



ELSEVIER

Contents lists available at ScienceDirect

## Journal of Accounting Literature

journal homepage: [www.elsevier.com/locate/acclit](http://www.elsevier.com/locate/acclit)



# Aggregate earnings and why they matter<sup>☆</sup>



Ray Ball<sup>a</sup>, Gil Sadka<sup>b,\*</sup>

<sup>a</sup>University of Chicago, Booth School of Business, United States

<sup>b</sup>University of Texas at Dallas, United States

### ARTICLE INFO

#### Article history:

Received 6 January 2015

Accepted 10 January 2015

Available online 2 February 2015

#### Keywords:

Aggregate earnings

Asset pricing

Aggregate returns

Earnings–returns relation

### ABSTRACT

The accounting literature has traditionally focused on firm-level studies to examine the capital market implications of earnings and other accounting variables. We first develop the arguments for studying capital market implications at the aggregate level as well. A central issue is that diversification makes equity investors at least partially and potentially almost completely immune to several firm-level properties of earnings by holding diversified portfolios. Diversification is particularly important when assessing the welfare consequences of random errors in accounting measurement (imperfect accruals) and, to the extent it is independent across firms, of deliberate manipulation (earnings management). Consequently, some firm-level metrics of association, timeliness, value relevance, conservatism and other earnings properties do not map easily into investor welfare. Similarly, earnings-related risk manifests itself to equity investors largely through systematic earnings risk (covariation with aggregate earnings and/or other macroeconomic indicators). We conclude that the design and evaluation of financial reporting must adopt at least in part an aggregate perspective. We then summarize the literature in accounting, economics and finance on aggregate earnings and stock prices. Our review highlights the importance of studying earnings at the aggregate level.

© 2015 University of Florida, Fisher School of Accounting. Published by Elsevier Ltd. All rights reserved.

<sup>☆</sup> We are grateful for helpful comments and suggestions from Bill Cready, Bjorn Jorgensen, Alon Kalay, Suresh Nallareddy, Jennifer Wu Tucker, Ronnie Sadka, and Lakshmanan Shivakumar.

\* Corresponding author. Tel.: +1 972 883 5929.

E-mail addresses: [ray.ball@chicagobooth.edu](mailto:ray.ball@chicagobooth.edu) (R. Ball), [gil.sadka@utdallas.edu](mailto:gil.sadka@utdallas.edu) (G. Sadka).

## 1. Introduction

The accounting literature has a long tradition of studying the relation between earnings and stock prices at the firm level, employing cross-sectional or pooled research designs. Consequently, important earnings properties including usefulness, timeliness, conservatism, value relevance, analyst forecast accuracy, trading volume, information asymmetry, and liquidity typically have been defined and measured from earnings–returns relations at the firm level. In contrast, the economics and finance literatures have an almost as long tradition of studying earnings and prices at the aggregate level, employing time series designs. Conceptually, “aggregate” variables are economy-wide totals, but in practice they are measured using market indexes of prices and earnings.<sup>1</sup> The two literatures have operated almost orthogonally; only recently has the accounting literature turned to aggregate-level work. We compare and contrast these approaches, describe why aggregate-level analysis is relevant to users of financial statement information and to policy makers, and summarize the principal results from aggregate-level research to date.

Studying earnings–returns relations at the firm level is relevant from the perspective of many financial statement users, including managers, boards, security analysts covering the stock, auditors, regulators and litigants. Firm-level results also are relevant for most contracting uses of earnings and earnings-related variables, including debt, compensation, supply, and licensing contracts. A considerable amount has been learned from what has become a very large firm-level literature, even though due to the complexity of economic activity there remains much work to be done.

Nevertheless, for diversified users of financial statement information, firm-level earnings–returns metrics do not map easily into welfare. Perhaps the most obvious example is the earnings–returns  $R^2$  measure of association, due to Lev (1989). This metric does not aggregate from the firm to the portfolio level (Ball, Robin, & Sadka, 2008). In general, the portfolio-level earnings–returns  $R^2$  increases in the number of stocks in the investor’s portfolio, the effect being that firm-level metrics substantially under-estimate the importance of earnings to even modestly diversified investors. Other examples of the need to address diversification when assessing investor welfare are the consequences of random errors in accounting measurement (imperfect accruals) and, to the extent it is independent across firms, the consequences of deliberate manipulation (earnings management). We discuss these further below.

These examples illustrate the general point that the design and evaluation of financial reporting involves, at least in part, an aggregate perspective. There is a growing literature that takes this perspective. We summarize this literature below. Because the results obtained from aggregate earnings–returns studies are substantially different than at the firm level, we believe it is important for researchers and policy makers to be familiar with them.

Aggregate returns–earnings relations also are of considerable interest to economists and financial economists. A direct reason is that aggregate after-tax earnings are a component of US Gross Domestic Product that is both large (e.g., over 10% in Q2 2014) and variable (e.g., falling below 5% in Q4 2008).<sup>2</sup> Consequently, the nature of the relation between aggregate earnings and the economy is important to researchers and policy makers alike. For example, if aggregate earnings were strongly pro-cyclical, as was alleged to result from fair valuing banks’ balance sheets during the Global Financial Crisis, they would add substantially to undiversifiable economic risk. Investors then would find that returns on even well-diversified share portfolios were correlated with returns on human capital, housing and other assets.

Another reason to study the relation between earnings and the aggregate economy is the issue of allegedly excess volatility in aggregate assets prices, in which price volatility frequently is benchmarked against aggregate earnings (e.g., Shiller, 2000). A dominant theme has been based on the Campbell–Shiller hypothesis that an excessive amount of the variation in asset prices is due to variation in expected returns, and that a correspondingly minor amount of the variation is due to shocks to aggregate earnings. We also summarize this literature.

<sup>1</sup> In this literature, indexes include both averages (equal- and value-weighted) across firms of scaled variables such as stock returns, and sums/totals. Samples typically are comprised of all publicly traded firms or important sub-samples such as the Standard and Poor’s 500.

<sup>2</sup> <http://research.stlouisfed.org/fred2/graph/?g=cSh>

Download English Version:

<https://daneshyari.com/en/article/1005705>

Download Persian Version:

<https://daneshyari.com/article/1005705>

[Daneshyari.com](https://daneshyari.com)