Identifying the Prime Predictors of Human Resource Accounting Disclosure: A Literature Review

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Abstract
Human Resources in the present age are considered essential, but its disclosure and reporting practices are still at an initial stage. The reporting practices are not uniform, and there are no mandatory requirements for its reporting. Yet, we have witnessed companies voluntarily report their human resources. The literature shows that many factors influence human resource disclosure with contradicting viewpoints from authors where variables endorsed by one author are ignored as non-significant by others. Therefore, we conducted this study to identify the primary factors that affect human resource accounting disclosure information.

Keywords: disclosure, human resource, accounting, predictors

I. Introduction
The Indian Companies Act, 2013 and the Institute of Chartered Accountants of India (ICAI) have no statutory requirements regarding human resource information disclosure and reporting. ICAI has drafted several Accounting Standards (AS) for various purposes, but none are suitable for accounting and reporting of human resources. However, companies, such as ONGC (Oil & Natural Gas Corporation Ltd.), NTPC (National Thermal Power Corporation Ltd.), HSL (Hindustan Shipyard Ltd.), OIL (Oil India Ltd.), HMTL (Hindustan Machine Tools Ltd.), SAIL (Steel Authority of India Ltd.) and many more voluntarily disclose human resource information (Saxena & Verma, 2021; Sharma & Khatik, 2017). There has been no such development in the international environment also regarding human resources and their reporting. No specified accounting standard presents the rules and regulations on accounting for human assets directly. However, there are a few accounting standards that can be utilized to account for human resources indirectly, such as IAS 38 – Intangible Assets; IFRS 5 – Non-current assets held for sale and discontinued operations; IAS 19 – Employees Benefit; and IFRS 2 – Share-based payments (International Financial Reporting Standards, 2017, as cited in Soetan et al., 2018). Despite the above lacuna, companies disclose human resource information to their stakeholders in the annual report. This is because when it comes to making investment decisions, stakeholders place a high value on the annual report (Ghazali, 2010; Anderson, 1981; Chang et al., 1983). Companies are motivated to reveal human capital (HC) data to build employee and stakeholder confidence (Prusak & Cohen, 2001; Backhaus et al., 2002). Research on a
similar line found that HC-related disclosures convey value to potential and internal employees. Prospective job applicants can use and interpret publicly available HC information to understand an organization’s working conditions which may influence their decision on whether or not to apply for a job (Greening & Turban, 2000; Backhaus et al., 2002). On the other hand, as noted by Sullivan (1998), internal audiences may require human resource information to determine how their contributions can increase the company’s business performance. According to Olayiwola (2016), reporting human resource information positively and significantly impacts market value and leads to an improved corporate image.

II. Research Method
The present study has used a systematic literature search to gather relevant articles. In order to select the sample of articles for our literature review, we searched for the keywords “human capital disclosure”, “human asset disclosure”, “company characteristics”, “corporate attributes factors”, and “determinants of human resource disclosure” between 1970 to 2022 in both Google Scholar and Web of Science (WOS) gateway. An extended period was chosen to give vital information on the domain. However, there were many articles on human resource accounting and human capital accounting, but the articles were minimal on determinants of human resource accounting and its disclosure. The initial search has given us 84 articles on different determinates of human resource accounting. To fit the study’s objective, we have eliminated studies on intellectual capital as it is composed of three components- human capital, structural capital, and relational capital. The prime target of our study is a human resource/human capital, and including intellectual capital will make the study complex.

The article selection process has been highlighted below:

![PRISMA Flow Chart](image_url)
After the filtration we have followed four-fold methodology:

**Step 1:** The researcher tried identified the determinants and attributes responsible for human resource accounting disclosure

**Step 2:** When looked in the literature, it has been observed that different authors are using different attributes/variables to examine which attribute is significantly responsible for disclosing human resource accounting information. To keep it concise, the author retained variables used by at least two studies and eliminated variables used by one researcher or author.

**Step 3:** Variables with common name or meaning have been merged. This has trimmed the number of variables from 54 to 20 (appendix). For instance, firm size and company size have merged. Similarly other variables have been done in the same way viz. industry membership (industry type, industry profile, type of company, and nature of company), Profitability (Net profit margin, financial performance, earnings after tax), GRI, Listing status (globalization, listing abroad), Ownership concentration (managerial ownership concentration, ownership diffusion), leverage (debt), firm age(listing age, , company age , length of service, time of registration), type of auditor (auditor size and company size audit), liquidity ratio, total number of pages in annual report, type of ownership (type of entity), total number of employees, foreign ownership (foreign investment), turnover, structural complexity, employee expenses to total ratio, board size, board independence, board gender diversity.

**Step 4:** Analysis was done using dichotomous approach which variables are more influencing towards human resource disclosures. Variables that scored more than 50% have considered important for the present study.

**III. Description of the Variables**

a) **Firm size/company size:** Size is the grouping of companies into large, medium, and small companies taking indicators namely net fixed assets, net sales and market capitalization. The size of a company is imperative to determine the level of voluntary disclosure (Kusumastuti, 2021; Aggarwal & Verma, 2020).

b) **Industry Membership/Industry Type/Industry Profile/Type of Company/Nature of company:** The type of industry a company is in affects disclosure mechanisms in a significant way. Different companies' disclosures are motivated by various considerations. Companies in environmentally sensitive industries, for instance, typically provide more information than those in less environmentally sensitive ones (Hackston & Milne, 1996).

c) **Profitability/Net Profit Margin/Financial Performance/ Earnings after Tax:** Profitability is the ability to make profit from all the business activities (Adejuwon, et.al, 2020). The greater the profitability the higher will be human resource disclosures to maintain stakeholders’ loyalty (Ali & Ahmed, 2019).

d) **GRI (Global Reporting Initiative) Reporting:** The Global Reporting Initiative (GRI) was founded in 1997 with the intention to establishes a common framework for sustainability reporting based on the belief that such information may reveal how organizations operate and their impact on sustainable development (Emerick, n.d.).

e) **Listing Status/Globalization /Listing Abroad:** Listing status refers to the presence of firms in different stock exchanges. Multinational companies disclose more information as compared to companies whose operations are restricted to domestic country only (Aggarwal & Verma, 2020).
f) Ownership concentration/managerial ownership concentration/ownership diffusion: The percentage of shares held by an owner in relation to the firm's total shareholding is referred to as ownership concentration (Owiredu et al., 2014).

g) Leverage/Debt: Leverage refers to the usage of debt in financing the operations of the company (Garg & Singh, 2017).

h) Firm Age/Company Age/Listing Age/Length of service/Time of registration: The firm age is the duration of the business. Older businesses will gain a great deal of expertise in overcoming challenges. Studies by Christy (2015), Sarkar et al. (2016), and others have shown that age has a major impact on HRD, in contrast to those by Ali & Ahmed (2019), Diansari & Rispin (2019).

i) Type of Auditor/Auditor Size/Company Size Audit: The kinds of auditors who are linked with the companies can also have a significant impact on the amount of information that is disclosed. Large audit companies are more likely to require higher quality disclosures from their clients than smaller audit firms.

j) Liquidity ratio: Liquidity refers to ability of a firm to meet its short-term obligation. Cooke (1989) discovered that healthy organisations are characterized by high liquidity ratios as well as the disclosure of more specific information than companies with low liquidity ratio.

k) Total number of pages in annual report: The conventional wisdom holds that the more pages, the more information there is. Therefore, organizations who want to publish more information in their annual report should include additional pages as it is one of the key papers on which external shareholders rely on.

l) Type of Ownership>Type of entity: Investors have more faith in public sector firms than in private enterprises. Therefore, public sector firms are not required to disclose more. In order to increase confidence, private sector organizations provide more information (Aggarwal & Verma, 2020).

m) Total number of employees: Organizations with many employees have a propensity to reveal more HR data, demonstrating the positive correlation between the number of employees and information disclosure (Hossain et al., 2004).

n) Foreign Ownership/Foreign Investment: More foreign participation and foreign investment require firms to disclose more information because of complexities involved in it. Moreover, firms need to satisfy the demand of the diverse group of shareholders (Kaur et al., 2016).

o) Turnover: Turnover is a measure used to investigate the company’s performance in relation to its sales force.

p) Structural complexity: Structural complexity requires a firm to have an effective management information system for monitoring purposes and the availability of such a system helps to reduce the cost of information production per unit and thus, higher disclosure (Courtis, 1978; Cooke, 1989).

q) Employee expenses to total ratio: This is the cost incurred for the development and training of human resources.

r) Board Size: Board size refers to the total number of members in the board. The board of directors represents a control and monitoring tool capable of promoting the dissemination of more information and reducing asymmetries (Vitolla et al., 2020).

s) Board Independence: The proportion of independent directors to the total number of directors represents the board’s degree of independence.
**t) Board Gender diversity:** The percentage of women on the board is referred to as gender diversity. Women have different cultural values than men, and their presence disseminate more information than their male counterparts (Raimo et al., 2020).

### IV. Results and Discussion

In this section, we have tried to determine the most significant variable contributing to the disclosure of human resource accounting information. The paper's approach was to verify the contradicting statements made by various authors in the literature. For instance, "profitability" is regarded as an essential determinant of human resource accounting disclosure (Mamun, 2009; Pham et al., 2021), while the same was regarded as non-significant by Vazakidis (2013); Møller et al. (2011); Aggarwal & Verma (2020). To add up, when observed, we also found in the literature that "firm size" was stated as a significant variable by Møller et al. (2011); Aggarwal & Verma (2020); Fontana & Macagnan (2013); Pham et al. (2021); while Kateb (2015) and Hay et al. (2018) found it to be non-significant. The same trend has been found for other variables also. We identified the top seven variables out of 20 variables that significantly contribute to the disclosure of human resource accounting information using dichotomous approach as stated in the methodology. It is evident from Fig. 2 that factors like firm size, GRI reporting, total pages in the annual report, board size, board independence, foreign ownership and total employees to expense ratio significantly impact how much information regarding human resources is disclosed. By employing percentage analysis, we have identified these seven variables. For instance, 27 researchers have used variable firm size, 21 have deemed it significant, and six have deemed it non-significant. So, the significant score of firm size comes out to be $(21/27) = 77.77\%$. Industry membership is employed by 14 studies, although only 7 found it relevant and the other 7 found it insignificant. This gives a significant score to industry member as 50\%. Profitability, which earlier literature suggests is essential for human resource disclosures, scored 33.33\%. 9 of 27 studies using profitability found it significant. GRI reporting scored 100\% because two studies considered it useful for human resource disclosures. Listing status used by 7 studies, 3 studies found it to be significant while 4 study found it to be insignificant, making a score of 42.86\%. Ownership concentration variable employed by 6 studies, 1 found it to be significant while 5 studies found it to be insignificant, the significant score becomes 16.67\%. 12 studies used leverage, 8 of which found it non-significant and 4 significant, yielding a 33.33\% significant score. 22 research employed firm age, however only 8 found it significant and 14 insignificant, producing a significant score of 36.36%. Only 3 of 8 investigations found the auditor variable to be significant, while 5 found it to be non-significant, resulting in a significant score of 37.50\%. Liquidity ratio was utilized by 2 research, but both found it insignificant. Type of ownership was employed in 2 investigations, which found no significance. Total number of pages in annual report was significant in all 3 studies with a significant score of 100\%. Total number of employees variables scored 33.33\%, with 1 study reporting this as significant and 2 as non-significant. Foreign ownership was employed in 3 studies, 2 of which deemed it significant with a score of 66.67\%. Turnover used by 2 research, 1 of which deemed it significant with a 50\% score. Structural complexity obtained a zero significant score since both studies showed it to be an insignificant. 3 research used the employee expense to total ratio; 2 found it to be significant, while 1 found it to be insignificant with a score of 66.67\%. Board size is found to be an important variable as all the 3 studies reported it to be significant with a significant score of 100\%. Board independence also secured 100\% as both the study reported it as significant variables. Board gender diversity used by 3 studies, where only 1 study found it to be significant with a score of 33.33\%.
V. Conclusion
Organizations must give due importance to their human resources in the knowledge economy to survive in the mounting competition. Human capital disclosure fulfills the need for pertinent information among relevant users to support decision-making and accountability (Guthrie & Petty, 2000; Verrecchia, 2001). Early literature has shown three ways to examine human capital disclosure's benefits. First off, disclosure of human capital will lower the cost of capital. Second, the relevance of financial statements in influencing investors' decision-making would grow with the disclosure of information about human capital. Thirdly, it will help businesses with internal control and performance management of knowledge assets (Ridhuan et al., 2016). Looking at the paramount importance of human assets, it is very much necessary for firms to disclose information about it; omission of such information from the corporate annual report negatively influences the cost of capital and the relevance of financial reporting (Dumay & Tull, 2007). Moreover, missing such information leads to poor management and control of human knowledge-based activities (Guimon, 2005).

VI. Managerial Implications
The present study has revealed that human resource disclosure is mostly influenced by a set of variables namely firm size, GRI reporting, total number of pages in annual report, board size and board independence, foreign ownership and employee expenses to total ratio. So, the Accounting Bodies and Companies Act should come up with some provision with regard to these variables; so that companies come forward to disclosure more about human resources. This can be made possible by setting some threshold limit in case of firm size which if crossed need to go for compulsorily disclosure. The same pattern may be done with other variables also in times to come.

References


## Appendix

**Table: 1 Top 20 variables used by different authors along with their individual score**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Studies Used</th>
<th>Code</th>
<th>No. of Occurrence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Size/Company Size</td>
<td>Vazakidis (2013); Moller et.al (2011); Aggarwal &amp; Verma (2020); Fontana &amp; Macagnan (2013); Pham et. al (2021); Mamun (2009); Surdu et.al (2020); Kaur et.al (2016); Hay et.al (2018); Jindal &amp; Kumar (2012); Petera et. al (2015); Kateb (2015); Raimo et.al (2020); Uyar &amp; Kilic (2013); Anifowose et. al (2017); Ullah et.al (2014); Ali &amp; Ahmed (2019); Ali et. al (2020); Brown et. al (2005); Kusumastuti (2021); Junior et. al (2016); Adejuwon et.al (2020); Modupeola &amp; Solomon (2021); Sudiari et. al (2020); Kugavarathasarma. &amp; Ajanthan (2018); Adila &amp; Wahyuningrum (2021); Ali &amp; Barda (2019).</td>
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<tr>
<td>Industry Membership/Industry Type/Industry Profile/Type of Company/Nature of company</td>
<td>Vazakidis (2013); Moller et.al (2011); Petera et. al (2015); Aggarwal &amp; Verma (2020); Pham et. al (2021); Surdu et.al (2020); Kaur et.al (2016); Jindal &amp; Kumar (2012); Kateb (2015); Uyar&amp;Kilic (2013); Anifowose et. al (2017); Brown et. al (2005); Junior et. al (2016); Mamun (2009)</td>
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<tr>
<td>Profitability/Net Profit Margin/Financial Performance/Earnings after Tax</td>
<td>Vazakidis (2013); Moller et.al (2011); Aggarwal &amp; Verma (2020); Fontana &amp;Macagnan (2013); Pham et. al (2021); Mamun (2009); Mishra &amp; Mishra (2017); Kaur et.al (2016); Hay et.al (2018); Jindal &amp; Kumar (2012); Kateb (2015); Raimo et.al (2020); Uyar&amp;Kilic (2013); Anifowose et. al (2017); Ullah et.al (2014); Ali &amp; Ahmed (2019); Ali et. al (2020); Alawi &amp;Belfaqih (2018); Junior et. al (2016); Adejuwon et.al (2020); Sudiari et. al (2020); Kugavarathasarma.</td>
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<tr>
<td>GRI Reporting</td>
<td>Vazakidis (2013); Sudiari et. al (2020)</td>
<td>GR</td>
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<td>Listing Status/Globalization /Listing Abroad</td>
<td>Vazakidis (2013); Surdu et.al (2020); Petera et. al (2015); Kateb (2015); Aggarwal &amp; Verma (2020); Kaur et.al (2016); Jindal &amp; Kumar (2012)</td>
<td>LS</td>
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<tr>
<td>Ownership concentration/managerial ownership concentration/ownership diffusion</td>
<td>Aggarwal &amp; Verma (2020); Kaur et.al (2016); Jindal &amp; Kumar (2012); Kateb (2015); Uyar&amp;Kilic (2013);Sudiari et. al (2020)</td>
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<tr>
<td>Leverage/Debt</td>
<td>Aggarwal &amp; Verma (2020); Pham et. al (2021); Surdu et.al (2020); Kaur et.al (2016); Hay et.al (2018);Jindal&amp; Kumar (2012); Kateb (2015); Uyar&amp;Kilic (2013);Kusumastuti (2021); Modupeola&amp; Solomon (2021); Kugavarathasarma. &amp;Ajanthan (2018);</td>
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<td>Type of Auditor/Auditor Size/Company Size Audit</td>
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<td>Liquidity ratio</td>
<td>(2016); Adila &amp; Wahyuningrum (2021); Aggarwal &amp; Verma (2020); Fontana &amp; Macagnan</td>
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<tr>
<td>Total no of pages in annual report</td>
<td>Aggarwal &amp; Verma (2020); Ali &amp; Ahmed (2019); Ali et. al (2020)</td>
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<td>3</td>
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<tr>
<td>Type of Ownership/Type of entity</td>
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<td>2</td>
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<tr>
<td>Total number of employees</td>
<td>Surdu et. al (2020); Ali &amp; Ahmed (2019); Ali et. al (2020)</td>
<td>TO</td>
<td>3</td>
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<tr>
<td>Turnover</td>
<td>Mishra &amp; Mishra (2017); Souza et al (2016)</td>
<td>TU</td>
<td>2</td>
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<td>Structural complexity</td>
<td>Kaur et al (2016); Jindal &amp; Kumar (2012)</td>
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<td>Employee expenses to total ratio</td>
<td>Kaur et al (2016); Jindal &amp; Kumar (2012); Alawi &amp; Belfaqih (2018)</td>
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<td>Board Size</td>
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