

Valuation and Forensics: Economic Benefit Streams

By Darrell D. Dorrell, CPA/ABV, MBA, ASA, CVA,
CMA, DABFA, and
Gregory A. Gadawski, CPA/ABV, CVA, CFE

Despite the attention focused on financial forensics in recent years, virtually nothing has been published on how to use these techniques in valuation. The primary impediment has been one of *misunderstanding*. That is, valuers unconsciously (or even purposely) equate the term “forensics” with “fraud.” That posture somehow distances them from a perceived liability associated with financial forensics and the need for a codified body of knowledge.

The valuation profession rests upon only three essential components: an economic benefit stream, a required rate of return, and secondary adjustments, all represented by the following formula:

$$V = \left[\frac{\text{EBS}}{R} \right] S_a$$

V	Value
EBS	Economic Benefit Stream
R	Required Rate of Return
S _a	Secondary Adjustments

The derivation of an economic benefit stream is a forward-looking concept, which can be determined through a wide variety of quantitative and qualitative forecasting techniques. The techniques can generally be categorized as historically driven, management-driven, or independent-variable-driven to derive the outlook for the subject business.

The required rate of return and secondary adjustment components can be exceedingly complex

and thus require considerable deliberation. Nonetheless, one would be hard-pressed to find substantive guidance for constructing an economic benefit stream.¹ For example, assuming six years of financial statement history, valuation reports will often contain some weighted-average calculation intended to represent the near-term outlook of the stream. That is, a 3-2-1 (or other) weighting of the recent historical stream may be the only “science” applied. Worse, the report’s supporting rationale may be nothing more than a statement that such method was used by the appraiser. Surprisingly, even a highly regarded and very recent valuation book recommends the same tired, stale approach.

Economic benefit streams in damages calculations fare no better. While the literature and related technical guidance typically address issues regarding *ex post*² and *ex ante*³ matters, very little practical substantive guidance for economic benefit stream construction can be found.

Therefore, this section delivers logical, practical, and defensible guidance for the forensic operator striving to develop a representative economic benefit stream in either valuation or damages matters. Furthermore, it provides a foundation upon which the forensic operator can continuously build and refine economic benefit streams.

-
- 1 One notable exception is *Quantitative Business Valuation: A Mathematical Approach for Today's Professionals*, by Jay B. Abrams; McGraw-Hill, 2001.
 - 2 Refers to past events when uncertainties have been eliminated.
 - 3 Refers to future, unknown events.

BUSINESS VALUATION UPDATE

Executive Editor: Jan Davis
 Legal Editor: Sherrye Henry Jr.
 CEO, Publisher: David Foster
 Managing Editor: Janice Prescott
 Graphic & Technical Designer: Monique Nijhout
 Customer Service: Jasmine Pearsall
 VP of Sales: Lexie Gross
 President: Lucretia Lyons

EDITORIAL ADVISORY BOARD

CHRISTINE BAKER
 CPA/ABV/CFF
 PARENTEBEARD
 NEW YORK, NY

JARED KAPLAN, ESQ.
 MCDERMOTT, WILL & EMERY
 CHICAGO, IL

NEIL J. BEATON
 CPA/ABV, CFA, ASA
 ALVAREZ & MARSAL VALUATION
 SERVICES
 SEATTLE, WA

GILBERT E. MATTHEWS CFA
 SUTTER SECURITIES
 INCORPORATED
 SAN FRANCISCO, CA

JOHN A. BOGDANSKI, ESQ.
 LEWIS & CLARK
 LAW SCHOOL
 PORTLAND, OR

Z. CHRISTOPHER MERCER
 ASA, CFA
 MERCER CAPITAL
 MEMPHIS, TN

JOHN W. PORTER, ESQ.
 BAKER & BOTTS
 HOUSTON, TX

MICHAEL A. CRAIN
 CPA/ABV, ASA, CFA, CFE
 THE FINANCIAL VALUATION GROUP
 FORT LAUDERDALE, FL

RONALD L. SEIGNEUR
 MBA, ASA, CPA/ABV, CVA, CFF
 SEIGNEUR GUSTAFSON
 LAKEWOOD, CO

NANCY J. FANNON
 ASA, CPA/ABV, MCBA
 FANNON VALUATION GROUP
 PORTLAND, ME

BRUCE SILVERSTEIN, ESQ.
 YOUNG, CONAWAY, STARGATT &
 TAYLOR
 WILMINGTON, DE

JAY E. FISHMAN
 FASA, CBA
 FINANCIAL RESEARCH ASSOCIATES
 BALA CYNWYD, PA

JEFFREY S. TARBELL
 ASA, CFA
 HOULIHAN LOKEY
 SAN FRANCISCO, CA

LYNNE Z. GOLD-BIKIN, ESQ.
 WEBER GALLAGHER
 NORRISTOWN, PA

GARY R. TRUGMAN
 ASA, CPA/ABV, MCBA, MVS
 TRUGMAN VALUATION
 ASSOCIATES
 PLANTATION, FL

LANCE S. HALL, ASA
 FMV OPINIONS
 IRVINE, CA

KEVIN R. YEANOPLOS
 CPA/ABV/CFF, ASA
 BRUEGGEMAN & JOHNSON
 YEANOPLOS, P.C.
 TUCSON, AZ

Business Valuation Update[™] (ISSN 1088-4882) is published monthly by Business Valuation Resources, LLC, 1000 SW Broadway, Suite 1200, Portland, OR, 97205-3035. Periodicals Postage Paid at Portland, OR, and at additional mailing offices. Postmaster: Send address changes to *Business Valuation Update*[™], Business Valuation Resources, LLC, 1000 SW Broadway, Suite 1200, Portland, OR, 97205-3035.

The annual subscription price for the *Business Valuation Update*[™] is \$359. Low cost site licenses are available for those wishing to distribute the *BVU* to their colleagues at the same address. Contact our sales department for details. Please feel free to contact us via email at customerservice@BVResources.com, via phone at 503-291-7963, via fax at 503-291-7955 or visit our web site at BVResources.com. Editorial and subscription requests may be made via email, mail, fax or phone.

Please note that by submitting material to *BVU*, you are granting permission for the newsletter to republish your material in electronic form.

Although the information in this newsletter has been obtained from sources that BVR believes to be reliable, we do not guarantee its accuracy, and such information may be condensed or incomplete. This newsletter is intended for information purposes only, and it is not intended as financial, investment, legal, or consulting advice.

Copyright 2012, Business Valuation Resources, LLC (BVR). All rights reserved. No part of this newsletter may be reproduced without express written consent from BVR.

A valuation premise is used for the section, but the same principles and techniques apply to economic damages calculations.

The economic benefit stream technique is outlined in the following seven steps and is summarized as follows:

1. Array historical financial statements in both schedule and visual formats.
2. Array historical economic benefit stream(s) in both schedule and visual formats.
3. Identify historical benefit stream(s) comparison sources from three categories of independent variables as available:
 - d. The subject entity's financial history, that is, itself.
 - e. Management-prepared financial estimates (if any) such as business plans, budgets, forecasts, and projections.
 - f. Independent variables such as GDP⁴ or GDP-derived measures, GSP,⁵ or GSP measures, industry sector measures, and so forth.
7. Illustrate and quantify as available the relationships for each of the three categories listed in Step 3.
8. Estimate and visually array as available the history, planned, and correlated measures for each of the three categories listed in Step 3. Anything prepared by XYZ is considered a "dependent" variable, while GDP, GSP, and related sources are considered "independent" variables.
9. Compare and contrast the respective strengths and weaknesses of the quantitative and visual relationships.
 - 4 Gross domestic product—The total annual value of all goods and services produced by labor and capital within a country's borders.
 - 5 Gross state product—The total annual value of all goods and services produced by labor and capital within a state's borders.

Reprinted with permissions from Business Valuation Resources, LLC

10. Conclude upon a stream that reflects the strongest quantitative and/or visual representations from the preceding steps. The selected stream may be best represented by a convergence of streams.

The preceding steps outline the reasoning applied to the respective assignment, which in aggregate are persuasive in their simplicity,

defensibility, and logic. More important, for most audiences, the visualization of the history and alternative outlooks leads to the same logical and empirical conclusion reached by the forensic operator.

This article is excerpted from Dorrell and Gadawski's Financial Forensics Body of Knowledge, just published by John Wiley & Sons.