

COMPETITOR ANALYSIS

Boskalis

Van Oord

Jan De Nul

DEME

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PROFITABILITY

P&L Financial Figures Boka - Van Oord - JDN - DEME - Great Lakes - CCCC period 2017-2021 in mio EUR

	2017	2018	2019	2020	2021	2017-2021	2012-2021	2007-2021	2002-2021
Boskalis									
Turnover	2.343	2.570	2.645	2.525	2.957	13.038	28.267	39.880	45.491
EBITDA	437	354	376	404	462	2.032 16%	5.849 21%	8.309 21%	9.160 20%
EBIT	252	-401	111	-56	199	105 1%	1.662 6%	3.252 8%	3.701 8%
Net Group Profit	185	-434	75	-97	148	-122 -1%	867 3%	2.120 5%	2.488 5%
Van Oord									
Turnover	1.530	1.876	1.644	1.677	1.517	8.244	17.957	26.222	
EBITDA	290	306	254	226	67	1.143 14%	2.777 15%	4.269 16%	
EBIT	133	145	88	59	-98	327 4%	1.190 7%	2.126 8%	
Net Group Profit	78	92	46	33	-62	187 2%	793 4%	1.525 6%	
Jan De Nul									
Turnover	1.758	1.708	2.030	1.908	1.737	9.140	20.203	29.930	33.976
EBITDA	365	277	342	344	231	1.559 17%	4.009 20%	6.169 21%	7.072 21%
EBIT	140	78	137	129	16	500 5%	1.612 8%	2.822 9%	3.301 10%
Net Group Profit	71	32	63	27	-19	173 2%	938 5%	1.950 7%	2.410 7%
DEME									
Turnover	2.356	2.646	2.622	2.196	2.511	12.330	23.693	31.485	35.454
EBITDA	456	459	437	369	469	2.191 18%	4.490 19%	5.969 19%	6.624 19%
EBIT	231	196	141	64	143	775 6%	1.927 8%	2.712 9%	3.007 8%
Net Group Profit	155	156	125	50	115	601 5%	1.323 6%	1.865 6%	2.048 6%
Total Big Four									
Turnover	7.986	8.799	8.940	8.306	8.721	42.752	90.119	127.517	144.424
EBITDA	1.548	1.396	1.409	1.343	1.230	6.925 16%	17.124 19%	24.715 19%	27.586 19%
EBIT	755	19	477	197	260	1.707 4%	6.392 7%	10.912 9%	12.362 9%
Net Group Profit	489	-154	308	14	182	839 2%	3.921 4%	7.461 6%	8.619 6%
Great Lakes									
Turnover	524	526	635	642	614	2.941	5.908	7.929	9.644
EBITDA	12	70	132	104	107	425 14%	754 13%	1.032 13%	1.236 13%
EBIT	-32	28	82	99	71	247 8%	357 6%	523 7%	627 7%
Net Group Profit	-28	-5	44	58	42	111 4%	91 2%	148 2%	129 1%
CCCC - Dredging									
Turnover	4.139	4.464	4.472	4.879	5.629	23.582	43.930	56.380	
EBITDA	657	585	563	751	763	3.319 14%	6.345 14%	8.373 15%	
EBIT	374	362	228	246	223	1.434 6%	3.550 8%	5.167 9%	
Total All									
Turnover	12.649	13.789	14.047	13.827	14.964	69.275	139.957	191.826	212.344
EBITDA	2.217	2.051	2.104	2.198	2.099	10.669 15%	24.223 17%	34.120 18%	37.487 18%
EBIT	1.097	408	787	542	553	3.388 5%	10.298 7%	16.602 9%	18.363 9%

P&L Financial Figures Boka - Van Oord - JDN - DEME - Great Lakes - CCCC period 2001-2021 in mio EUR

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		2021	
Boskalis																							
Turnover	1.083	1.035	1.046	1.020	1.156	1.354	1.869	2.094	2.175	2.674	2.801	3.081	3.144	3.167	3.240	2.596	2.343	2.570	2.645	2.525		2.957	
EBITDA	160	166	149	137	163	237	348	455	445	622	591	568	757	946	885	661	437	354	376	404	16,0%	462	
EBIT	98	100	70	48	82	150	246	339	249	402	354	337	463	652	563	-458	252	-401	111	-56	-2,2%	199	
Net Group Profit	78	82	71	34	63	117	207	250	229	313	254	250	365	492	444	-562	185	-434	75	-97	-3,8%	148	
Van Oord				2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		2021	
Turnover				763	1.002	1.516	1.652	1.896	1.424	1.578	1.715	1.676	1.641	2.104	2.579	1.713	1.530	1.876	1.644	1.677		1.517	
EBITDA				110	140	211	290	366	260	289	287	265	318	312	406	333	290	306	254	226	13,5%	67	
EBIT				32	66	129	206	221	161	174	174	138	180	159	239	147	133	145	88	59	3,5%	-98	
Net Group Profit				16	42	89	164	165	120	165	118	98	130	119	169	90	78	92	46	33	2,0%	-62	
Jan De Nui	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		2021	
Turnover	667	634	656	770	795	1.191	1.830	1.883	2.103	1.801	2.110	2.114	2.124	2.043	2.244	2.538	1.758	1.708	2.030	1.908		1.737	
EBITDA	163	129	119	179	178	298	456	377	493	374	460	510	550	419	632	339	365	277	342	344	18,0%	231	
EBIT	102	64	58	83	84	190	331	222	319	117	221	216	240	162	337	157	140	78	137	129	6,8%	16	
Net Group Profit	22	47	60	64	96	192	351	80	263	119	200	121	130	145	265	104	71	32	63	27	1,4%	-19	
DEME	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		2021	
Turnover	744	677	721	649	845	1.077	1.314	1.509	1.403	1.801	1.766	1.915	2.532	2.587	2.351	1.978	2.356	2.646	2.622	2.196		2.511	
EBITDA	121	103	103	119	153	177	259	302	289	329	300	351	438	502	558	450	456	459	437	369	16,8%	469	
EBIT	72	49	43	42	78	82	149	175	147	177	137	140	217	259	318	218	231	196	141	64	2,9%	143	
Net Group Profit	40	34	27	26	43	53	93	121	104	121	104	89	109	169	199	155	155	156	125	50	2,3%	115	
Total Big Four	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		2021	
Turnover	2.494	2.346	2.423	3.202	3.798	5.138	6.665	7.382	7.105	7.854	8.392	8.786	9.440	9.900	10.415	8.825	7.986	8.799	8.940	8.306		8.721	
EBITDA	444	398	371	545	634	922	1.353	1.500	1.487	1.613	1.638	1.694	2.063	2.178	2.481	1.783	1.548	1.396	1.409	1.343	16,2%	1.230	
EBIT	272	213	170	205	311	551	932	957	876	870	886	832	1.100	1.232	1.458	63	755	19	477	197	2,4%	260	
Net Group Profit	140	163	158	141	244	451	815	615	716	718	676	559	734	925	1.076	-213	489	-154	308	14	0,2%	182	
Great Lakes		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		2021	
Turnover		416	352	268	340	339	376	401	412	459	373	456	550	610	772	579	524	526	635	642		614	
EBITDA		62	44	24	32	42	42	38	57	76	65	58	74	58	75	63	12	70	132	104	16,2%	107	
EBIT		44	28	2	10	20	21	18	36	53	38	25	39	18	14	14	-32	28	82	99	15,4%	71	
Net Group Profit		15	-1	-14	-12	-7	5	3	11	25	12	-3	-26	8	-6	7	-28	-5	44	58	9,0%	42	
CCCC - Dredging					2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		2021	
Turnover					752	1.143	1.587	2.023	2.399	2.845	3.596	3.933	3.981	3.450	4.846	4.139	4.139	4.464	4.472	4.879		5.629	
EBITDA					101	191	261	315	418	527	506	558	548	470	793	657	657	585	563	751	15,4%	763	
EBIT					60	147	211	247	326	421	412	430	440	329	543	374	374	362	228	246	5,1%	223	
Total All	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		2021	
Turnover	2.494	2.762	2.775	3.470	4.890	6.621	8.628	9.806	9.916	11.157	12.362	13.175	13.972	13.960	16.033	13.542	12.649	13.789	14.047	13.827		14.964	
EBITDA	444	460	415	569	767	1.155	1.656	1.853	1.962	2.217	2.209	2.310	2.686	2.706	3.349	2.503	2.217	2.051	2.104	2.198	15,9%	2.099	
EBIT	272	257	199	206	381	718	1.164	1.222	1.238	1.344	1.336	1.287	1.578	1.580	2.014	451	1.097	408	787	542	3,9%	553	

STATEMENTS OF CASH FLOWS – Y2021

Year 2021	Boskalis		Van Oord		Jan De Nul		DEME	
Turnover	2.956.778		1.516.635		1.736.735		2.510.607	
Net Group Profit (incl. NCI)	148.399	5,0%	-62.433	-4,1%	-20.258	-1,2%	114.581	4,6%
Operating Profit	198.588	6,7%	-103.788	-6,8%	15.569	0,9%	143.281	5,7%
Depreciation, amortization and impairment losses	263.670	8,9%	164.791	10,9%	215.247	12,4%	325.216	13,0%
Taxes	-43.273	-22,6%	-4.526	7,8%	-52.817	-162,2%	-38.422	-25,1%
Movements in Working Capital / Provisions	42.284		55.522		-215.682		-6.732	
Other Adjustments	-42.623		-76.137		44.696		-2.082	
Cash flow from Operating Activities	418.646	14,2%	35.862	2,4%	7.012	0,4%	421.261	16,8%
Net investments in intangible and tangible assets	-348.860		-202.687		-67.009		-253.598	
Net investments in financial fixed assets	63		104.817		-25.958		-12.814	
Cash flow from/(used in) Investing Activities	-348.797	83,3%	-97.870	272,9%	-92.968	1325,9%	-266.412	63,2%
Dividend	-64.819		-15.963		0		-20.421	
Net interest expense	-11.830		-7.786		4.469		-202	
Other movements (Equity)	-27.711		0		0		0	
Debt movements	-30.957		189.970		227.866		-227.531	
Cash flow from/(used in) Financing Activities	-135.317		166.221		232.335		-248.154	
Cash at 1 January 2021	814.992		268.424		555.253		621.937	
Cash at 31 December 2021	749.524	-65.468	372.637	104.213	701.632	146.379	528.632	-93.305
EBITDA	462.258	15,6%	67.000	4,4%	231.000	13,3%	469.309	18,7%
Cash Flow (CF)	418.646	14,2%	35.862	2,4%	7.012	0,4%	421.261	16,8%
Levered Free Cash Flow (FCF)	58.019	2,0%	-69.794	-4,6%	-81.487	-4,7%	154.647	6,2%
Free Cash Flow to Equity (FCFE)	27.062	0,9%	120.176	7,9%	146.379	8,4%	-72.884	-2,9%
Unlevered Free Cash Flow (FCFF)	67.178	2,3%	-61.399	-4,0%	-78.707	-4,5%	154.798	6,2%

STATEMENTS OF CASH FLOWS – Y2020

Year 2020	Boskalis		Van Oord		Jan De Nul		DEME	
Turnover	2.524.911		1.677.369		1.907.906		2.195.828	
Net Group Profit (incl. NCI)	-96.679	-3,8%	33.042	2,0%	26.934	1,4%	50.410	2,3%
Operating Profit	-55.575	-2,2%	60.388	3,6%	128.774	6,7%	64.281	2,9%
Depreciation, amortization and impairment losses	421.962	16,7%	166.912	10,0%	214.743	11,3%	305.177	13,9%
Taxes	-16.893	21,2%	-16.924	-33,9%	-20.981	-43,8%	-25.735	-33,8%
Movements in Working Capital / Provisions	347.955		272.128		-91.559		117.670	
Other Adjustments	17.657		-4.925		-73.170		-81.313	
Cash flow from Operating Activities	715.106	28,3%	477.579	28,5%	157.807	8,3%	380.080	17,3%
Net investments in intangible and tangible assets	-208.269		-89.971		-340.835		-184.636	
Net investments in financial fixed assets	-41.991		-29.861		0		37.497	
Cash flow from/(used in) Investing Activities	-250.260	35,0%	-119.832	25,1%	-340.835	216,0%	-147.139	38,7%
Dividend	0		-21.099		0		0	
Net interest expense	-11.601		-6.426		-2.939		-7.753	
Other movements (Equity)	-29.403		0		0		0	
Debt movements	21.351		-169.970		29.436		-78.386	
Cash flow from/(used in) Financing Activities	-19.653		-197.495		26.497		-86.139	
Cash at 1 January 2020	369.799		108.172		711.784		475.135	
Cash at 31 December 2020	814.992	445.193	268.424	160.252	555.253	-156.531	621.937	146.802
EBITDA	404.000	16,0%	226.000	13,5%	344.000	18,0%	369.457	16,8%
Cash Flow (CF)	715.106	1,8%	477.579	28,5%	157.807	8,3%	380.080	17,3%
Levered Free Cash Flow (FCF)	453.245	1,1%	351.321	20,9%	-185.967	-9,7%	225.188	10,3%
Free Cash Flow to Equity (FCFE)	474.596	1,2%	181.351	10,8%	-156.531	-8,2%	146.802	6,7%
Unlevered Free Cash Flow (FCFF)	467.302	1,2%	355.570	21,2%	-184.315	-9,7%	230.321	10,5%

STATEMENTS OF CASH FLOWS – 2017-2021 (5 years)

Period 2017 - 2021 (5 years)	Boskalis		Van Oord		Jan De Nul		DEME	
Turnover	13.038.461		8.244.198		9.139.589		12.330.194	
Net Group Profit (incl. NCI)	-156.674	-1,2%	186.827	2,3%	172.211	1,9%	600.657	4,9%
Operating Profit	38.268	0,3%	310.421	3,8%	499.354	5,5%	775.227	6,3%
Depreciation, amortization and impairment losses	1.918.595	14,7%	816.121	9,9%	1.058.794	11,6%	1.408.180	11,4%
Taxes	-162.228	-2920,9%	-99.395	-34,7%	-167.910	-49,4%	-169.531	-22,0%
Movements in Working Capital / Provisions	111.540		75.016		-296.880		69.517	
Other Adjustments	-175.065		-114.957		-178.057		-121.703	
Cash flow from Operating Activities	1.731.110	13,3%	987.206	12,0%	915.300	10,0%	1.961.690	15,9%
Net investments in intangible and tangible assets	-1.297.095		-709.601		-1.024.327		-1.716.894	
Net investments in financial fixed assets	204.316		47.522		-24.464		-67.025	
Cash flow from/(used in) Investing Activities	-1.092.779	63,1%	-662.079	67,1%	-1.048.791	114,6%	-1.783.919	90,9%
Dividend	-199.491	127,3%	-149.514	-80,0%	0	0,0%	-185.427	-30,9%
Net interest expense	-66.535		-125.472		38.147		-34.237	
Other movements (Equity)	-201.743		0		0		0	
Debt movements	-390.787		42.541		290.378		42.747	
Cash flow from/(used in) Financing Activities	-858.556		-232.445		328.525		-176.917	
Cash at 1 January 2017	969.749		279.955		506.598		527.778	
Cash at 31 December 2021	749.524	-220.225	372.637	92.682	701.632	195.034	528.632	854
EBITDA	2.032.258	15,6%	1.143.000	13,9%	1.558.769	17,1%	2.190.866	17,8%
Cash Flow (CF)	1.731.110	13,3%	987.206	12,0%	915.300	10,0%	1.961.690	15,9%
Levered Free Cash Flow (FCF)	571.796	4,4%	199.655	2,4%	-95.344	-1,0%	143.534	1,2%
Free Cash Flow to Equity (FCFE)	181.009	1,4%	242.196	2,9%	195.034	2,1%	186.281	1,5%
Unlevered Free Cash Flow (FCFF)	630.066	4,8%	301.445	3,7%	-115.961	-1,3%	170.168	1,4%

STATEMENTS OF CASH FLOWS – 2011-2021 (10 years)

Period 2012 - 2021 (10 years)	Boskalis		Van Oord		Jan De Nul		DEME	
Turnover	28.266.912		17.957.738		20.203.303		23.692.849	
Net Group Profit (incl. NCI)	833.855	2,9%	793.727	4,4%	938.223	4,6%	1.328.936	5,6%
Operating Profit	1.597.012	5,6%	1.170.825	6,5%	1.496.848	7,4%	1.845.579	7,8%
Depreciation, amortization and impairment losses	4.096.414	14,5%	1.587.402	8,8%	2.396.706	11,9%	2.506.095	10,6%
Taxes	-512.984	-38,1%	-228.836	-22,4%	-303.487	-24,4%	-378.455	-22,2%
Movements in Working Capital / Provisions	-45.366		321.119		-635.976		159.217	
Other Adjustments	-270.367		-234.794		-244.645		-173.036	
Cash flow from Operating Activities	4.864.709	17,2%	2.615.716	14,6%	2.709.446	13,4%	3.959.400	16,7%
Net investments in intangible and tangible assets	-2.427.500		-1.820.189		-1.878.799		-2.744.027	
Net investments in financial fixed assets	-475.649		14.217		-56.998		-210.675	
Cash flow from/(used in) Investing Activities	-2.903.149	59,7%	-1.805.972	69,0%	-1.935.796	71,4%	-2.954.702	74,6%
Dividend	-429.617	-51,5%	-450.545	-56,8%	0	0,0%	-401.244	-30,2%
Net interest expense	-234.537		-249.782		-17.577		-190.591	
Other movements (Equity)	90.533		0		0		6.640	
Debt movements	-964.557		65.600		-200.005		-40.350	
Cash flow from/(used in) Financing Activities	-1.538.178		-634.727		-217.583		-625.545	
Cash at 1 January 2012	326.142		197.620		145.565		149.479	
Cash at 31 December 2021	749.524	423.382	372.637	175.017	701.632	556.067	528.632	379.153
EBITDA	5.891.458	20,8%	2.777.000	15,5%	4.008.869	19,8%	4.489.566	18,9%
Cash Flow (CF)	4.864.709	17,2%	2.615.716	14,6%	2.709.446	13,4%	3.959.400	16,7%
Levered Free Cash Flow (FCF)	1.727.023	6,1%	559.962	3,1%	756.072	3,7%	814.107	3,4%
Free Cash Flow to Equity (FCFE)	762.466	2,7%	625.562	3,5%	556.067	2,8%	773.757	3,3%
Unlevered Free Cash Flow (FCFF)	1.936.797	6,9%	763.511	4,3%	780.834	3,9%	962.248	4,1%

STATEMENTS OF CASH FLOWS – 2007-2021 (15 years)

Period 2007 - 2021 (15 years)	Boskalis		Van Oord		Jan De Nul		DEME	
Turnover	39.879.949		26.223.045		29.930.193		31.485.249	
Net Group Profit (incl. NCI)	2.094.097	5,3%	1.526.120	5,8%	1.950.458	6,5%	1.857.551	5,9%
Operating Profit	3.186.887	8,0%	2.105.402	8,0%	2.618.280	8,7%	2.629.676	8,4%
Depreciation, amortization and impairment losses	4.966.055	12,5%	2.108.317	8,0%	3.346.518	11,2%	3.203.154	10,2%
Taxes	-807.318	-27,8%	-355.276	-18,9%	-403.159	-17,1%	-516.046	-21,7%
Movements in Working Capital / Provisions	196.594		481.124		-681.456		475.845	
Other Adjustments	-364.036		-227.569		-275.289		-200.483	
Cash flow from Operating Activities	7.178.182	18,0%	4.111.998	15,7%	4.604.894	15,4%	5.592.146	17,8%
Net investments in intangible and tangible assets	-3.614.671		-3.050.883		-4.338.498		-4.386.648	
Net investments in financial fixed assets	-1.523.130		7.066		-145.097		-238.527	
Cash flow from/(used in) Investing Activities	-5.137.801	71,6%	-3.043.817	74,0%	-4.483.595	97,4%	-4.625.175	82,7%
Dividend	-726.644	-34,7%	-894.134	-58,6%	0	0,0%	-541.712	-29,2%
Net interest expense	-307.533		-304.450		-114.452		-286.539	
Other movements (Equity)	317.884		-70.000		0		9.945	
Debt movements	-724.190		248.872		225.255		306.372	
Cash flow from/(used in) Financing Activities	-1.440.483		-1.019.712		110.803		-511.934	
Cash at 1 January 2006	149.626		324.168		469.529		73.595	
Cash at 31 December 2021	749.524	599.898	372.637	48.469	701.632	232.103	528.632	455.037
EBITDA	8.351.558	20,9%	4.269.000	16,3%	6.168.893	20,6%	5.968.666	19,0%
Cash Flow (CF)	7.178.182	18,0%	4.111.998	15,7%	4.604.894	15,4%	5.592.146	17,8%
Levered Free Cash Flow (FCF)	1.732.848	4,3%	763.731	2,9%	6.848	0,0%	680.432	2,2%
Free Cash Flow to Equity (FCFE)	1.008.658	2,5%	1.012.603	3,9%	232.103	0,8%	986.804	3,1%
Unlevered Free Cash Flow (FCFF)	2.000.514	5,0%	1.015.611	3,9%	118.296	0,4%	904.626	2,9%

STATEMENTS OF CASH FLOWS – 2002-2021 (20 years)

Period 2002 - 2021 (20 years)	Boskalis		DEME	
Turnover	45.490.949		35.454.756	
Net Group Profit (incl. NCI)	2.211.155 4,9%		2.033.459 5,7%	
Operating Profit	3.636.074 8,0%		2.924.458 8,2%	
Depreciation, amortization and impairment losses	5.363.521 11,8%		3.563.468 10,1%	
Taxes	-881.620 -28,5%		-574.445 -22,0%	
Movements in Working Capital / Provisions	154.819		508.666	
Other Adjustments	-369.230		-183.062	
Cash flow from Operating Activities	7.903.564 17,4%		6.239.085 17,6%	
Net investments in intangible and tangible assets	-4.239.829		-5.088.351	
Net investments in financial fixed assets	-1.523.519		-236.722	
Cash flow from/(used in) Investing Activities	-5.763.348 72,9%		-5.325.073 85,4%	
Dividend	-817.121 -37,0%		-597.633 -29,4%	
Net interest expense	-309.956		-345.200	
Other movements (Equity)	317.884		11.388	
Debt movements	-698.643		484.109	
Cash flow from/(used in) Financing Activities	-1.507.836		-447.336	
Cash at 1 January 2002	117.144		61.956	
Cash at 31 December 2021	749.524 632.380		528.632 466.676	
EBITDA	9.202.458 23,1%		6.623.904 21,0%	
Cash Flow (CF)	7.903.564 19,8%		6.239.085 19,8%	
Levered Free Cash Flow (FCF)	1.830.260 4,6%		568.812 1,8%	
Free Cash Flow to Equity (FCFE)	1.131.617 2,8%		1.052.921 3,3%	
Unlevered Free Cash Flow (FCFF)	2.099.902 5,3%		837.743 2,7%	

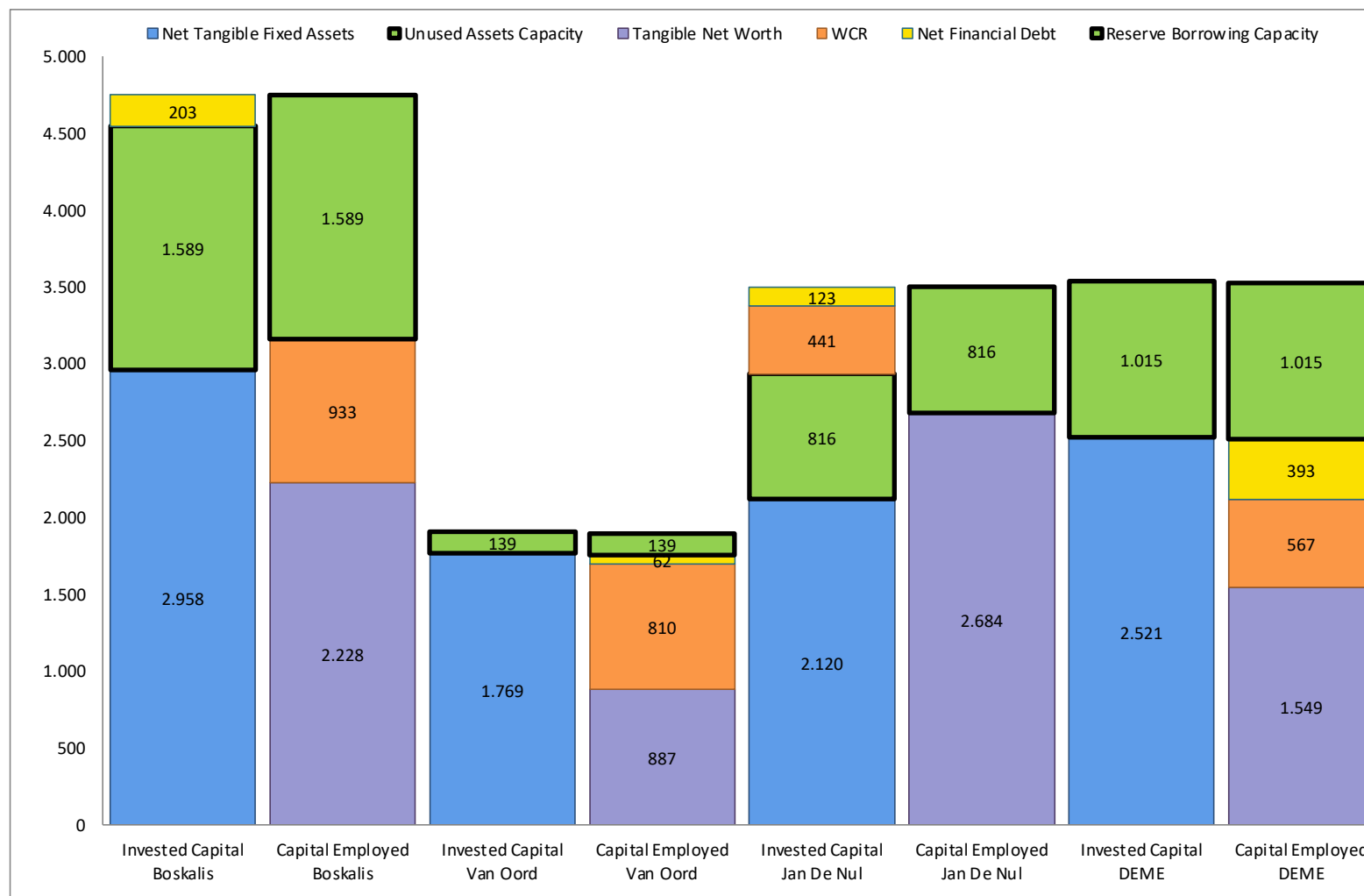
Boskalis	2021		2021 - 2017 (5 y)		2021 - 2012 (10 y)		2021 - 2007 (15 y)		2021 - 2002 (20 y)	
Turnover	2.956.778		13.038.461		28.266.912		39.879.949		45.490.949	
Net Group Profit (incl. NCI)	148.399	5,0%	-156.674	-1,2%	833.855	2,9%	2.094.097	5,3%	2.211.155	4,9%
Operating Profit	198.588	6,7%	38.268	0,3%	1.597.012	5,6%	3.186.887	8,0%	3.636.074	8,0%
Depreciation, amortization and impairment losses	263.670	8,9%	1.918.595	14,7%	4.096.414	14,5%	4.966.055	12,5%	5.363.521	11,8%
Taxes	-43.273	-22,6%	-162.228	-2920,9%	-512.984	-38,1%	-807.318	-27,8%	-881.620	-28,5%
Movements in Working Capital / Provisions	42.284		111.540		-45.366		196.594		154.819	
Other Adjustments	-42.623		-175.065		-270.367		-364.036		-369.230	
Cash flow from Operating Activities	418.646	14,2%	1.731.110	13,3%	4.864.709	17,2%	7.178.182	18,0%	7.903.564	17,4%
Net investments in intangible and tangible assets	-348.860		-1.297.095		-2.427.500		-3.614.671		-4.239.829	
Net investments in financial fixed assets	63		204.316		-475.649		-1.523.130		-1.523.519	
Cash flow from/(used in) Investing Activities	-348.797	83,3%	-1.092.779	63,1%	-2.903.149	59,7%	-5.137.801	71,6%	-5.763.348	72,9%
Dividend	-64.819	-43,7%	-199.491	127,3%	-429.617	-51,5%	-726.644	-34,7%	-817.121	-37,0%
Net interest expense	-11.830		-66.535		-234.537		-307.533		-309.956	
Other movements (Equity)	-27.711		-201.743		90.533		317.884		317.884	
Debt movements	-30.957		-390.787		-964.557		-724.190		-698.643	
Cash flow from/(used in) Financing Activities	-135.317		-858.556		-1.538.178		-1.440.483		-1.507.836	
Cash at 1 January	814.992		969.749		326.142		149.626		117.144	
Cash at 31 December	749.524	-65.468	749.524	-220.225	749.524	423.382	749.524	599.898	749.524	632.380
EBITDA	462.258	15,6%	2.032.258	15,6%	5.891.458	20,8%	8.351.558	20,9%	9.202.458	20,2%
Cash Flow (CF)	418.646	14,2%	1.731.110	13,3%	4.864.709	17,2%	7.178.182	18,0%	7.903.564	17,4%
Levered Free Cash Flow (FCF)	58.019	2,0%	571.796	4,4%	1.727.023	6,1%	1.732.848	4,3%	1.830.260	4,0%
Free Cash Flow to Equity (FCFE)	27.062	0,9%	181.009	1,4%	762.466	2,7%	1.008.658	2,5%	1.131.617	2,5%
Unlevered Free Cash Flow (FCFF)	67.178	2,3%	630.066	4,8%	1.936.797	6,9%	2.000.514	5,0%	2.099.902	4,6%

Van Oord	2021		2021 - 2017 (5 y)		2021 - 2012 (10 y)		2021 - 2007 (15 y)	
Turnover	1.516.635		8.244.198		17.957.738		26.223.045	
Net Group Profit (incl. NCI)	-62.433	-4,1%	186.827	2,3%	793.727	4,4%	1.526.120	5,8%
Operating Profit	-103.788	-6,8%	310.421	3,8%	1.170.825	6,5%	2.105.402	8,0%
Depreciation, amortization and impairment losses	164.791	10,9%	816.121	9,9%	1.587.402	8,8%	2.108.317	8,0%
Taxes	-4.526	7,8%	-99.395	-34,7%	-228.836	-22,4%	-355.276	-18,9%
Movements in Working Capital / Provisions	55.522		75.016		321.119		481.124	
Other Adjustments	-76.137		-114.957		-234.794		-227.569	
Cash flow from Operating Activities	35.862	2,4%	987.206	12,0%	2.615.716	14,6%	4.111.998	15,7%
Net investments in intangible and tangible assets	-202.687		-709.601		-1.820.189		-3.050.883	
Net investments in financial fixed assets	104.817		47.522		14.217		7.066	
Cash flow from/(used in) Investing Activities	-97.870	272,9%	-662.079	67,1%	-1.805.972	69,0%	-3.043.817	74,0%
Dividend	-15.963	-25,6%	-149.514	-80,0%	-450.545	-56,8%	-894.134	-58,6%
Net interest expense	-7.786		-125.472		-249.782		-304.450	
Other movements (Equity)	0		0		0		-70.000	
Debt movements	189.970		42.541		65.600		248.872	
Cash flow from/(used in) Financing Activities	166.221		-232.445		-634.727		-1.019.712	
Cash at 1 January	268.424		279.955		197.620		324.168	
Cash at 31 December	372.637	104.213	372.637	92.682	372.637	175.017	372.637	48.469
EBITDA	67.000	4,4%	1.143.000	13,9%	2.777.000	15,5%	4.269.000	16,3%
Cash Flow (CF)	35.862	2,4%	987.206	12,0%	2.615.716	9,3%	4.111.998	15,7%
Levered Free Cash Flow (FCF)	-69.794	-4,6%	199.655	2,4%	559.962	2,0%	763.731	2,9%
Free Cash Flow to Equity (FCFE)	120.176	7,9%	242.196	2,9%	625.562	2,2%	1.012.603	3,9%
Unlevered Free Cash Flow (FCFF)	-61.399	-4,0%	301.445	3,7%	763.511	2,7%	1.015.611	3,9%

Jan De Nul	2021		2021 - 2017 (5 y)		2021 - 2012 (10 y)		2021 - 2007 (15 y)	
Turnover	1.736.735		9.139.589		20.203.303		29.930.193	
Net Group Profit (incl. NCI)	-20.258	-1,2%	172.211	1,9%	938.223	4,6%	1.950.458	6,5%
Operating Profit	15.569	0,9%	499.354	5,5%	1.496.848	7,4%	2.618.280	8,7%
Depreciation, amortization and impairment losses	215.247	12,4%	1.058.794	11,6%	2.396.706	11,9%	3.346.518	11,2%
Taxes	-52.817	-162,2%	-167.910	-49,4%	-303.487	-24,4%	-403.159	-17,1%
Movements in Working Capital / Provisions	-215.682		-296.880		-635.976		-681.456	
Other Adjustments	44.696		-178.057		-244.645		-275.289	
Cash flow from Operating Activities	7.012	0,4%	915.300	10,0%	2.709.446	13,4%	4.604.894	15,4%
Net investments in intangible and tangible assets	-67.009		-1.024.327		-1.878.799		-4.338.498	
Net investments in financial fixed assets	-25.958		-24.464		-56.998		-145.097	
Cash flow from/(used in) Investing Activities	-92.968	1325,9%	-1.048.791	114,6%	-1.935.796	71,4%	-4.483.595	97,4%
Dividend	0		0		0		0	
Net interest expense	4.469		38.147		-17.577		-114.452	
Other movements (Equity)	0		0		0		0	
Debt movements	227.866		290.378		-200.005		225.255	
Cash flow from/(used in) Financing Activities	232.335		328.525		-217.583		110.803	
Cash at 1 January	555.253		506.598		145.565		469.529	
Cash at 31 December	701.632	146.379	701.632	195.034	701.632	556.067	701.632	232.103
EBITDA	231.000	13,3%	1.558.769	17,1%	4.008.869	19,8%	6.168.893	20,6%
Cash Flow (CF)	7.012	0,4%	915.300	10,0%	2.709.446	13,4%	4.604.894	15,4%
Levered Free Cash Flow (FCF)	-81.487	-4,7%	-95.344	-1,0%	756.072	3,7%	6.848	0,0%
Free Cash Flow to Equity (FCFE)	146.379	8,4%	195.034	2,1%	556.067	2,8%	232.103	0,8%
Unlevered Free Cash Flow (FCFF)	-78.707	-4,5%	-115.961	-1,3%	780.834	3,9%	118.296	0,4%

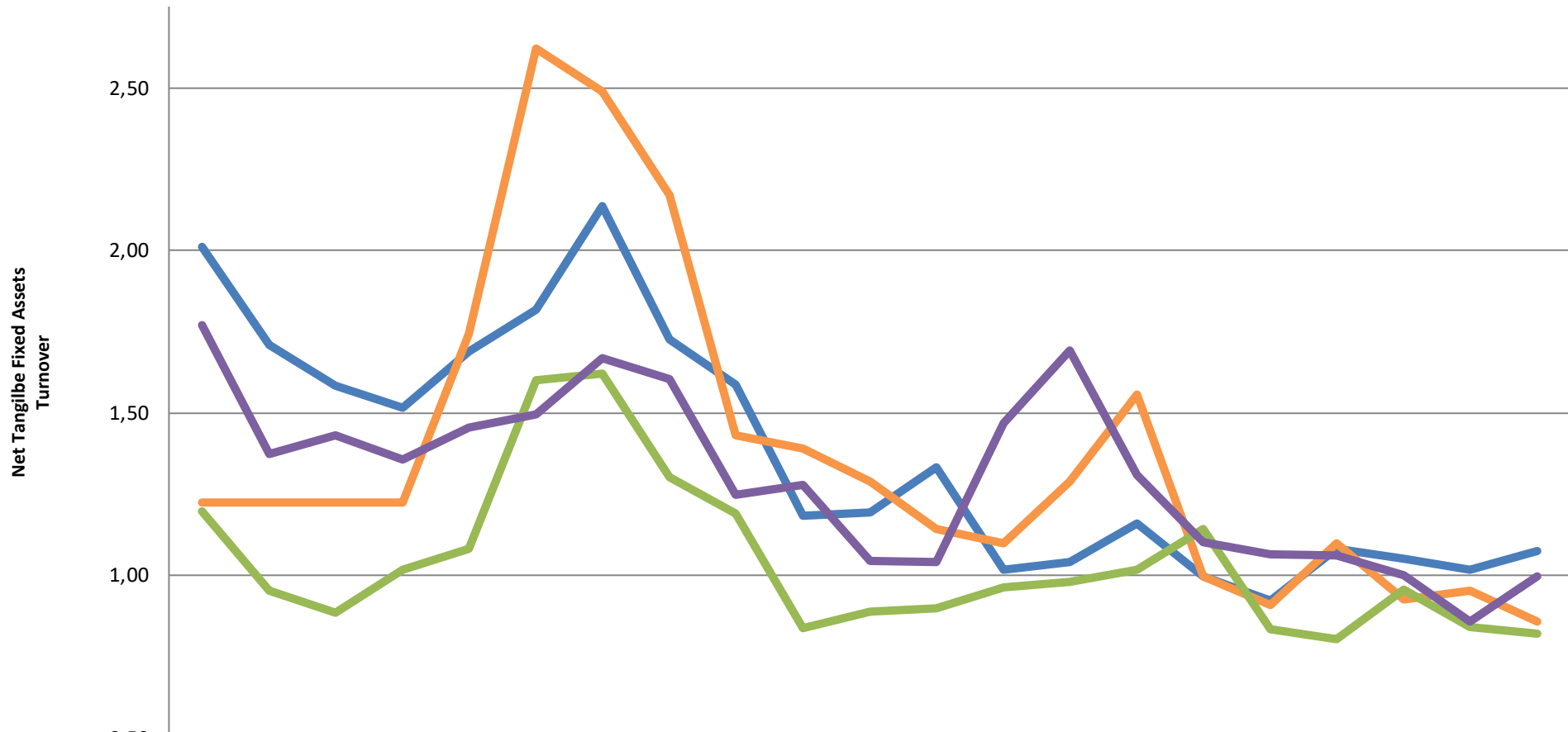
DEME	2021		2021 - 2017 (5 y)		2021 - 2012 (10 y)		2021 - 2007 (15 y)		2021 - 2002 (20 y)	
Turnover	2.510.607		12.330.194		23.692.849		31.485.249		35.454.756	
Net Group Profit (incl. NCI)	114.581	4,6%	600.657	4,9%	1.328.936	5,6%	1.857.551	5,9%	2.033.459	5,7%
Operating Profit	143.281	5,7%	775.227	6,3%	1.845.579	7,8%	2.629.676	8,4%	2.924.458	8,2%
Depreciation, amortization and impairment losses	325.216	13,0%	1.408.180	11,4%	2.506.095	10,6%	3.203.154	10,2%	3.563.468	10,1%
Taxes	-38.422	-25,1%	-169.531	-22,0%	-378.455	-22,2%	-516.046	-21,7%	-574.445	-22,0%
Movements in Working Capital / Provisions	-6.732		69.517		159.217		475.845		508.666	
Other Adjustments	-2.082		-121.703		-173.036		-200.483		-183.062	
Cash flow from Operating Activities	421.261	16,8%	1.961.690	15,9%	3.959.400	16,7%	5.592.146	17,8%	6.239.085	17,6%
Net investments in intangible and tangible assets	-253.598		-1.716.894		-2.744.027		-4.386.648		-5.088.351	
Net investments in financial fixed assets	-12.814		-67.025		-210.675		-238.527		-236.722	
Cash flow from/(used in) Investing Activities	-266.412	63,2%	-1.783.919	90,9%	-2.954.702	74,6%	-4.625.175	82,7%	-5.325.073	85,4%
Dividend	-20.421		-185.427	-30,9%	-401.244	-30,2%	-541.712	-29,2%	-597.633	-29,4%
Net interest expense	-202		-34.237		-190.591		-286.539		-345.200	
Other movements (Equity)	0		0		6.640		9.945		11.388	
Debt movements	-227.531		42.747		-40.350		306.372		484.109	
Cash flow from/(used in) Financing Activities	-248.154		-176.917		-625.545		-511.934		-447.336	
Cash at 1 January	621.937		527.778		149.479		73.595		61.956	
Cash at 31 December	528.632	-93.305	528.632	854	528.632	379.153	528.632	455.037	528.632	466.676
EBITDA	469.309	18,7%	2.190.866	17,8%	4.489.566	18,9%	5.968.666	19,0%	6.623.904	21,0%
Cash Flow (CF)	421.261	16,8%	1.961.690	15,9%	3.959.400	16,7%	5.592.146	17,8%	6.239.085	19,8%
Levered Free Cash Flow (FCF)	154.647	6,2%	143.534	1,2%	814.107	3,4%	680.432	2,2%	568.812	1,8%
Free Cash Flow to Equity (FCFE)	-72.884	-2,9%	186.281	1,5%	773.757	3,3%	986.804	3,1%	1.052.921	3,3%
Unlevered Free Cash Flow (FCFF)	154.798	6,2%	170.168	1,4%	962.248	4,1%	904.626	2,9%	837.743	2,7%

BALANCE SHEET ANALYSIS – Y2021



Theoretical Reserve Borrowing Capacity		Boskalis	Van Oord	Jan De Nul	DEME
Equity to Assets Ratio	Equity / Total Assets max 25 %	4.606	1.018	7.105	2.347
Debt to Equity Ratio	Net Financial Debt / Equity max 2	5.012	1.767	5.635	2.806
Debt Coverage Ratio	EBITDA / Net Financial Debt max 3	1.589	139	816	1.015
Debt Coverage Ratio	EBITDA / Net Financial Debt max 1	665	5	354	77

Asset Turnover Ratio by Net Tangible Fixed Assets versus Turnover 2001 - 2021



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
— Boskalis	2,01	1,71	1,58	1,52	1,69	1,82	2,14	1,73	1,59	1,18	1,19	1,33	1,02	1,04	1,16	1,00	0,92	1,08	1,05	1,02	1,07
— Van Oord	1,22	1,22	1,22	1,22	1,74	2,62	2,49	2,17	1,43	1,39	1,29	1,14	1,10	1,29	1,56	1,00	0,91	1,10	0,93	0,95	0,86
— Jan De Nul	1,20	0,95	0,88	1,02	1,08	1,60	1,62	1,30	1,19	0,84	0,89	0,90	0,96	0,98	1,02	1,14	0,83	0,81	0,96	0,84	0,82
— DEME	1,77	1,37	1,43	1,36	1,45	1,50	1,67	1,60	1,25	1,28	1,04	1,04	1,47	1,69	1,31	1,10	1,06	1,06	1,00	0,86	1,00

EXPLANATORY NOTE

The following notes can be considered as explanatory remarks and personal reflections on the previous tables.

- **Profitability**

- Costs for Maintenance & Repair: In the DA (Depreciation and Amortization) component of the EBITDA of DEME, the capital repairs activated under IAS 16 are also included. International Financial Reporting Standards (IFRS) reporting rules do not allow a system of provisions for maintenance and repair costs. Boskalis mentions in their annual report: *“The maintenance and repair expenses to keep the assets in their operational condition are charged to the Statement of Profit or Loss”*. JDN and Van Oord do not report figures according to IFRS standards. They use the “classic” provision system of booking the repair costs in P&L while respecting the matching principle through accruals. As both Boskalis and DEME do not report their IAS 16 activation of maintenance and repair costs, the effect on their EBITDA’s can be estimated at between +1,5 % and +2,5 % compared to applying a provision system and assuming that those costs are included in the EBITDA result. The bottom-line result in the long run should lead to the same result reported, it is merely the EBITDA that is affected. But as EBITDA is often used in valuing a company or whereas EBITDA margin is used to measure operational performance, a correction of +2 % (best guess estimate) could be applied on the EBITDAs of the groups using a provision system.
- Figures of CCCC: these are only the segment ‘Dredging’. CAPEX of the dredging division was 129 mio EUR in 2021 and 285 mio EUR in 2020.

- **Statement of Cash Flows**

This presentation is a model developed to compare the four groups. Those groups are using different reporting standards. Boskalis and DEME report their figures according to IFRS standards. Van Oord uses Dutch GAAP and JDN reports according to Luxembourg GAAP.

- Boskalis: The company states to put available 40 % to 50 % of their net profit from ordinary operations for distribution towards its shareholders. Boskalis traditionally offered its shareholders a choice between a cash and a stock dividend. For the profit distribution year 2019 with pay-out in year 2020, Boskalis cancelled the dividend payment. For the year 2020, the dividend was distributed fully in cash. The actual cash out of the last twenty years has been substantially lower than 40 % to 50 % of the net profit as being only 37 % (dividend payout over the last twenty years). The creation of new shares did not create a cash loss/out for the company. They merely created a shift in shareholding between the ones preferring the present by opting for cash and the ones betting on a bigger piece of the future Boskalis pie.
- Jan De Nul: Until 2015, the interest expenses were not reported separately but they were reported together with the exchange results. This distorted the statement of cash flows. For this reason, until 2013, an adjustment was applied. This adjustment was to calculate an estimated interest cost of 4 % on the average yearly outstanding financial debt. As of 2014, the interest charges have been deducted with the interest income to report the net interest.

As in previous years, the reported consolidated cash flow analysis of JDN is not drafted in the same manner as IFRS reporting entities. It lacks some information to be able to prepare a fully accurate statement of cash flows. E.g., the corporate income taxes paid are not specifically mentioned. Further the working capital movements and the investments in fixed assets cannot be correctly reconciled with the balance sheet. Some of those remarks also apply to the reported figures of Van Oord. Both JDN and VO do not have directly or indirectly shareholders listed on a stock exchange which would lead to higher public reporting requirements. Despite these flaws, the big lines give a clear view. This is even more true when looking over a larger time span such as over five to ten years and even fifteen years. To quote legendary investor Warren Buffet: "In the business world, the rear-view mirror is always clearer than the windshield."

- The ten- and fifteen-year summary enables us to see longer term trends on cash flow strategies pursued. For Boskalis and DEME a twenty-year summary is available. It is widely accepted that 'Cash flow from Operating Activities' is in the long run a better indicator for operational cashflow than EBITDA. CF from Operating Activities considers the taxes (which are a cost for the company and in an international landscape the capital structure has less of an impact on the tax rate than on a stand-alone single country set-up), the movements in working capital/provisions and other adjustments such as consolidation changes/financial exchange results. Nevertheless, EBITDA is still considered as the most important financial performance measure in the industry, together with turnover and net profit. EBITDA is a non-GAAP measure meaning that companies can give their own interpretation on the calculation.

The following tables compares the Cash Flow from Operating Activities with the reported EBITDA over the last five, ten- and fifteen-year periods.

	Boskalis			Van Oord			Jan De Nul			DEME		
CF incl. Taxes	CF Op.	EBITDA		CF Op.	EBITDA		CF Op.	EBITDA		CF Op.	EBITDA	
Five Year	1.731	2.032	117%	987	1.143	116%	915	1.559	170%	1.962	2.191	112%
Ten Year	4.865	5.849	120%	2.616	2.777	106%	2.709	4.009	148%	3.959	4.490	113%
Fifteen Year	7.178	8.309	116%	4.112	4.269	104%	4.605	6.169	134%	5.592	5.969	107%

To improve comparability, in the following table the corporate income taxes have been excluded out of the Cash Flow from Operating Activities to have the Cash Flow from Operating Activities before Taxes and Interests.

	Boskalis			Van Oord			Jan De Nul			DEME		
CF excl. Taxes	CF Op.	EBITDA		CF Op.	EBITDA		CF Op.	EBITDA		CF Op.	EBITDA	
Five Year	1.893	2.032	107%	1.087	1.143	105%	1.083	1.559	144%	2.131	2.191	103%
Ten Year	5.378	5.849	109%	2.845	2.777	98%	3.013	4.009	133%	4.338	4.490	103%
Fifteen Year	7.986	8.309	104%	4.467	4.269	96%	5.008	6.169	123%	6.108	5.969	98%

The EBITDA of DEME was over the years in line with its cash flows generated through operations. Jan De Nul on the other hand has reported consistently a higher EBITDA compared with its cash flows from operations. For DEME and Van Oord the EBITDA reported is closely matching with the Cash Flow from operations excluding interests and taxes. The main reason will be explained further in the working capital analysis. JDN reports a higher working capital and thus has less been able to frontload its cashflows.

Another reason is that JDN in recent years did not book an important part of its losses on the third set of locks of the Panama Canal as operational results and thus has excluded them from the EBITDA. In 2018, a negative amount of 108 mio EUR was booked as a value adjustment in respect of financial assets. A reversal of this provision was booked for +29,4 mio EUR in Y2019 of which 1,4 mio EUR was re-provisioned in Y2020 and again 20,4 mio EUR in Y2021.

- **Balance Sheet Analysis**

- IFRS 16 – Leases

As of January 1st, 2019, the new standard IFRS 16 relates to changes in accounting for operational lease commitments. IFRS 16 requires lessees to recognize a liability in their Consolidated Statement of Financial Position and to capitalize the right-of-use of a leased asset if it is leased for a period exceeding one year. This new standard affects the balance sheet in a way that the fixed assets and the debts are increasing. Aside from this, IFRS 16 also influences the income statement, because an entity now must recognize interest expense on the lease liability (obligation to make lease payments) and depreciation on the 'right-of-use' asset (that is, the asset that reflects the right to use the lease asset). Another consequence of the changes in presentation is that EBIT and EBITDA will be higher for companies that have material operational leases. The new guidance also changes the cash flow statement in a sense that cash flows from operational activities will decrease while cash flows from financing activities increase.

Boskalis and DEME both report their annual statements applying IFRS standards. The impact on the figures is:

in mio EUR	Y2019		Y2020		Y2021
	DEME	Boskalis	DEME	Boskalis	Boskalis
Impact Tangible Fixed Assets	85,3	103,9	75,3	115,0	140,3
Impact Net Financial Debt	86,1	108,3	76,8	120,9	147,8
Impact EBITDA	17,6	23,8	19,7	28,0	35,4
Impact EBITDA Margin	0,67%	0,90%	0,75%	0,95%	1,20%
Impact Net Result	-0,8	-1,2	-0,7	-1,8	-2,1
Impact Net Result Margin	-0,03%	-0,05%	-0,03%	-0,06%	-0,07%

DEME did not report the IFRS 16 impact anymore in their financial report Y2021. Jan De Nul and Van Oord have not reported changes as they apply different accounting standards being Luxembourg and Dutch GAAP respectively.

- 'Net Tangible Fixed Assets' has been used as indicator. This is the 'Fixed Assets' excluding 'Intangibles' such as 'Goodwill'. For comparison between the groups, this is a better indicator than the reported 'Fixed Assets'. On the liability side of the balance sheet, to balance the correction on the intangibles has been applied on the Equity. By doing so instead of Book Value Equity, the 'Tangible Net Worth' has been calculated.
 - Boskalis had end of the year 2021 an amount of 177 mio EUR reported under 'Intangibles' of which 168 mio EUR was 'Goodwill' generated by its acquisitions in previous years. Goodwill is not depreciated under IFRS. It stays unchanged on the balance sheet until impairment is required.
 - Van Oord had at the end of 2021 an amount of 18,2 mio EUR reported under 'Intangible Fixed Assets'. In accordance to Dutch GAAP this is depreciated over twenty years.
 - The acquisitions done in recent years by DEME (A2Sea, G-Tec, part of Medco, SPT Offshore) were done by paying hardly any goodwill or a surplus value over book value. End of 2021, DEME had only 13 mio EUR booked under 'Goodwill' on its balance sheet.
- The 'Theoretical Reserve Borrowing Capacity' is calculated as follows:

Theoretical Reserve Borrowing Capacity		Boskalis			Van Oord			Jan De Nul			DEME		
		2019	2020	2021	2019	2020	2021	2019	2020	2021	2019	2020	2021
Equity to Assets Ratio	Equity / Total Assets max 25 %	5.382	4.617	4.606	1.618	1.602	1.018	7.068	7.100	7.105	1.844	2.000	2.347
Debt to Equity Ratio	Net Financial Debt / Equity max 2	4.907	4.890	5.012	1.709	2.054	1.767	5.883	5.714	5.635	2.186	2.482	2.806
Debt Coverage Ratio	EBITDA / Net Financial Debt max 3	1.045	1.530	1.589	455	702	139	1.416	1.236	816	603	619	1.015
Debt Coverage Ratio	EBITDA / Net Financial Debt max 1	293	722	665	-53	250	5	732	548	354	-271	-120	77

The limiting factor for calculating the borrowing capacity is 'the Debt Coverage Ratio'. EBITDA versus 'Net Financial Debt' has been set at maximum 3. In the past this covenant was put at 2,5 as being the market benchmark a few years ago. The expected monetary tightening by central banks which will be required to contain inflation might impact future credit conditions and see this covenant back at 2,5 in a few years' time. But as of today, both Boskalis and DEME report in their annual report that their current financial covenant net financial debt divided by EBITDA should be lower than 3. For debt funding, this ratio used to be more relevant in the past than in the current financial climate. Boskalis further writes in their annual report: they believe a net debt/EBITDA ratio in range of 1 to 1,5 through the cycle to be appropriate for their mix of activities. For that reason, an additional calculation with very strict ratio of 1 has been added.

End of 2021, Van Oord had the lowest 'Reserve Borrowing Capacity'. The debt level has been stretched but the maximum level was never reached leaving ample room for obtaining additional financing. All four groups have more than sufficient financing fire power. A low 'Reserve Borrowing Capacity' can also be considered as having the least 'Unused Assets Capacity'. In classical corporate finance theory, a company should borrow as much as it can to maximize its 'Return on Equity' (RoE) by fully exploiting its leverage. However, there are some limiting factors which are preventing companies to achieve the optimum Equity/Debt ratio. Further it is worth noting that JDN has reported 702 mio EUR cash on its balance end of Y2021 but also 579 mio EUR owned to credit institutions of which 144 mio EUR is commercial paper. It is known that a part of the cash is blocked in joint ventures, but this cannot explain fully the higher unexpected debt and more specifically the commercial paper funding is particular as without having more inside details available one could conclude that the company has sufficient funds and opts to work with a high cash reserve buffer. This would not be unwise. In a project driven environment of the sort of dredging / maritime construction maintaining a safe cash reserve combined with unused and confirmed credit lines are highly recommendable in case of the occurrence of a black swan event which could wipe out a company in an extreme situation.

- **Asset Turnover by Net Tangible Fixed Assets versus Turnover**

This ratio and graph illustrate the high capital requirements and cyclicity of the business.

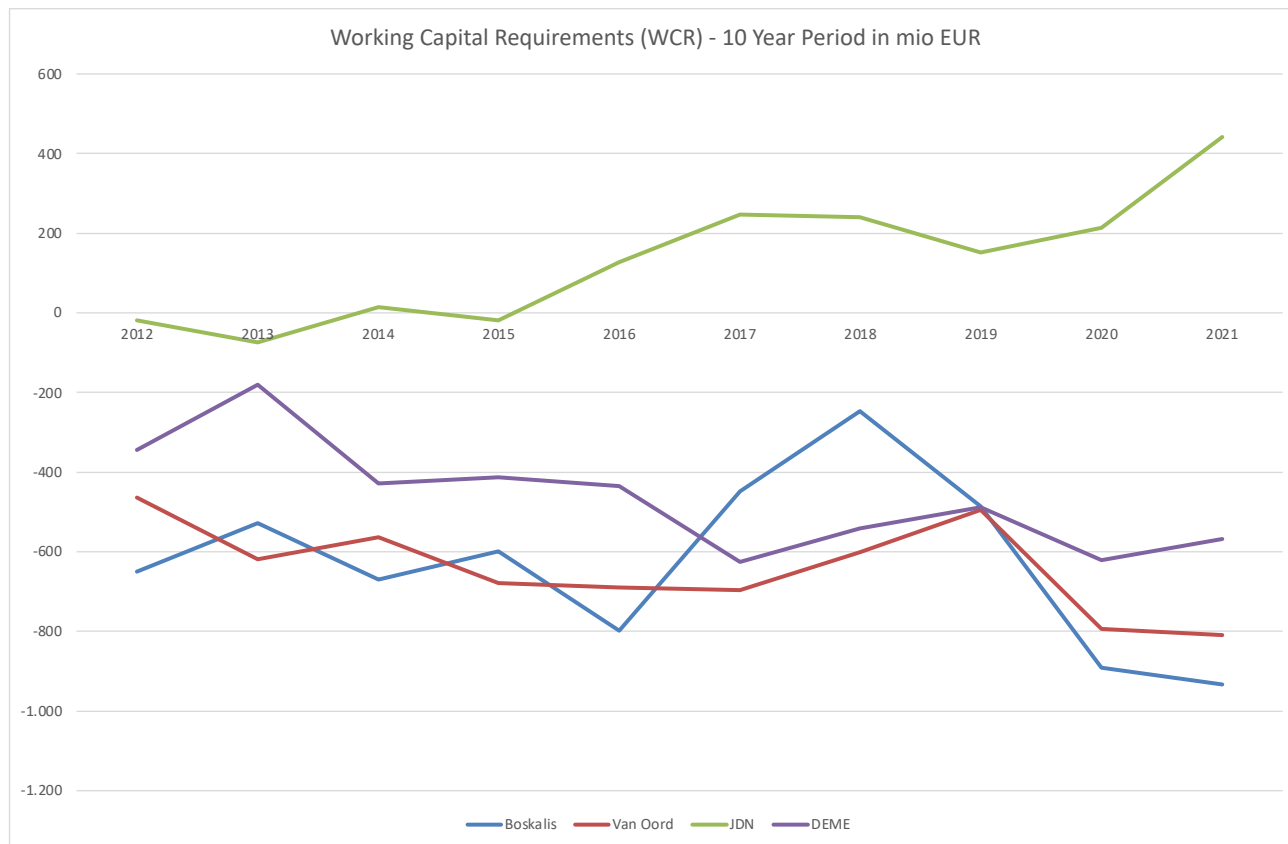
- To compare or to draw conclusions, it should be mentioned that this ratio considers the turnover which is generated by different types of activities and the 'Net Tangible Fixed Assets' also consists out of a variety of types of equipment. These underlying differences make a full straight forward comparison not possible.
- The three groups Van Oord, JDN and DEME have reported limited amounts of financial assets. Boskalis is the exception as they began in 2008 with a broader diversification strategy through acquisitions. Boskalis took a position in Dockwise in the year 2012. The following years also former Smit activities were divested into joint ventures. Since the amount reported under 'Joint ventures and Associates' has evolved from almost nothing in 2011 to 1,2 billion EUR in 2015. After booking severe impairment charges in 2016 and 2018 with also in 2020 a big amount of 96 mio EUR, combined with the sale of the interest in the partnership SAAM Smit Towage (Y2018), this number had fallen back to 208 mio EUR in 2020 and in 2021 has remained at a steady level of 206 mio EUR. As Boskalis exercises only joint control in those JV companies, there is no turnover recognized in its P&L – equity consolidation method. The 'Net Tangible Fixed Assets' in the graph are for Boskalis excluding 'Joint Ventures and Associates' as they are not turnover generating assets.
- In the year 2021, the four groups have evolved to an average Asset Turnover ratio of around 1 or even slightly below. This is rather low and can be explained by the rather depressed stage in the business cycle of the dredging and oil & gas activities.

- **Working Capital Requirements (WCR)**

- The WCR or funding gap is the minimum number of resources that a company requires to effectively cover the usual costs and expenses necessary to operate the business. From a technical point of view, it is calculated by deducting the net financial debt and the equity from the fixed assets. In the table below, the non-current working capital requirements have also been added to have a total overall view of the receivables, payables, and the provisions.
- Conceptually, maritime construction groups can 'manage their earning' in two ways: first by influencing the valuation of their equipment (e.g., to consider repair costs as lifetime enhancing assets instead of booking them as costs in P&L) and secondly by the valuation assessment of the working capital requirements components such as the revenue recognition and by the evaluation of the provisions for future costs.
- The Working Capital Requirements (WCR) reported by the end of Y2021: Boskalis: -933 mio EUR, Van Oord: -810 mio EUR, Jan De Nul: +441 mio EUR and DEME -567 mio EUR. The WCR of JDN is the highest compared to the other three. For a detail of the various components see last page.
- Without having the full details of the composition of the WCR; it is difficult to draw hard conclusions. A low amount of WCR or a small funding gap in this business can mean a few things:
 - Efficient use of the working capital and reducing the funding gap: being fast in collecting money from clients, being as late as possible in paying its suppliers/other creditors, and by keeping stock components including contracts in progress as low as possible.
 - It can also mean a more conservative accountancy policy in reporting the results of the various projects.

- An analysis of the composition of the WCR learns:
 - JDN reports a substantial higher stock of raw materials and consumables compared to the others. One can assume that this includes stock for spare parts. DEME books spare parts partly into P&L - costs and partly activates its spare parts under fixed assets following IAS 16.
 - The four groups do not book their trade receivables & payables and work in progress in the same manner. At DEME, invoices to be made and to be received including undefined provisions are booked under trade payables and trade receivables. Boskalis groups an important non defined amount under 'Other creditors and accruals', while Van Oord uses the component 'Other Liabilities – Accruals and deferred income' on its balance sheet.
 - Looking at this parameter from an opposite perspective, JDN will require in the future less working capital or will need to use less of their cash in comparison to the other groups in a scenario that all the provisions would materialize as effective cash-out or in case of a shift of the WCR composition. Meaning if the WCR composition in the future would change in the direction that payables will need to be converted to cash. This will have a negative effect on the cash position of the company.

- The evolution of the WCR of the last ten years is illustrated in the following graph:



- Detail of the WCR compositions for the years Y2021 and Y2020

Working Capital Requirements Analysis	Y2021				Y2020			
	Boskalis	Van Oord	JDN	DEME	Boskalis	Van Oord	JDN	DEME
Raw materials and consumables	110.560	56.175	235.839	12.168	91.130	37.585	222.018	10.456
Contracts in progress	-182.027	-405.400	210.114	44.523	-150.840	-192.673	14.562	34.366
Trade receivables	371.534	197.061	751.620	384.022	276.502	127.393	548.749	309.636
Other receivables	271.779	228.237	154.294	103.855	240.046	239.046	186.765	35.095
Trade payables	-273.425	-142.155	-489.453	-772.905	-228.502	-130.283	-351.253	-747.635
Other payables	-1.070.541	-425.918	-130.659	-188.863	-910.080	-464.379	-119.537	-166.965
Taxes	-117.349	-97.864	-90.006	-76.370	-130.853	-108.166	-69.327	-66.336
Maintenance & Repair		-94.681	-41.538			-129.779	-33.388	
Non-Current WCR	-43.565	-125.257	-158.875	-73.799	-79.630	-173.515	-184.716	-28.920
WCR 2021	-933.034	-809.802	441.334	-567.369	-892.227	-794.771	213.874	-620.303

- **Average Return on Equity (RoE) based on Book Value**

Only Boskalis is directly listed on the stock market for which an immediate market valuation metric can be retrieved. DEME is indirectly listed through its shareholder CFE for which also a market valuation can be estimated. As of mid 2022, DEME will be listed directly on the stock market. Boskalis on the other hand might be delisted if their largest shareholder HAL succeeds in its take-over bid. The other two groups Van Oord and Jan De Nul are privately held. Return on Equity even using book value offers an indication of the return realized towards its shareholders. Calculating the averages of the last five, ten and fifteen years:

Average Return on Equity			
	2021-2017	2021-2012	2021-2007
Boskalis	-1,4%	3,0%	9,2%
Van Oord	3,7%	9,5%	14,7%
Jan De Nul	1,3%	4,0%	7,1%
DEME	8,4%	11,3%	13,7%
Euro Stoxx 50	6,5%	7,0%	2,1%

All four groups have proved to consistently outperform the EuroStoxx 50 over a longer time span. Boskalis did not generate a positive return on equity due to the big write-offs on its acquisitions in the last five years. Jan De Nul Group has always been financed through a high level of equity which led to mediocre returns on equity in the last five years. Taking the US S&P 500 as a benchmark, the average return was over 14 % for the last ten-year period which was a lot better than the 10 % long term average. In hindsight it is always easy to evaluate but it remains a fact that a low-cost S&P 500 tracker has led in recent decades to great returns in relation to its risk profile. A guess on the future for what it is worth would be that future S&P 500 returns will be lower than has been the case in recent times.

- **Unlevered Free Cash Flow (UFFC)**

Unlevered Free Cash Flow (also known as Free Cash Flow to the Firm or FCFF for short) is a theoretical cash flow figure for a business. It is the cash flow available to all equity holders and debtholders after all operating expenses, capital expenditures, and investments in working capital have been made. Unlevered Free Cash Flow is used in financial modeling to determine the enterprise value of a firm. It is technically the cash flow that equity holders and debt holders would have access to from business operations.

Unlevered Free Cash Flow (UFFC)	Boskalis		Van Oord		Jan De Nul		DEME	
Period 2017 - 2021 (5 years)	630.066	4,8%	301.445	3,7%	-115.961	-1,3%	170.168	1,4%
Period 2012 - 2021 (10 years)	1.936.797	6,9%	763.511	4,3%	780.834	3,9%	962.248	4,1%
Period 2007 - 2021 (15 years)	2.000.514	5,0%	1.015.611	3,9%	118.296	0,4%	904.626	2,9%

Cash Flow used in Investing Activities / Turnover	Boskalis		Van Oord		Jan De Nul		DEME	
Period 2017 - 2021 (5 years)	-1.092.779	-8,4%	-662.079	-8,0%	-1.048.791	-11,5%	-1.783.919	-14,5%
Period 2012 - 2021 (10 years)	-2.903.149	-10,3%	-1.805.972	-10,1%	-1.935.796	-9,6%	-2.954.702	-12,5%
Period 2007 - 2021 (15 years)	-5.137.801	-12,9%	-3.043.817	-11,6%	-4.483.595	-15,0%	-4.625.175	-14,7%

The minimum objective of a corporation is at least to keep on running the business by investing in maintenance CAPEX. A more ambitious objective is to grow the business through growth CAPEX. In the end and over the long run of the business cycle what matters is to generate free cash flow. Looking at the unlevered free cash flows the two Dutch groups have generated more free cash compared to the two Belgian groups. Taking the investments into the equation, the full picture becomes clear. All four groups have done well over the last ten to fifteen years but in relation to their turnover with the Belgian groups having invested more than the Dutch. Whereas until a few years ago Jan De Nul had the highest investment level in new equipment in the industry, in the last few years DEME has led the pack on investing in a variety of new types of equipment.

Conclusion on valuation, which is part science and a lot of art, until a few years ago the four dredging / offshore construction groups generated healthy EBITDA margins of being on average around 20 %. As the groups have diversified more into offshore projects which often generate less EBITDA margin and thus having reduced the dredging part in their overall scope and with having a more competitive landscape on dredging, the average EBITDA margins of the four groups has fallen to 16 % in the last five years. As always EBITDA is only a part of the valuation equation, free cash flow should be the predominant denominator. This type of capital-intensive business leads to better net margins than lower margin civil construction activities but still free cash flows remain small compared to the risks involved in being in this exiting industry.