How Useful are Brand Valuation Methods?
A Validation Study

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SUMMARY

Research question and approach

The financial value of a brand is of high interest to many stakeholders and decision makers. As a result, several methods for measuring the financial value of a brand have been suggested in the past. Their results, however, differ to a great extent, which raises serious concerns about the validity of these methods. Unfortunately, the true value of a brand cannot be observed. This makes it impossible to assess how close a model's estimate comes to the true value. While unpromising at first glance, this dilemma is not new but well known in the social sciences that frequently need to measure unobserved constructs. In fact, this discipline has developed a rigorous framework of test procedures and statistics that evaluate the validity of a construct. Construct validity represents the correspondence of a construct and the operational procedure to measure that construct. It includes reliability, convergent validity, discriminant validity, nomological validity, and predictive validity. In this large-scale study, we adopt the established construct validation methodology to assess the validity of several brand valuation methods.

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Data

We apply the test procedure to nine prominent valuation methods that cover the basic philosophies in brand valuation, which are cost-based, market-based, and income/DCF-based approaches. The cost-based approaches include a historical cost model and an advertising stock model. The market-based approaches include the Simon and Sullivan model and the CoreBrand model. The income/DCF-based approaches comprise the models of the following vendors/authors, Interbrand, Millward Brown, Semion, Brand Finance, and Ailawadi, Lehmann, and Neslin. The data cover a period of 22 years from 1990 to 2001. The sample includes 36,992 financial values of 4,879 brands that originate from 89 countries and represent more than 70 industries.

Main conclusion

The validity test produces interesting and surprising results. Generally speaking, the various brand valuation methods perform quite well in terms of reliability, convergent validity, and discriminant validity, although there remain concerns about convergent validity for a few methods. In contrast, the methods generally do not sufficiently demonstrate their nomological and predictive validity. Only very few methods satisfy these criteria. Considering all validity test criteria together, it appears that the market-based methods, i.e. the Simon-and-Sullivan model and the CoreBrand model, perform best in meeting the validity requirements. Since it is a non-traditional approach we were surprised that our test revealed the advertising-stock model performs comparably to the market-based models and better than the income/DCF-based models.

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OVERVIEW OF VALIDATION RESULTS

Validation criteria	Reliability/ stability		Convergent validity	Discriminant validity	Nomological Validity		Predictive validity
Test method(s)	Test-retest reliability	Variance decomposition	Correlation Co-integration test	Correlation Co-integration test	Correlation Co-integration test	Granger causality test	Stock return response model (t-test)
Required threshold	r > .90	Ratio of cross-sectional to time variance > 3	r > .50 ADF > t	r < .30 ADF < t	r > .40 ADF > t	Ratio of expected to reverse causalities > 2	t > 1.96
Cost-based methods							
Ad-stock model	✓	✓	✓	✓	✓	✗	✗
Historical Costs	✓	✗	✗	✓	✓	✗	✗
Market-based methods							
Simon and Sullivan (1993)	✓	✓	✓	✓	✓	✗	✗
CoreBrand	✓	✓	✓	✗	✓	✗	✓
Income/DCF forecast-based methods							
Future-oriented							
Interbrand	✓	✓	✗	✓	✗	✗	✓
Millward Brown	✓	✓	✗	✗	✗	✗	✗
Semion	✓	✓	✗	✓	✓	✗	✓
Brand Finance	✓	✓	✓	✗	✓	✗	✗
Current period-oriented							
Ailawadi, Lehmann, and Neslin (2003)	✓	✓	✗	✓	✗	✗	✗
Across all methods	*All*	*8 of 9*	*4 of 9*	*6 of 9*	*6 of 9*	*0 of 9*	*3 of 9*

Notes: ✓ passed, ✗ not passed; r denotes the correlation coefficient, ADF is the augmented Dicky-Fuller test statistic applied in co-integration tests, and t refers to the respective t-statistic.

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