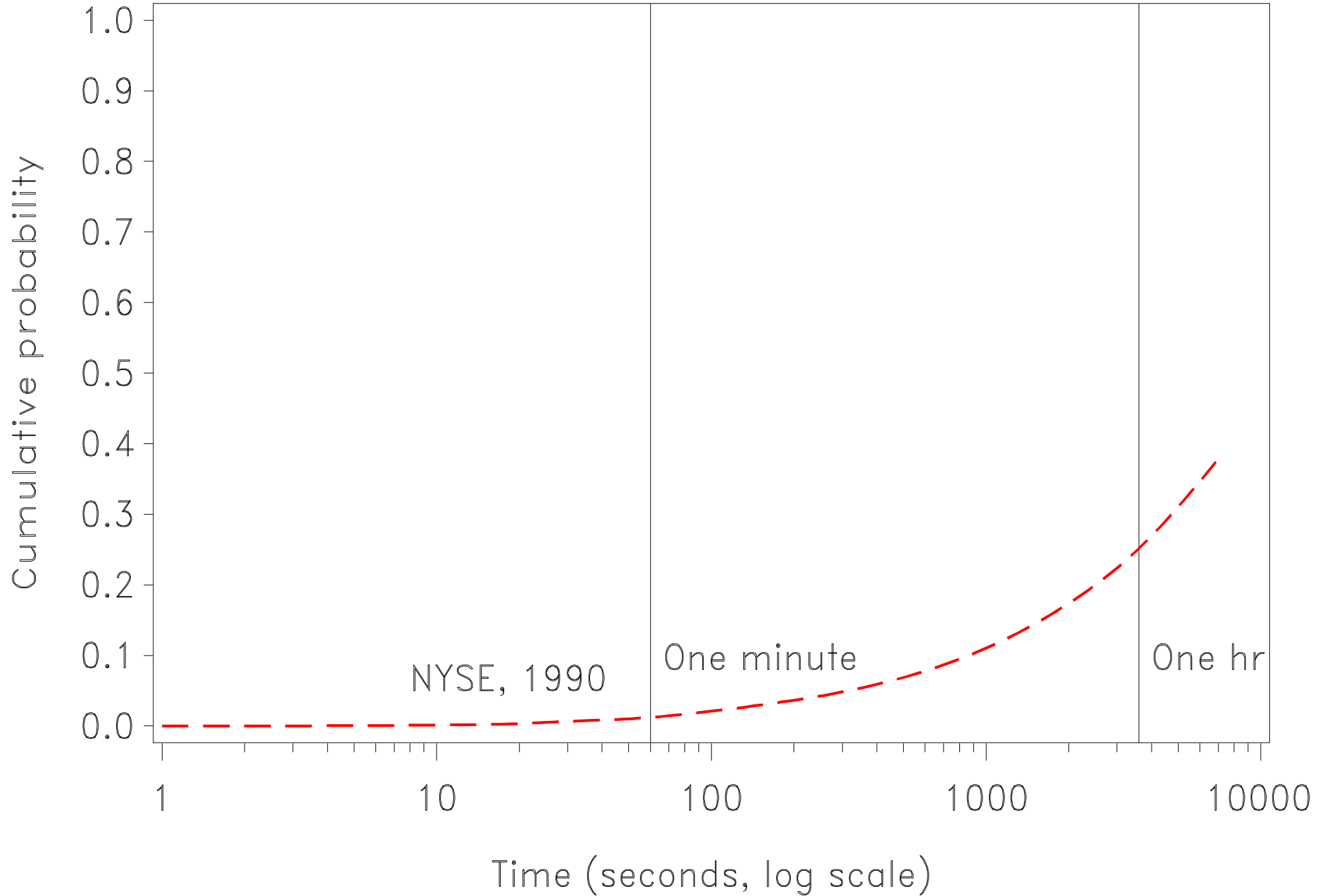
Limit Order Execution Probability



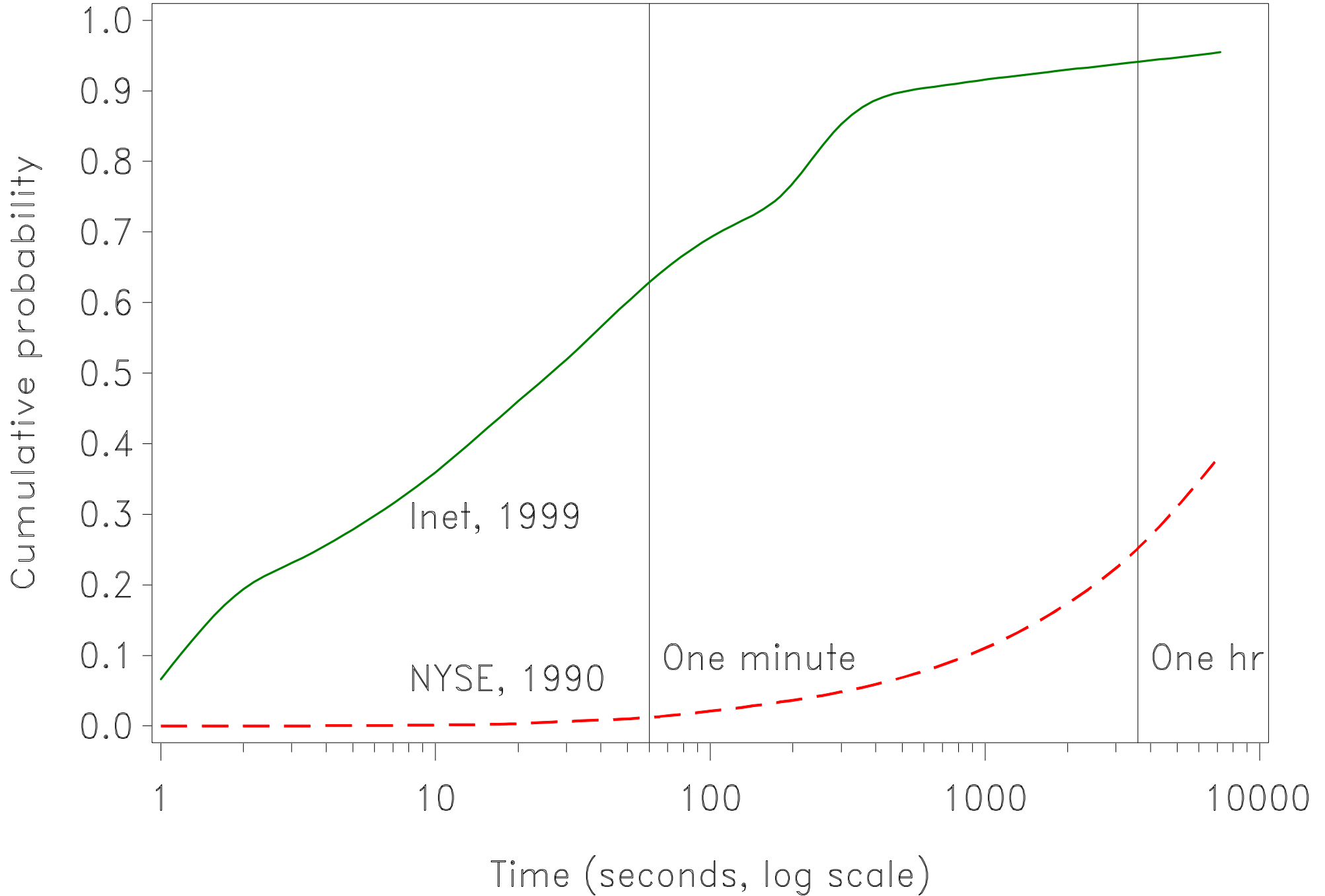
How long should I let my limit order sit?

- What are the cancellation rates in the three samples?

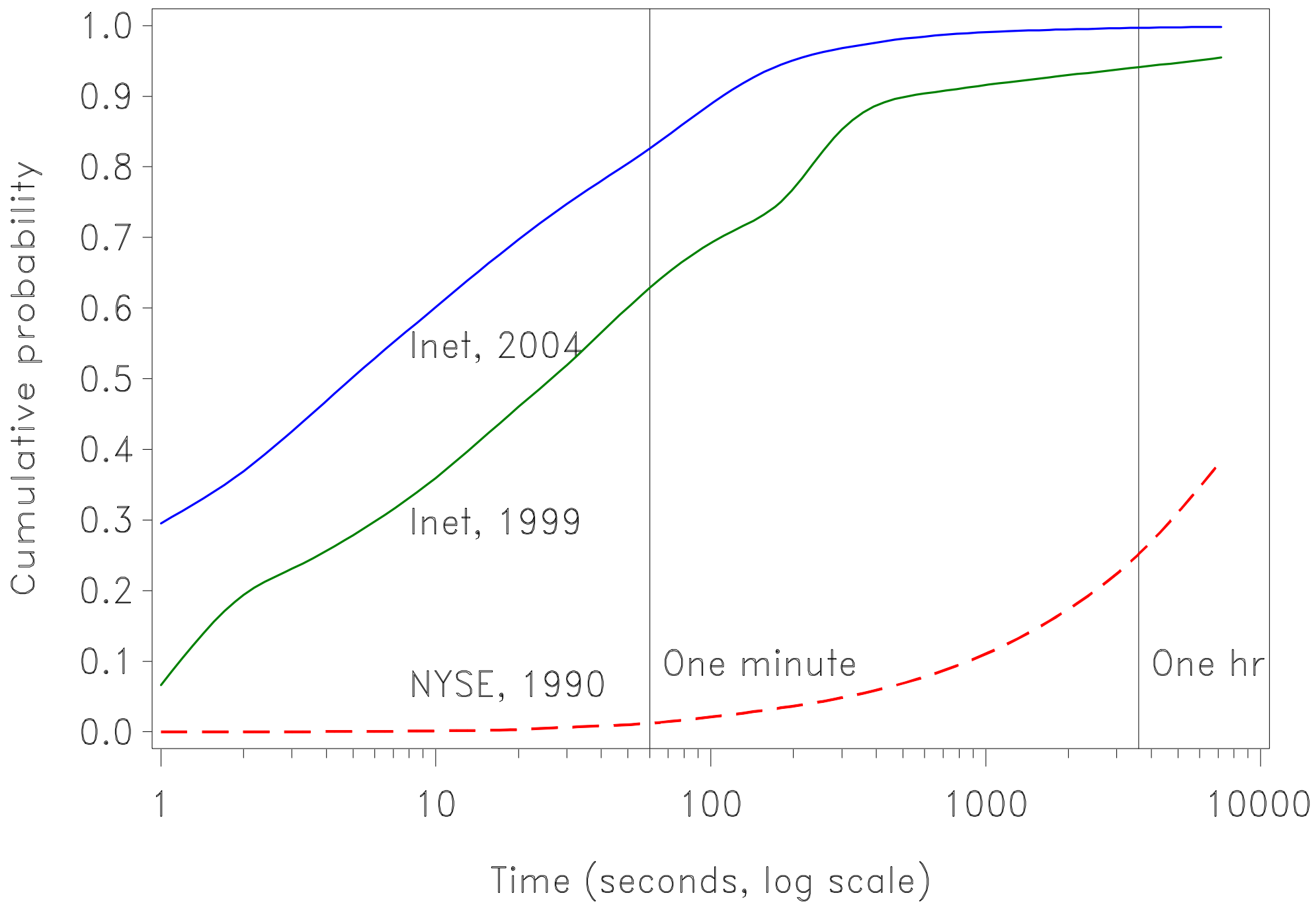
Limit Order Cancellation Probability



Limit Order Cancellation Probability



Limit Order Cancellation Probability



A fleeting limit order is ...

- Visible
- Accessible for execution
- Otherwise cancelled within two seconds

How to think about fleeting orders: background

- Make vs. Take
- Liquidity suppliers vs. Demanders
- Dealers and specialists vs. Customers
- Market orders vs. Limit orders

Latent liquidity

- Who would respond to a fleeting order?
- Agents who:
 - ▣ closely monitor the market
 - ▣ willing and available to trade, but ...
 - ▣ can't or won't post their best price.

A different sort of equilibrium

- Based on the search for latent liquidity
- Made possible by technology
- Driven by:
 - ▣ Decimalization
 - ▣ Fragmentation of trade