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# Accruals: An overview

James A. Ohlson

*Stern School of Business, NYU, United States*
*Cheung Kong GSB, China*

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ABSTRACT

The paper provides a broad discussion of the topic "accruals". Though much of what is said is familiar from the literature on accruals, the paper tries to develop concepts and show how theses forge tight links across a variety of themes. The starting point of the analysis concerns the construct of an accrual. The case is made that it should rest solely on consecutive balance sheets and the splitting of assets/liabilities into (i) cash and approximate cash, assets/liabilities and (ii) all other kinds of assets/liabilities. Given this divide of assets/liabilities one can measure the components in the foundation equation: cash earnings + net accrual = comprehensive earnings. The paper then proceeds to discuss how the net accrual relates to growth in a firm's operating activities and the extent to which it can be informative or misleading. This topic in turn integrates with the issue of a firm's quality of earnings and the role of accounting conservatism. Among the remaining topics, the paper discusses how one conceptualizes diagnostics to assess whether or not a period's accrual is likely to be biased upwards or downwards. It gives rise to a consideration of how one constructs accruals that may be more informative than GAAP accruals and the role of value-relevance studies to assess the information content of accrual constructs. The paper ends with a list of suggestions how future research may be modified in light of the discussions in this paper.



*E-mail address:* johlson@stern.nyu.edu

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## 1. Introduction

Research on "accruals" has grown significantly over the past 15 years, the most well-known papers being due to Jones (1991) and Sloan (1996). While this extensive literature deals with a variety of questions, most of the papers in one way or another consider the statistical properties of accruals – or the properties of cash flows vs. earnings. These flow variables prompt the issue of how one converts financial data into a period's cash flows or accruals. A review of the literature bears out that there are numerous approaches to the measurement of accruals. Some of these depend on changes in balance sheet accounts; other studies start from statements of cash flows and adjust key numbers using information extracted from income statements. Specific details in individual studies can also vary, so readers may be left with an uneasy feeling that research executions allow for too many degrees of freedom.[1] One can safely assert that the literature offers no "standardized" way of putting the 3 components – cash flows, earnings and accruals – together. Nevertheless, the various efforts at measuring accruals would seem to be based on a common understanding as to the nature of accruals; when studies discuss the measurement of accruals they do move (broadly speaking) in a similar direction.[2]

Missing in all of this empirical research is an analysis of the *concept* or *construct* of an accrual and its implications.[3] Such absence makes it hard to assess whether there are other workable (perhaps better) alternatives to the accrual measurements found in specific studies. These hypothetical alternatives could lead to different (or less robust) empirical findings, suggesting the need for an accrual concept. In the background lurks a more fundamental issue, however. Only after a construct is in place can one examine the circumstances under which accruals have a practical role in valuation because they beneficially complement cash earnings. This sets the stage for an analysis of when accruals tend to misinform rather than inform investors.

This paper develops and evaluates an accrual construct which I view as particularly useful. It is not new. Textbooks, like Penman (2009), refer to it as "change in net operating assets." Much of what is discussed in this regard reaffirms what many readers have seen elsewhere. Yet in key respects the analysis here diverges from what the literature puts forward. This paper places the emphasis on ideas and how theses forge links as opposed to a critical evaluation of the work that has been done (and how it perhaps could be improved). It applies to any accounting that satisfies the basic stocks-flows reconciliation built into accounting. Thus the paper tries to deal with questions of broad interest which hopefully should supply a conceptual foundation for those individuals who try to familiarize themselves with the literature, or who aspire to a better sense of what one may call the "big picture." Following that, the paper discusses empirical questions related

[1] As an illustration of implementation "details", in many studies earnings serve as an ingredient to measure either cash flows or accruals. The researcher must then decide on the earnings number to use: which, if any, special items should be excluded?

[2] This paper does not compile extensive references to the large literature, empirical and conceptual, that deals with accruals and linked topics. I should further underscore that there are really few new ideas in this paper and yet I have not tried to attribute various insights to originators as is commonly done. It would have been too difficult and thorny to develop the relevant citations. The topics covered – like the general idea of an accrual – have long histories with non-standardized terminology and an enormous number of applications in research. To get started on navigating the literature, the following papers should prove useful. Jones (1991) and Sloan (1996) have been mentioned in the main text's first paragraph and thus they have a significant status as "classics". With respect to textbooks, Penman (2009) provides an introductory discussion of the quality of earnings issue as it relates to accruals. See also the textbook by Easton et al. (2009). For a very broad perspective on the quality of earnings topic, see Dechow et al. (2009). Melumad and Nissim (2009) discuss quality of earnings specifics for numerous line items such as the accounting for pensions, inventories, deferred revenues, etc. Quality of earnings evaluations as it relates to changes in balance sheet conservatism can be found in Penman and Zhang (2002). Ohlson and Aier (2009) discuss what they refer to as modified cash accounting ("MCA") earnings – a measure of cash earnings – as opposed to accrual earnings and they explain how MCA fits into the quality of earnings literature. The paper particularizes the cash assets/liabilities vs. other assets/liabilities dichotomy and it discusses the full range of judgment issues, including the use of footnote disclosures to measure cash earnings. Empirical work related to GAAP accruals – their reversal properties as well as trading strategy opportunities – Allen et al. (2009) summarizes what one may refer to as the most recent state-of-the-art of accrual research when it comes to empirical work. Richardson et al. (2009) review the literature on accruals and anomalies, and it lists just about all references that one can reasonably hope for.

[3] To be sure, the concept of an accrual as employed in this paper always refers to a (period's) flow. The reason for noting this obvious convention here is that an often cited paper by Dechow et al. (2002) suggests that they have modeled accruals, which in my mind is unfounded insofar that they are actually dealing with stock variables. Specifically, in my reading of the paper, it has the flavor of a model of "errors" in balance sheet accounts – which are stocks and not flows. The errors pick up biases (upwards or downwards) as to the expected cash that will be realized at the end of the period. In my interpretation, therefore, rather than capturing accruals the model in question develops the consequences of fair market valuations when these can reflect an upward or downward bias.