

TRACKING ANGEL RETURNS

Robert E Wiltbank, PhD

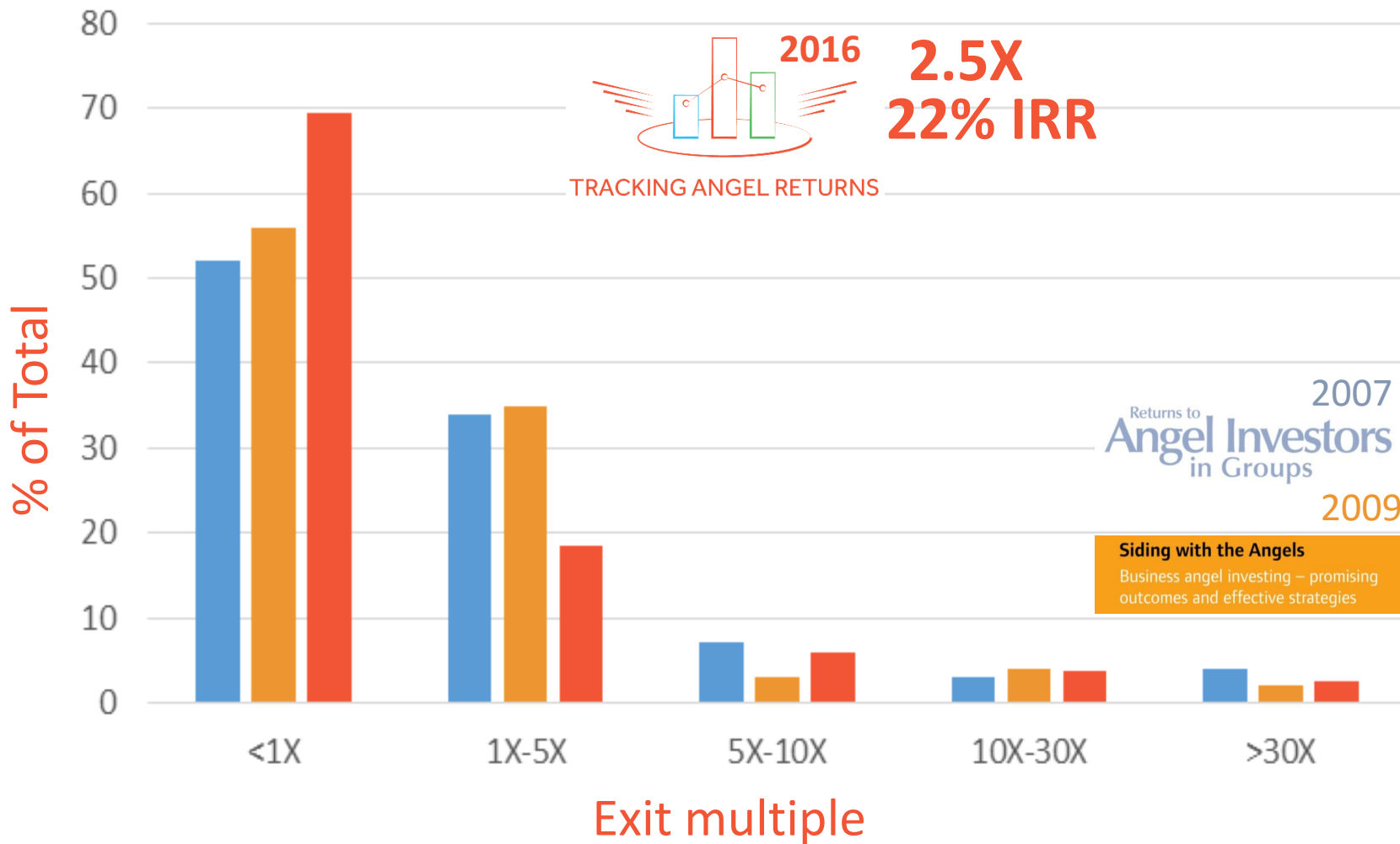
Prof. Wade T Brooks

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Distribution of Outcomes



Tracking Angel Returns

Key Take Aways

The overall cash on cash multiple is estimated at **2.5X Capital**.
The **holding period** has increased by 25% to **4.5 years** on average.
This leads to an **gross IRR of 22%**.

10% of all exits generated 85% of all cash.

Angel investing, like formal VC, is a homerun game, where many investments result in losses, but the occurrence of large homeruns are the key driver of the rate of return.





The **failure rate** (exits at less than 1X) climbed to **70%**.

Investments that might have otherwise delivered a 1X-5X weren't able to reach those exits during the recession in 09/10/11. **Homerun exits still represent about 10% of all outcomes** which kept the overall multiple at 2.5X.

As with the prior studies and also formal VC, the distribution is highly skewed: **the median investment is a loss, while the mean is a 2.5X multiple.**

The consistent pattern of outcomes across multiple studies (which cover different time frames, economic cycles, geographies, and units of analysis) increases our confidence that these results are representative of outcomes to U.S. group angel investing.

Perspective

	Multiple	Hold	IRR	<1X	10% of exits to \$
2016 	2.5X	4.5yrs	22%	70%	85%
2007 	2.6	3.5	27%	52%	90%
2009 	2.2	3.6	22%	56%	80%
 Early stage VC '05-'11	2.1		29%		

Gross TVPI & includes carried value

Tracking Angel Returns

The DATA

245 complete investments (*was 240 in '09 & 450 in '07*)

91% of events occurred between 2010-2016

100% U.S.

95% of investments made post 2001

Some bias toward angel firms that subsequently take VC\$

- Sources for detail:
Pitchbook & Inventurist & Angel funds/side car funds.
- Completed investments ONLY
(liquidity events or closures, no estimated carried value)

Raising Capital in the HALO Set

- Investors own 2/3 of a venture's equity by liquidity event
- VC was involved in 2/3rds of the ventures
- VC's are significantly related to success
45% of the <1X outcomes, but 70% of the >1X

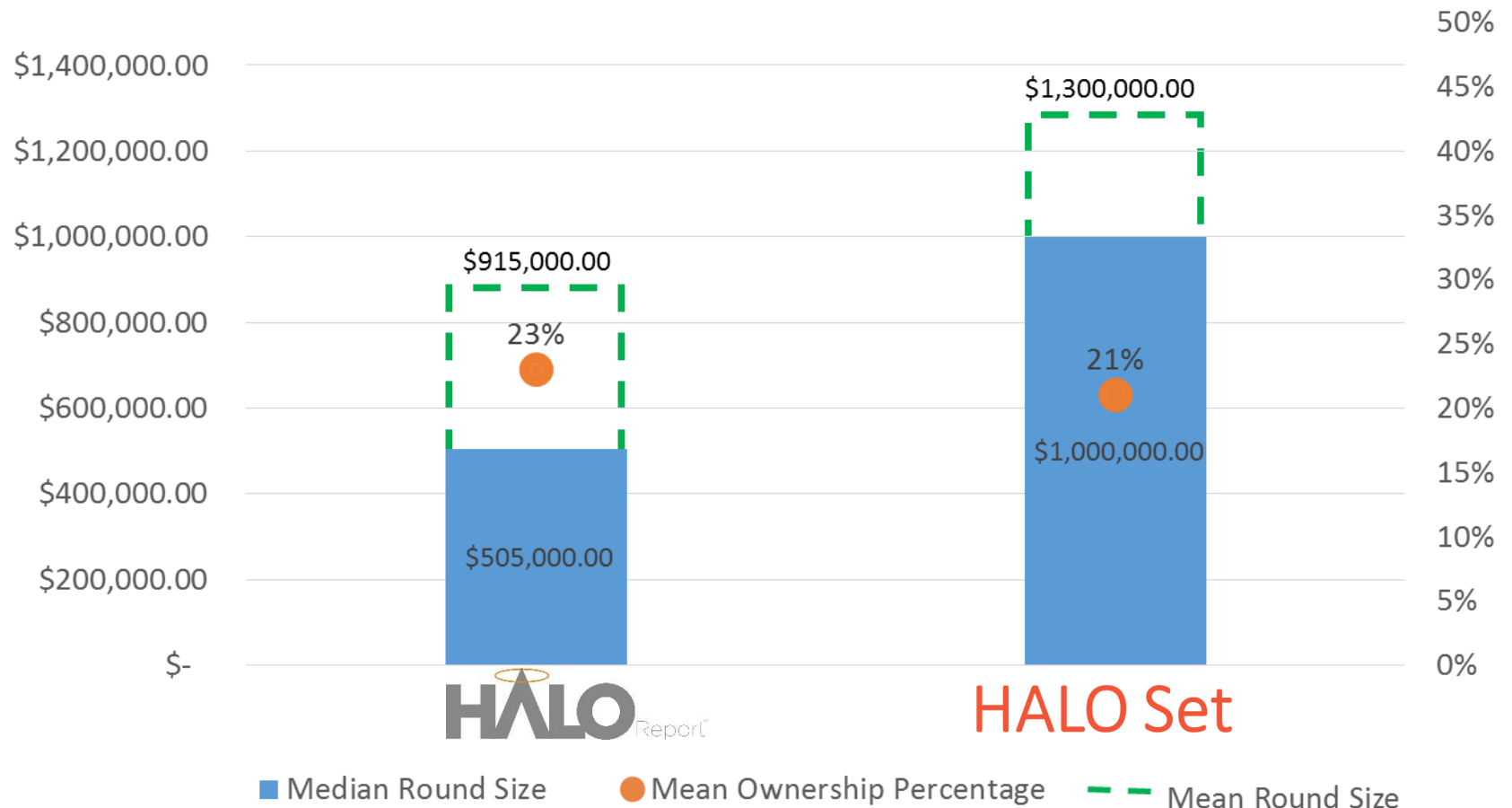
Completed investments: pre-money valuation = \$4.0M

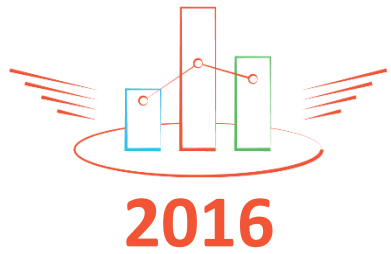
Ongoing investments: pre-money valuation = \$5.0M

Comparable years for whole HALO data set = \$3.2M

Round Size & Ownership Percentage in first round with angels only

As valuation climb, so too does round size, resulting in a fairly stable % of equity owned post an early stage venture round.





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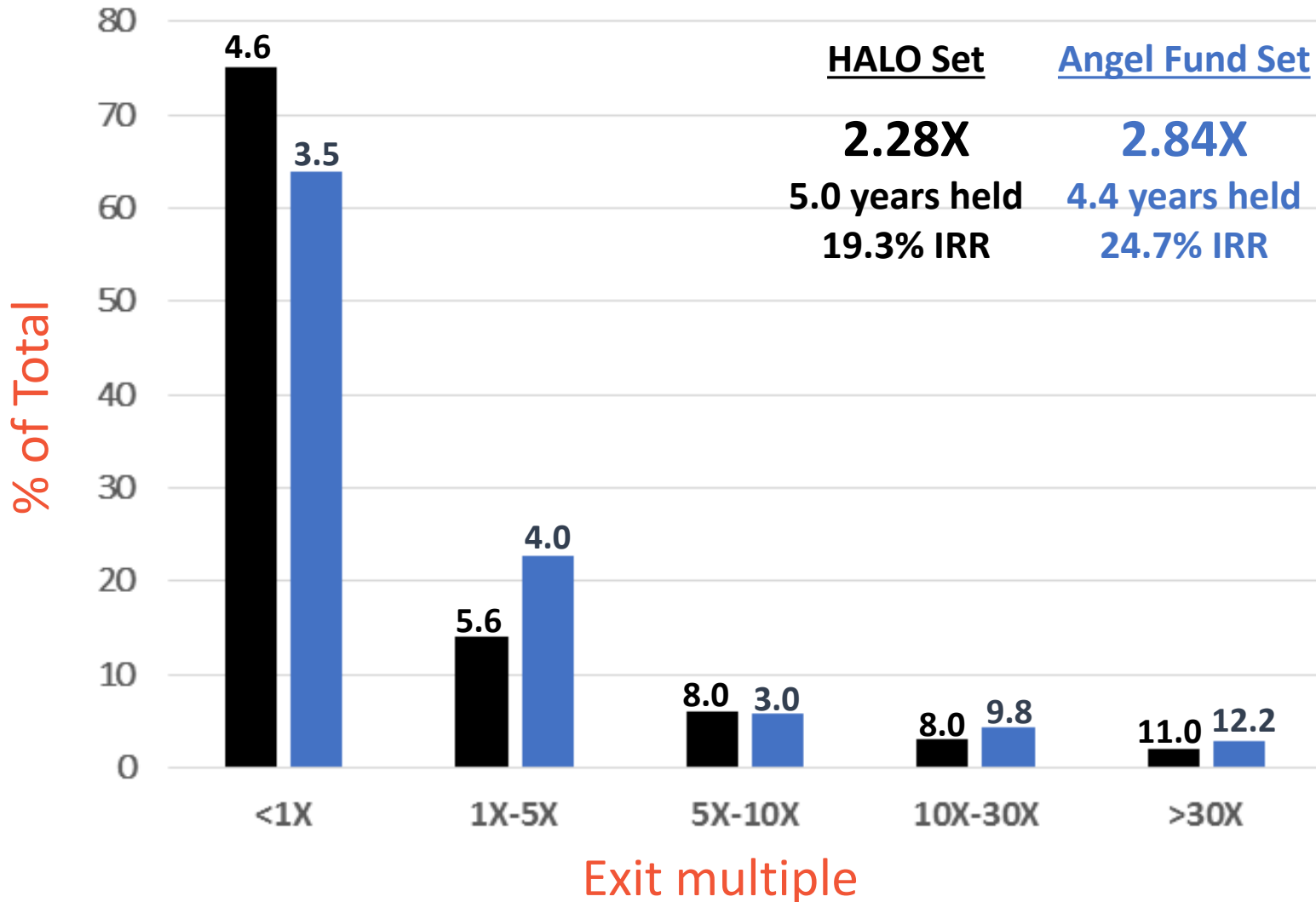
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Methods & Sources

These 2 sets were combined to create the overall estimate reported in this '16 Tracking Angel Returns study.



Methods & Sources

The following slides describe the sources/biases of the two data sets compiled for this study.

HALO Report Set

- Longitudinal panel data of firms reported to Halo prior to 2012
- Tracked via Pitchbook & Inventurist
- Completed investments only (liquidity events or closures)

Angel Fund Set

- Sample of US Angel Funds (sidecar & direct)
- Direct report of investments & outcomes
- Completed investments only (liquidity events or closures)

HALO Report Set

VERY different approach than the '07 Study.

Good: No survivor bias, Minimal selection bias, Repeatable

Bad: **Right justified data**, Less data, **VC bias**, Fewer strategic points

More Visibility of VC backed firms, thus more data with VC
2/3 have VC\$ in addition to Angel\$ (1/3 in the '07 study)

Angel Resource Institute Directly collects quarterly investment data from angel groups.

Pitchbook Scraping & collecting from ventures and investors;
Active fact checking through direct venture contact.

Inventurist Focused on activity indicators/survival via social media

The HALO Set

356 total firms identified in the HALO process prior to 2012

109 of those are now completed investments

56% of events from **2013-2016**

36% from **2010-2012**

8% prior to **2010**

Angel Fund Set

Sample of U.S. angel funds (sidecar & direct)

31 funds contacted, 20 participated

Good: direct investor gp/lp accuracy, **Repeatable**

Bad: self selection risk, some survivor bias risk,
limited strategic variables, 0 exits for many so far

136 complete investments

65% of events from **2013-2016**

25% from **2010-2012**

10% prior to **2010**