



HOULIHAN LOKEY CASE STUDY

Houlihan Lokey Assists Morningstar in the Creation of the Morningstar PitchBook Global Unicorn Indexes

THE CLIENT

Morningstar Indexes is a leading provider of index solutions that draw on Morningstar's data and research to help investors understand evolving markets and build more effective portfolios.

INTRODUCTION

The huge shift of investor money from mainstream public markets to private markets is one of the biggest trends in the global money management industry. Morningstar observed that the tools and benchmarks necessary to support investors' needs have not kept pace. While capital continues to flow into them, private markets remain largely opaque. Because there was no representative index for these limited-visibility companies, allocators lacked a true proxy for the private markets or reliable performance benchmarks. Limited partners lacked the consistent, comparable information they needed to make informed investment decisions. This lack of indexes, coupled with the lack of reporting requirements for private companies, left many investors at a disadvantage.

THE CHALLENGE

The lack of regular, observable prices in private companies creates the potential for illusions in private company returns when compared with public equity returns. Private companies, unlike public companies, are not required to disclose their financial information. For an index to be a reasonable proxy of the market or the asset class, it should reflect the best available pricing of the underlying securities.

Morningstar Indexes sought an advisor with substantial valuation experience to enhance its new index offering by providing a practitioner's perspective and engaged Houlihan Lokey to fill this role. PitchBook, a subsidiary of Morningstar and leading provider of private market data and research, joined forces with its parent company's indexes division to tackle the challenge.

THE SOLUTION

Leveraging PitchBook's extensive data on private transactions, Morningstar and PitchBook created a first-of-its-kind family of Unicorn Indexes, which represent the performance of late-stage, venture-capital-backed private companies that have reached a post-money valuation of \$1 billion.

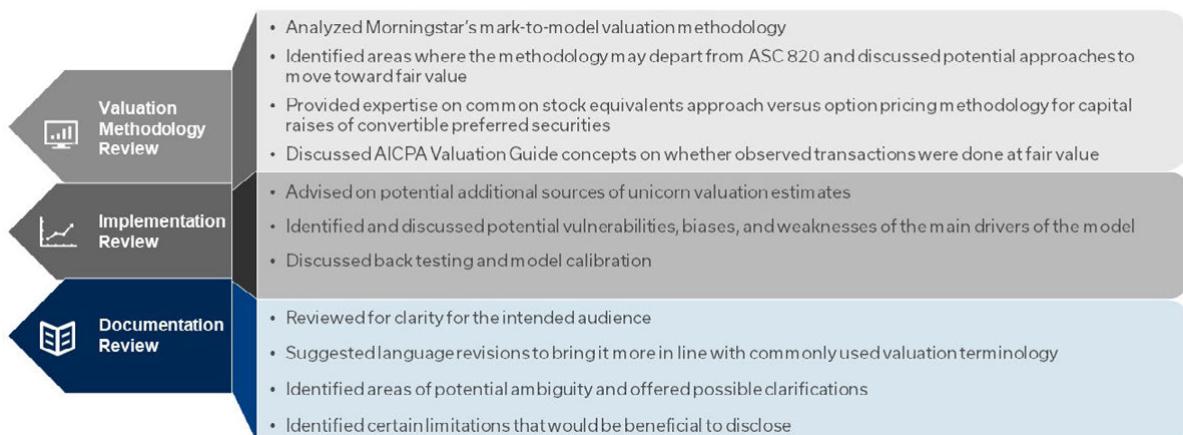
Using public and private sources of information, Morningstar developed a matrix to value each unicorn daily. This mark-to-model methodology uses three factors: past subject company deal data, comparable private company deal data, and public market comparable values. The model was designed to overcome the obstacles of scarce, asymmetric information and subjective human input.

In creating the model, Morningstar began with past deals, which reflect real-world valuations. However, the older the deal, the less relevant it becomes. Deals of privately owned companies similar to the subject company also contributed to price discovery. These comparisons are based on market intelligence provided by PitchBook industry analysts. Finally, Morningstar and PitchBook mapped unicorns to public market industries, and a Morningstar index representing the performance of the global industry peer group is used in the model.

Morningstar recognized the need to change the weighting of its models' three inputs as their relevance changes over time. The weight of the past deals factor and the comparable private market deals factor are decayed as time passes from their respective deal dates.

In creating the Houlihan Lokey Private Performing Credit Index, we also faced challenges in model calibrations and comparisons against public comparables and benchmarks. We applied that experience to our role as advisor to Morningstar Indexes.

HOULIHAN LOKEY ROLE



THE OUTCOME

Applying its mark-to-model methodology, Morningstar launched the Morningstar PitchBook Global Unicorn Indexes, the first index series to provide daily insights into the behavior and performance of late-stage venture-capital-backed companies. The indexes empower investors to better understand and access this rapidly growing but difficult-to-track asset class. The chart below shows the index values of the Morningstar Pitchbook US Unicorn Index and the Nasdaq for the past year.



Morningstar Indexes conducted an efficacy test of its pricing model that spanned January 2021 to June 2022 and achieved impressive results. The evaluation showed the model accurately identified 79.2% of major up rounds (where valuations rose more than 5% from the previous investment round) and 73.1% of major down rounds (for those with drops larger than 5%). An aggregate success rate across all deals was 78.8%.

As private equity investments become increasingly integrated into retirement and individual investment portfolios, investors now have unprecedented access to a comprehensive market overview. The Morningstar PitchBook Global Unicorn Indexes offer daily snapshots of late-stage venture opportunities, contributing significantly more transparency than ever before.

For more information on the [Morningstar PitchBook Global Unicorn Indexes](#), [click here](#).

For more information or to view Houlihan Lokey's [Private Performing Credit Index](#), [click here](#).

CONTACTS

To receive further information, please contact our Portfolio Valuation and Fund Advisory Services team members listed below.



Cindy Ma

Managing Director
Global Head of Portfolio Valuation and Fund
Advisory Services
CMa@HL.com



Terence Tchen

Senior Advisor
TTchen@HL.com



David Wagner

Senior Advisor
DWagner@HL.com



Andrew MacNamara

Director
AMacNamara@HL.com



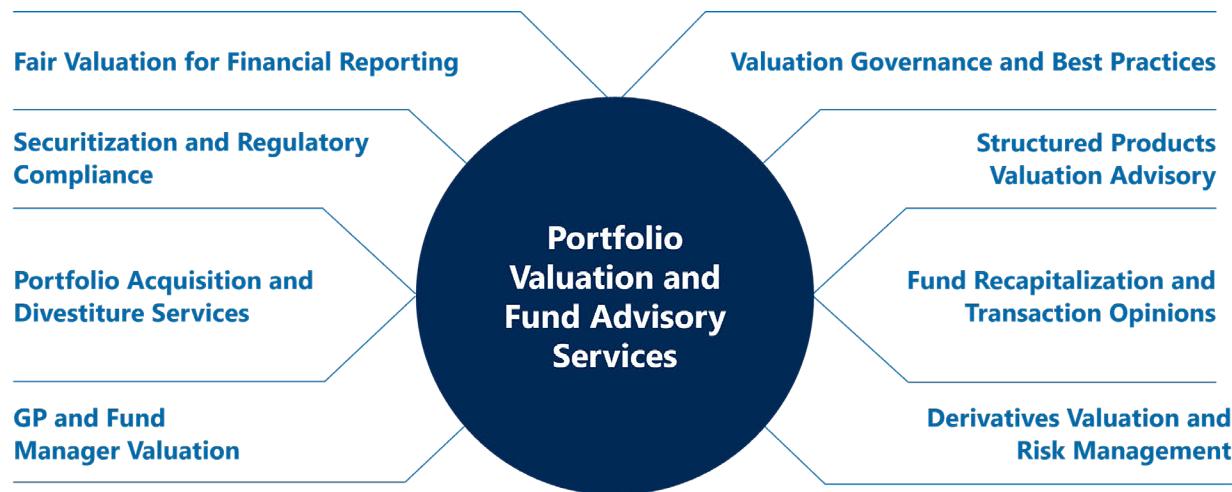
Ian Coffman

Senior Vice President
ICoffman@HL.com

ABOUT PORTFOLIO VALUATION AND FUND ADVISORY SERVICES

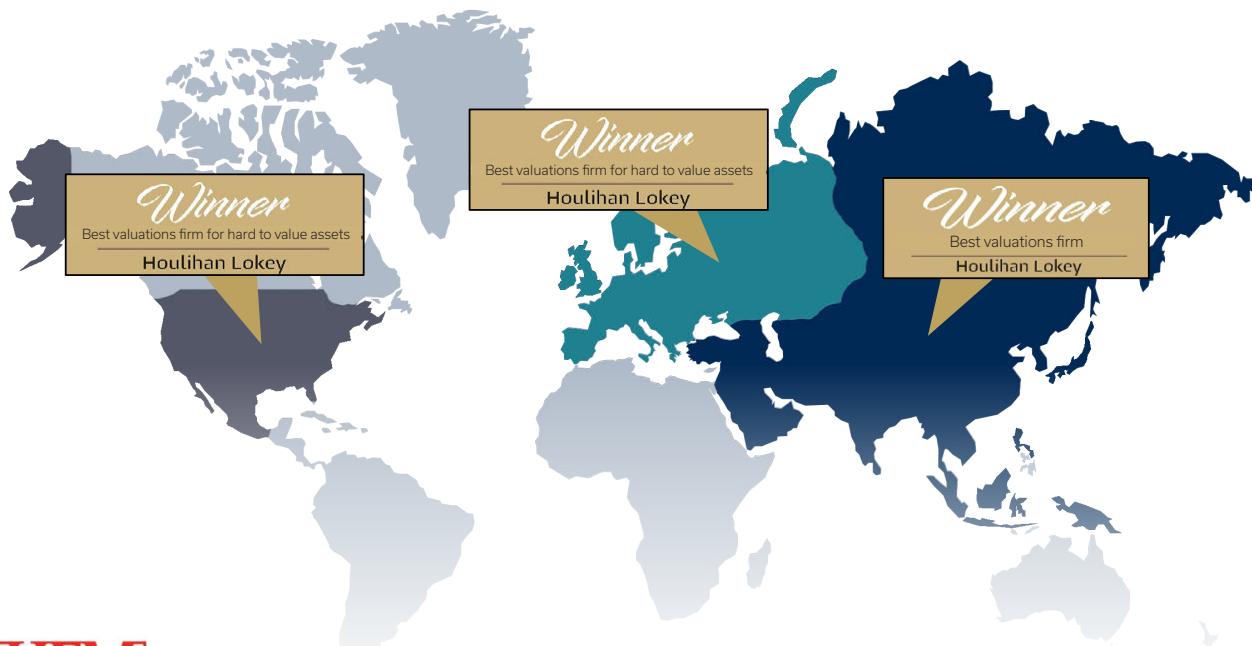
Houlihan Lokey's Portfolio Valuation and Fund Advisory Services practice is a leading advisor to many of the world's largest asset managers who rely on our strong reputation with regulators, auditors, and investors; private company, structured product, and derivative valuation experience; and independent voice. We value illiquid assets on behalf of hundreds of hedge funds, private equity firms, financial institutions, corporations, and investors. We rapidly mobilize the right team for the job, drawing on our expertise in a wide variety of asset classes and industries along with our real-world transaction experience and market knowledge from our dedicated global Financial and Valuation Advisory business.

OUR SERVICE AREAS



GLOBAL RECOGNITION

The HFM Services Awards named Houlihan Lokey "Best Valuations Firm for Hard to Value Assets" in the U.S. in 2018–2022 and in Europe in 2020–2022, and it was named "Best Valuations Firm" in Asia in 2020–2022. Houlihan Lokey has now won these awards in all three geographic regions for three consecutive years!



The HFM Services Awards recognize hedge fund service providers that have demonstrated exceptional client service, innovative product development, and strong and sustainable business growth over the prior 12 months.



Houlihan Lokey

LEADING GLOBAL INDEPENDENT INVESTMENT BANK

North America

Atlanta	Miami
Boston	Minneapolis
Chicago	New York
Dallas	San Francisco
Houston	Washington, D.C.
Los Angeles	

Europe and Middle East

Amsterdam	Milan
Dubai	Munich
Frankfurt	Paris
London	Stockholm
Madrid	Tel Aviv
Manchester	Zurich

Asia-Pacific

Beijing	Nagoya
Fukuoka	Osaka
Gurugram	Shanghai
Ho Chi Minh City	Singapore
Hong Kong SAR	Sydney
Mumbai	Tokyo



Important Disclosure

© 2023 Houlihan Lokey. All rights reserved. This material may not be reproduced in any format by any means or redistributed without the prior written consent of Houlihan Lokey.

Houlihan Lokey is a trade name for Houlihan Lokey, Inc., and its subsidiaries and affiliates, which include the following licensed (or, in the case of Singapore, exempt) entities: in (i) the United States: Houlihan Lokey Capital, Inc., and Houlihan Lokey Advisors, LLC, each an SEC-registered broker-dealer and member of FINRA (www.finra.org) and SIPC (www.sipc.org) (investment banking services); (ii) Europe: Houlihan Lokey Advisory Limited, Houlihan Lokey EMEA, LLP, Houlihan Lokey (Corporate Finance) Limited, and Houlihan Lokey UK Limited, authorized and regulated by the U.K. Financial Conduct Authority; Houlihan Lokey (Europe) GmbH, authorized and regulated by the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht); (iii) the United Arab Emirates, Dubai International Financial Centre (Dubai): Houlihan Lokey (MEA Financial Advisory) Limited, regulated by the Dubai Financial Services Authority for the provision of advising on financial products, arranging deals in investments, and arranging credit and advising on credit to professional clients only; (iv) Singapore: Houlihan Lokey (Singapore) Private Limited and Houlihan Lokey Advisors Singapore Private Limited, each an "exempt corporate finance adviser" able to provide exempt corporate finance advisory services to accredited investors only; (v) Hong Kong SAR: Houlihan Lokey (China) Limited, licensed in Hong Kong by the Securities and Futures Commission to conduct Type 1, 4, and 6 regulated activities to professional investors only; (vi) India: Houlihan Lokey Advisory (India) Private Limited, registered as an investment adviser with the Securities and Exchange Board of India (registration number INA000001217); and (vii) Australia: Houlihan Lokey (Australia) Pty Limited (ABN 74 601 825 227), a company incorporated in Australia and licensed by the Australian Securities and Investments Commission (AFSL number 474953) in respect of financial services provided to wholesale clients only. In the United Kingdom, European Economic Area (EEA), Dubai, Singapore, Hong Kong, India, and Australia, this communication is directed to intended recipients, including actual or potential professional clients (UK, EEA, and Dubai), accredited investors (Singapore), professional investors (Hong Kong), and wholesale clients (Australia), respectively. Other persons, such as retail clients, are NOT the intended recipients of our communications or services and should not act upon this communication.

Houlihan Lokey gathers its data from sources it considers reliable; however, it does not guarantee the accuracy or completeness of the information provided within this presentation. The material presented reflects information known to the authors at the time this presentation was written, and this information is subject to change. Any forward-looking information and statements contained herein are subject to various risks and uncertainties, many of which are difficult to predict, that could cause actual results and developments to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. In addition, past performance should not be taken as an indication or guarantee of future performance, and information contained herein may be subject to variation as a result of currency fluctuations. Houlihan Lokey makes no representations or warranties, expressed or implied, regarding the accuracy of this material. The views expressed in this material accurately reflect the personal views of the authors regarding the subject securities and issuers and do not necessarily coincide with those of Houlihan Lokey. Officers, directors, and partners in the Houlihan Lokey group of companies may have positions in the securities of the companies discussed. This presentation does not constitute advice or a recommendation, offer, or solicitation with respect to the securities of any company discussed herein, is not intended to provide information upon which to base an investment decision, and should not be construed as such. Houlihan Lokey or its affiliates may from time to time provide investment banking or related services to these companies. Like all Houlihan Lokey employees, the authors of this presentation receive compensation that is affected by overall firm profitability.