

Data on intangible capital and Total q from Peters and Taylor (2016)

Description: This page provides data on firms' "Total q " ratio and the replacement cost of firms' intangible capital. Total q is an improved Tobin's q proxy that includes intangible capital in the denominator, i.e., in the replacement cost of firms' capital. Peters and Taylor (2016) show that Total q captures firms' investment opportunities better than other popular Tobin's q proxies. Peters and Taylor estimate the replacement cost of firms' intangible capital by accumulating past investments in R&D and SG&A.

For additional details:

Peters, Ryan H. and Lucian A. Taylor, 2016, Intangible capital and the investment- q relation, Forthcoming, *Journal of Financial Economics*.

The paper is available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2405231

The measure of intangible capital builds on the measures of Lev and Radhakrishnan (2005); Corrado, Hulten, and Sichel (2009); Corrado and Hulten (2010, 2014); Eisfeldt and Papanikolaou (2013, 2014); Falato, Kadyrzhanova, and Sim (2013); and Zhang (2014). [Full references in paper above.]

Data coverage: Compustat firms, 1950 – 2015.

Variable definitions:

- $gvkey$ is Compustat's firm identifier
- $datadate$ is the date on which variables are measured
- $fyear$ is the firm's fiscal year
- q_tot is Total q , a proxy for Tobin's q , which is the ratio of capital's market value to its replacement cost
- K_int is the estimated replacement cost of the firm's intangible capital. This variable corresponds to K^{int} in Peters and Taylor (2016).
- K_int_offBS is the portion of K_int that does not appear on the firm's balance sheet. Note that K_int equals K_int_offBS plus Compustat variable $Intan$ ("Intangible Assets"). Also note that K_int_offBS equals K_int_Know plus K_int_Org .
- K_int_Know is the replacement cost of the firm's knowledge capital, which is the portion of intangible capital that comes from R&D. This variable corresponds to G in Peters and Taylor (2016).
- K_int_Org is the replacement cost of the firm's organization capital, the portion of intangible capital that comes from SG&A. This variable corresponds to S in Peters and Taylor (2016).

All K variables are measured in nominal millions of dollars.

Data source: Compustat and Jay Ritter's website

Important warnings:

- q_tot should be winsorized
- Peters and Taylor do not recommend using the measures (1) before 1975, (2) for firms with missing or non-positive book value of assets or sales, or (3) for firms with less than \$5 million in physical capital (Compustat variable $ppegt$) measured in 1990 dollars.

- Peters and Taylor exclude the following industries from their analysis: regulated utilities (SIC codes 4900-4999), financial firms (6000-6999), and firms categorized as public service, international affairs, or non-operating establishments (9000+). The measures may not be appropriate for these industries.