



FinTech valuation:
improvements for
better decision-making

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Introduction

Investment into European FinTech has grown rapidly in recent years, increasing from \$0.3bn in 2012 to \$3.6bn in 2018 and producing six unicorns (i.e., companies valued at \$1.0bn or more) as of early 2019.^{1,2} This trend is set against a broader backdrop of annual European venture capital (VC) deal value growth from \$7.7bn to \$23.5bn between 2008 and 2018, fueled in part by the rise of corporate venture capital vehicles (CVCs).³

The global financial crisis spurred regulators and limited partners (LPs) alike to increasingly demand robust fair value (FV) reporting from VC and CVC funds. From experience in serving this market, however, there is an observed risk of meaningful FV measurement shortcomings that have the potential to:

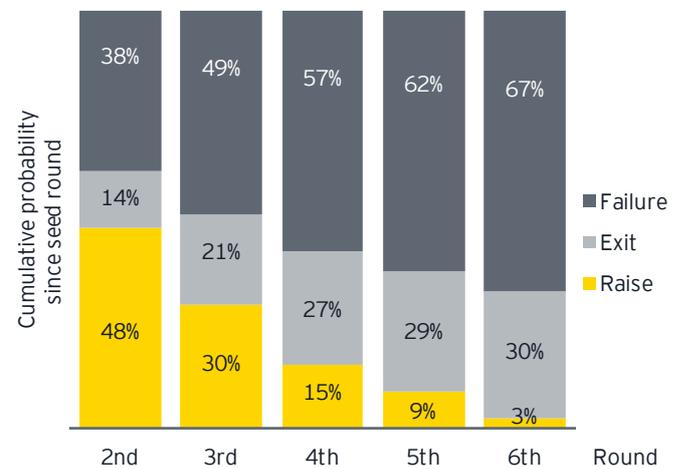
- ▶ Expose funds and their managers or parent organizations to regulatory risk, particularly where the public interest is high (e.g., in the case of a bank investing in a FinTech)
- ▶ Skew fund investors' expectations
- ▶ Impact the quality of investment decisions

This paper summarizes the most frequently encountered FV measurement shortcomings observed at valuations of FinTech investments EY professionals have reviewed for VC and CVC funds.

Common biases

- ▶ *Survivorship bias:* Investors tend to focus on familiar VC-backed success stories in forming their FV estimates, without always appropriately considering data on the less familiar but much more frequent failures (see chart).

Probability of survival of early-stage companies



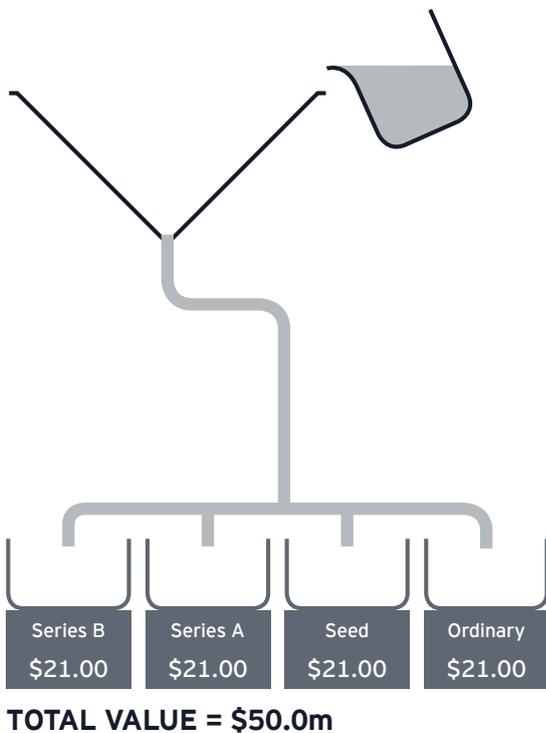
Source: CB Insights⁴

- ▶ *Lack of consideration of broader market movements:* Regardless of whether a valuation is based on observable metrics for comparable quoted companies, a significant market movement in the investee's sector should impact the valuation analysis.
- ▶ *Look-ahead bias:* Valuations should not be based on information that was unavailable as at the measurement date (e.g., a funding round for the investee taking place months after the accounting period end).

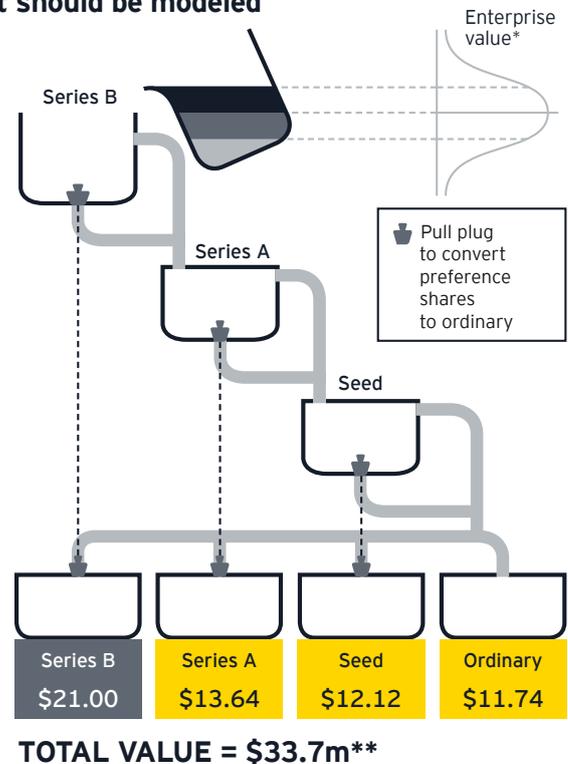
Capital structure-related valuation considerations

- ▶ Valuations based on a static waterfall implicitly assume an exit as of the valuation date, and therefore tend to misstate the value of any instruments that include an element of optionality (e.g., preference shares, loans with exit fee elements, share options or warrants). Very often, such models assign nil values to options or ordinary equity, which do not reflect what a market participant would pay for them.
- ▶ Valuations of convertible note investments at their principal amount plus accrued interest effectively ignore the optionality embedded within these investments.
- ▶ EY professionals frequently find the quantitative modeling of contingent consideration in the form of 'earn-outs' (more typical for companies from the growth stage onward) insufficiently reflect the range of possible outcomes.
- ▶ EY professionals often observe errors in valuations based on the most recent price:
 - ▶ All existing shares revalued to the price paid for preference shares issued in the most recent funding round, ignoring differences in terms among share classes (i.e., most notably, liquidation and exit preferences often set at a 1.0x 'multiple of money' or more) and thus causing the FV of specific instruments held by a fund to be misstated.
 - ▶ The price paid for preference shares in the most recent funding round multiplied by the fully diluted share count to arrive at an (inappropriate) overall business valuation.

What tends to be modeled



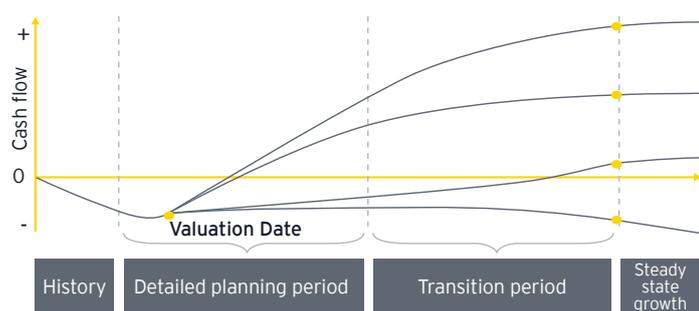
What should be modeled



*An option pricing or scenario-based model uses a probabilistic range of EV

**Implied by a Series B preferred share funding round price of \$21.00, given certain interest rate, volatility and time horizon assumptions

'VC Method' implementation pitfalls



- ▶ Managers may fail to appropriately adjust the valuation of comparable companies for differences in their stage of development or time to maturity.
- ▶ EY professionals often observe a lack of rigorous valuation trajectory modeling that would:
 - ▶ Explicitly incorporate key technological and commercial milestones in the construction of scenarios
 - ▶ Apply appropriate probabilities (i.e., including failure rates) to these scenarios

Easily understood examples include clinical-stage biotechnology companies, for which reliable failure or survival rate data by trial stage are available. In FinTech, similar milestones exist, e.g., in the form of regulatory approvals or securing the first major customer. Failure to adopt a robust approach can result in implicit assumptions that are inconsistent with observable market data.

- ▶ Managers often aggregate a range of considerations into relatively large, insufficiently justified premiums or discounts to observable values, where reasonably robust quantitative modeling would be possible (e.g., conflating discounts for points of difference with those related to the time value of money).

Developments since the transaction date

Valuations based on the most recent investment price frequently may not adequately consider:

- ▶ An investee's progress between the date of the most recent transaction and the measurement date, relative to the plans and key milestones that had been in place as of the transaction date (e.g., where the last funding round occurred more than a few months prior to the accounting period end)
- ▶ The size of the reference transaction in relation to the overall value of the business (e.g., a 1% stake) and the size of the stake in question
- ▶ Transaction-specific circumstances that may be inconsistent with the definition of FV (e.g., transactions not at arm's length, one indicator being transactions that involve the issuance of shares only to existing investors)

Conclusion

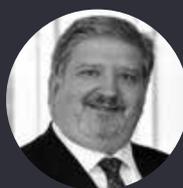
FV measurement weaknesses have the potential to damage investors' relationships with their funds, or even their commitment to VC as an asset class. Such issues tend to become acute in times of crisis. Funds should review their valuation processes and models to ensure they are robust and can stand up to scrutiny.

References

1. CB Insights, *Fintech Trends to Watch in 2018*, 31 January 2018, © 2018 CB Information Services, Inc.
2. CB Insights, *Global Fintech Report Q1 2019*, 30 April 2019, © 2019 CB Information Services, Inc.
3. PitchBook, *2018 Annual European Venture Report*, 16 January 2019, © 2019 PitchBook Data, Inc.
4. "Venture Capital Funnel Shows Odds Of Becoming A Unicorn Are About 1%," *CB Insights website*, <https://www.cbinsights.com/research/venture-capital-funnel-2/>, accessed 20 June 2019.

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