Jacobs Levy Equity Management Center
for Quantitative Financial Research

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2019 Wharton-Jacobs Levy Prize for Quantitative Financial Innovation Remarks
Bruce I. Jacobs, Ph.D., Chair of the Prize Selection Committee, Jacobs Levy Center
Kenneth N. Levy, Advisory Board, Jacobs Levy Center

Ken Levy:

Thank you, Chris, for those kind remarks.

You know, amazing things happen when the right people get together in the right place, at the right time. Ray Ball and Phil Brown were the right people. They met at the University of New South Wales in the 1960s. Phil left Australia in ’63 to study as a Fulbright Scholar at the University of Chicago. There, he earned his MBA and Ph.D., becoming an assistant professor at Chicago’s Graduate School of Business.

Meanwhile, Ray earned his Fulbright Scholarship, and at Phil’s urging, also enrolled at Chicago, where he also earned his MBA and Ph.D., and is today the Sidney Davidson Distinguished Service Professor of Accounting. Phil ultimately went on to the University of Western Australia, where today he’s a Senior Honorary Research Fellow in Accounting and Finance and a Professor Emeritus.

And Chicago was the right place. As Ray and Phil pointed out in their article “Ball and Brown (1968) After Fifty Years,” the University of Chicago was a place where “all ideas were viewed as candidates for challenge, with alternative arguments and with data.”

It was also the right time—the dawn of the computer age. The CRSP database had become available at the University of Chicago in 1964, two years after Standard & Poor’s released the Compustat database. These databases constituted a mere fraction of the data available to analysts today, but Ray and Phil made the most of what they had.

The research was first presented to the November 1967 Seminar on the Analysis of Security Prices at the University of Chicago. Their seminal paper, “An Empirical Evaluation of Accounting Income Numbers,” was published a year later in the *Journal of Accounting Research*. It focused on the relationship between accounting earnings and subsequent changes in stock prices. They found that, contrary to the prevailing academic view at the time, accounting earnings were relevant for investors, thus bridging academia and practice.

As important as the findings of the paper, was the approach Ray and Phil took. Their aim, as they noted in "After Fifty Years," was to "confront" the accounting literature's "central ideas with systematic—as opposed to anecdotal—evidence." Theirs was the first published event study using earnings data. As Ray and Phil stated, their paper "paved the way for an entirely new, robust and still-expanding evidence-based accounting literature." The importance of the paper's contribution to accounting has been recognized by Ray and Phil's respective inductions into the American Accounting Association Hall of Fame and the Australian Accounting Hall of Fame.

"An Empirical Evaluation of Accounting Income Numbers" opened another research door—one that's had a particular impact on investing and led to much fruitful investigation and practice in the many years since its publication. Its finding that abnormal returns continued in the expected direction even after the announcement of earnings—the so-called post earnings announcement drift—was the first reported evidence of anomalous behavior in the context of the efficient market hypothesis.

Bruce Jacobs:

The Wharton-Jacobs Levy Prize for Quantitative Financial Innovation recognizes outstanding quantitative research that has contributed to an important innovation in the practice of finance. Ray Ball and Phil Brown's seminal research on earnings announcements and stock prices certainly fits that bill. It ignited a revolution in accounting research, opening the door to new methods of conducting empirical research in finance and, ultimately, innovations in the practice of finance.

Ray and Phil's path to innovation followed a classical template. First, they challenged conventional wisdom. As they describe it, the thinking at the time was that "financial statements prepared under existing accounting standards are completely devoid of meaning." This embrace of accounting nihilism reflected the great disparity in the accounting methods used. Theorist R.J. Chambers, in an academic paper from the 1960s, calculated a single set of organizational transactions could give rise to some 30 million different profit figures.

Confronted by the seeming futility of their chosen profession, Ray and Phil asked themselves, "Why do firms put so many resources into calculating net income and preparing balance sheets, if they're meaningless?"

Second, Ray and Phil set out to answer this question using the latest available methods and tools. To determine whether accounting information—in particular, earnings—were important to investors, they exploited an emergent technique in finance—the event study—and data that had just become available thanks to the CRSP and Compustat databases. To crunch the data, they took over the University of Chicago's computer, an IBM 7094. It was a behemoth in terms of size but diminutive in terms of today's computers, with a memory only one sixteen-millionth the size of an Apple iPhone's.

Their findings were revolutionary: Earnings and stock prices were most definitely correlated. While stock prices generally anticipated earnings announcements, they continued to be affected after the announcement, providing investors with an opportunity to use earnings data to forecast future returns.

Third, as with so many innovations, Ray and Phil's 1968 paper faced rejection before it gained acceptance. *The Accounting Review* rejected it partly because the editors felt it had "little to do with accounting." After its publication in the *Journal of Accounting Research*, the article met with some "vitriolic reactions." The typical finance academic continued to believe the accounting numbers were meaningless. However, Ray and Phil had started the revolution. New generations of accounting and finance scholars came to appreciate the discipline of Ray and Phil's approach, and the new research tools they had harnessed.

We are proud to award the 2019 Wharton-Jacobs Levy Prize for Quantitative Financial Innovation to Ray Ball and Phil Brown in recognition of their transformative accomplishment.

Thank you for your contributions and a hearty congratulations!

Ray, please join us now to accept the award on behalf of yourself and Phil, who isn't able to be with us today.

Ray, it's an honor to present you the Wharton-Jacobs Levy Prize Medal.