HITA: Portfolio Management Applications

Term Project

UNLV MIS 764

Written By:

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Introduction

Introduce HITA, Harmonious Information Technology Affordances

Current Measurement Techniques

Find paper where HITA is first Introduced   
  
Find paper where HITA or Organizational HITA is measured.

Probably the U-shaped non-liner paper in the title

Explain measurement techniques used in paper.

Develop an alternative way to measure HITA using a company’s publicly available financial statements.

Motivation & Importance

Develop a way to integrate HITA into investment decisions as an additional variable for portfolio management applications.

HITA, as it was measured in (non linear influences) might be difficult to use for portfolio management applications.

Literature

Theory & Conceptualization

The development of this index starts with the concept of HITA and attempts to use various parts of a company’s publicly available financial statements to create a measure of HITA. The balance sheet item: intangible assets is being used as a proxy for the IT Infrastructure that an organization has at its disposal. Although it might be more appropriate to use an actual balance sheet item that indicates the actual value of an organization’s information technology infrastructure, there are a number of problems with this approach, first is that IT infrastructure would fall within the plant, property, and equipment line item on a balance sheet, but plant, property, and equipment isn’t always broken down into a more granular way that would allow an investor to see specifically what an organization owns in terms of Information Technology, the second issue is that an organization may either lease IT services and equipment from IT services provider, or they may pay subscription fees to a cloud computing services provider, in which case the organization’s IT capabilities aren’t captured as an asset on the balance sheet, but rather as an expense on the income statement, and here too the expenses aren’t always broken down in granular detail that would allow an investor to see exactly what an organization is spending on information technology services.

The income statement item: revenue is being used as a proxy for Actualized Affordances. The Harmony aspect of HITA will be inferred by taking the distance between an organization’s revenue to intangible Assets ratio, a proxy for how an organization is actualizing its information technology affordances and comparing that ratio to the sample mean ratio of revenue to intangible assets.

Selection

Randomly Selected

395 Packaging Corp of America PKG

Revenue: 7,802,000,000

Intangible: 1,154,000,000

9 Eli Lilly & Co. LLY

Revenue: 34,124,000,000

Intangible: 11,846,000,000

443 The J.M. Smucker Company SJM

Revenue: 8,529,000,000

Intangibles: 9,646,000,000

156 Air Products & Chemicals, Inc. APD

Revenue: 12,600,000,000

Intangibles: 01,196,000,000

49 Pfizer Inc. PFE

Revenue: 061,996,000,000

Intangibles: 132,683,000,000

40 Abbott Laboratories ABT

Revenue: 40,109,000,000

Intangibles: 32,494,000,000

463 C.H. Robinson Worldwide, Inc. CHRW

Revenue: 17,596,000,000

Intangibles: 01,620,000,000

18 Johnson & Johnson JNJ

Revenue: 85,159,000,000

Intangibles: 70,733,000,000

368 Hologic Inc HOLX

Revenue: 4,030,000,000

Intangibles: 4,170,000,000

190 Metlife, Inc. MET

Revenue: 66,905,000,000

Intangibles: 11,793,000,000

300 Dollar Tree Inc. DLTR

Revenue: 30,604,000,000

Intangibles: 03,064,000,000

Criteria Based Selection (Large Cap)

Energy: CVX CHEVRON CORP

Revenue: 196,913,000,000

Intangibles: 004,722,000,000

Materials: LIN LINDE PLC

Revenue: 32,854,000,000

Intangibles: 39,150,000,000

Industrials: CAT CATERPILLAR INC

Revenue: 67,060,000,000

Intangibles: 005,872,000,000

Con. Disc.: AMZN AMAZON.COM INC

Revenue: 574,785,000,000

Intangibles: 030,476,000,000

Con. Stap.: WMT WALMART INC

Revenue: 645,737,000,000

Intangibles: 032,213,000,000

Health Care: NVO NOVO NORDISK A/S

Revenue: 34,445,000,000

Intangibles: 08,958,000,000

Financials: JPM JPMORGAN CHASE & CO

Revenue: 236,311,000,000

Intangibles: 064,381,000,000

Info. Tech.: MSFT MICROSOFT CORP

Revenue: 211,915,000,000

Intangibles: 077,252,000,000

Comm. Serv.: META META PLATFORMS INC

Revenue: 134,902,000,000

Intangibles: 021,442,000,000

Utilities: NEE NEXTERA ENERGY INC

Revenue: 28,114,000,000

Intangibles: 06,783,000,000

Real Estate: PLD PROLOGIS INC

Revenue: 8,428,000,000

Intangibles: 1,950,000,000

Criteria Based Selection (Small Cap)

Energy: SUN SUNOCO LP

Revenue: 23,068,000,000

Intangibles: 02,143,000,000

Materials: ATR APTARGROUP INC.

Revenue: 3,487,000,000

Intangibles: 1,247,000,000

Industrials: HII HUNTINGTON INGALLS INDUSTRIES INC

Revenue: 11,454,000,000

Intangibles: 03,509,000,000

Con. Disc.: SN SHARKNINJA INC

Revenue: 4,254,000,000

Intangibles: 1,312,000,000

Con. Stap.: ELF E L F BEAUTY INC

Revenue: 579,000,000

Intangibles: 250,000,000

Health Care: TFX TELEFLEX INC

Revenue: 2,978,000,000

Intangibles: 5,416,000,000

Financials: JEF JEFFERIES FINANCIAL GROUP INC

Revenue: 7,498,000,000

Intangibles: 2,036,000,000

Info. Tech.: U UNITY SOFTWARE INC

Revenue: 2,187,000,000

Intangibles: 4,573,000,000

DLB DOLBY LABORATORIES INC

Revenue: 1,300,000,000

Intangibles: 0576,000,000

Comm. Serv.: NWSA NEWS CORP

Revenue: 1,300,000,000

Intangibles: 00576,000,000

Utilities: BEP BROOKFIELD RENEWABLE PARTNERS LP

Revenue: 5,038,000,000

Intangibles: 1,959,000,000

Real Estate: REXR REXFORD INDUSTRIAL REALTY INC

Revenue: 798,000,000

Intangibles: 159,000,000

CUBE CUBESMART

Revenue: 1,056,000,000

Intangibles: 00002,000,000

JLL JONES LANG LASALLE INC

Revenue: 20,761,000,000

Intangibles: 05,372,000,000

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Compare Intangible Assets and Revenue

Random Selection Removals

13 Exxon Mobil Corporation XOM

Revenue:

Intangibles:

Also removed for a new randomly selected company

335 Coterra Energy Inc. CTRA had to be replaced with a new, randomly selected company, they didn’t have any listed

Criteria Based Selection Removals

Energy: CVX was selected over XOM due to issues with XOM during the random selection process

Industrials: LTMAY was not selected because it is not traded on either the NASDAQ or NYSE

GE was not selected due to recent restructuring

Health Care: LLY was not selected because it already appears in the randomly selected group

NVO was selected over UNH in an effort to include international companies in the selection process.

Revenue per employee

Reason for using intangible assets

It’s not easy to determine how much of a balance sheet is IT related

IT assets would be part of plant, property, and equipment, but a more granular

Breakdown may take more

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