

The Impact of IFRS16 on Key Financial Ratios: a New Methodological Approach

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Literatura académica previa

- Contexto: No existía una norma aprobada.
- Separación entre profesión y academia:
 - Los analistas utilizaban múltiplos (Moody's, 2015).
 - Académicos: Método de capitalización se basaba en los pagos mínimos proyectados en los 1/ 2-5/ +5 años
 - Imhoff et al. 1991, 1997, Bennett & Bradbury, 2003; Duke, Hsieh, & Su, 2009; Durocher, 2008; Fitó, Moya, & Orgaz, 2013; Fülbier, Silva, & Pferdehirt, 2008; Goodacre, 2003; Grossman & Grossman, 2010; Imhoff Jr. & Lipe, 1991, 1997; Mulford & Gram, 2007; Singh, 2012.
- Deficiencias:
 - El tipo de descuento no se calculaba correctamente (marginal de la financiación de la empresa y garantía del activo).
 - No se considera la duración del contrato/activo.
 - Se obvia que los contratos se renueva.

CONSTRUCTIVE CAPITALIZATION METHOD (Imhoff et al., 1991)

This cash-flows include only payments under existing contracts in these years, without considering those present contracts that could be renewed

	Less than one year	One to five years	Over five years	TOTAL CASH FLOWS
FIRM EXAMPLE (FISCAL YEAR 2015)	1,332,298	2,335,834	1,401,540	5,069,672
EFFECTIVE TAX RATE	23%			
INTEREST RATE	10.00%			
LIABILITY (NET PRESENT VALUE OF CASH FLOWS)	- 3,601,147			
ASSET (90% LIAB.)	2,981,434			
DEFERRED TAXES	142,534			
NET EFFECT ON EQUITY	- 477,179			

Discount rate would be the same for all sample companies.

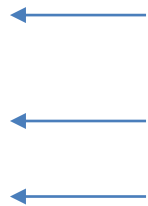
Assumption: Different contracts terms and non renewable contract.

Phases of proposed methodology

1	<p>Key variables determination:</p> <ul style="list-style-type: none">○ Company's sector○ Company's credit rating○ Main leased asset of the company / sector○ Estimated average lease term (including renewals)○ Selection of discount rate considering credit rating, lease asset and lease term.○ Current lease expense (excluding contingent payments or sublease incomes).
2	<p>Cash-flows projection by year: arithmetical series starting from current lease expense and considering a decreasing factor equal to current lease expense divided into average lease term.</p>
3	<p>Net present value of the cash-flow projection. This is the liability to be recognised.</p>
4	<p>Asset measurement (proxied by a 90% of liability).</p>
5	<p>Deferred tax asset measurement.</p>
6	<p>Equity impact measurement.</p>

PROPOSED METHOD

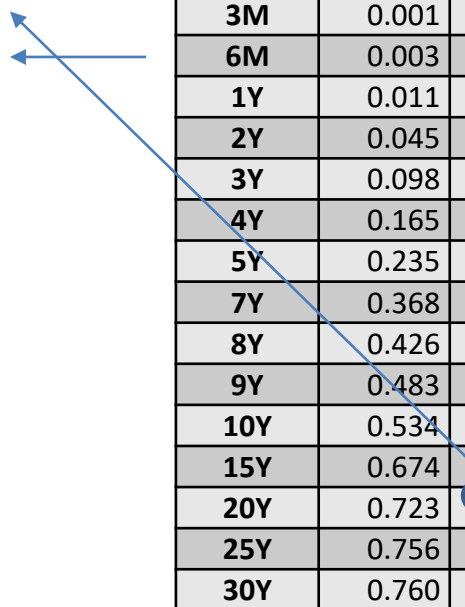
FIRM EXAMPLE	FISCAL YEAR 2015	
MAIN LEASED GOOD	REAL ESTATE (MORTGAGE)	
OPERATING LEASE EXPENSE	1,728,979	
EXPECTED LIFE OF AN OPERATING LEASE CONTRACT (n)	20	
OPERATING LEASE EXPENSE / n	86,449	
GICS 4 DIG.	2550. RETAIL	
RATING	AA	
SECTOR INTEREST RATE	GENERIC	
INTEREST CURVE	GENERIC-MORTGAGE-AA	
INTEREST RATE	0.7858%	
EFFECTIVE TAX RATE	23%	
LIABILITY(NET PRESENT VALUE OF CASH FLOWS)	-	17,153,641
ASSET (90% LIAB.)	15,438,276	
DEFERRED TAXES	-	394,534
NET EFFECT ON EQUITY	-	2,109,898



Los contratos tienen una vida similar y cada conjunto de contratos se encuentra en un momento de la vida útil diferente.



	Generic Curve Considering Recovery Rate for Mortgage			
Tenor	AAA	AA	A	BBB
3M	0.001	0.001	0.009	0.011
6M	0.003	0.003	0.018	0.023
1Y	0.011	0.011	0.039	0.050
2Y	0.045	0.045	0.086	0.121
3Y	0.098	0.100	0.146	0.213
4Y	0.165	0.169	0.219	0.318
5Y	0.235	0.243	0.290	0.414
7Y	0.368	0.383	0.420	0.556
8Y	0.426	0.444	0.478	0.615
9Y	0.483	0.504	0.533	0.668
10Y	0.534	0.559	0.584	0.721
15Y	0.674	0.713	0.761	0.910
20Y	0.723	0.786	0.825	1.049
25Y	0.756	0.818	0.836	1.055
30Y	0.760	0.820	0.843	1.057



Sector	N	Leas.exp/						
		Liab	var.Ass	var.Liab	CI.LE	CI.LA	CI.ROA	CI.COBB
Banks and Insurance	75	0.001***	0.007***	0.009***	0.026***	0.002***	0.008	0.022**
Real State, Consumer Durables & Apparel, Commercial & Professional Services	36	0.006***	0.031***	0.070***	0.092***	0.034**	0.003	-0.023***
Household & Personal Products	5	0.008**	0.032**	0.065**	0.081***	0.031**	-0.003	-0.037***
Utility-Energy-Gas	46	0.011***	0.045***	0.105***	0.138***	0.054***	0.055	-0.044***
Diversified Financials	36	0.011***	0.029***	0.108***	0.127***	0.075***	0.017	-0.068***
Materials	58	0.012***	0.048***	0.112***	0.137***	0.060***	-0.005	-0.088***
Pharmaceuticals, Biotechnology & Life Sciences	27	0.015***	0.051***	0.156***	0.191***	0.076***	-0.002	-0.071***
Automobiles	10	0.016***	0.071***	0.156***	0.195**	0.078**	0.021	-0.090***
Food, Beverage & Tobacco	26	0.016***	0.080***	0.178***	0.245***	0.081***	0.018	-0.036***
Whole Sample	646	0.019***	0.100***	0.214***	0.321***	0.093***	0.031*	-0.122***
Media	23	0.020***	0.130***	0.238***	0.409**	0.093***	-0.014	-0.139***
Capital Goods	101	0.022***	0.111***	0.219***	0.314***	0.092***	0.082*	-0.137***
Telecommunication Services Semiconductors, Technology	22	0.024***	0.138***	0.272***	0.426***	0.108**	0.043***	-0.169***
Hardware & Equipment	20	0.026***	0.107***	0.314***	0.382***	0.176***	0.064	-0.292***
Health Care Equipment & Services	14	0.028***	0.128***	0.310***	0.386***	0.154***	0.002	-0.126***
Software & Service	22	0.030***	0.141***	0.336***	0.606***	0.162***	-0.034	-0.271***
Commercial	28	0.032***	0.193***	0.341***	0.593***	0.122***	0.090	-0.232***
Transportation	29	0.037***	0.272***	0.533***	0.947**	0.188***	0.026	-0.242***
Hotels	27	0.041***	0.284***	0.553***	0.990***	0.185***	0.150	-0.135***
Food & Staples, Retailing, Consumer Durables & Apparel, Retailing	41	0.042***	0.270***	0.592***	0.861***	0.234***	-0.003	-0.257***

Muchas Gracias

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