

BUSINESS SCHOOL

Recognizing non-compete agreements as intangible assets: A proposal for capitalizing human capital

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Problem

- Unrecognized intangibles argued to be driver of firm value
- Increasing difference between balance sheet and market value 'missing gap' especially in the information age
- Impacts financial analysis (e.g. assets and earnings are understated)
- One important intangible is People
- Anecdotal: Company's No. 1 Asset is people
- Empirical: Human capital is associated with firm value
- IASB (2025) survey: 69% of users say f/s have insufficient information on human capital



Solutions?

- EFRAG and SEC propose disclosure driven solutions (KPIs)
- ISSB has an ESG lenses of disclosures
- Disclosure driven solutions don't solve missing gap recognition vs disclosure literature
- Capitalizing all expenditure related to intangibles is unlikely to gain support from a broad constituent group
- Training expense doesn't provide data on high value employees
- "..accounting for intangibles needs improvement, yet views differ on both the problems and their solutions" (Barckow, 2024)



Literature review

- Intangible assets are value relevant and so are uncapitalized software costs and research expenses
- Estimates of internally generated intangibles expenditure are useful
 - Related expenditure as a function of revenue is useful (Enache and Srivastava 2018, Iqbal et al., 2025)
 - Regier and Rouen (2023) find that employee costs as a function of revenue and find it is value relevant.



Human Capital exception

- Unlikely to see Human Capital on B/S
- Football players controlled by an entity as a result of past events; probable future economic benefits (hopefully), cost can be measured reliably (and directly), arises from contractual rights
- So when else could we see humans on the balance sheet per current GAAP?

| | 2024 No. | 2024 £000 | 2023 No. | 2023 £000 |
|---|-------------|--------------|-------------|--------------|
| The number of players with a book value in excess of £1m by contract expiry date is as follows: | | | | |
| Contract expiry within 1 year | - | - | 1 | 1,200 |
| Contract expiry within 2 years | 1 | 1,846 | 2 | 3,857 |
| Contract expiry within 3 years | 8 | 14,988 | 3 | 8,927 |
| Contract expiry within 4 years | 1 | 2,339 | 4 | 8,392 |
| Contract expiry within 5 years | 1 | 4,035 | - | - |
| | 11 | 23,208 | 10 | 22,376 |



Non-compete agreements

- Restrict employees from starting a competing business or working for competitors for a period of time (or approaching customers, co-workers etc)
- Often bundled with non-disclosure agreements
- To be enforceable must be reasonable in scope and do not apply immediately
- About 1 in 5 usage in US and Australia, 37% of high skilled workers in Finland



NCA as an asset?

- Identifiable as arises from a legal contract
 - IFRS 3 (Consolidations) basis of conclusions has non-competes as an example of an identifiable intangible assets acquired in a business combination
- Directly measurable and attributable as proportion of salary
- Probable benefit from reduced product market competition
 - IAS 38.17 allows for benefits beyond cash realizability and IFRIC (2010) says restraining an employee from working for a competitor is a benefit (under share based payments) + anecdotally can be bought out
- Arise from a past event and present control is enforceable
- Non-competes also meet the idea that any employee asset should be valued/unique and can be kept out of the reach of competitors
- Narrow in scope + most similar to football?



Research Question

- Narrow class of identifiable investments that are more likely to satisfy existing IASB recognition criteria*
- How does it change reported numbers? (stewardship, debt contracting)
- Does it improve the usefulness of reported numbers?

RQ: What is the impact of recognizing a non-compete asset on the financial statements??



The Debits and Credits

Dr. Employee Costs 100

Cr. Cash 100

Assume \$30 of Employee costs are subject to a 6 month non-compete which activates over 2 years

Dr. Employee Costs 92.5

Dr. Non-Compete Asset 7.5*

Cr. Cash 100

*potential capitalized costs x non-compete period x vesting period

• $30 \times 6/12 \times 1/2 = 7.5 =$ capitalizable amount



Setting and sample

- NZ
- ISAs, IFRS, similar policy settings
- Must disclose number of employees that earning above 100k, in 10k bands
- This granular disclosure is important as it allows a firm specific estimate of those who could be subject to a non compete agreement – unique and highly value employees
- Start with all NZX companies, exclude shells, no data, no high earners – 75 observations in 2018-2024 = 450 obs).



TEAM MEMBERS' REMUNERATION

Grouped below are the number of team members or former team members, not being Directors or former Directors, who received remuneration and other benefits valued at or exceeding \$100,000 during the period 1 August 2022 to 30 July 2023.

Remuneration includes redundancy payments and termination payments made during the year to team members whose remuneration would not otherwise have been included in the table reported below.

| Remuneration (\$ 000) | Number of Team Members | Remuneration (\$ 000) | Number of Team Members | Remuneration (\$ 000) | Number of Team Members |
|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|
| 100 - 110 | 132 | 260 - 270 | 4 | 430 - 440 | 1 |
| 110 - 120 | 103 | 270 - 280 | 6 | 440 - 450 | 1 |
| 120 - 130 | 100 | 280 - 290 | 6 | 590 - 600 | 1 |
| 130 - 140 | 81 | 290 - 300 | 1 | 620 - 630 | 1 |
| 140 - 150 | 81 | 300 - 310 | 4 | 670 - 680 | 1 |
| 150 - 160 | 50 | 310 - 320 | 4 | 680 - 690 | 1 |
| 160 - 170 | 24 | 320 - 330 | 1 | 730 - 740 | 1 |
| 170 - 180 | 47 | 330 - 340 | 7 | 770 - 780 | 1 |
| 180 - 190 | 41 | 340 - 350 | 1 | 890 - 900 | 1 |
| 190 - 200 | 16 | 350 - 360 | 1 | 1,030 - 1,040 | 1 |
| 200 - 210 | 13 | 360 - 370 | 2 | 1,070 - 1,080 | 1 |
| 210 - 220 | 19 | 370 - 380 | 2 | 1,100 - 1,110 | 1 |
| 220 - 230 | 13 | 390 - 400 | 3 | 1,120 - 1,130 | 1 |
| 230 - 240 | 6 | 400 - 410 | 1 | 2,790 - 2,800 | 1 |
| 240 - 250 | 8 | 410 - 420 | 3 | | |
| 250 - 260 | 5 | 420 - 430 | 1 | | |
| | | | | | |

Method

- Follow lease capitalization literature recalculate numbers under our proposal and test if ratios and value relevance changes
 - Assume six month non-enforce period (standard in NZ),
 - Those earning over \$130,000 have a non-compete (proposed threshold and double average salary)
 - Two year vesting period
 - Amortized over 6 years (turnover rates)
 - 40% Accum dep OB (Mehnaz et al. 2024)
- Capitalized amount for each year is then subtracted from employee costs and added to profit
- Amortized, subtracted from profit
- Equity is adjusted



Estimation procedure

Initial OB:

• Non-compete $asset_{p-1} = (potential\ capitalized\ costs_{p-2} \times 6/12) + (potential\ capitalized\ costs_{p-1} - potential\ capitalized\ costs_{p-2} \times 6/12 \times 1/2).$

Onwards example

• Non-compete $asset_{p+3} = Non-compete$ $asset_{p+2} + (potential capitalized <math>costs_{p+3} - potential capitalized costs_{p+2} \times 6/12 \times 1/2) + (potential capitalized <math>costs_{p+2} - potential capitalized costs_{p+1} \times 6/12 \times 1/2)$



| | Mean | Median | Minimum | Maximum |
|--------------------------------|---------|--------|---------|----------|
| Pre-capitalization ('000) | | | | |
| Total Assets | 1990000 | 581000 | 5201 | 15800000 |
| Total Equity | 872000 | 290000 | -5658 | 8610000 |
| Total Intangible Assets | 194000 | 46800 | 0 | 5510000 |
| Total Operating Expense | 883000 | 271000 | 3411 | 13700000 |
| Employee Costs | 152000 | 75000 | 1276 | 1660000 |
| | | | | |
| New accounts ('000) | | | | |
| Non-Compete Asset | 30300 | 13500 | 0 | 556000 |
| | | | | |
| Post-capitalization ('000) | | | | |
| Total Assets | 2000000 | 588000 | 5228 | 16000000 |
| Total Equity | 889000 | 297000 | -5616 | 8640000 |
| Total Intangible Assets | 211000 | 56700 | 0 | 5650000 |
| Total Operating Expense | 880000 | 269000 | 2977 | 13700000 |
| Employee Costs | 148000 | 72400 | -17000 | 1640000 |
| | | | | 1.4 |

| Leverage (Total Liabilities/Total Assets) | | | | | | |
|---|------------|--|--|--|--|--|
| Pre-capitalization | 0.493 | | | | | |
| Post-capitalization | 0.482 | | | | | |
| t-test | 10.925*** | | | | | |
| | | | | | | |
| ROA (EBIT/Total Assets) | | | | | | |
| Pre-capitalization | 0.047 | | | | | |
| Post-capitalization | 0.052 | | | | | |
| t-test | -5.543*** | | | | | |
| | | | | | | |
| Intangibles to Asset (Intangible Assets /Total As | set) | | | | | |
| Pre-capitalization | 0.175 | | | | | |
| Post-capitalization | 0.192 | | | | | |
| t-test | -14.516*** | | | | | |
| | | | | | | |
| MTB (Market value/Book value of equity) | | | | | | |
| Pre-capitalization | 2.635 | | | | | |
| Post-capitalization | 2.447 | | | | | |
| t-test | 4.946*** | | | | | |

by year and industry

Sensitivity tests

| | Leverage | ROA | Intangibles to Asset | МТВ |
|---------------------------------|----------|-------|----------------------|-------|
| Pre-capitalization | 0.493 | 0.047 | 0.175 | 2.635 |
| \$NZ200,000 threshold | 0.486 | 0.050 | 0.185 | 2.492 |
| \$NZ300,000 threshold | 0.489 | 0.049 | 0.181 | 2.577 |
| Double average salary threshold | 0.484 | 0.049 | 0.188 | 2.478 |
| 3 month non-compete period | 0.487 | 0.050 | 0.184 | 2.533 |
| 12 month non-compete period | 0.472 | 0.056 | 0.208 | 2.310 |
| No ramp up | 0.485 | 0.050 | 0.187 | 2.473 |
| 3-year ramp up | 0.481 | 0.053 | 0.194 | 2.343 |
| 4-year useful life | 0.482 | 0.052 | 0.191 | 2.456 |
| 8-year useful life | 0.480 | 0.053 | 0.194 | 2.428 |
| No amortisation | 0.475 | 0.054 | 0.203 | 2.335 |
| 30% OB Accum. Amort. | 0.479 | 0.054 | 0.197 | 2.424 |
| 50% OB Accum. Amort. | 0.480 | 0.054 | 0.195 | 2.447 |



Value relevance tests

```
Price = NI + BVE (reported accounting numbers)

VS

Price = NI^* + BVE^* (recalculated accounting numbers)
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Test whether the mean squared errors differ significantly to see if capitalising non-compete agreements results in accounting better explaining firm value

- Price is share price 3 months after balance date
- NI is the reported net profit after tax deflated by shares
- BVE is the book value of equity deflated by number of shares
- Include year and industry fixed effects
- Data from Refinitiv Eikon



Descriptive stats

Adjusted numbers

| Variable | Mean | Median | SD | Min | Max |
|----------|-------|--------|-------|--------|--------|
| Price | 4.790 | 2.624 | 7.255 | 0.054 | 43.200 |
| NI | 0.181 | 0.106 | 0.389 | -0.838 | 1.868 |
| BVE | 2.304 | 1.582 | 2.484 | 0.003 | 13.830 |
| NI* | 0.192 | 0.116 | 0.396 | -0.842 | 1.858 |
| BVE* | 2.369 | 1.648 | 2.530 | 0.003 | 14.139 |



| | Full Sample | | | | |
|---------------|-------------|----------|--|--|--|
| | Price | Price | | | |
| Constant | -0.354 | -0.385 | | | |
| NI | 6.857*** | | | | |
| BVE | 1.270*** | | | | |
| NI* | | 6.740*** | | | |
| BVE* | | 1.250*** | | | |
| Year FE | Yes | Yes | | | |
| Industry FE | Yes | Yes | | | |
| F | 55.32 | 56.59 | | | |
| Adjusted R2 | 0.611 | 0.617 | | | |
| N | 450 | 450 | | | |
| Paired t test | 0.458*** | | | | |
| Mean diff in | (4.467) | | | | |
| MSEs | (4.467) | | | | |

compete clauses
explains more of



| | High Intang | | Low Intang | | High_HCI | | Low_HCI | | |
|---------------|-------------|--------------|------------|----------|----------|----------|-----------|----------|--|
| | Price | Price | Price | Price | Price | Price | Price | Price | |
| Constant | 0.588 | 0.584 | 2.614*** | 2.570*** | 0.005 | 0.047 | -0.566 | -0.627 | |
| NI | 9.257*** | | 5.136*** | | 3.244* | | 8.499*** | | |
| BVE | 1.220*** | | 0.352*** | | 1.660*** | | 1.122*** | | |
| NI* | | 8.848*** | | 5.042*** | | 3.613* | | 8.163*** | |
| BVE* | | 1.177*** | | 0.346*** | | 1.592*** | | 1.130*** | |
| Year FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| Industry FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | |
| F | 42.14 | 43.57 | 14.56 | 14.72 | 21.74 | 22.73 | 60.97 | 60.03 | |
| Adjusted R2 | 0.828 | 0.833 | 0.614 | 0.616 | 0.546 | 0.558 | 0.672 | 0.668 | |
| N | 112 | 112 | 112 | 112 | 156 | 156 | 294 | 294 | |
| Paired t test | 1.379*** | | -0.012 | | 1.295*** | | -0.415*** | | |
| Mean diff in | -2.7 | 7 Q 1 | (. O ´ | 772\ | _2 4 | 315 | (.20 | 215) | |
| MSEs | -2., | 701 | (-0.2 | (-0.223) | | -3.615 | | (-2.915) | |

Robustness

- Vary assumptions
- Isolating the NCA as a separate variable
- Controlling for employees
- Vuong test



Costs

- Non-competes can reduce labour mobility and innovation
- Comparability between countries depends on use of noncompetes
- Earnings management opportunity? would be a real earnings management as tied to actual non-compete in practice?
- Complex/Audit fees?



Conclusion

- Longstanding debate on the 'missing gap'
 - Expenditure related to intangibles is associated with firm value (e.g. Enache and Srivastava 2018; Banker et al. 2019; Regier and Rouen 2023)
- Argue for a specific new intangible asset (Non-Compete Asset)
- A small but systematic proposal grounded in the current standard
 - Contribute to debate with differing views and promote discussion on intangible asset accounting

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- Improves ratios and reduces 'missing gap'
- Improves usefulness of accounting in knowledge driven firms
- Have we created a monster?



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