Multiple Capital Accounting

Mark W. McElroy, Ph.D.
Executive Director, Center for Sustainable Organizations
Co-Founding Principal, Thomas & McElroy LLC
MultiCapital Accounting (MCA)
What is MCA?

- Arguably the most pervasive principle found in the 100+ year old literature on sustainability
  - That the performance of a society or organization is best understood in terms of what its impacts on vital capitals are, and with specific reference to their limits
  - Vital capitals: natural, human, social, constructed, intellectual and economic

“Only the second revolution in accounting since double-entry bookkeeping began” and “of seismic proportions”

Jane Gleeson-White
Six Capitals
MCA now also standards-based

• International Integrated Reporting Council (IIRC)

“Integrated thinking is the active consideration by an organization of the relationships between its various operating and functional units and the capitals that the organization uses or affects.” (12/13)

• Sustainability Accounting Standards Board (SASB)

“Material sustainability issues arise in industries that rely on common capitals as a source of value creation, beyond financial or manufactured capital ... Common capitals, as used in this Framework, include natural capital ... and human capital.” (10/13)

• Global Initiative for Sustainability Ratings (GISR)

“Leading reporting initiatives such as IIRC and SASB include references to multiple, or ‘vital,’ capitals. GISR embraces the multiple capitals framework as well.” (12/13)
MCA: What does it do for us?

- Provides us with a theory of performance that addresses the subject in all of its dimensions in an integrated way
  - A basis for operationalizing the Triple Bottom Line!
    - Applies common principles to measuring, managing and reporting financial and non-financial performance, both
    - Makes meaningful Integrated Reporting possible (i.e., per the IIRC)
  - A basis for quantifying and monetizing intangible asset elements of market value (now upwards of 80% of market caps)
    - Treats intangibles as capitals
    - Interprets externalities as impacts on capitals
- Also provides a basis for making integrated materiality determinations (stakeholder capitals!)
What is capital?

A stock of anything that yields a flow of valuable goods or services

Based upon Fisher, 1906; Boulding, 1949; Hicks, 1974; El Serafy, 1991; Ekins, 1992; Costanza and Daly, 1992; Porritt, 2005; and many others.
What are the capitals?

• In broad strokes, there are six of them:
  – Natural
  – Human
  – Social (and Relationship)
  – Manufactured (or Constructed or Built)
  – Economic (or Financial)
  – Intellectual

• Since Intellectual Capital is embedded in many of the others, 5-capital models are also common

• How we slice and dice capitals is of less importance than that our accounting be capital based in the first instance!
The IIRC’s 6-capital model
Notable 5-capital models

SIGMA (2003)  
Forum for the Future (2005)
How capitals relate to the TBL

<table>
<thead>
<tr>
<th>Vital Capitals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Human</strong></td>
</tr>
<tr>
<td><strong>Social &amp; Relationship</strong></td>
</tr>
<tr>
<td><strong>Constructed</strong></td>
</tr>
<tr>
<td><strong>Internal Economic</strong></td>
</tr>
<tr>
<td>Internal Financial &amp; Non-Financial</td>
</tr>
<tr>
<td><strong>External Economic</strong></td>
</tr>
<tr>
<td>Financial &amp; Non-Financial</td>
</tr>
<tr>
<td><strong>Natural</strong></td>
</tr>
<tr>
<td>Natural Resources &amp; Ecosystem Services</td>
</tr>
<tr>
<td><strong>Social Bottom Line</strong></td>
</tr>
<tr>
<td><strong>Economic Bottom Line</strong></td>
</tr>
<tr>
<td><strong>Environmental Bottom Line</strong></td>
</tr>
</tbody>
</table>

Source: Thomas & McElroy
What makes MCA relevant?

Organizational Performance Affects Them!

Organizations can, do and/or should have impacts on vital capitals

- Stocks of natural capital
- Stocks of human capital
- Stocks of social capital
- Stocks of constructed capital
- Stocks of economic capital

Available flows of valuable goods and services (carrying capacity)

Appropriations of stocks and flows by stakeholders who need them

Resulting levels of stakeholder well-being

Organizational impacts on carrying capacities of capitals affect human well-being!
How can MCA be done?

• The standards are principles-based only, so we’re left to our own devices when it comes to methods.
• There are arguably two schools of thought or broad approaches as to how MCA should be done:
  1. Market Value (MV)
  2. Triple Bottom Line (TBL)
• MV school is about measuring and monetizing intangibles and externalities as a basis for explaining market caps and the ability to create $ value.
• TBL school, by contrast, is about assessing impacts on vital capitals as a basis for determining the overall performance of organizations.
Are there any MCA methods?

• Market Value School
  – First, this is arguably the IIRC’s school of thought because it stresses measurement, management and reporting of capital impacts primarily for the benefit of shareholders
  – Prominent illustrations of this approach include the EP&L method (pioneered at Puma); the TIMM method (proprietary PwC tool); and Ernst & Young’s approach to Integrated Reporting
  – Forthcoming *Natural Capital Protocol* may also fit in here

• Triple Bottom Line School
  – So far only one method extant: the *MultiCapital Scorecard*
    • A capital-, context-based and open-source TBL system
    • Early users include Ben & Jerry’s, New Chapter and Cabot

*Source: Thomas & McElroy LLC*
The MultiCapital Scorecard

• A *context-based* approach to TBL measurement and reporting (defines company-specific standards of performance on a bottom-up basis)

• A three-step process:

  1. **Scoping and Materiality** – Identify duties and obligations for what an organization’s impacts on vital capitals must be in order to be sustainable; results in identification of related Areas of Impact (AOIs)

  2. **AOI Development** – Define company-specific goals and standards of performance for each AOI, *context-based metrics* and associated data collection protocols

  3. **Scorecard Implementation** – Operationalize Scorecard in order to measure, manage and report performance
Reporting in the MultiCapital Scorecard

- Performance is reported at 3 levels of analysis:
  1. The individual Area of Impact (AOI) level
  2. The Operating Unit level
  3. The Consolidated Operations level
### Reporting at the Operating Unit Level: A MultiCapital Scorecard

#### 2019 – Company ABC

<table>
<thead>
<tr>
<th>Bottom Line</th>
<th>Areas of Impact (Capitals)</th>
<th>Progression Score</th>
<th>Weight</th>
<th>Weighted Score</th>
<th>Fully Sustainable Score</th>
<th>Gap to Fully Sustainable</th>
<th>Area of Impact Bottom Line</th>
<th>Triple Bottom Line</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>A x B</td>
<td>B x 3</td>
<td>D - C</td>
<td>C / D</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Social
- **Living Wage (H)**
  - Progression Score: 3
  - Weight: 1
  - Weighted Score: 3
  - Fully Sustainable Score: 3
  - Gap to Fully Sustainable: 0
  - Area of Impact Bottom Line: 100%

- **Workplace Safety (H,S,C)**
  - Progression Score: 3
  - Weight: 5
  - Weighted Score: 15
  - Fully Sustainable Score: 15
  - Gap to Fully Sustainable: 0
  - Area of Impact Bottom Line: 100%

- **Innovative Capacity (H,S,C)**
  - Progression Score: 1
  - Weight: 2
  - Weighted Score: 2
  - Fully Sustainable Score: 6
  - Gap to Fully Sustainable: 4
  - Area of Impact Bottom Line: 33%

#### Economic
- **Equity (E:IF)**
  - Progression Score: 3
  - Weight: 5
  - Weighted Score: 15
  - Fully Sustainable Score: 15
  - Gap to Fully Sustainable: 0
  - Area of Impact Bottom Line: 100%

- **Borrowings (E:IF)**
  - Progression Score: 2
  - Weight: 1
  - Weighted Score: 2
  - Fully Sustainable Score: 3
  - Gap to Fully Sustainable: 1
  - Area of Impact Bottom Line: 67%

- **Competitive Practices (E:EF & ENF)**
  - Progression Score: 2
  - Weight: 1
  - Weighted Score: 2
  - Fully Sustainable Score: 3
  - Gap to Fully Sustainable: 1
  - Area of Impact Bottom Line: 67%

#### Environmental
- **Water Supplies (N)**
  - Progression Score: 3
  - Weight: 3
  - Weighted Score: 9
  - Fully Sustainable Score: 9
  - Gap to Fully Sustainable: 0
  - Area of Impact Bottom Line: 100%

- **Solid Wastes (N)**
  - Progression Score: 2
  - Weight: 2
  - Weighted Score: 4
  - Fully Sustainable Score: 6
  - Gap to Fully Sustainable: 2
  - Area of Impact Bottom Line: 67%

- **The Climate System (N)**
  - Progression Score: 2
  - Weight: 5
  - Weighted Score: 10
  - Fully Sustainable Score: 15
  - Gap to Fully Sustainable: 5
  - Area of Impact Bottom Line: 67%

#### Overall Performance
- **62**
- **75**
- **13**
- **83%**

#### Capitals:
- C = Constructed*
- EE = External Economic*
- H = Human*
- IE = Internal Economic*
- N = Natural
- S = Social & Relationship*

*Usually includes embedded Intellectual Capital

#### Notes
- **Note:**
  - The Areas of Impact shown here are purely illustrative and are otherwise always company-specific.

Copyright © 2015 by Mark W. McElroy, Ph.D.
What’s the business case for MCA?

• Two schools of thought:
  1. You genuinely want your organization to be sustainable
     • Can’t manage it unless you measure it
     • No better way to do that than by measuring and managing performance relative to impacts on vital capitals!
  2. You want to reap the economic and business benefits of operating sustainably in more conventional terms
     1. Lower costs, higher revenue, more effective employee recruiting and retention, lower risk, etc.) … i.e., operating benefits
     2. While also reaping the benefits of CSR performance on market value – a powerful new business case!
        – A convergence of the MV and TBL schools
        – Whereby strong non-financial performance is material to, and measurably drives, market capitalization
Thank You!

mmcelroy@vermontel.net