

First Edition – Australia

Wednesday, March 24, 2021

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EQUITY RESEARCH

CREDIT SUISSE EQUITIES (AUSTRALIA) LIMITED

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MARKET EVENTS

Markit Australia PMI Services (Mar P)	24 Mar
BBG March Aust Economic Survey	24 Mar
US, Durable Goods Orders (Feb P)	24 Mar
US, Markit US Services PMI (Mar P)	24 Mar
NZ, Trade Balance NZD (Feb)	24 Mar

UPCOMING CONFERENCES

Cap Goods Automation - Hannover Messe - Hannover	12 - 13 Apr
23rd Annual Communications Conference - Virtual / New York	14 - 15 Jun

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Featured Research

Australian Banks: 1Q21 Valuation chart pack - three reasons why banks can trade higher

Banks are now trading above where they were 12-13 months ago. The rebound has been strong but we see three fundamental reasons why they can trade higher in the near term:

- 1) Regulatory environment - versus 12 months ago;
- 2) Credit growth the fuse for revenue growth;
- 3) Capital management.

[Click here](#) to read further into why Jarrod Martin remains positive on the sector.

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Australia & NZ Market Reports

Australia	Index	+/-	1Day	1Wk	%1Mth	%Yr
All Ordinaries	6986.6	-8.4	-0.1%	-1.3%	-1.1%	53.1%
S&P/ASX 50	6495.1	3.5	0.1%	-1.3%	-1.0%	41.4%
S&P/ASX 200	6745.4	-7.1	-0.1%	-1.2%	-0.7%	48.4%
Banks	7825.1	0.0	0.0%	-1.2%	3.8%	74.8%
Insurance	3210.2	0.0	0.0%	-2.4%	1.2%	14.8%
REITs	1407.0	9.0	0.6%	-0.5%	5.0%	60.4%
Industrials	5767.0	-10.5	-0.2%	-2.7%	0.7%	33.5%
Materials	15552.7	34.0	0.2%	-3.0%	-4.7%	58.3%
Cons. Discreet	3115.5	-22.8	-0.7%	0.8%	-0.4%	95.0%
Cons. Staples	12399.5	-11.9	-0.1%	0.0%	-1.1%	6.3%
NEW ZEALAND						
NZX 50	12394.3	65.250	0.5%	-2.3%	-1.2%	45.8%

Currencies, Interest Rates & Gold

	Index	+/-	%1Day	%1Wk	%1Mth	%Yr
AUD/USD	0.769	-0.005	-0.7%	-0.7%	-2.1%	32.0%
AUD/GBP	0.559	0.000	0.0%	0.2%	-0.5%	10.7%
EUR/AUD	1.540	0.000	0.0%	0.3%	0.0%	-16.3%
NZD/USD	0.708	-0.008	-1.1%	-1.5%	-2.9%	23.8%
AUD/NZD	1.081	0.000	0.0%	0.4%	0.4%	6.0%
TDI	0.643	-0.002	-0.3%	-0.3%	0.5%	24.1%
AU 10Y	1.751	-0.086	-4.7%	1.3%	14.4%	90.5%
NZ 10Y	1.730	-0.118	-6.4%	-1.7%	5.5%	76.0%
US 10Y	1.695	-0.035	-2.0%	4.4%	26.5%	120.9%
UK 10Y	0.816	-0.028	-3.3%	3.0%	16.6%	92.5%
DE 10Y	-0.307	-0.021	7.3%	-8.1%	1.0%	-18.6%
Gold Spot	1,739	-6,050	-0.3%	0.4%	-2.4%	12.0%

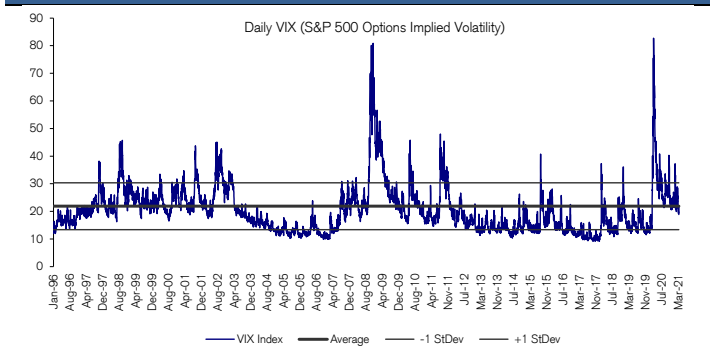
Best Performers		Vol	Worst Performers		Vol
	Close	% '000		Close	% '000
Nick Scali	9.98	5.5%	502 Senex Energy Limited	2.93	-4.7%
AGL Energy	10.47	5.1%	6193 Alkane Resources	0.71	-4.7%
Integrated	2.29	4.6%	212 Unibail Rod West	5.14	-4.3%
Sigma Healthcare	0.70	4.5%	3907 Flight Centre	18.90	-4.2%
Telix Pharms	4.72	4.2%	1574 Pilbara Minerals Ltd	0.98	-3.9%
Australian Pharmaceutical Ind	1.30	4.0%	2052 Corporate Travel Mgmt	20.18	-3.9%
Nufarm	4.93	4.0%	988 Pointsbet	13.71	-3.7%
IOOF Holdings	3.56	3.5%	4246 Orocobre Ltd	4.65	-3.7%
Sonic Healthcare	34.91	3.5%	2164 Ioneer	0.40	-3.7%
AVITA Medical	5.69	3.3%	451 Webjet	5.94	-3.4%
Hansen Tech	5.30	3.3%	666 Worley	10.71	-3.3%
ResMed Inc.	24.95	3.3%	1414 Starpharma	2.07	-3.3%

Source: ASX, The BLOOMBERG PROFESSIONALTM service, Refinitiv

Commodity Prices		Spot*	Forward Curve		Credit Suisse Forecasts		
			3mth	15mth	1Q21	2021	2022
Bulks							
Iron Ore	\$/t	79.7			170.0	150.0	120.0
Coking Coal	\$/t				150.0	137.5	145.0
Thermal Coal	\$/t	61.8			85.0	75.0	70.0
Base Metals							
Aluminium	US\$/lb	101.7	103.1	103.6	89.6	88.2	86.2
Copper	US\$/lb	413.5	413.2	406.5	359.7	352.5	320.2
Nickel	US\$/lb	744.8	746.8	750.5	800.1	745.3	680.4
Zinc	US\$/lb	129.5	130.0	130.5	124.7	120.2	117.9
Lead	US\$/lb	88.3	89.5	90.9	97.3	93.8	92.0
Tin	US\$/lb	1261.7	1170.3		910.7	916.0	930.0
Precious Metals							
Gold	US\$/oz	1738.7			1950.0	2113.0	2300.0
Silver	US\$/oz	25.8			25.0	25.0	18.0
Platinum	US\$/oz	1182.9					
Energy							
Oil (Brent)	US\$/bbl	63.9	64.1	59.8	50.0	50.0	60.0
Oil (WTI)	US\$/bbl	61.4	61.2	56.1	45.0	45.0	55.0

*Fiscal year averages used, Steel prices are contract prices. Spot as of 10PM AEST.

VIX (S&P 500 Options Implied Volatility)



VIX - Current	1mth rol(avg)	3mth rol(avg)	6mth rol(avg)
18.88	23.20	23.49	24.83
Spot	1 Wk (avg)	1 Mt (avg)	3 Mt (avg)
Baltic Dry	2281.0	2155	1884
		1669	1518
			1308

Source: The BLOOMBERG PROFESSIONALTM service

Upcoming Credit Suisse Global Conferences

New additions this week in bold.

April to November 2021	
12 - 13 Apr	2021 Cap Goods Automation - Hannover Messe - Hannover
14 - 15 Jun	2021 23rd Annual Communications Conference - Virtual / New York
21 - 27 Jun	2021 Paris Air Show - London
23 - 25 Jun	2021 Summer Biotech Conference - Virtual / Montauk or New York
28 Jun - 1 Jul	2021 Mobile World Congress - Barcelona
11 - 12 Aug	2021 4th Annual Fintech Conference - Virtual / New York
8 - 11 Nov	2021 30th Annual Healthcare Conference - Rancho Palos Verdes, CA

Dates and events are subject to change.

Link to the live Credit Suisse conference calendar: [Credit Suisse - Global Corporate Access Calendar](#)

If you would like to attend any of the above conferences, please contact the Australian Corporate Access team:
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At a Glance

Market and key sector metrics

As at 23 March 2021	PE ⁽¹⁾			PE Rel vs ASX 200 ⁽¹⁾			EPS Growth % ⁽¹⁾			Div Yield % ⁽¹⁾		
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023
S&P/ASX 200	18.65	17.53	17.08	1.00	1.00	1.00	41.21	6.38	2.62	3.86	3.77	3.85
Emerging Companies (3)	22.51	17.19	15.36	1.21	0.98	0.90	36.44	30.95	12.84	2.80	3.24	3.63
Financials (2)	17.37	16.09	14.63	0.93	0.92	0.86	45.79	7.98	9.95	4.21	4.54	5.08
Banks (2)	16.34	15.61	14.19	0.88	0.89	0.83	43.59	4.69	9.98	4.40	4.71	5.31
Diversified Financials (2)	20.42	19.44	17.78	1.10	1.11	1.04	-2.80	5.05	9.30	3.35	3.72	4.12
Insurance (2)	21.91	14.81	13.39	1.17	0.84	0.78	n.m	47.90	10.58	4.39	4.77	5.15
Real Estate (2)	19.03	17.31	16.63	1.02	0.99	0.97	18.02	9.94	6.53	3.97	4.17	4.39
Materials (2)	8.94	10.22	12.97	0.48	0.58	0.76	55.14	-12.52	-21.25	7.45	5.36	4.05
Metals & Mining (2)	8.34	9.70	12.70	0.45	0.55	0.74	58.35	-14.04	-23.61	8.04	5.59	4.06
Energy (2)	18.95	15.28	14.53	1.02	0.87	0.85	26.63	24.00	5.15	3.33	3.45	3.68
Industrials ex Infra (2)	41.41	18.08	14.64	2.22	1.03	0.86	n.m	n.m	23.48	2.71	3.07	3.37
Infrastructure	-115.28	77.06	48.78	-6.18	4.40	2.86	n.m	n.m	57.99	2.47	4.19	5.15
Consumer Discretionary (2)	28.98	25.01	21.74	1.55	1.43	1.27	29.53	15.85	15.08	2.52	2.98	3.16
Consumer Staples (2)	23.29	22.38	20.88	1.25	1.28	1.22	19.09	4.09	7.18	3.14	3.34	3.57

(1) Includes all companies covered by Credit Suisse analysts. (2) All sectors are based on S&P/ASX200. Companies on restricted list are not included in aggregates (3) Emerging companies are all companies covered by Credit Suisse analysts excluding top 100 stocks.

Source: Company data, Credit Suisse Estimates, Refinitiv

Australia equities executive summary

COMPANIES & SECTORS

Tangshan steel cuts likely to be made up elsewhere

We doubt the 30-50% output restrictions imposed on 23 Tangshan steel mills for the rest of the year will reduce China's steel output as Tangshan accounts for only about 9% of China's steel output. With steel prices at decade highs, producers of the other 91%, including new integrated mills starting up, will be incentivised to increase production. The restrictions in Tangshan are penalties for the 23 steel mills that failed to adhere to air pollution control measures earlier in the month. Mysteel estimated the measure would reduce hot metal output by 22Mt for the year and iron ore demand by 36Mt. That is only 2% of the 890Mt of pig iron produced last year, and should be easily made up.

Australian coal prices are being compressed between sagging premium low-vol coking coal (PLV) at US\$113/t FOB and tight Newcastle thermal which reached US\$90/t last week and may tighten further on flooded rails and a damaged port terminal in weather ravaged eastern Australia. Ex-China demand for coking coal grades is mis-matched with the grades Australia produces. PLV is oversupplied by 0.5-0.7Mt/month according to McCloskey, while second tier HCC and LV-PCI are very tight. It is even possible that second tier HCC could exceed the PLV price and LV-PCI may reach parity, but most contracts reference PLV. Unless BMA curbs PLV output sharply, met coal prices may crumble further and our 1H21 forecast of US\$145/t for PLV will be too high.

Tsingshan plans to add 2GW of clean energy to slash the CO2 emissions from its planned battery grade nickel output in Indonesia – a part of its massive increase to 40% of global nickel supply. Wood Mackenzie noted the current coal-fired power supply is 2GW, but as renewable power is intermittent, it may provide only a third of the current demand, falling to a fifth as Ni output increases. But, the clean energy would probably be focused on battery supply and may reduce emissions from the nickel matte lines by 60%. Coal cannot be entirely eliminated as it will be needed for reduction gases within the kilns.

Commodities Notes

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FcRn a synthetic risk; upgrade to OUTPERFORM

Forecasting IG sales CAGR +10% in 2025-30 with muted FcRn risk: We published a [global industry primer](#) assessing the FcRn threat in CIDP. In our view, the market's concern that FcRns will structurally change IG demand is unwarranted with CIDP ~24% of IG usage, yet PID/SID is nearly twice the market size (~44% of IG) and growing. argenx is the only company pursuing a FcRn CIDP indication. We estimate the FcRn addressable market is up to ~40% of the CIDP patient population, yet specific autoantibodies (IgG4) have only been found in 10% of patients. We factor FcRns taking 10% share of the CIDP market by 2030, yet still believe IG volume will grow at 8% p.a. due to rising awareness, access and sub-indications of PID/SID. For CSL, we forecast 10% IG sales CAGR in 2025-30, in line with industry forecasts & including ~2% price/mix benefit. In a bear case where FcRns capture 40% of the CIDP market, we forecast IG volume CAGR of ~7% p.a. in 2025-30.

Proprietary survey shows neurologists are supportive of limited FcRn addressable market: We surveyed 50 US neurologists who treat CIDP patients. While doctors are supportive of FcRn as a treatment option for CIDP and see 56% probability of trial success, they believe it will only address 25-50% of CIDP patients, in line with our forecasts.

Downside risk to FY22 due to temporary COVID-19 related supply shortage: We forecast IG revenue growth of -12% in 1H22, but a recovery in 2H22 for sales to be -2% for FY22. We forecast CSL Behring gross margin down 170bps in FY22 to 55.6%, with NPAT -8% in FY22, lowering estimates ~1-2%. We sit 11% below consensus in FY22.

Valuation upside emerges: CSL has underperformed the market by 8% since its 1H21 result and trades at a 70% P/E premium to XJI, below its 2- and 5-year averages. As the vaccine rollout progresses and stimulus packages ease, plasma collections are likely to return and this would be a key positive catalyst for the stock. Despite sitting at the bottom of the market for FY22 and seeing risk of ST consensus earnings downgrades, we believe this is a one-off COVID-19 impact and should be looked through, given the LT IG demand outlook remains strong with FcRns having a limited impact. **We upgrade our rating to OUTPERFORM (from Neutral) and lower our TP to A\$315 (from A\$320).**

Immunoglobulin: 8% long-term growth assured

A key debate that has contributed to the underperformance of CSL, Grifols and Takeda, the global plasma fractionators, has been the impact of a potential new class of drugs (FcRn) on sales of immunoglobulin (Ig) in the second-biggest disease where Ig is used, Chronic Inflammatory Demyelinating Polyneuropathy (CIDP). CIDP is a rare condition with up to 40k treated patients, but which accounts for some US\$3bn out of US\$12.8bn of global Ig sales. Leveraging the expertise of our global team, and based on a proprietary survey of 50 US neurologists, in this Global Connections Series report we review this debate and conclude that the market maybe too pessimistic on the plasma companies.

We have conducted a survey of 50 US neurologists which concludes that the FcRn class has around a 56% probability of approval in CIDP (is a rare autoimmune condition). FcRns are likely to address only ~25-50% of the population. argenx is currently the only player pursuing a CIDP indication, with P2/3 results for efgartigimod due in 2H23. We forecast a 70% chance of a 2025 launch and US\$1.2bn peak potential. UCB recently discontinued its CIDP FcRn work, prioritising other potential areas and citing a lack of biomarkers. Please contact the analysts for further information on the survey.

We expect any shortfall in demand for CIDP to be offset by strong growth in primary and secondary immunodeficiency (PID/SID), already twice the size of CIDP with strong structural growth and not vulnerable to FcRns (due to their mode of action).

Major threat to forecasts is not demand but lack of raw material supply. Supply is limited by the growth rate in collection centres and donor numbers, with a need to free up regulations to expand ex US collection. This should favour the 3 major plasma companies.

Analysis for this report has confirmed our long-term Ig thesis. Despite trimming short-term EPS to reflect sustained higher donor fees, we are **upgrading both CSL and Grifols from Neutral to OUTPERFORM.** We estimate Ig accounts for 70% of NPV for CSL (TP A\$315) and 43% of Grifols' NPV (upgrade TP €25). We already rate Takeda an OUTPERFORM (Ig 15% of NPV). We rate argenx as NEUTRAL, with FcRns fully valued.

CSL (CSL.AX)

**Share Price 260.16 (AUD)
(from NEUTRAL)
OUTPERFORM**

Target Price (from 320.00) 315.00 (AUD)

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Global Healthcare

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Market pricing on the up and dividends resumed

Solid set of 1H numbers; 2H to be stronger: NHC's 1H21 underlying numbers were a small beat vs CS and consensus, reflective of better than assumed realised pricing. Whilst net debt only marginally reduced to ~A\$265mn from ~A\$290mn (excluding leases), the benefit of stronger pricing is on the doorstep and we expect NHC's gearing to fall further from the current 14%. The resumption of dividends was earlier than our expectations but in hindsight no surprise given the market backdrop, with a fully franked A4cps prudently taking advantage of some of the ~A\$500mn franking credit balance (as at July 2020). We adjust our forecasts to reflect the stronger result and resumption of dividends and with a suite of minor modelling adjustments sees our earnings lift ~20% in FY21 (from a low base), with downgrades in later years on higher D&A (<3% EBITDA impact). Our A\$1.30/sh NPV-based target price suggests NHC is fairly priced but we acknowledge with consensus upgrades likely, more dividends to come and a far better pricing backdrop the upside risk is far more visible as we sit today versus the downside.

Tight market backdrop: Similar to peers, NHC's market commentary noted strong demand and far more favourable pricing, without even taking into account the current weather events (which were said to have made little impact on NHC thus far). Whilst we continue to run a NEWC price forecast of US\$80/t this half, the number increasingly looks undercooked with the YTD price hovering ~US\$86/t. Pending demand holds up as strongly as it is, recent weather impacts are only likely to tighten the market further.

Catalysts/risks (ex-commodity prices): 1) Acland progress - Land Court hearing date reserved for November; 2) Colton potential litigation; 3) Bengalla performance; 4) Capital management; 5) Carrying values for ex-coal segments; 6) M&A.

View: No change to our TP, rating or view. If we were holders there's no way we'd be selling with NHC somewhat a value option on Acland and a tightening market backdrop but not without some uncertainty (Stage 3; Colton; potential M&A). We prefer WHC given the higher operation and financial leverage at this point in time.

Cost outs flowing through earnings

Retain OUTPERFORM: We forecast SIG achieving EBITDA CAGR of 10% between FY21-FY24F, having generated 40% EBITDA growth in FY21. This is driven by cost outs, increased efficiencies and continued above market growth in its retail and wholesale division. Regulatory headwinds have diminished following the finalisation of the 7CPA, where the increased funding to the CSO is offsetting PBS pricing reforms. Additionally, SIG now has ~50% exposure to non-PBS earnings streams and this diversification in the Hospital and 3PL/4PL space should allow for continued margin expansion. The stock trades on 19x 12-mth forward CS EPS, below its 2- and 5-year averages. We lower our EBITDA estimates 7% in FY22 and 3% in FY23 but continue to forecast SIG beating its A\$100mn EBITDA target in FY23. We raise our FY24 EBITDA forecasts 2%. **We retain our OUTPERFORM and raise TP to A\$0.73 (from A\$0.70)** due to model roll forward.

End of capex investment cycle leaves sufficient BS capacity for growth: SIG has strengthened its balance sheet, with Net Debt/EBITDA at 0.6x in FY21 (vs 2.4x in FY20). We believe it will continue to look at pursuing growth opportunities and acquisitions in the Hospital and 3PL/4PL space, where it will be supported by ample DC capacity.

Project Pivot savings complete; focus now turns to digital transformation: SIG completed its A\$100mn cost out program by the end of FY21, in line with its original guidance. Benefits will continue to be realized in FY22. Focus now turns to SIG's digital transformation and in particular the implementation of its ERP system (due to be complete in Q4 2021) as this will provide the next round of efficiency savings.

Strong earnings result but weak cash flow: SIG reported FY21 underlying EBITDA of A\$83.2mn, up 40% YoY, above CSe of A\$80.7mn. Wholesale distribution sales (ex. CW) +11.4% (vs market +3.1%) and like-for-like retail sales +11.7%. The Board reinstated its dividend and is targeting a 70% fully franked dividend payout ratio. The cash result disappointed with gross cash conversion of 18% as SIG holds greater inventory. However, we do expect this to improve post COVID. No FY22 earnings guidance was provided.

**New Hope Corporation
(NHC.AX)**

Share Price 1.34 (AUD)
NEUTRAL

Target Price 1.30 (AUD)

[Sam Webb](#)
Research Analyst
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Sigma Healthcare (SIG.AX)

Share Price 0.70 (AUD)
OUTPERFORM

Target Price (from 0.70) 0.73 (AUD)

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FY21 guidance revisions

Volumes impacted on a few fronts: Post identification of faults at the SL1 shiploader at the Port of Newcastle rendering both shiploaders now inactive, Newcastle Coal Infrastructure Group (NCIG) has halted activity, anticipating a two-week repair period. With the downtime at NCIG, longer time navigating through the fault at Narrabri than was expected and the risk from the heavy rainfall the region is experiencing, WHC is now expecting 0.5-1Mt of less managed coal sales, downgrading its full year guidance slightly to 18.5 – 19Mt (19 – 20Mt). Despite the challenges which are largely outside WHC's control, pleasingly unit cost guidance was left unchanged at A\$69-72/t. Whilst operations at Maules are largely unchanged and going well, Narrabri is yet again the challenge, with the LW move now to take place towards the end of the JunQ which will see the final panel mined before moving to the shallower ground and the 200 series. Whilst downgrades are not ideal, we expect further thermal price spikes as supply is impacted by the weather events and with an already tight market, spot prices have surged above US\$100/t quickly. Given the pricing strength, NEWC benchmark now sits above CS and consensus estimates and pending no further volume impacts are forthcoming, will more than offset today's marginal downgrade to sales volumes. Remains our top pick - A\$1.95/sh Target price and Outperform rating unchanged.

Key catalysts and risks: 1) Coal prices (+ AUD); 2) Narrabri operating performance; 3) Weather impacts/delays to production/shipments/logistics; 4) Progress at Narrabri (Stage 3), Vickery, Maules (16Mtpa option) and Winchester South.

View: Whilst we by no means discount the ongoing weather risk as the full impact remains to be determined, we think WHC can outperform given the strong operational leverage (versus say NHC). WHC remains our top pick despite volume risks, with upside to consensus earnings expectations on the back of rising coal prices.

Whitehaven Coal (WHC.AX)**Share Price 1.74 (AUD)****OUTPERFORM[V]****Target Price 1.95 (AUD)**[Sam Webb](#)

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ESG

Rio outlines response to Juukan

Today (23 Mar) we attended the Rio Tinto (RIO.AX) investor briefing on its *Community & Social Performance: Cultural Heritage*. Key takeaways included:

Tone from the top: In his introductory remarks, the new Chief Executive Jakob Stausholm was clear that the destruction of the caves at Juukan Gorge “should never have happened” and the company would seek to repair its relationship with indigenous groups. A large part of the statements, and indeed the overall rhetoric of the event, focused on acknowledging past mistakes. RIO had “failed to uphold [its] values” and had not achieved “genuine partnerships with the Traditional Owners.” The new management team clearly wants a re-set post Juukan Gorge; however, in our view, the tenor was more about drawing a line in the sand. In truth, RIO is still bedding down its new social performance function and strategy and, with a big step-up in funding for social performance, there will be more detail to follow on the pathway forward. Of the tangible aspects communicated so far, a new Indigenous Advisory Group has been formed and more detail was provided on the new governance structure that will be implemented to oversee social performance.

Indigenous Advisory Group: The IAG aims to bring diversity & breadth of views to support and challenge key social performance considerations and decisions. The 5-8 members will provide input on how to redevelop industry leading land use agreements with Indigenous groups. An aspiration to return to sector leading best practice was set. Additionally, US\$50m will be invested in an Indigenous leadership program. To date, over 200 employees are participating in the development program, with 62 senior leaders and indigenous employees engaging in a two-way mentoring program. Since August 2020, the Indigenous leadership program has doubled the number of Indigenous leaders from 7 to 15.

Back to the future governance structure: Citing procedural failures as a key cause of the Juukan incident, a refreshed governance structure included “three lines of defence.” Sitting within the Sustainability Committee, chaired by board member Megan Clark AC, the first line of defence is [mine site] Operations, with the responsibility for Traditional Owner relationships returning to General Managers at the asset level, as they were prior to the changes in 2015. Genuine partnerships will be a focus at all levels of operations to ensure ongoing consultation on decision-making. The Communities and Social Performance (CSP) Function will now be the second line of defence, responsible for conducting internal assessment and regular reviews of asset performance against standards, training and development. The final line of defence is the Group Internal Audit of control effectiveness. Finally, significant changes will be made to the bonus structure, incorporating both ESG and CSP objectives and performance assessment.

Less clear on international impact and response: When questioned on the cascading impact of Juukan on stakeholder relations at other operations, the management team was less clear, noting major differences in approaches in different jurisdictions. Resolution Copper was referred to as a very “unique situation” and the CEO was more sanguine than expected given the recent rejection of the Environmental Impact Assessment (EIA) by the US Forest Service. The rejection of the EIA means that the prior approval under the Trump administration is rescinded and the US Department of Agriculture, which is the competence authority with ultimate responsibility for the decision, has set an indefinite interregnum on next steps in the process. It remained unclear whether the revamped approach to social performance would be universally applied across all jurisdictions, partly because of the drastically different regulatory frameworks.

Looking forward: Rio acknowledged “impeccable” ESG and social licence as essential to the business, and committed to stronger protocols to ensure an event like Juukan Gorge cannot happen again. One of the concluding sentiments was a clear aspiration to be reinstated as the industry leader in indigenous relations. Only time will reveal if this new approach will be enough to achieve that.

Australian ESG

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Commodities Notes

Tangshan steel cuts likely to be made up elsewhere

Diversified Metals & Mining | Sector Review

- **We doubt the 30-50% output restrictions imposed on 23 Tangshan steel mills for the rest of the year will reduce China's steel output** as Tangshan accounts for only about 9% of China's steel output. With steel prices at decade highs, producers of the other 91%, including new integrated mills starting up, will be incentivised to increase production. The restrictions in Tangshan are penalties for the 23 steel mills that failed to adhere to air pollution control measures earlier in the month. Mysteel estimated the measure would reduce hot metal output by 22Mt for the year and iron ore demand by 36Mt. That is only 2% of the 890Mt of pig iron produced last year, and should be easily made up.

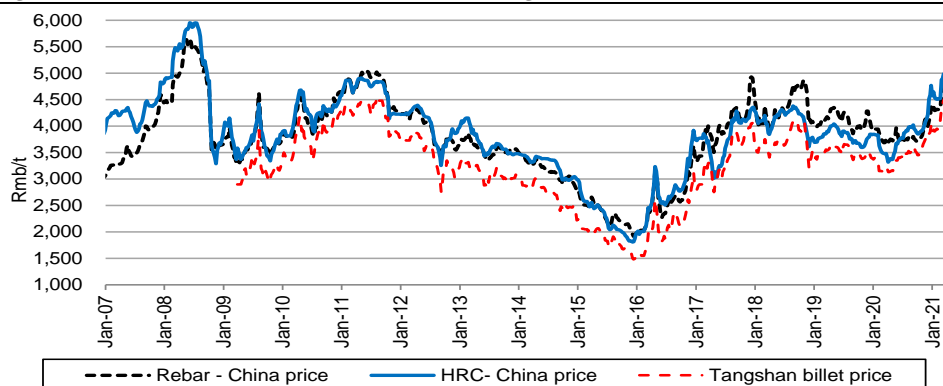
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Figure 1: China steel prices climb to decade highs



Source: Antaike, SSI, Credit Suisse estimates

- **Australian coal prices are being compressed between sagging premium low-vol coking coal (PLV) at US\$113/t FOB and tight Newcastle thermal** which reached US\$90/t last week and may tighten further on flooded rails and a damaged port terminal in weather ravaged eastern Australia. Ex-China demand for coking coal grades is mismatched with the grades Australia produces. PLV is oversupplied by 0.5-0.7Mt/month according to McCloskey, while second tier HCC and LV-PCI are very tight. It is even possible that second tier HCC could exceed the PLV price and LV-PCI may reach parity, but most contracts reference PLV. Unless BMA curbs PLV output sharply, met coal prices may crumble further and our 1H21 forecast of US\$145/t for PLV will be too high.
- **Tsingshan plans to add 2GW of clean energy to slash the CO2 emissions from its planned battery grade nickel output in Indonesia** – a part of its massive increase to 40% of global nickel supply. Wood Mackenzie noted the current coal-fired power supply is 2GW, but as renewable power is intermittent, it may provide only a third of the current demand, falling to a fifth as Ni output increases. But, the clean energy would probably be focused on battery supply and may reduce emissions from the nickel matte lines by 60%. Coal cannot be entirely eliminated as it will be needed for reduction gases within the kilns.

Figure 1: Credit Suisse commodity price forecasts

	2020					2021					2022				2022	2023	2024	LT
	Yr Avg	Q1 (f)	Q2 (f)	Q3 (f)	Q4 (f)	Yr Avg (f)	Q1 (f)	Q2 (f)	Q3 (f)	Q4 (f)	Yr Avg (f)	Yr Avg (f)	Yr Avg (f)	Yr Avg (f)				(real)
Iron ore																		
Iron ore fines - 62% - China CFR (US\$/t)	109	170	170	140	120	150	125	130	115	110	120	90	85	75				75
Iron ore - 58% low Al, China CFR (US\$/t)	98	156	156	126	108	137	111	116	102	98	107	78	74	65				65
Iron ore - 58% high Al, China CFR (US\$/t)	90	146	146	118	101	128	99	103	91	87	95	72	68	62				62
Iron ore - 65% China CFR (US\$/t)	121	187	187	159	136	167	144	150	133	127	139	104	98	86				86
Freight																		
Capesize WA-China (US\$/t)	6.6	10	11	10	10	10	11	11	11	11	11	11	12	15				15
Handysize Aust-China (US\$/t)	17	21	21	20	20	21	21	21	21	21	21	21	22	30				30
Coking Coal																		
Hard coking coal (US\$/t)	125	150	140	130	130	138	150	150	140	140	145	155	160	160				160
Semi soft coal (US\$/t)	92	113	105	98	98	104	107	107	99	99	103	111	114	105				105
PCI coal (US\$/t)	98	120	112	104	104	110	116	116	108	108	112	120	123	120				120
Thermal Coal																		
Newcastle - 6000kcal FOB US\$/t	58	85	75	65	75	75	80	70	65	65	70	65	65	75				75
Newcastle high-ash - 5500kcal FOB US\$/t	43	54	50	45	50	50	55	48	45	45	48	45	45	62				62
Manganese																		
Manganese Ore - 44% (\$/dmu)	4.77	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.58	4.50				4.50
Base Metals																		
Copper (US\$/t)	6,175	7,930	8,160	7,720	7,275	7,771	7,060	7,060	7,060	7,060	7,060	6,620	6,836	6,600				6,600
Aluminium (US\$/t)	1,704	1,975	2,000	1,900	1,900	1,944	1,900	1,900	1,900	1,900	1,900	1,900	1,901	2,866				2,866
Aluminium - Mid West Premium	274	309	309	309	309	309	331	331	331	331	331	313	295	175				175
Aluminium - Japan Premium	102	103	104	105	106	107	107	108	109	109	110	109	114	110				110
Aluminium - Rotterdam Premium	101	101	102	103	104	102	105	106	107	107	106	109	114	110				110
Alumina spot (US\$/t)	270	305	295	300	300	300	320	320	320	320	320	330	330	400				400
Bauxite - China CIF (US\$/t)	43	45	45	45	45	45	46	46	46	46	46	48	48	55				55
Nickel (US\$/t)	13,783	17,640	17,200	15,880	15,000	16,430	15,000	15,000	15,000	15,000	15,000	15,000	15,439	14,775				14,775
Lead (US\$/t)	1,824	2,145	2,067	2,028	2,028	2,067	2,028	2,028	2,028	2,028	2,028	2,080	2,072	2,000				2,000
Zinc (US\$/t)	2,265	2,750	2,650	2,600	2,600	2,650	2,600	2,600	2,600	2,600	2,600	2,600	2,590	2,400				2,400
Mineral Sands																		
Zircon (US\$/t)	1,460	1,500	1,500	1,520	1,520	1,510	1,540	1,540	1,540	1,540	1,540	1,523	1,508	1,250				1,250
Rutile (US\$/t)	1,025	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,100	1,138	1,193	1,250				1,250
Synthetic Rutile (US\$/t)	750	800	800	800	800	800	850	850	850	850	850	899	965	1,100				1,100
Ilmenite (Sulfate) (US\$/t)	160	170	170	170	170	170	180	180	180	180	180	183	190	200				200
TiO2 slag SA Chloride 86% (US\$/t)	825	900	900	900	900	900	900	900	900	900	900	928	969	1,000				1,000
Precious Metals																		
Gold (US\$/oz)	1,773	1,950	2,100	2,200	2,200	2,113	2,300	2,300	2,300	2,300	2,300	1,800	1,783	1,400				1,400
Silver (US\$/oz)	20.39	25.00	26.00	25.00	24.00	25.00	18.00	18.00	18.00	18.00	18.00	17.98	18.37	16.50				16.50
Lithium																		
Lithium Carbonate	5,745	6,900	6,900	7,250	7,250	7,075	7,500	8,000	8,500	9,000	8,250	9,500	9,912	11,500				11,500
Oil & Gas																		
Crude oil - Brent (\$/bbl)	43	55	58	62	60	59	63	63	63	63	63	60	61	60				60
Gas - Henry Hub (\$/mmbtu)	2.00	2.75	2.75	2.75	2.75	2.75	2.50	2.50	2.50	2.50	2.50	2.50	2.54	2.50				2.50
Commodity Currencies																		
AUD/USD	0.69	0.78	0.80	0.76	0.76	0.78	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75				0.75

Source: Credit Suisse estimates

Limited impact on iron ore from Tangshan steel cuts

23 mills have production curbed as a penalty for ignoring pollution restrictions

A new round of restrictions on steel production on the Tangshan City region has been released to penalise 23 steel mills that were found to have failed to meet emission control targets. This does not seem to be related to MIIT's stated goal to lower steel production this year. Instead it seems to be driven by China's Ministry of Ecology and Environment (MEE), after the Minister personally caught Tangshan mills ignoring emission restrictions on high-pollution days earlier this month.

Environment Minister caught mills red-handed

During a visit to Tangshan on 8 March to discuss emission controls during a period of high air pollution, the Minister dropped in on four steel mills and found them ignoring production restrictions and falsifying reports. After that news broke, other rule-breaking mills rushed to shut production facilities that were supposed to be idled, according to Mysteel, but the damage was done. The Minister urged Tangshan city officials to severely crack down on violations of atmospheric environment rules. "We must deal with it in according with law with a zero-tolerance attitude," Mysteel reported the Minister saying in a statement. Further investigations apparently identified 23 steel mills that had ignored the restrictions.

Detailed restrictions to prevent malpractices and raise costs of restarts

The Tangshan Government has gone to work and the result is that seven mills, including the four the Minister caught, are required to lower emissions by 50pc from 20 March to 30 June, followed by 30pc cuts from 1 July to 31 December. Another 16 mills must reduce emissions by 30pc from 20 March to 31 December. In addition, curbs will be applied to smaller sintering machines below 180m², blast furnaces below 1,000m³ and converters with less than 100t of capacity. Blast furnaces should not only be banked, but completely suspended and hot metal removed from the furnaces, according to the notice. Mysteel noted that such a clear-cut instruction will prevent any cheating and will make it harder and more costly to reignite a blast furnace.

Curbs to cost Tangshan region 22Mt of pig iron for the year - 35Mt of iron ore demand

Mysteel has calculated that the restrictions should reduce hot metal production by 106kt per day to end of June and then 92kt per day to the end of the year, equivalent to 22Mt of pig over the year and 36Mt of iron ore demand.

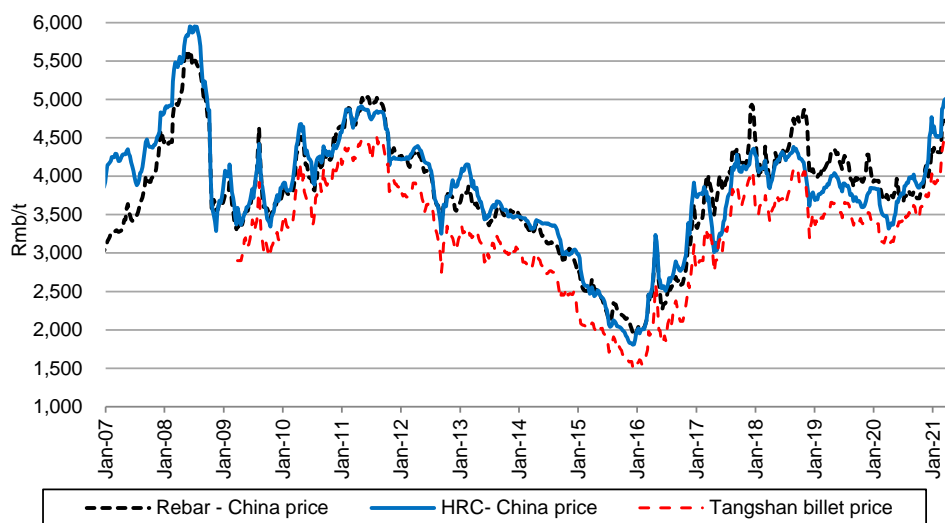
Argus reported a Tangshan mill manager saying "the restrictions will lift steel profits by driving up steel prices and weighing on iron ore prices." A Tangshan trader was reported to have commented that "the production cutbacks will shore up medium and high-grade iron ore fines demand due to better profits. Low-grade fines like Indian fines will see lower demand."

Chinese market participants expected HRC to be hardest hit, and expected HRC exports from the Tangshan mills and perhaps all of China to fall due to these measures. Views on iron ore were divided some expected lower demand to depress prices, while others expected stronger expected steel prices and therefore mill margins may support iron ore, according to Argus.

Curbs to Tangshan won't be effective unless other 91% of Chinese capacity restricted

However, in our opinion, it is hard to see why total Chinese steel production should fall due to a restriction on the Tangshan region alone. Tangshan's steel capacity of 100Mtpa produced perhaps 9% of China's steel production of 1065Mt last year. Without curbs on steel mills outside Tangshan, it is hard to see why the other producers of 91% of China's steel output would not lift to meet any shortfall.

HRC steel prices are already at the highest level since 2008. If steel prices edge up on the restrictions – as Tangshan Billet is apparently doing – steel production would be even more attractive for mills. There is every reason to expect other mills in the country would make up the loss from Tangshan.

Figure 3: Chinese steel prices head for decade highs

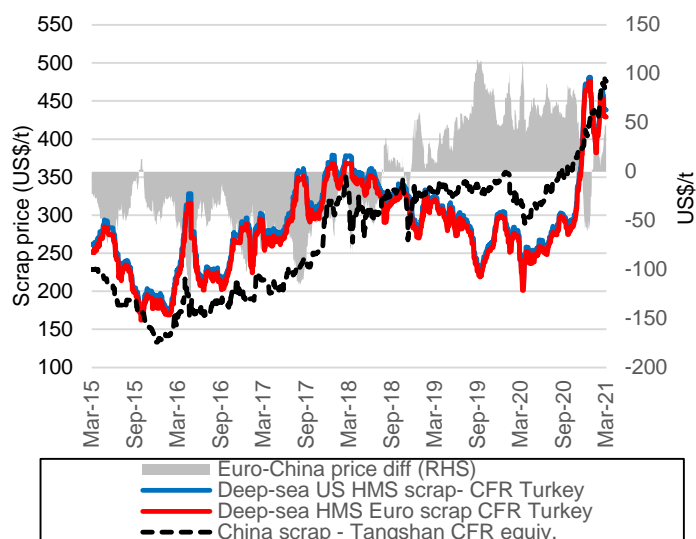
Source: Antaike, Steelhome, Credit Suisse estimates

Little impact for iron ore

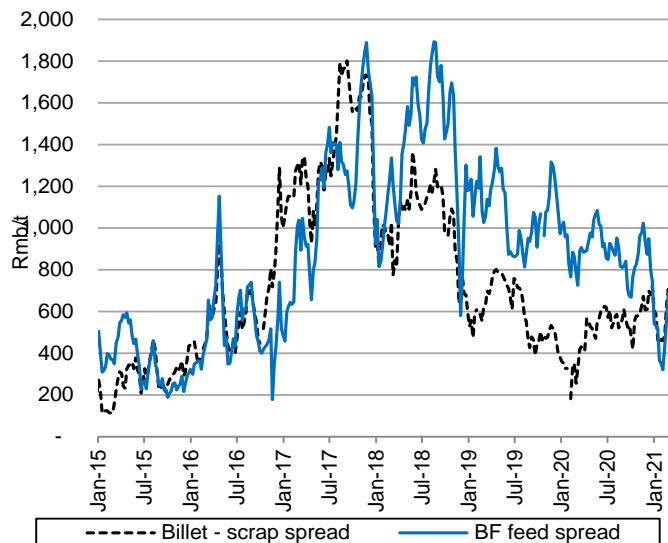
We expect little overall impact on iron ore. While Tangshan mills may show a preference for higher grade ore given constrained production facilities, mills in other regions could continue to use whichever ore mix returns the strongest margins.

EAF production lifting with steel prices

Where there might be an impact is if EAF production makes up part of the loss from the integrated steel mills. Mysteel has reported that the profit margins that China's independent electric-arc-furnace (EAF) steelmakers are earning on their steel are improving, largely because domestic steel prices are rising faster than prices of steel scrap. Mysteel's survey of the 71 independent EAF mills on 18 March found the operation rate had edged up by 6.7 percentage points over the week to reach 68.9%. On our assessment, spreads for Tangshan scrap versus billet and blast furnace raw materials versus billet, are now close to even at over Rmb800/t, well ahead of the low point in early Feb (Figure 5). Production from both should be profitable.

Figure 4: Scrap prices: deep sea versus Tangshan CFR

Source: Beijing Cu Steel, Fastmarkets, Credit Suisse estimates

Figure 5: China spreads for scrap & BF feed against billet

Source: Beijing Cu Steel, Fastmarkets, Steelhome, SSI, Credit Suisse estimates

However, scrap supply is the critical issue for EAFs. Domestic scrap supply in China grows by about 15Mtpa and is shared between integrated steel mills and EAFs depending on which can afford to use it. But, whether it is melted in a BOF or an EAF, scrap is fixed share of Fe units and doesn't affect demand for virgin iron ore unless more scrap is imported. We doubt that will occur as scrap is now very pricey, with steel demand spiking around the world, and deep sea prices are equivalent to China prices. So while EAF output is lifting, we suspect that may be at the expense of scrap use in BOF's falling.

Will the Tangshan restrictions satisfy the MIIT?

China steel production to peak in 2025 at 1.16Bt, so why the Tangshan restrictions?

China's president committed the country to be carbon neutral by 2060 and the steel industry produces 15% of China CO2 emissions, making it an important target. China's MIIT has been seeking to have China's steel production fall this year as a demonstration to "settle the market doubt from in and out of China how serious the central government is on the matter [of accomplishing carbon neutrality by 2060]" as the head of MIIT stated on 3 March.

Will the Tangshan restrictions satisfy the MIIT? It might, as perhaps the MIIT is softening in its aim. Early this month Mysteel reported on a press conference with the head of the MIIT in which he conceded demand for steel is robust due to the "fast economic recovery". He also noted that the country's economy may grow further and steel per capita has room to grow in many construction sites that still use bricks and stone. He suggested that one solution for higher demand and lower output would be for steel mills to upgrade the steel quality to use less steel use in various sectors for the same result. That appeared to imply stronger steel capable of bearing a greater load. But, that would not appear to be a solution for this year. So, perhaps MIIT will take the Tangshan cuts as its win and maintain strong warnings all year without interfering further, especially as steel prices are already so high.

Another Government agency targets steel production to peak in 2025 at 1.16Bt.

We also note a report by Refinitiv that another Government Agency – the China Metallurgical Industry Planning and Research Institute – told an industry conference in this week Beijing that it estimates China's crude steel output will peak at 1.16Bt in 2025. By 2030, it estimates the steel sector will have fallen 30% from its peak, bringing CO2 emissions down by 420Mtpa. With that target for rising steel output inside the Government, it seems a bit premature for the MIIT to be locking down steel this year. It really just needs to slow growth so that production only grows 100Mt over the next four years, and then swiftly retreats from 2025.

Coal differentials compress

Coal prices caught between rising thermal and falling premium coking coal

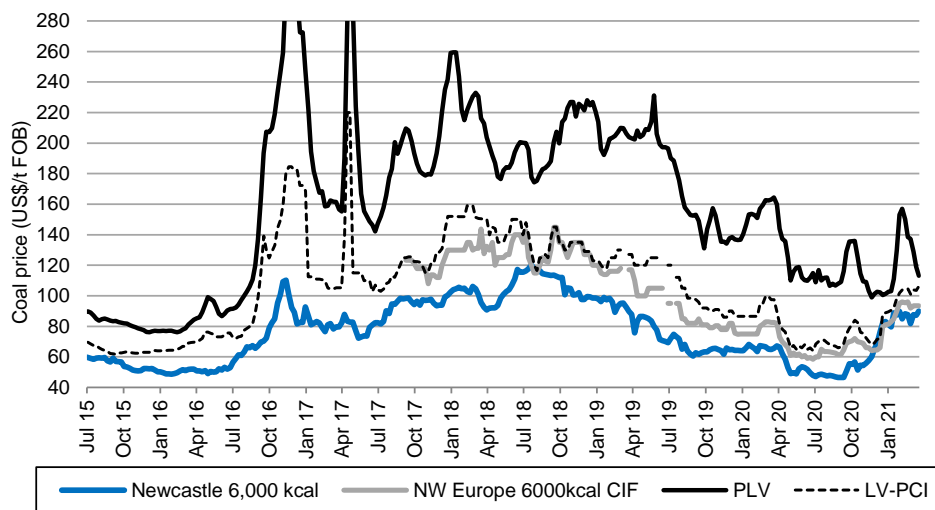
Newcastle prices jumped to \$90/t the highest in two years last week. Prompt cargoes from Newcastle were said to be tight and they are likely to tighten further as there will be few shipments for the next couple of weeks at least. Eastern Australia from Brisbane to Sydney including the Hunter Valley is currently being deluged with rain with record flood levels in most coastal rivers. Oceans have been rough, which hampers ship-loading, and the NCIG port terminal will be closed for the next two weeks for repairs after damage to the remaining shiploader. The AFR reports that trains ceased running from Maitland to Newcastle on Thursday, cutting the flow of coal to port, and there is no time set for reopening yet as the rain continues. Some mines have ceased operations in current conditions, but while some workers may be cut off from mines by flooded rivers, there's no reports of flooded pits. Thermal prices are likely climb further this week.

Premium hard coking coal slumps on over-supply, capping met prices

Meanwhile the spot price for Premium low vol hard coking coal (PLV) dropped to \$113/t FOB average for the week, compressing Australian coal differentials into a \$23/t range between Newcastle thermal at \$90/t and premium LV HCC. The range may lessen if thermal rises further. Second tier HCC was \$108/t - \$5 below premium; LV-PCI was another \$2 below HCC at \$107/t, and semi-soft at \$94/t, only \$4 above Newcastle thermal. The highest price for Australian coal is currently Premium mid-vol coal at \$115/t.

These coal differentials are very tight. Looking back in met coal spot pricing history to its start in 2010 there has been a period with a lower differential between PLV and Newcastle – last December when it was \$18 for two weeks as thermal prices started to rise on winter demand while HCC demand remained slack. The average differential since 2010 is \$86/t, and the maximum differential was \$215/t.

Figure 6: Australian coal prices corralled by rising thermal and falling PLV



Source: McCloskey, Credit Suisse estimates

Semisoft likely to head into thermal

It is immediately apparent that semi-soft is likely to drop out of the export mix as there are higher value propositions than selling as a coking coal to fetch only \$4 more than the Newcastle benchmark. Semi-soft can be sold into the thermal coal market and with a higher calorific value than standard thermal it can either receive a price premium of up to 10%. Alternatively, it can be used to upgrade other off-spec coal. Semisoft coal also requires thorough washing, incurring yield losses and additional costs. These can be reduced by selling the material as thermal coal.

Second Tier HCC price may overtake PV and LV-PCI reach parity

LV-PCI and second tier are less flexible. The thermal market is still too low in price, so they will likely remain in the met market, but the normal pricing paradigm with PLV at the top extending down to LV-PCI at the bottom may change. There are suggestions that perhaps LV-PCI price may reach parity with PLV, and second tier coal may overtake the premium price, as supply of both of these products is tight, while PLV is slack.

This would be a strange situation, with the lower quality met coal commanding a higher price than premium material. If it occurs, it will not be a permanent change, but just reflect the unusual circumstances at the present time. Australia – primarily BMA – has mines built to feed China's demand for PLV, a grade where there is a gap in China's domestic supply. Australian product was heavily bought by China for supplementing domestic coal in coke blends. But now China has banned Australian imports and other big coking coal buyers such as JKT, and India have no domestic supply to blend with, so are less enamored with the PLV grade. While much of the supply has been placed outside of China, McCloskey suggests there remains 0.5-0.7Mt per month of PLV left over seeking a new destination. BMA will probably need to curb production until the ex-China market can absorb that quantity as it is left standing as the marginal producer of spot material. Other producers, South32, Anglo and Peabody are out of the spot market. McCloskey reported a trader saying "They (BHP) did a good job of placing into term contracts, but there's no way you can hide 10Mt of Saraji,"

Shortfall of second tier to blend down PLV

Despite an excess of PLV, there is a shortage of second tier HCC: "We have increasingly desperate buyers talking about not being able to fill full vessels in Q2 due to a shortage of second tier coals," said an Australian producer. Apparently a lot of the second tier coal sold

outside of China is being used to blend down PLV with higher volatility, higher fluidity coals. The qualities of the PLV are not exactly what the ex-China coke makers need. McCloskey says the second tier coals amount to about 14Mtpa, met largely by Jellinbah, Lake Vermont, and Carborough Downs

Over time we expect PLV will see stronger demand if the China ban continues as ex-China buyers will accept the availability has become more permanent and be prepared to alter their coke blends. Right now that has not yet occurred as many still see the China ban as temporary. But that may take time as most ex-China buyers have locked in supply contracts for the next 12 months.

LV-PCI is also very tight and may possibly reach parity. That would be extraordinary as the highest level previously reached was 87% of prime HCC in 2016.

Shift to term contracts has lowered spot liquidity impeding any pricing change

With China demand absent, the producers of second tier coal have largely switched to term contracts with ex-China buyers. So the availability of spot tonnes is scarce, making price discovery difficult. And that makes it difficult to change the pricing scheme. Buyers just want to buy on a relativity to PLV, which is detrimental to producers when PLV is long.

In the past, the relativity of second tier to PLV has climbed to 95%, and some producers hope that it may even overhaul PLV in the short term as buyers consider value in use assessments. However, with the absence of liquidity it may be hard for that to occur. So producers are caught with sagging prices in oversupplied in premium grades capping prices in other grades that are in tight supply.

Our forecast too high unless BMA curtails PLV sharply

Demand for coal grades is mismatched with what Australia produces

Our price forecasts for PLV of \$145/t are looking overdone unless BMA curbs output sharply and quickly. We previously estimated ex-China could absorb no more than 170Mt of Australian met coal supply and worried that prices may soften later in the year if producers tried to push too hard in the dry season and match 2019 exports of 184Mt.

It now appears we were over-optimistic because the demand for coal grades is mis-matched with the actual grades produced. It proves that coking coal is not really a commodity. One unit of coking coal is not equivalent to any other unit from elsewhere. Coke makers pick and choose coals to build blends with desired attributes.

The best hope for the met coal producers would seem to be having BMA curtail. That looks inevitable at present, with the only question being how low will the price slide before it occurs.

Tsingshan cutting carbon footprint

Shortly after announcing its plans to massively boost nickel production and begin producing battery grade nickel matte supply, Tsingshan has also revealed a plan to slash its carbon footprint in Indonesia. Without this, the operations would have been located at the 60th percentile of CO₂ emissions for global nickel operations according to Wood Mackenzie and it is questionable whether any western battery makers would be interested in the product.

Tsingshan said it would set up a 2 gigawatt clean energy base in Indonesia in the next three-five years to power its production, and in future it plans to launch a 5 GW hydropower project. Tsingshan said it had officially started investing in the 2 GW clean energy project, which will involve building solar and wind power plants and supporting facilities at its industrial parks at Morowali, on the Indonesian island of Sulawesi, and Weda Bay on Halmahera. "After completion of the project, the production of battery raw materials in Tsingshan's Indonesia industrial parks will use clean and renewable energy to a large extent and realise zero CO₂ emissions during the production process," the firm said, according to Nasdaq news website.

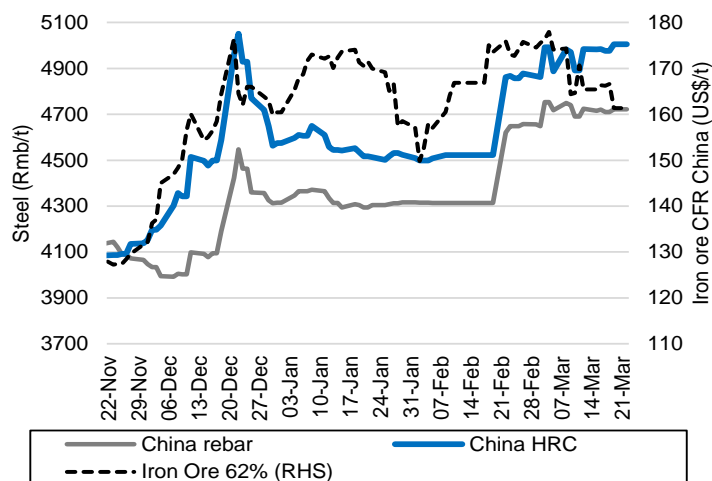
Wood Mackenzie has looked at Tsingshan plans and provided some ballpark estimates of what it means. It estimated 2GW of solar would cover 50 sqkm of land and cost US\$1.9bn, whereas 2GW of wind would occupy 300sqkm and cost \$3.6bn. More likely a blend would be used.

Both are cheaper than hydro that might cost \$18bn. Renewable projects typically grow at 0.5GW per 1.5-2 years so 2GW may take five years – in line with the announced plan. However Wood Mackenzie did note severe challenges – a paucity of days of clear skies for solar and rugged terrain making wind power more difficult and expensive.

Wood Mackenzie believes the current installed coal-fired power supply at Morowali is about 2GW, but growing. The coal fired power plan might operate at 60% utilisation, but solar is rated at 20% utilisation, so would only provide one third of the power. As power demand lifts, the renewable share of power supply may drop towards one fifth. But presumably the solar would be focused on lines dedicated to battery supply. Wood Mackenzie says that could reduce emissions for the nickel matte lines by 60%. It would not eliminate emissions as electricity would power the furnace, but coal would still need to be burned within the kiln to provide the reduction gases.

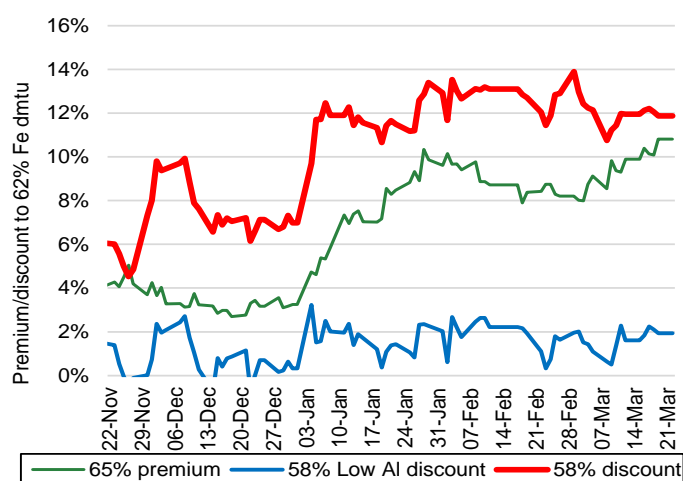
Commodity prices & stocks

Figure 7: Iron ore and steel prices



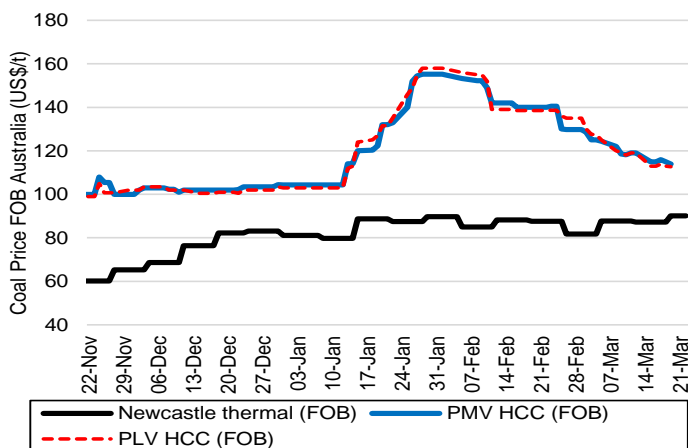
Source: Fastmarkets, SSI, Antaika, Credit Suisse

Figure 8: Iron ore grade premium/discounts vs 62%



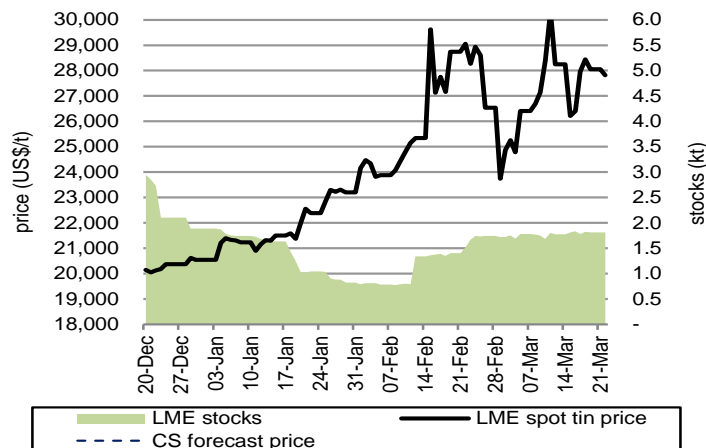
Source: Fastmarkets, Credit Suisse

Figure 9: Coking and thermal coal news



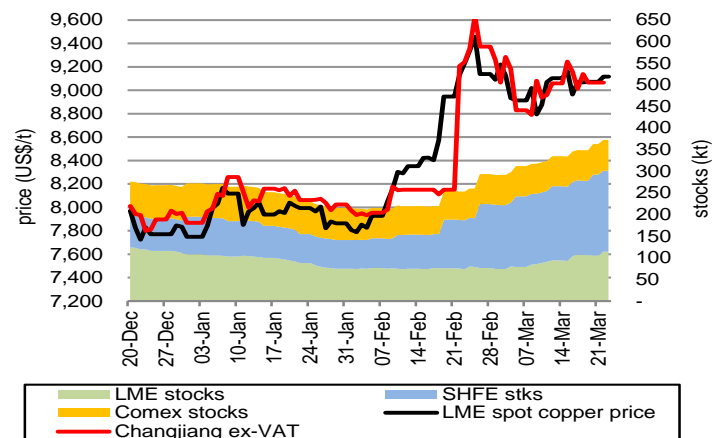
Source: IHS McCloskey, Credit Suisse

Figure 10: Tin prices and warehouse stocks



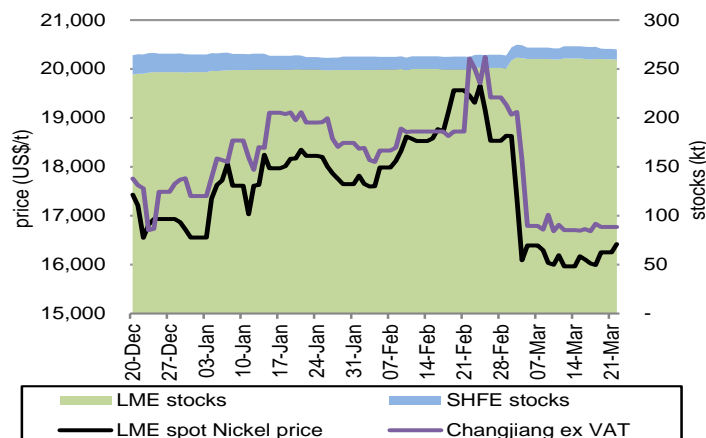
Source: LME, Credit Suisse

Figure 11: Copper prices and warehouse stocks

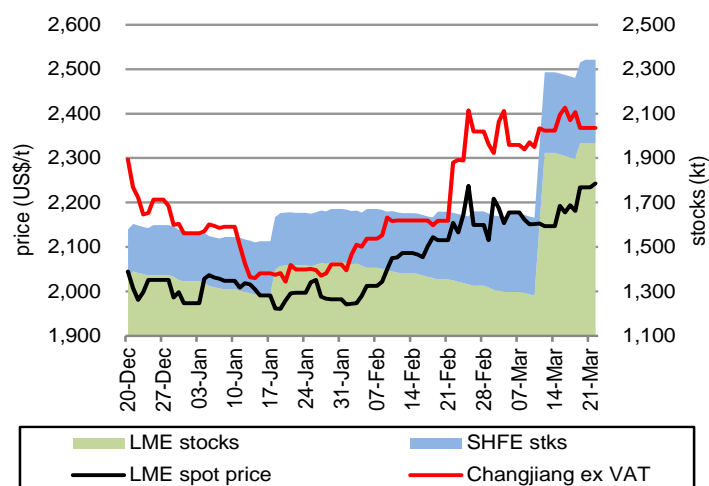


Source: LME, SHFE, COMEX, Antaika, Credit Suisse

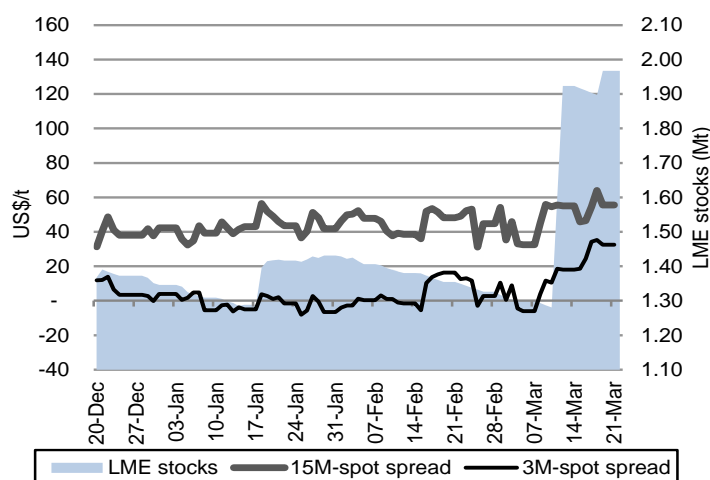
Figure 12: Nickel prices and warehouse stocks



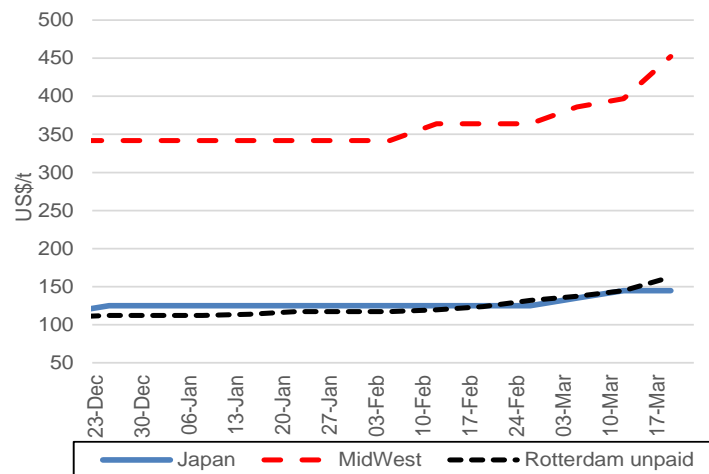
Source: LME, SHFE, Antaika, Credit Suisse

Figure 13: Aluminium prices and warehouse stocks

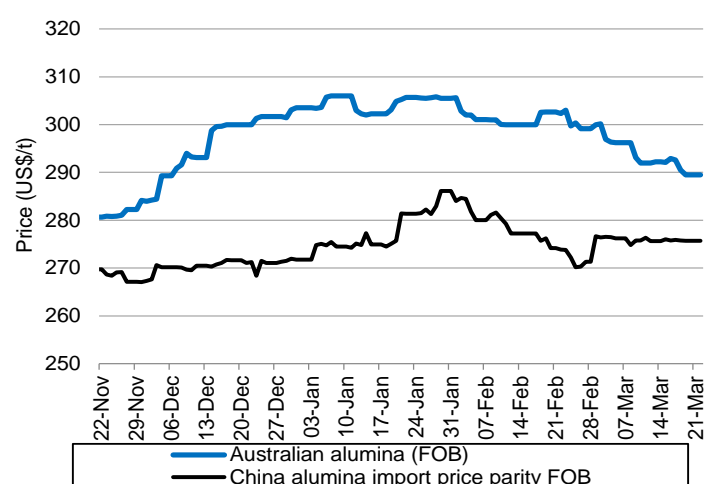
Source: LME, SHFE, Credit Suisse

Figure 14: Aluminium contango: 3 month & 15 month vs cash

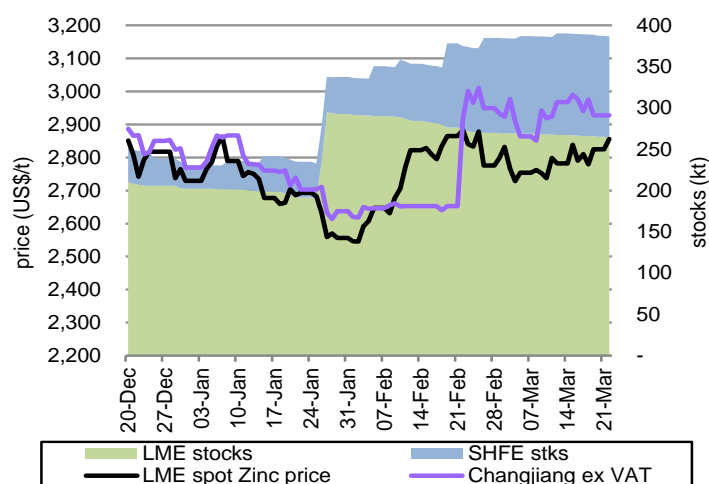
Source: LME, Credit Suisse

Figure 15: Aluminium premiums

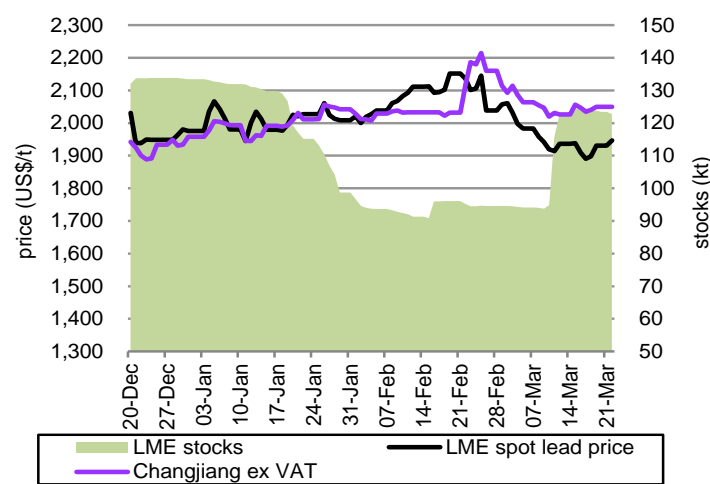
Source: Fastmarkets, Credit Suisse

Figure 16: Alumina prices, China and Australia

Source: Fastmarkets, Credit Suisse

Figure 17: Zinc prices and warehouse stocks

Source: LME, SHFE, Antaike, Credit Suisse

Figure 18: Lead prices and warehouse stocks

Source: LME, Antaike, Credit Suisse

Steel news

- **China's crude steel output will peak at around 1.16 billion tonnes in 2025.** The output figure is just an estimation, but it's a trend," Li Xinchuang, chairman of the China Metallurgical Industry Planning and Research Institute told an industry conference in Beijing. The steel sector accounts for 15% of China's total greenhouse gas emissions. By 2030, carbon emissions in the steel sector is forecast to fall by 30% from its peak. "The target is very challenging," Li said, adding that state-owned mills should take the lead. *(Refinitiv)*
- **A new round of restrictions on steel production on the Tangshan City region have been released in draft form.** They are intended to apply from 20 March to 31 December and penalise 23 mills that were caught failing to meet emission control targets earlier this month. Seven mills in Tangshan are required to lower emissions by 50pc from 20 March to 30 June, followed by 30pc cuts over 1 July to 31 December. Another 16 mills must reduce emissions by 30pc from 20 March to 31 December. In addition curbs will be applied to smaller sintering machines below 180m², blast furnaces below 1,000m³ and converters with less than 100t of capacity. *(Argus)*
- **China's Ministry of Ecology and Environment (MEE) urged top steelmaking city Tangshan to severely crack down on violations of atmospheric environment rules after it found four steel mills failed to implement production curbs during heavy pollution.** Tangshan government had issued a second-level pollution alert on March 8. However, an inspection team led by Huang Runqiu, the minister of MEE, found on Thursday that a stainless steel producer belonging to HBIS Group, plus Tangshan Jinma Steel Group and two other mills, were producing at high rates during the pollution alert and had falsified production records. "We must deal with it in according with law with a zero-tolerance attitude," the MEE cited Huang in a statement published on late Thursday, adding that suspected crimes will be transferred to the public security department. *(Refinitiv)*
- **Steel producers in Tangshan have rushed into shutting down all those problematic facilities including blast furnaces, after the MEE caught four mills ignoring emission reduction measures,** Mysteel Global noted. "We just banked two more blast furnaces this morning, and I heard that the other mills are taking similar action," an official from a Tangshan steel mill shared on March 12, admitting that the mill's steel sales have been on hold because of the facilities' suspension. "This is probably the severest curbs ever, even harsher than in the 2017-2018 winter when Beijing requested for a universal 50% capacity trimming among all of our blast furnaces," he added. *(Mysteel)*
- **The profit margins that China's independent electric-arc-furnace (EAF) steelmakers are earning on their steel are improving, largely because domestic steel prices are rising faster than prices of steel scrap,** Mysteel's latest survey has found. The fatter margins are encouraging more mini-mills to beef up production, survey respondents said. Mysteel's survey of the 71 independent EAF mills on 18 March found the operation rate had edged up by 6.7 percentage points over the week to reach 68.9%. *(Mysteel)*
- **China's crude steel output rose 12.9% in the first two months of 2021 compared with a year earlier,** as steel mills increased production in expectation of more robust demand from the construction and manufacturing sectors. China produced 174.99 million tonnes of crude steel in January and February, National Bureau of Statistics (NBS) data showed on Monday. Average daily output stood at 2.97 million tonnes, up from 2.94 million tonnes in December and compared with a daily average of 2.58 million tonnes in Jan-Feb, 2020, according to Reuters calculations. *(Refinitiv)*
- **Indian state-controlled Vizag Steel has reduced the list price of rebar for the third straight month in March, reflecting slower demand for the long steel product.** Rebar prices have been hit by slower offtake from commercial real estate projects which remain hobbled by a shortage of workers and weak consumer appetite for new homes.

Construction workers left cities in droves during the COVID-19 induced lockdown imposed in mid-2020 and have been slowly trickling back into cities in the past few months. While there is an expectation of an uptick in infrastructure spending by the federal government, the fiscal situation remains precarious due to lower tax collections. *(Inside Coal & Steel Raw Materials)*

Iron ore news

- **Congo Republic has signed two mining conventions with Congo's Sangha Mining to exploit iron ore on licenses the government withdrew last year from Australian miners Sundance and Equatorial Resources, and Nevis-registered Avima.** The government handed the licenses to Sangha Mining Development Sasu which is registered in the Congolese city of Pointe Noire. Sangha Mining said on Saturday that it will invest \$10 billion to develop the projects. "We plan to start work in the fourth quarter 2021, with a plan to start exporting in 2023 and eventually have an annual production of over 100 million tonnes of iron ore," Manuel Andre, the chief executive of Sangha, said at the signing ceremony on Saturday. Sangha is little-known company backed by Chinese investment. *(Refinitiv)*
- **Vale has started to increase wet processing production on the Timbopeba site, part of the Mariana Complex.** At the end of commissioning process, which is expected to last two months, Timbopeba will operate with an iron ore production capacity of 12 Mtpa, adding 7 Mtpa to the current capacity of the site. Timbopeba operations were resumed with partial capacity in May 2020, after being suspended since March 2019, using 3 of its 6 beneficiation lines at the processing plant. The tailings generated by the wet processing in the 3 additional lines, in line with requirements and authorizations from the competent authorities, will continue to be disposed of in Timbopeba pit, a bedrock self-contained structure. *(Company announcement)*

Met Coal news

- **Divergent supply and demand fundamentals in the Australian prime hard and second tier coking coal segments are creating a two-speed market.** Limited demand, and a surfeit of prime low vol coals, primarily BHP's Peak Downs and Saraji brands, has led to traders exiting their positions in a declining market, pushing the index down. On the other hand, spot enquiries for second tier or HCC64 coals have picked up in a tight supply market, narrowing the price differential between the two segments. "We have increasingly desperate buyers talking about not being able to fill full vessels in Q2 due to a shortage of second tier coals," said an Australian producer. *(Inside Coal & Steel Raw Materials)*
- **Low-vol PCI producer Foxleigh is understood to have agreed to lagged calendar Q1 (January-March) quarterly contract prices with Japan's Nippon Steel and South Korea's POSCO at \$101/t FOB.** The latest price represents almost an 83% relativity to the three-month (December-February) benchmark prime low vol index average of around \$122/t FOB and is an improvement on 80% relativity last quarter. Crucially it signals a tight supply side, especially in Australia, where a COVID-19-led downturn in prices last year took out considerable production. With the global steel sector rebounding in Q4 2020, demand for PCI of all origins has returned. *(McCloskey)*
- **Nippon Steel has reached agreement with an Australian supplier to price semi-soft coal deliveries for the first calendar quarter at \$92/t FOB.** The agreement uses the same mechanism that sets the price for PCI for quarterly contract prices delivered in January-March and follows the previously set PCI price at \$101/t FOB. The latest semisoft price is just 6.5% better than the \$86.50/t FOB agreed for Q4 2020 and represents a relativity of 75% to the benchmark prime low vol index average of around \$122/t FOB set for the same period. *(McCloskey)*

- **Britain's government has intervened in a plan for a new deep coal mine in northern England after climate change advisers said the project would "increase global emissions".** In a letter, signed on behalf of housing minister Robert Jenrick, the government said the decision to "call in" the application for the mine had been taken because of that advice and added that there should be a public inquiry. The Cumbria mine, being developed by privately owned West Cumbria Mining, will extract coking coal which is used for steel production rather than power generation. (*Mining Weekly*)
- **A financing agreement with a Japanese bank to support development of the Longview HVA mine in West Virginia brings the greenfield project much closer to being realised.** The Longview project plans to produce 4 million short tons per annum (3.6Mt) of high vol A coking coal, with targeted full-scale production for the end of 2022. This will follow two Arch operations. The three mines will have a total annual production capacity of close to 12Mt in 2023. In addition, Warrior Met's proposed Blue Creek mine in Alabama, also to produce HVA, signals large shifts in the availability of US HVA coking coal in the international market over the coming years. IHS Markit estimates the US produced 17.7Mt of HVA in 2019 and 13.3Mt in 2020, most of which serviced the seaborne market. The three longwall mines, Leer South, Longview and Blue Creek, would increase that by another 10-12Mt/y, assuming the Blue Creek mine moves forward. (*Inside Coal & Steel Raw Materials*)
- **Russian PCI exports have become more of a mainstay option for buyers.** Australian supply is under pressure after around 2-3Mt of Australian PCI production was cut in response to the COVID-19 related slowdown and the absence of Chinese buyers. And no producer is willing to bring idled production back at current FOB prices, assessed at \$105/t FOB. Russian exporters have had enquiries for second quarter delivery PCI from Japanese and South Korean buyers with prices to be tied to the delivered Chinese spot market, according to trading sources. A shortage of rail infrastructure for moving Russian coal to the country's Far Eastern ports to service Asia remains a key obstacle for further export growth. (*Inside Coal & Steel Raw Materials*)

Thermal coal news

- **Newcastle Coal Infrastructure Group (NCIG) has advised it has suspended shiploading at the Port of Newcastle after a structural assessment of its shiploader SL1 identified faults requiring an expected period of two weeks to be repaired.** NCIG will not have any shiploading capability until the repairs to SL1 are complete, noting that storm-related damage to its other shiploader (SL2) in November 2020 is expected to return to operation in Q4 CY21. Significant flooding has been seen elsewhere, with the Australian Rail Track Corporation advising that the Hunter Valley rail network is experiencing interruptions due to localised flooding which is expected to subside later this week. (Whitehaven company announcement)

Copper news

- **The impact of Covid-19-related mine closures, project deferrals and capital expenditure reductions will last into 2021 as well, major miners said at the Fastmarkets Copper Seminar on Friday March 12.** The Chief financial officer of Freeport-McMoRan, said production at its Cerro Verde mine in Peru had yet to be ramped back up to its pre-pandemic levels after it was put on suspension last year. Freeport does not plan to ramp up production at Cerro Verde to pre-pandemic level 'Until sometime later this year', or even in 2022" due to continuing restrictions. (*Fastmarkets*)
- **Codelco, has received approval from the regional environmental regulator to extend the life of its Radomiro Tomic mine until 2030, a key part of a larger plan to maintain output from its aging operations in the South American nation.** The Radomiro Tomic mine, which produced 261,000 tonnes of copper in 2020, was originally slated to end operations in 2022, the state-run company said, but advances in technology and processes will now allow it to tap additional resources. "Thanks to the incorporation of

new mining resources, it will be possible to extend it for seven more years from 2023," Codelco said in a statement, adding that additional investment would be necessary to sustain output. (*Refinitiv*)

- **Chinese buyer interest in the overseas blister copper spot market shrank in February due to the increased availability of lower-cost substitute material - scrap and ingots - in the domestic market.** Refining charges (RCs) for 98-99% blister copper, cif China, were assessed at \$160-170 per tonne for February - rising due to the increasing availability of overseas blister copper compared with January when RCs were assessed at \$150-165 per tonne. More high purity copper scrap, a substitute for blister copper, has appeared on the spot market recently as domestic yards try to capitalise on the sharp price rally in the red metal. Domestic copper ingots, smelt out of copper scrap, also became abundant with fabricators receiving more offers at bigger discounts, (*Fastmarkets*)
- **Antapaccay copper mine in Peru, controlled by Glencore, announced the suspension of operations due to a road blockade by local communities,** said the miner in a statement. The mine near the city of Espinar in the Cusco region is the sixth largest copper producer in Peru, accounting last year for 8.8% of Peru's total copper production. (*Refinitiv*)

Aluminium news

- **The global aluminium industry must slash greenhouse gas emissions by 77% by 2050 to meet climate change goals, largely through shifting to green electricity,** the International Aluminium Institute said. "The challenge for us and for many sectors is reducing those emissions while growing production to meet demand," Chris Bayliss, IAI deputy secretary general, told an online briefing. About 60% of aluminium emissions are from electricity used to smelt raw materials into the lightweight metal, according to a report released by the industry group on Tuesday that detailed ways to reduce emissions. (*IAI*)
- **China's Inner Mongolia autonomous region would take measures to reduce its energy consumption from 2021 onward under its 14th Five-Year Plan.** The region will not approve any new electrolytic aluminium capacity projects nor any for alumina, according to a draft document. In addition, sources have heard that several major aluminium producers were asked to reduce their current aluminium operating output, to cut energy consumption. An estimated 100,000 tonnes per year of aluminium capacity has been shut down since last week, according to one aluminium analyst in Shanghai. Fastmarkets aluminium analyst Cao Yang estimated that Chinese aluminium production would continue to increase in 2021, to total production over the year of 38.6 million tonnes. (*Fastmarkets*)
- **The Chinese city of Baotou in Inner Mongolia on Monday ordered some industrial production and power plants to shut down in a bid to meet its energy consumption targets for the first quarter.** SMM reported that smelters East Hope and Baotou Aluminium would each have to reduce power consumption by 150 million kilowatt hours, citing an internal Baotou document. CRU analyst Wan Ling estimated aluminium production cuts as a result of the Baotou energy consumption measures would total around 100,000 tonnes on an annual basis. That is a relatively small amount but is still having quite a large "psychological impact" on the market, she noted. China churned out 6.45 million tonnes of primary aluminium in January and February combined, with average daily output at a record high. (*Refinitiv*)
- **Aluminum inventories in LME warehouses extended a record-breaking jump with metal flooding into Asian depots,** as a squeeze may have forced traders to deliver supplies on the bourse. Another 314,350 tons worth about \$680 million was added to stockpiles. Malaysia's Port Klang saw the bulk of inflows, and inventories also rose in Johor and Singapore, taking overall LME supplies to the highest since 2017. (*Bloomberg*)

- **Alcoa announced that it had secured a five-year electricity supply deal for the Portland aluminium smelter, signing electricity supply agreements alleviating fears it was on the cusp of closure.** As part of the deal, the smelter will take on a greater role as a provider of demand response services, with the federal government having already committed to paying Alcoa \$19.2 million a year for four years to underwrite the Portland Smelter's participation in the Reliability and Emergency Reserve Trader (RERT) program. *(Renew Economy)*

Nickel news

- **Tsingshan said it would set up a 2 gigawatt clean energy base in Indonesia in the next three-five years to power its production of raw materials for the electric-vehicle (EV) battery sector.** Tsingshan, the biggest nickel producer in Indonesia, said it had officially started investing in the 2 GW clean energy project, which will involve building solar and wind power plants and supporting facilities at its industrial parks at Morowali, on the Indonesian island of Sulawesi, and Weda Bay on Halmahera. "After completion of the project, the production of battery raw materials in Tsingshan's Indonesia industrial parks will use clean and renewable energy to a large extent and realise zero CO2 emissions during the production process," the firm said. *(Nasdaq)*
- **Nornickel said that nickel production is expected to miss its 2021 output guidance by 35,000 tonnes, copper by 65,000 tonnes and platinum group metals by 710,000 troy ounces following flooding in the mines.** Nornickel is installing barriers and pouring 30,000 tonnes of concrete into the Oktyabrsky and Taimyrsky underground mines to stop the inflow of water, it said in a statement. The mines account for 36% of ore mined by Nornickel in Russia. *(Refinitiv)*
- **Silkroad Nickel said it would supply Chinese stainless steel giant Tsingshan Holding Group with 2.7 million tonnes of high-grade nickel ore in Indonesia by the end of 2022,** marking its second major customer win this year. Singapore-listed Silkroad, which mines ore on the Indonesian island of Sulawesi, said in a filing it had inked a contract with Tsingshan unit PT Ekasa Yad Resources worth more than \$90 million at current prices and would deliver at least 50,000 tonnes per month from March 2021 to December 2022. Tsingshan uses nickel ore to make stainless steel raw material nickel pig iron (NPI) in Indonesia and is also pursuing projects to make nickel chemicals for use in electric vehicle batteries in the country, including on Sulawesi. *(Refinitiv)*

CSL

FcRn a synthetic risk; upgrade to OUTPERFORM

Biotechnology | Upgrade Rating

CSL.AX

Target price (12M, A\$)
315.00
Outperform

- **Forecasting IG sales CAGR +10% in 2025-30 with muted FcRn risk:** We published a [global industry primer](#) assessing the FcRn threat in CIDP. In our view, the market's concern that FcRns will structurally change IG demand is unwarranted with CIDP ~24% of IG usage, yet PID/SID is nearly twice the market size (~44% of IG) and growing. argenx is the only company pursuing a FcRn CIDP indication. We estimate the FcRn addressable market is up to ~40% of the CIDP patient population, yet specific autoantibodies (IgG4) have only been found in 10% of patients. We factor FcRns taking 10% share of the CIDP market by 2030, yet still believe IG volume will grow at 8% p.a. due to rising awareness, access and sub-indications of PID/SID. For CSL, we forecast 10% IG sales CAGR in 2025-30, in line with industry forecasts & including ~2% price/mix benefit. In a bear case where FcRns capture 40% of the CIDP market, we forecast IG volume CAGR of ~7% p.a. in 2025-30.
- **Proprietary survey shows neurologists are supportive of limited FcRn addressable market:** We surveyed 50 US neurologists who treat CIDP patients. While doctors are supportive of FcRn as a treatment option for CIDP and see 56% probability of trial success, they believe it will only address 25-50% of CIDP patients, in line with our forecasts.
- **Downside risk to FY22 due to temporary COVID-19 related supply shortage:** We forecast IG revenue growth of -12% in 1H22, but a recovery in 2H22 for sales to be -2% for FY22. We forecast CSL Behring gross margin down 170bps in FY22 to 55.6%, with NPAT -8% in FY22, lowering estimates ~1-2%. We sit 11% below consensus in FY22.
- **Valuation upside emerges:** CSL has underperformed the market by 8% since its 1H21 result and trades at a 70% P/E premium to XJI, below its 2- and 5-year averages. As the vaccine rollout progresses and stimulus packages ease, plasma collections are likely to return and this would be a key positive catalyst for the stock. Despite sitting at the bottom of the market for FY22 and seeing risk of ST consensus earnings downgrades, we believe this is a one-off COVID-19 impact and should be looked through, given the LT IG demand outlook remains strong with FcRns having a limited impact. **We upgrade our rating to OUTPERFORM (from Neutral) and lower our TP to A\$315 (from A\$320).**

Previous Rating	Neutral
Previous target price (12M, A\$)	320.00
Price (22 Mar, A\$)	260.16
Market cap (A\$m)	118,403.9
Yr avg. mthly trading (A\$m)	5,679.3
Projected return:	
Capital gain (%)	21.1
Dividend yield (net %)	1.0
Total return (%)	22.0

Research Analysts

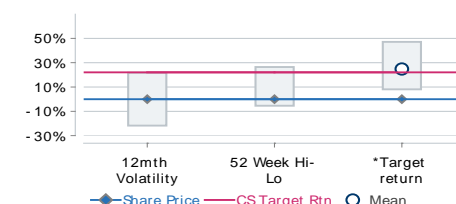
Gretel Janu
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Financial and valuation metrics

Year	6/20A	6/21E	6/22E	6/23E
Revenue (US\$ mn)	9,151	10,138	10,216	11,339
EBITDA (US\$ mn)	3,136	3,548	3,312	3,970
EBIT (US\$ mn)	2,716	3,090	2,860	3,429
Net Income (Adj.) (US\$ mn)	2,102	2,299	2,110	2,594
EPS (Adj.) (US\$)	4.61	5.04	4.63	5.72
Change from previous EPS (%)	n.a.	0.0	(1.3)	(1.6)
EPS growth (%)	9.1	9.2	(8.0)	23.4
Consensus EPS (US\$)	4.62	5.09	5.20	6.18
P/E (x)	43.5	39.9	43.4	35.2
Dividends (US\$)	2.02	1.68	2.02	2.56
Dividend yield (%)	1.0	0.8	1.0	1.3
Price/Book (x)	14.0	11.2	9.6	8.2
Net debt/EBITDA (x)	1.5	1.2	1.1	0.7

Source: Company data, Refinitiv, Credit Suisse estimates

Total return forecast in perspective



Source: Company data, Refinitiv, Credit Suisse estimates

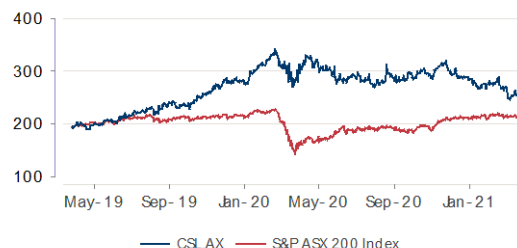
Performance	1M	3M	12M
Absolute (%)	-5.20	-9.88	-3.96
Relative (%)	-4.59	-12.19	-44.15

CSL (CSL.AX / CSL AU)Price (22 Mar 2021): **A\$260.16**Target Price: **(from A\$320) A\$315**Analyst: **Gretel Janu**Rating: **(from Neutral) Outperform**

Income Statement	6/20A	6/21E	6/22E	6/23E
Revenue	9,151	10,138	10,216	11,339
EBITDA	3,136	3,548	3,312	3,970
Depr. & Amort.	(420)	(458)	(452)	(541)
EBIT	2,716	3,090	2,860	3,429
Associates	-	-	-	-
Net interest exp.	(144)	(212)	(155)	(145)
Other	0	0	0	0
Profit before tax	2,573	2,878	2,706	3,284
Income tax	(470)	(579)	(595)	(690)
Profit after tax	2,102	2,299	2,110	2,594
Minorities	-	-	-	-
Preferred dividends	-	-	-	-
Associates & Other	0	0	0	0
Normalised NPAT	2,102	2,299	2,110	2,594
Unusual item after tax	0	0	0	0
Net profit (Reported)	2,102	2,299	2,110	2,594
Balance Sheet	6/20A	6/21E	6/22E	6/23E
Cash & equivalents	1,151	1,705	2,559	3,265
Inventories	3,510	4,161	3,822	4,097
Receivables	1,747	1,582	1,650	1,866
Other current assets	38	64	64	64
Current assets	6,446	7,512	8,095	9,292
Property, plant & equip.	5,366	6,544	7,382	7,935
Intangibles	2,140	2,105	2,007	1,908
Other non-current assets	1,512	1,521	1,521	1,521
Non-current assets	9,019	10,170	10,909	11,363
Total assets	15,465	17,682	19,005	20,656
Payables	1,525	1,595	1,575	1,614
Interest bearing debt	5,993	6,126	6,126	6,126
Other liabilities	1,419	1,791	1,791	1,791
Total liabilities	8,937	9,512	9,491	9,530
Net assets	6,527	8,170	9,513	11,125
Ordinary equity	6,527	8,170	9,513	11,125
Minority interests	0	0	0	0
Preferred capital	-	-	-	-
Total shareholder funds	6,527	8,170	9,513	11,125
Net Debt	4,842	4,421	3,567	2,861
Cash Flow	6/20A	6/21E	6/22E	6/23E
EBIT	2,716	3,090	2,860	3,429
Net Interest	(132)	(208)	(155)	(145)
Depr & Amort	420	458	452	541
Tax Paid	(355)	(423)	(595)	(690)
Change in Working capital	(402)	(512)	250	(452)
Other cash and non-cash items	241	562	(0)	(0)
Operating cash flow	2,488	2,966	2,812	2,683
Capex	(1,207)	(1,414)	(1,191)	(995)
Capex - expansionary	(737)	(998)	(838)	(553)
Capex - Maintenance	(470)	(416)	(353)	(442)
Acquisitions & Invest	0	0	0	0
Asset sale proceeds	0	0	0	0
Other	-	-	-	-
Investing cash flow	(1,367)	(1,460)	(1,191)	(995)
Dividends paid	(883)	(958)	(767)	(982)
Equity raised	42	38	0	0
Net borrowings	254	(66)	0	0
Other financing cash in/(outflows)	(55)	(2)	0	0
Financing cash flow	(643)	(987)	(767)	(982)
Total cash flow	479	519	854	706
Adjustments	15	35	0	0
Movement in cash/equivalents	493	554	854	706

Source: Company data, Credit Suisse estimates

Earnings	6/20A	6/21E	6/22E	6/23E
Equiv. FPO (period avg) (mn)	456	456	456	454
EPS (CS adj.) (c)	461.5	503.7	463.3	571.6
EPS growth (%)	9.1	9.2	(8.0)	23.4
DPS (c)	202.0	168.0	202.0	256.0
Dividend Payout (%)	43.8	33.3	43.6	44.8
Free CFPS (c)	443.0	558.9	539.9	493.8
Valuation	6/20A	6/21E	6/22E	6/23E
P/E (CS) (x)	43.5	39.9	43.4	35.2
PEG (x)	4.8	4.4	(5.4)	1.5
EV/EBIT (x)	35.4	31.0	33.2	27.5
EV/EBITDA (x)	30.7	27.0	28.7	23.8
Dividend Yield (%)	1.0	0.8	1.0	1.3
FCF Yield (%)	2.2	2.8	2.7	2.5
Price to book (x)	14.0	11.2	9.6	8.2
Returns	6/20A	6/21E	6/22E	6/23E
Return on Equity (%)	32.2	28.1	22.2	23.3
Profit Margin (%)	23.0	22.7	20.7	22.9
Asset Turnover (x)	0.6	0.6	0.5	0.5
Equity Multiplier (x)	2.4	2.2	2.0	1.9
Return on Assets (%)	13.6	13.0	11.1	12.6
Return on Invested Cap. (%)	19.5	19.6	17.1	19.4
Gearing	6/20A	6/21E	6/22E	6/23E
ND/ND+E (%)	42.6	35.1	27.3	20.5
Net Debt to EBITDA (x)	1.5	1.2	1.1	0.7
Int Cover (EBITDA) (x)	21.8	16.7	21.4	27.4
Int Cover (EBIT) (x)	18.9	14.6	18.5	23.6
Capex to Sales (%)	13.2	13.9	11.7	8.8
Capex to Depr (%)	347.5	393.4	337.4	225.0

Share price performance

On 22-Mar-2021 the S&P ASX 200 Index closed at 6752.5
On 22-Mar-2021 the spot exchange rate was A\$1.29/US\$1

Long-term IG growth story intact despite FcRn risk

We have published a global industry primer assessing the FcRn risk to the IG market. In particular, we assess the risk of FcRns in CIDP, noting CIDP makes up 24% of IG usage. In our view, while the market considers FcRns to be the greatest medium-term risk to IG demand, we believe the fear is unwarranted with continuing growth in Primary or Secondary Immunodeficiency (PID/SID) indications where there is no competitive threat.

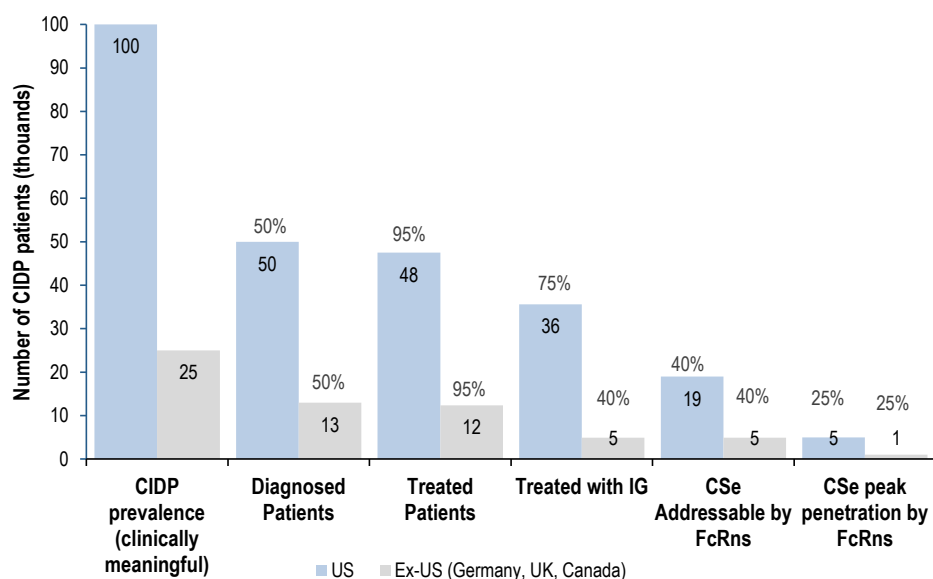
In addition to our global note where we outline our expectations for FcRns, we also publish top-line results from our proprietary survey of CIDP treating neurologists. We asked 50 US neurologists questions around current clinical practice and treatment of CIDP and their thoughts on the FcRn clinical trials. In total, doctors are supportive of FcRn as a treatment option for CIDP and believe there is a 56% probability of success. The neurologists believe FcRns could address 25-50% of the CIDP population, and 65% of doctors would recommend using FcRns over IG assuming similar efficacy and clinical trial success.

The below contains extracts from our Global Report. For full detail, please see the [report](#). If you would like further detail on our proprietary survey, please contact the analysts.

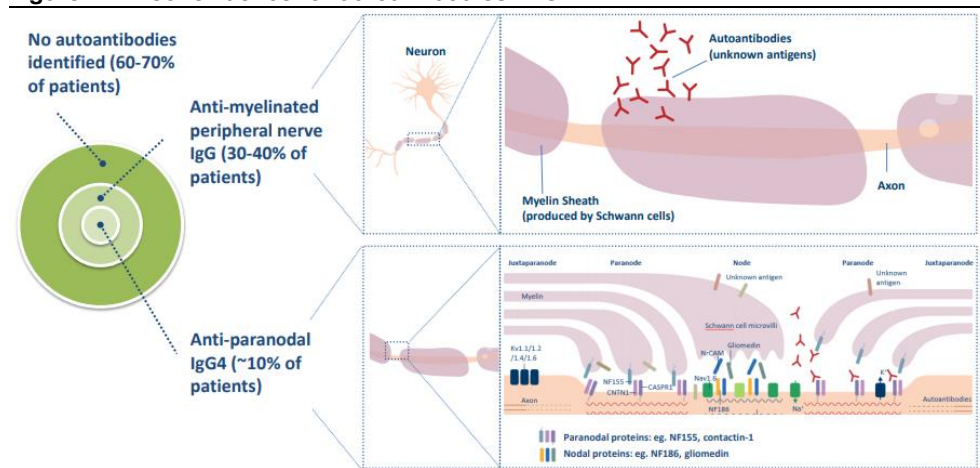
argenx is currently the only company pursuing a CIDP indication for FcRns and while we do believe the trial will be a statistical success, the addressable population is limited due to the disease heterogeneity. We assume only 40% of the CIDP market would be addressable by FcRn therapies (~19k patients in the US), based on evidence that 30-40% of CIDP patients have autoantibodies and thus may be amenable to treatment (Figure 2).

We assume FcRn's could capture at peak 25% of this ~19k addressable market, with argenx assuming 100% market share in early years where it is likely to be the only approved FcRn on the market. Whilst our peak penetration of 25% of the addressable market may be viewed as conservative, there remains many unknowns regarding potential penetration. **In total, we forecast FcRns taking 10% of the total CIDP patient market away from IG** which also aligns with the proportion of patients that have anti-paranodal IgG4 autoantibodies. Greater uptake is conditioned on establishing the FcRn class utility in patients with no identifiable autoantibodies.

Figure 1: CIDP Global opportunity for IG/FcRns



Source: Company data, Credit Suisse estimates

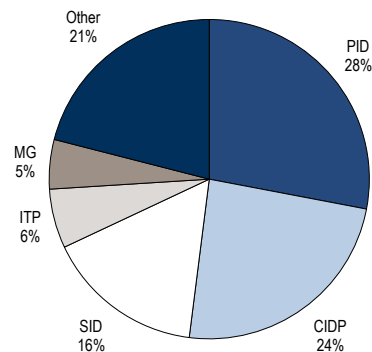
Figure 2: Direct evidence for autoantibodies in CIDP

Source: Company data

However, FcRns cannot be utilized in the management of Primary or Secondary Immunodeficiency (PID/SID), where the majority of IG is used today (~44%), as these are diseases where patients lack immunoglobulins and such IG therapy is used to top up antibodies to help prevent infection.

Figure 3: CIDP currently makes up 24% of IG usage...

IG use by indications - current



Source: Company data, Credit Suisse estimates

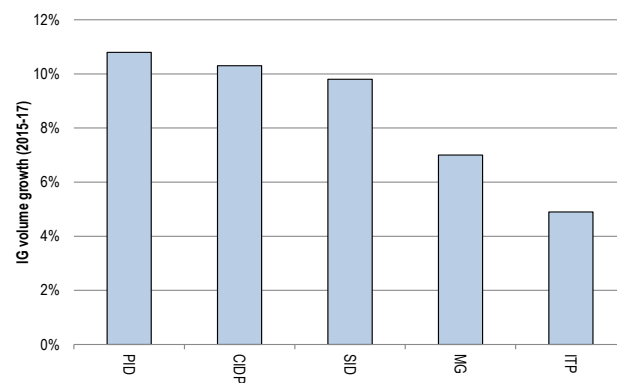
While PID is a rare disease (incidence of 1:10,000), a 2018 report noted a >20% increase in diagnosis rates between 2013-2018 and we note it now incorporates >400 disorders (vs >200 disorders only four years ago). IG replacement is used by 50-70% of PID patients. With increasing awareness and broader access to better/cheaper diagnostics, we expect the incidence rate of PID to continue to grow. We forecast 10% p.a. IG volume growth within the PID indication based on the rise in disorders, awareness of the disease and acknowledgement that IG is the primary treatment.

The prevalence and burden of SID is substantial and increasing. Some studies suggest SID is estimated to be 30x more common than PID, yet IG usage for SID remains below PID. In particular we note strong usage in patients with chronic lymphocytic leukemia (CLL) and multiple myeloma (MM). We believe the lower usage is a result of little evidence based data supporting IG replacement therapy for SID; most guidelines are mere extrapolations from experience in PID. However, we note that in 2018 the European Medicines Agency (EMA) updated their guidelines to explicitly recommend IVIG to address secondary immunodeficiencies. We forecast 12% p.a. IG volume growth within the SID indication to 2030 assuming SID usage grows in excess of PID, given increased prevalence relative to PID but lower penetration.

Australia First Edition

Figure 4: ...with high volume growth

IG volume growth by key indication – 2015-17



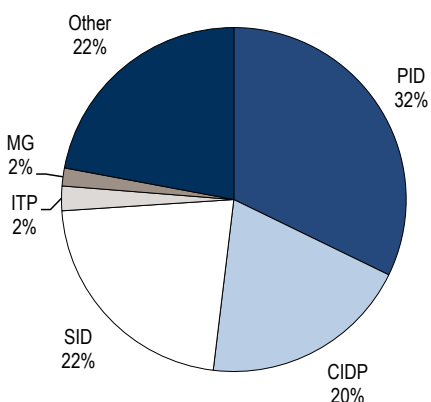
Source: Grifols, Credit Suisse estimates

For CIDP, we forecast 10% p.a. growth until 2025 but forecast by 2030 FcRns will capture 10% share from IG post 2025 launch. In the short term, we do not believe FcRns will be used off-label for CIDP post the launch in FcRns in Myasthenia Gravis, even with upcoming plasma shortages, due to limited real life knowledge of FcRns and limited trial data within the CIDP indication.

As depicted in Figure 5 and Figure 6, we forecast industry IG volume growth of 8-9% p.a. out to 2030, but with IG usage within CIDP reducing to 20% (from 24%) currently and SID usage increasing to 22% (from 16%) currently.

Figure 5: Forecast CIDP at 20% of IG usage by 2030...

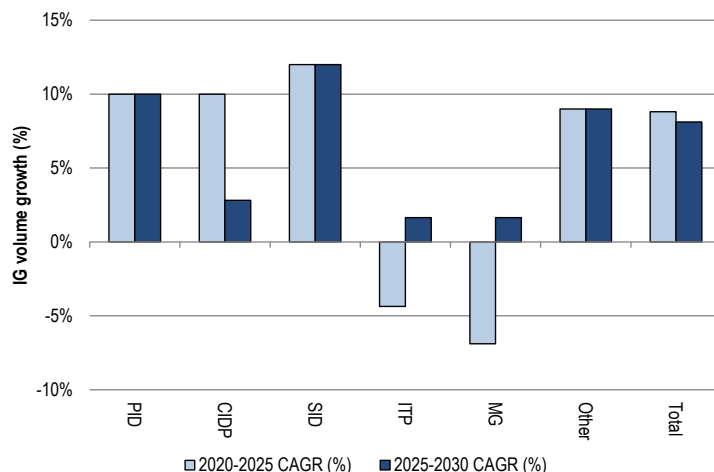
IG usage by indication – 2030 (CS estimates)



Source: Company data, Credit Suisse estimates

Figure 6: ...with increasing growth from SID

IG volume growth CAGR (%)



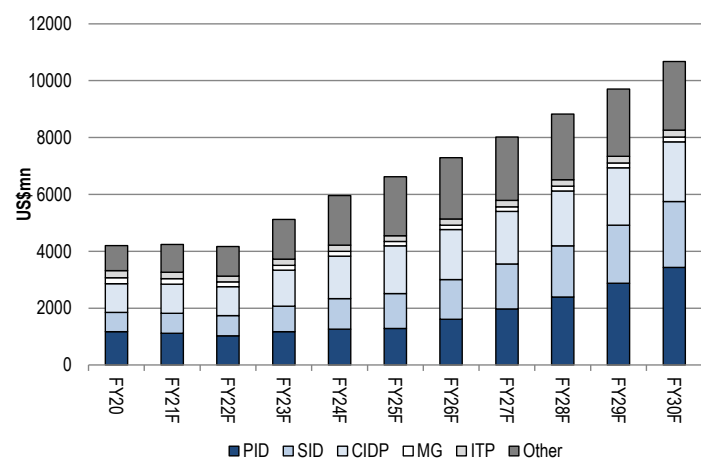
Source: Credit Suisse estimates

CSL forecasts

For CSL we forecast 10% IG sales CAGR from 2025–2030, with CSL benefitting from a small price/mix benefit as well being market leader. We note IG sales in CIDP only grow at low single-digit post the launch of FcRns.

Figure 7: CSL IG sales continues to grow strongly...

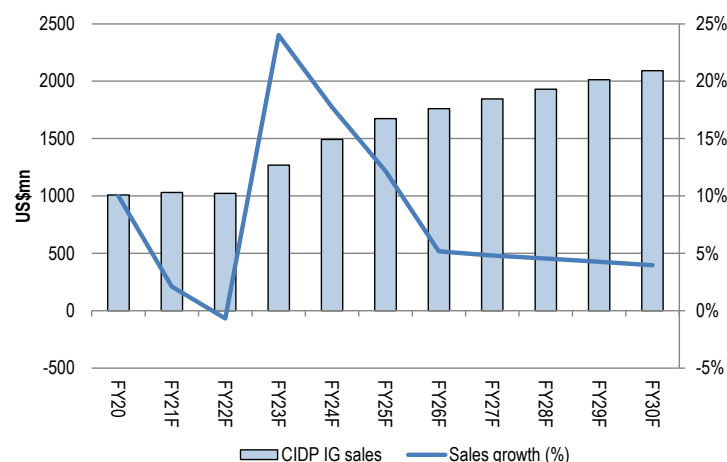
CSL – IG sales by indication (US\$m)



Source: Company data, Credit Suisse estimates

Figure 8: ...despite FcRn risk in CIDP

CSL – IG sales for CIDP (US\$m), growth (%)



Source: Company data, Credit Suisse estimates

Scenario analysis

The key risk to our analysis is the level of penetration FcRns could have in the CIDP market. We run three further scenarios assessing various levels of peak penetration by 2030.

- **Base case:** We assume FcRns penetrate 25% of its addressable market (40% of CIDP) at peak, ultimately taking 10% share of CIDP market by 2030. ***In total, we estimate 8.1% IG volume CAGR between 2025-2030.*** In this scenario, we forecast CIDP would account for 20% of IG sales in 2030.
- **Scenario 1:** We assume FcRns penetrate 50% of its addressable market (40% of CIDP) at peak, ultimately taking 20% share of CIDP market by 2030. ***In total, we estimate 7.6% IG volume CAGR between 2025-2030.*** In this scenario, we forecast CIDP would account for 18% of IG sales in 2030.
- **Scenario 2:** We assume FcRns penetrate 75% of its addressable market (40% of CIDP) at peak, ultimately taking 30% share of CIDP market by 2030. ***In total, we estimate 7.1% IG volume CAGR between 2025-2030.*** In this scenario, we forecast CIDP would account for 16% of IG sales in 2030.
- **Scenario 3:** We assume FcRns penetrate 100% of its addressable market (40% of CIDP) at peak, ultimately taking 40% share of CIDP market by 2030. ***In total, we estimate 6.7% IG volume CAGR between 2025-2030.*** In this scenario, we forecast CIDP would account for 14% of IG sales in 2030.

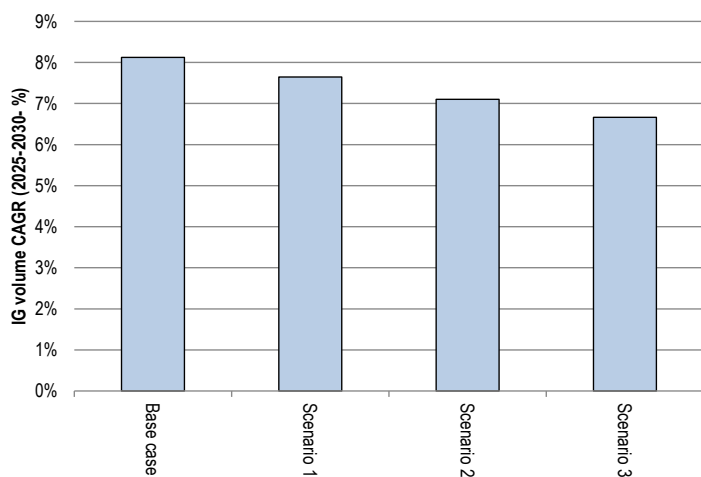
Whilst we note that Scenario 3 is highly unlikely, in all scenarios we still forecast high single-digit IG volume growth for the industry. In Scenario 3, our DCF valuation falls to A\$290 (from A\$315).

We do not factor in price sensitivity in each of these scenarios, however historically we note low single-digit price rises (~1% p.a.) in the US when supply/demand have been relatively balanced.

Price rises in RoW have generally been higher than the US (high single-digits) given these are typically tender markets. However, historically RoW IG pricing has been typically 20%+ cheaper than US IG, but we believe this gap is starting to converge with the current tight supply. With FcRns likely to take share away from the US CIDP market, product may shift towards RoW, at a lower average price. In aggregate, we believe the industry is likely to continue to see low single-digit IG price rises on an average basis.

Figure 9: Still forecast high IG volume growth...

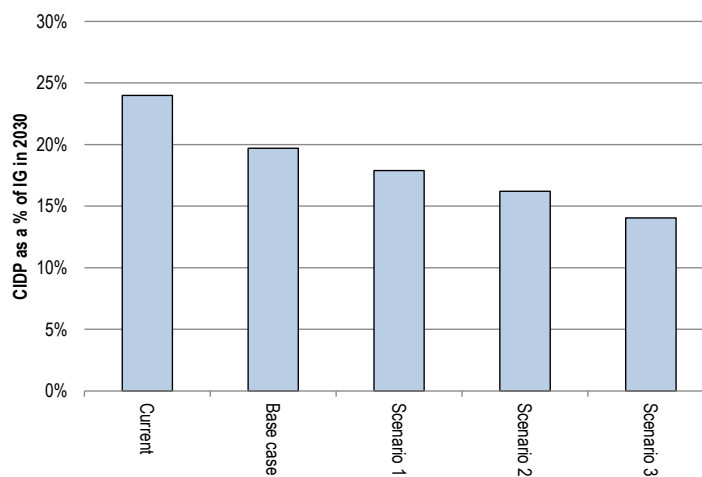
Scenario analysis – IG volume CAGR 2025-2030 (%)



Source: Company data, Credit Suisse estimates

Figure 10: ...even in scenarios of greater FcRn penetration

Scenario analysis – CIDP as a % of IG sales in 2030



Source: Company data, Credit Suisse estimates

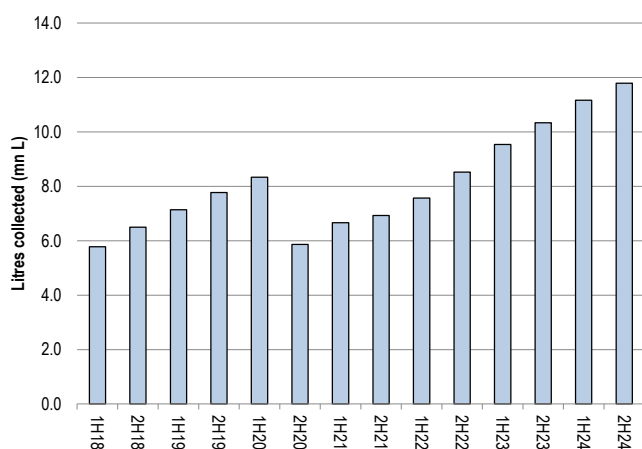
Risk to FY22 earnings remains but this is short term

We expect plasma collections to remain subdued into 2021 as a result of the added US stimulus packages. The latest stimulus package, passed into law on 11 March, includes US\$1,400 payments to individuals who make less than US\$75,000 or couples who earn less than US\$150,000. The US\$1,400 payment is on top of the US\$600 payment from the December bill. These stimulus cheques are targeting the low-income earners who are CSL's core donors.

Additionally, the added unemployment benefits of US\$300/week are not set to expire until 6 September. In February, CSL saw a dip in plasma donations post donors receiving the December stimulus cheques. We expect this to also occur when individuals receive this stimulus package, however we note that this stimulus is larger and likely to cause a longer dip in plasma collections as a result. We don't believe plasma donations will return to pre-COVID levels until all stimulus packages have been exhausted and there is a degree of herd immunity in the US. Lower collections currently puts greater risk on FY22 IG supply. We do not forecast plasma collections getting back above pre-COVID levels until 2H FY22.

Figure 11: Steady improvement in plasma collections...

Plasma collections (mn Litres)



Source: Company data, Credit Suisse estimates

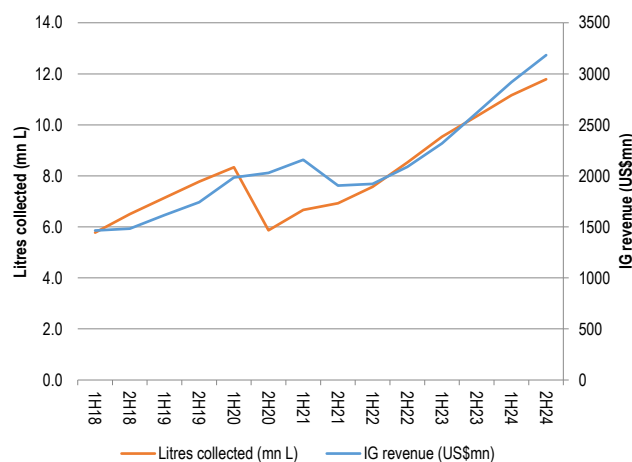
Historically, we estimate donor fees would have accounted for ~46% of collection costs. Not only have donor fees risen, but all plasma participants are also being impacted by the high fixed cost (rent/labour) relative to collection volumes as well as higher consumable costs (including PPE). We estimate collection costs/litre are up 20% with fixed costs historically accounting for 55% of costs pre-COVID.

We make the following earnings assumptions for CSL Behring for FY21 and FY22.

- **Plasma collections:** As disclosed by CSL, litres collected were down 5% in FY20 vs. FY19 and still down ~20% in December 2020. We forecast 2H21 collections +18% YoY, noting it is cycling weak comps, but only +4% vs. 1H21, given continued stimulus packages. We forecast steady improvement with collections being back above pre-COVID levels in 2H22.
- **Inventory:** CSL has indicated it has 1.9–2.8 months of inventory it can draw down upon. We believe CSL can operate at ~1 month of inventory. In our view, it is likely that CSL will phase the inventory drawdown to ensure more stable product supply for patients throughout FY22.
- **Collection costs/litre:** We estimate an average donor fee of US\$75 for FY21. We believe donor fees will likely remain high as there will be increased competition amongst the plasma companies once donations start to return. In total, we estimate collection costs/litre +20% in 2H21 and into FY22.

Figure 12: ...delayed impact to IG revenue

Plasma Litres vs IG revenue



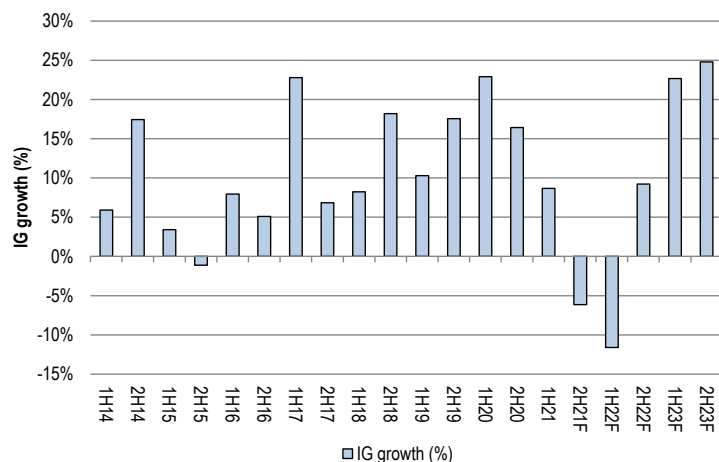
Source: Company data, Credit Suisse estimates

- **IG Price:** We assume 5% IG price growth, and continue to believe this is conservative given the tight supply and higher collection costs.

In total, we forecast IG revenue growth of -12% in 1H22, but a recovery in 2H22 for sales to be -2% for FY22. We forecast CSL Behring gross margin down 170bps in FY22 to 55.6%, following 380bps down in FY21.

Figure 13: Hit to IG revenue in FY21 and FY22...

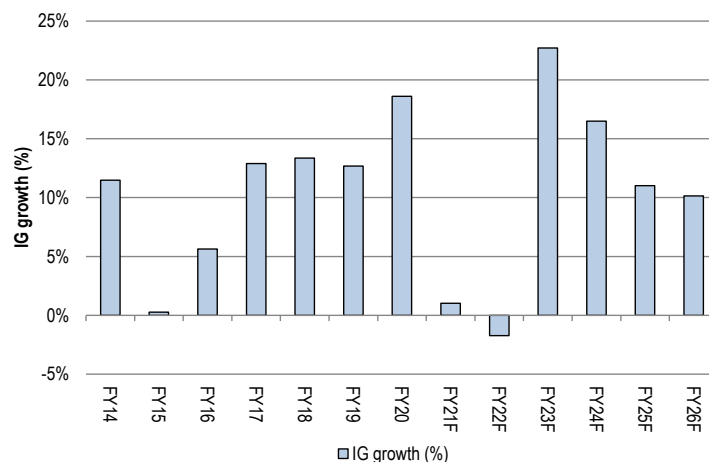
IG revenue growth (%)



Source: Company data, Credit Suisse estimates

Figure 14: ...but strong growth into medium term

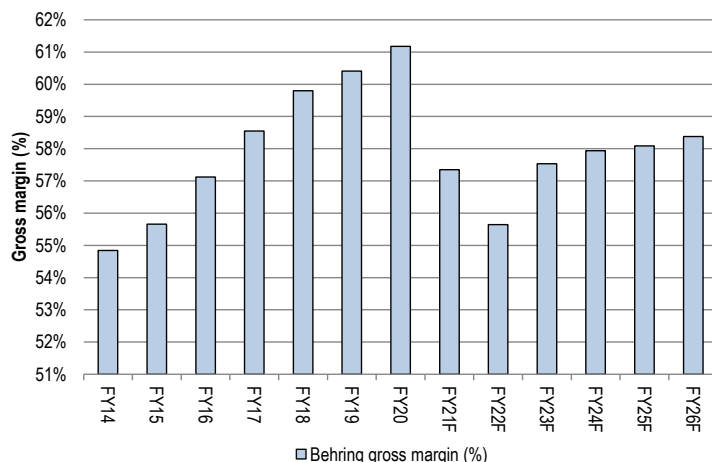
IG revenue growth (%)



Source: Company data, Credit Suisse estimates

Figure 15: Behring margin hit with higher collection costs...

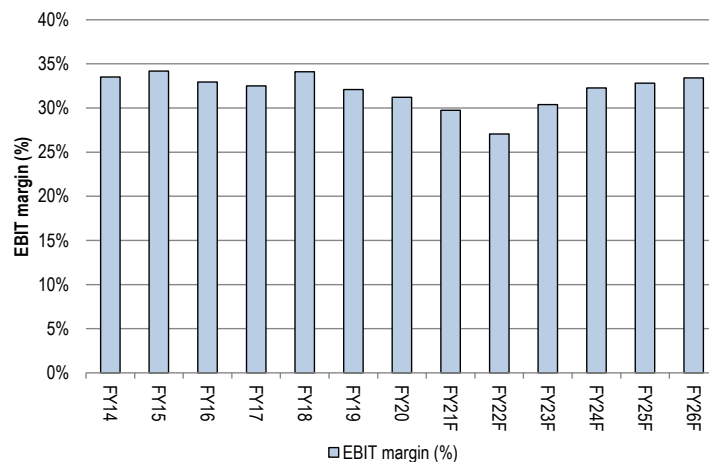
CSL Behring gross margin (%)



Source: Company data, Credit Suisse estimates

Figure 16: ...EBIT margin to bounce back

CSL Behring EBIT margin (%)



Source: Company data, Credit Suisse estimates

As a result of these assumptions outlined above, we lower our EPS ~1-2% in FY22 and FY23. We make no change to our FY21 forecasts. Our FY21 NPAT forecast of US\$2,299 (+9% YoY) includes a US\$30mn FX benefit that sits just above the top end of management's guidance range of US\$2,170-US\$2,265mn at constant currency. In FY22, we forecast an 8% decline to NPAT. However, we forecast 23% earnings growth in FY23 with this normalizing to ~10% p.a. NPAT growth by FY25F.

Figure 17: CSL earnings changes

US\$	FY21F			FY22F			FY23F		
	Old	New	Ch %	Old	New	Ch %	Old	New	Ch %
Sales revenue (\$mn)	10,138	10,138	0.0%	10,257	10,216	-0.4%	11,442	11,339	-0.9%
EBIT (\$mn)	3,090	3,090	0.0%	2,896	2,860	-1.2%	3,481	3,429	-1.5%
NPAT (\$mn)	2,299	2,299	0.0%	2,139	2,110	-1.3%	2,635	2,594	-1.6%
Diluted EPS (¢)	504	504	0.0%	470	463	-1.3%	581	572	-1.6%
DPS (¢)	168	168	0.0%	203	202	-0.5%	257	256	-0.4%

Source: Credit Suisse estimates

Recent underperformance provides buying opportunity; upgrade to OUTPERFORM

CSL shares have underperformed the market by 8% since its 1H21 result and 10% since the beginning of this year. The stock trades on 38x 12-month forward consensus EPS, at a ~70% premium to the ASX200 Industrials (ex. Financials), below both its 2-year and 5-year averages. While we do sit 11% below consensus in FY22 and do see risk of consensus earnings downgrades in the next six months, ultimately FY22 is a temporary delayed impact from COVID, due to ~9-month product time lag from time of plasma collection to the sale of product. To date, CSL has not yet seen a negative impact to earnings from COVID and we believe the market should look through the negative FY22 earnings impact, as it has done for many other sectors.

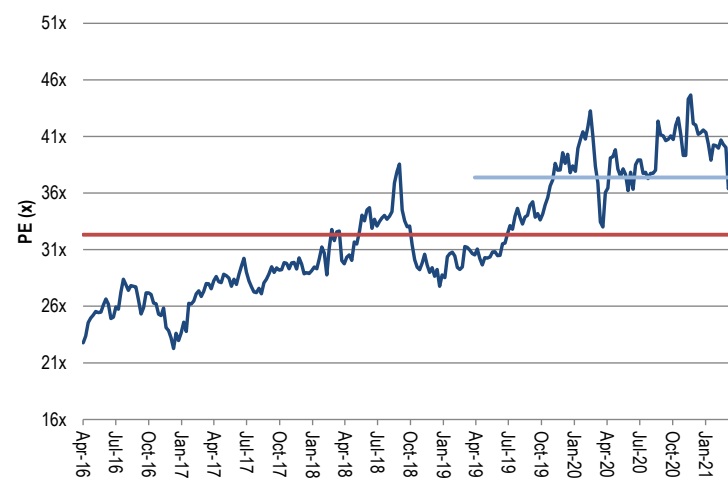
Ultimately, there has been no impact to demand and we continue to believe the market will be in a state of tight supply post COVID. Our analysis of the FcRn market indicates it is not a significant threat to the plasma players and we continue to forecast strong IG growth for the industry with particular strong growth from PID/SID. We believe CSL remains best positioned vs. its peers to rebuild its plasma inventory and meet demand post COVID due to its continual expansion of collection centres. We estimate that CSL is adding half of the required industry supply growth currently.

In our view, as the rollout of the vaccine continues in the US and as stimulus packages begin to wane, it is likely that plasma collections return. Signals of returning plasma collections will be the catalyst for the stock to begin to outperform.

We lower our DCF derived valuation to A\$315 (from A\$320), as a result of the 1-2% earnings downgrades. With >20% upside to our valuation, we upgrade to OUTPERFORM.

Figure 18: P/E of 38x on 12-mth forward basis...

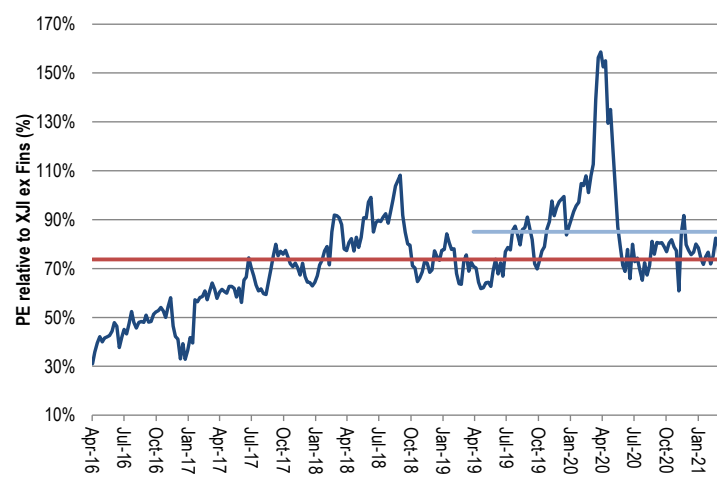
CSL – P/E (12mth forward)



Source: IBES, Company data, Credit Suisse estimates

Figure 19: ...trading at 70% premium to market

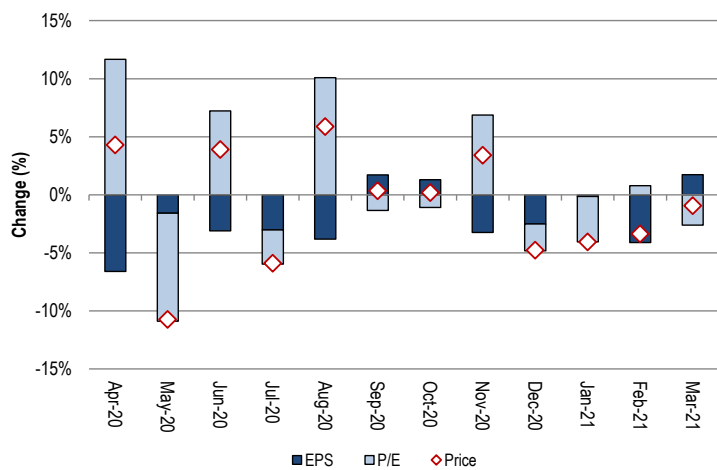
CSL – P/E vs ASX200 Industrials ex. Financials (12mth forward)



Source: IBES, Company data, Credit Suisse estimates

Figure 20: Multiple de-rate has been key share price driver...

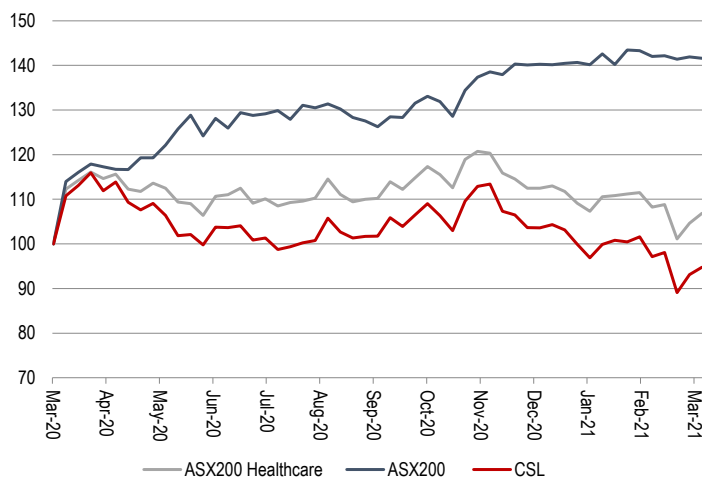
CSL – P/E attribution



Source: IBES, Company data, Credit Suisse estimates

Figure 21: ...CSL underperformed ASX200 & Healthcare index

CSL share price vs. ASX 200



Source: Company data, IBES, Credit Suisse estimates

Key forecasts

Figure 22: CSL key forecasts

US\$m	FY20	FY21F	FY22F	FY23F	FY20/19	FY21/20	FY22/21	FY23/22
CSL Behring	7,854	8,433	8,423	9,481	7.0%	7.4%	-0.1%	12.6%
Seqirus	1,297	1,706	1,793	1,858	8.5%	31.5%	5.1%	3.7%
Total Revenue	9,151	10,138	10,216	11,339	7.2%	10.8%	0.8%	11.0%
COGS	-3,664	-4,263	-4,461	-4,823	3.0%	16.4%	4.6%	8.1%
S&M	-865	-833	-830	-851	3.0%	-3.6%	-0.4%	2.5%
G&A	-595	-504	-568	-580	31.2%	-15.2%	12.6%	2.2%
R&D	-891	-990	-1,045	-1,115	10.6%	11.1%	5.6%	6.6%
EBITDA	3,136	3,548	3,312	3,970	8.8%	13.1%	-6.6%	19.9%
D&A	-420	-458	-452	-541	11.8%	9.1%	-1.4%	19.7%
CSL Behring	2,451	2,509	2,278	2,881	4.1%	2.3%	-9.2%	26.5%
Seqirus	265	581	582	548	72.8%	119.2%	0.2%	-5.9%
EBIT	2,717	3,090	2,860	3,429	8.3%	13.7%	-7.4%	19.9%
Interest charges	-151	-216	-184	-184	-14.7%	43.2%	-14.9%	0.0%
Interest revenue	7	4	29	39	-49.3%	-43.0%	631.6%	32.8%
PBT	2,573	2,878	2,706	3,284	9.7%	11.9%	-6.0%	21.4%
Tax	-470	-579	-595	-690	11.3%	23.1%	2.8%	15.9%
Normalised Net Profit	2,103	2,299	2,110	2,594	9.3%	9.3%	-8.2%	22.9%
Summary								
EPS ¢	461	504	463	572	8.9%	9.2%	-8.0%	23.4%
DPS ¢	202	168	202	256	9.2%	-16.8%	20.2%	26.7%
Payout %	43.8%	33.3%	43.6%	44.8%	0.1%	-10.4%	10.2%	1.2%
Tax Rate %	18.3%	20.1%	22.0%	21.0%	0.3%	1.8%	1.9%	-1.0%
Gross profit margin (%)	57.1%	55.3%	53.7%	54.5%	1.2%	-1.8%	-1.6%	0.8%
EBIT margin (%)								
CSL Behring	31.2%	29.8%	27.0%	30.4%	-0.9%	-1.5%	-2.7%	3.3%
Seqirus	20.4%	34.1%	32.5%	29.5%	7.6%	13.6%	-1.6%	-3.0%
Group	29.7%	30.5%	28.0%	30.2%	0.3%	0.8%	-2.5%	2.2%
Expense ratios (%)								
Cost of Goods Sold	42.9%	44.7%	46.3%	45.5%	-1.2%	1.8%	1.6%	-0.8%
Sales & Marketing	9.8%	8.5%	8.4%	7.9%	-0.4%	-1.3%	-0.1%	-0.6%
General and Administrative	7.6%	6.2%	6.8%	6.3%	0.8%	-1.4%	0.6%	-0.5%
Research & Development	10.1%	10.1%	10.5%	10.2%	0.3%	0.0%	0.5%	-0.4%
CSL Behring products								
Coagulation	1,122	1,164	1,193	1,184	6.8%	3.8%	2.5%	-0.8%
...recombinant	659	711	746	746	17.1%	8.0%	4.8%	0.0%
...plasma-derived	463	453	448	439	-5.1%	-2.2%	-1.1%	-2.0%
Immunoglobulin (IG)	4,014	4,061	3,986	4,933	19.5%	1.2%	-1.9%	23.8%
Hyperimmunes	188	183	185	185	1.5%	-2.6%	0.9%	0.0%
Albumin	640	1,086	1,039	1,133	-37.1%	69.7%	-4.3%	9.1%
Specialty	1,697	1,823	1,918	1,955	8.0%	7.4%	5.2%	1.9%
...Haegarda	319	382	413	413	12.0%	19.6%	8.2%	0.0%
...Berinert	343	352	355	355	10.0%	2.5%	0.8%	0.0%
...KCentra	429	474	512	537	12.0%	10.6%	7.9%	5.0%
...Other	605	615	639	650	2.5%	1.6%	3.8%	1.8%

Source: Company data, Credit Suisse estimates

Appendix

Figure 23: Competitive landscape for FcRn and complement inhibitors across IG indications

Disease	% of IG use today (by volume)*	FcRn					Complement inhibitors			Hypersialylated IG
		efgartigimod (argenx)	rozanolixizumab (UCB)	nipocalimab/M281 (Momenta/JNJ)	ALXN1830 (Alexion/AZN)	IMVT-1401 (Immunovant)	Soliris (Alexion/AZN)	Ultomiris (Alexion/AZN)	Zilucoplan (UCB)	M254 (Momenta/JNJ)
Primary Immunodeficiency (PID)	28%	x	x	x	x	x	x	x	x	x
Secondary Immunodeficiency (SID)	16%	x	x	x	x	x	x	x	x	x
Myasthenia Gravis (MG)	4-5%	Filed	P3	P2	P2 to start in 2021	P2	Marketed	P3	P3	P2
Immune thrombocytopenia (ITP)	5-6%	P3	P3	x	x	x	x	x	x	x
Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)	24%	P2	Discontinued P2	x	x	P2 to start in 2021	x	x	x	P2 to start in 2021
Other	21%		To move into 2 additional neuro-inflammatory diseases (undisclosed)	warm autoimmune hemolytic anemia (P2/3) Hemolytic Disease of Fetus and Newborn (HDFN) (P2)	warm autoimmune hemolytic anemia & MG (to move to P2 in 2021)	warm autoimmune hemolytic anemia (P2 - paused) Thyroid Eye Disease (P2 - paused)	NMO (marketed) aHUS (marketed) PNH (marketed)	aHUS (marketed) PNH (marketed) ALS (P3) NMO (P3) TMA (P3)	P2 in Immune-Mediated Necrotizing Myopathy (IMNM)	
Next Catalyst		Approval in MG (PDUFA December 17th 2021)	Announcement of studies in new indications	P2/3 readout in warm autoimmune anemia (mid-21)	P2 start in MG/WAIHA in 2H21	Outcome of safety analysis (lipid changes) & update on clinical program pause	Soliris IV GBS P3 to start (Japan only) in 1H21	P3 readout in MG in 2H21	P3 readout 2H21 in MG	CIDP study to start in 2021

*according to CSL 2019 data

Source: Company data, Credit Suisse estimates

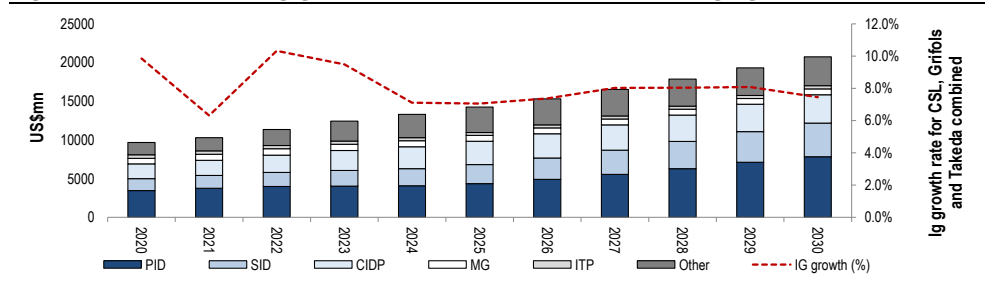
Global Healthcare

Immunoglobulin: 8% long-term growth assured

Healthcare | Global Sector Themes

Connections Series

Figure 1: CS forecasts Ig growth of 8% 2020-30 despite emerging FcRn competition



Source: Company data, Credit Suisse estimates

A key debate that has contributed to the underperformance of CSL, Grifols and Takeda, the global plasma fractionators, has been the impact of a potential new class of drugs (FcRn) on sales of immunoglobulin (Ig) in the second-biggest disease where Ig is used, Chronic Inflammatory Demyelinating Polyneuropathy (CIDP). CIDP is a rare condition with up to 40k treated patients, but which accounts for some US\$3bn out of US\$12.8bn of global Ig sales. Leveraging the expertise of our global team, and based on a proprietary survey of 50 US neurologists, in this Global Connections Series report we review this debate and conclude that the market maybe too pessimistic on the plasma companies.

- **We have conducted a survey of 50 US neurologists which concludes** that the FcRn class has around a 56% probability of approval in CIDP (is a rare autoimmune condition). FcRns are likely to address only ~25-50% of the population. argenx is currently the only player pursuing a CIDP indication, with P2/3 results for efgartigimod due in 2H23. We forecast a 70% chance of a 2025 launch and US\$1.2bn peak potential. UCB recently discontinued its CIDP FcRn work, prioritising other potential areas and citing a lack of biomarkers. Please contact the analysts for further information on the survey.
- **We expect any shortfall in demand for CIDP to be offset by strong growth** in primary and secondary immunodeficiency (PID/SID), already twice the size of CIDP with strong structural growth and not vulnerable to FcRns (due to their mode of action).
- **Major threat to forecasts is not demand but lack of raw material supply.** Supply is limited by the growth rate in collection centres and donor numbers, with a need to free up regulations to expand ex US collection. This should favour the 3 major plasma companies.
- **Analysis for this report has confirmed our long-term Ig thesis.** Despite trimming short-term EPS to reflect sustained higher donor fees, we are **upgrading both CSL and Grifols from Neutral to OUTPERFORM**. We estimate Ig accounts for 70% of NPV for CSL (TP A\$315) and 43% of Grifols' NPV (upgrade TP €25). We already rate Takeda an OUTPERFORM (Ig 15% of NPV). We rate argenx as NEUTRAL, with FcRns fully valued.

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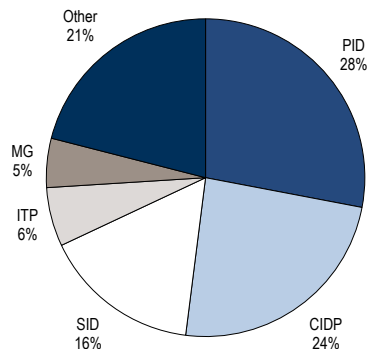
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Key charts

Figure 2: CIDP currently makes up 24% of Ig usage ...

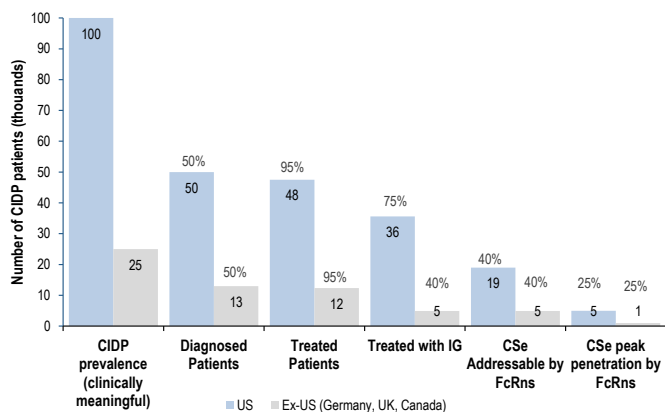
Ig use by indications – current



Source: Company data, Credit Suisse estimates

Figure 4: FcRn may address 40% of CIDP market ...

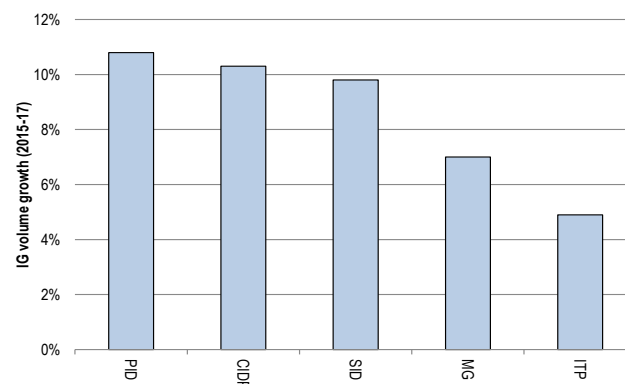
Global Opportunity in CIDP



Source: Company data, Credit Suisse estimates

Figure 3: ... with high volume growth

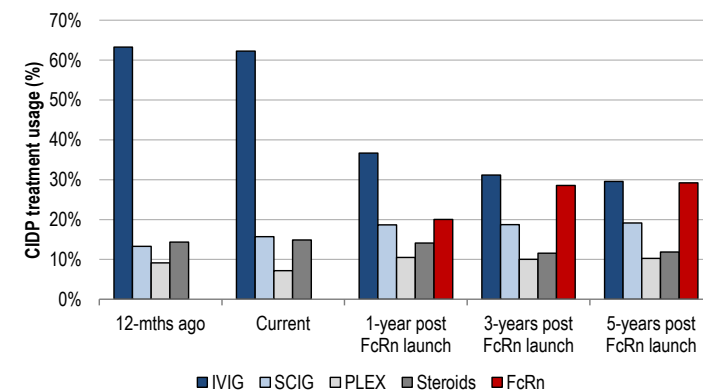
Ig volume growth by key indication – 2015-17



Source: Grifols, Credit Suisse research

Figure 5: ... doctors estimate FcRns take 30% share in 5 years

CS Proprietary survey - US neurologist view on current/future CIDP treatment



Source: Credit Suisse estimates

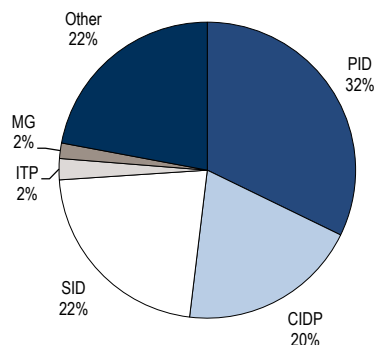
Figure 6: Competitive landscape for FcRn and complement inhibitors across Ig indications

Disease	% of Ig use today (by volume)*	FcRn					Complement inhibitors			Hypersialylated Ig
		efgartigimod (argenx)	rozanolixizumab (UCB)	nipocalimab/M281 (Momena/JNJ)	ALXN1830 (Alexion/AZN)	IMVT-1401 (Immunovant)	Soliris (Alexion/AZN)	Ultomiris (Alexion/AZN)	Zilucoplan (UCB)	
Primary Immunodeficiency (PID)	28%	x	x	x	x	x	x	x	x	x
Secondary Immunodeficiency (SID)	16%	x	x	x	x	x	x	x	x	x
Myasthenia Gravis (MG)	4-5%	Filed	P3	P2	P2 to start in 2021	P2	Marketed	P3	P3	x
Immune thrombocytopenia (ITP)	5-6%	P3	P3	x	x	x	x	x	x	P1/2
Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)	24%	P2/3	Discontinued P2	x	x	P2 to start in 2021	x	x	x	P2 to start in 2021
Other	21%		To move into 2 additional neuro-inflammatory diseases (undisclosed)	warm autoimmune hemolytic anemia (P2/3) Hemolytic Disease of Fetus and Newborn (HDFN) (P2)	warm autoimmune hemolytic anemia & MG (to move to P2 in 2021)	warm autoimmune hemolytic anemia (P2 - paused) Thyroid Eye Disease (P2 - paused)	NMO (marketed) aHUS (marketed) PNH (marketed)	aHUS (marketed) PNH (marketed) ALS (P3) NMO (P3) TMA (P3)	P2 in Immune-Mediated Necrotizing Myopathy (IMNM)	

Source: Company data, Credit Suisse estimates

Figure 7: CSe FcRns taking 10% CIDP market share by 2030...

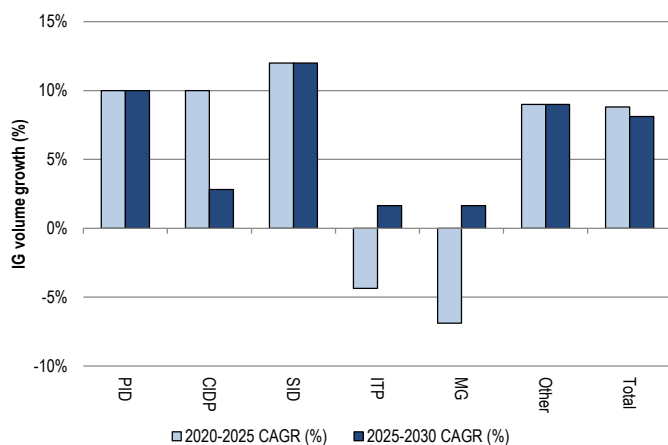
Ig usage by indication – 2030 (CS estimates)



Source: Credit Suisse estimates

Figure 9: Strong Ig growth from PID/SID indications ...

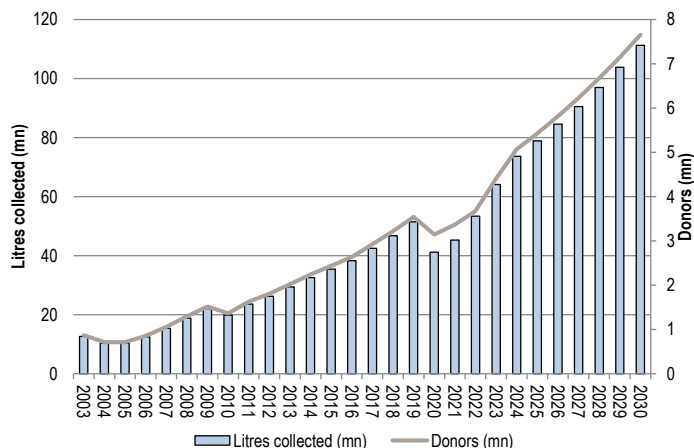
Ig volume growth CAGR (%)



Source: Credit Suisse estimates

Figure 11: Rise in plasma donations to meet demand ...

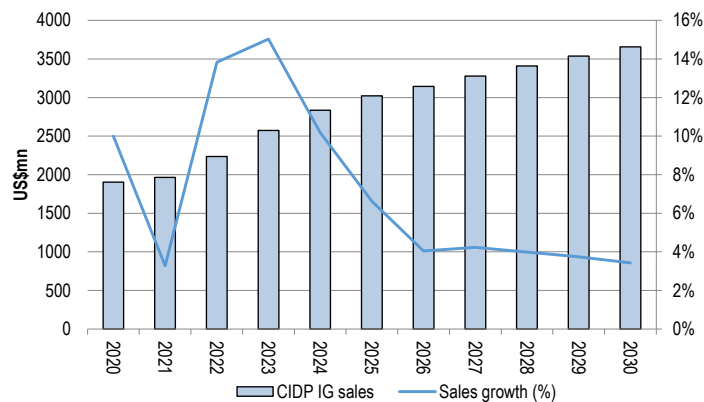
US plasma donations & plasma donors (mn) required to meet 2030 Ig demand



Source: PPTA, Credit Suisse estimates

Figure 8: ... Ig CIDP sales growth to weaken post-FcRn launch

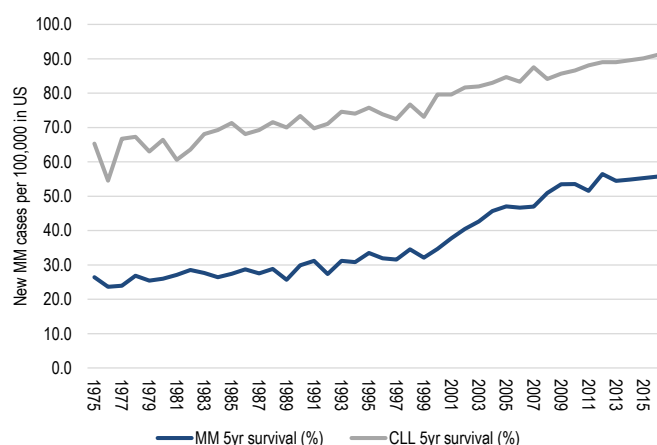
CIDP Ig sales (CSL, Takeda, Grifols) & growth by company



Source: Company data, Credit Suisse estimates

Figure 10: ... CLL and MM driving SID Ig treatment

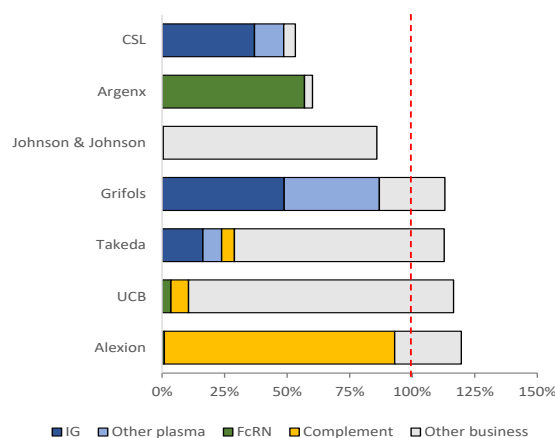
5-year survival rates for chronic lymphocytic leukemia (CLL) and multiple myeloma (MM)



Source: SEER, Credit Suisse research

Figure 12: ... Ig is a large proportion of NPV

NPV as % of EV, contribution to value of relevant categories, highlighting IG



Source: Company data, Credit Suisse PharmaValues estimates

Immunoglobulin: 8% long-term growth assured

In our report, we assess FcRns as a potential new treatment option for chronic inflammatory demyelinating polyneuropathy (CIDP). This is timely given that argenx recently announced its go ahead decision for its Ph2/3 ADHERE trial of efgartigimod, whilst UCB recently exited development for this indication. We evaluate the potential impact that FcRns could have on the immunoglobulin (Ig) market and the global plasma industry, and potential implications for CSL, Grifols and Takeda within our coverage.

CIDP is a rare and difficult to diagnose disease

CIDP is an autoimmune disorder in which the body's immune system attacks the myelin that insulates and protects the body's nerves. Autoimmune diseases are often caused by the presence of pathogenic autoantibodies ("bad antibodies") that attack healthy cells/tissue. Therapeutic approaches for these conditions usually rely on strategies to reduce the autoantibody production or increase the autoantibody clearance. Currently, Ig is the preferred treatment for autoimmune diseases, including CIDP, but there are some drawbacks including; reliance on raw plasma supply, high volume for each injection and frequent dosing.

The industry has grown Ig sales by 9-10% p.a. (above historical rates of 6-8% growth p.a) in recent years, in part driven by increasing awareness of CIDP and increased access to product, with subcutaneous Ig, Hizentra (CSL), adding CIDP to the label in 2018. While investors may consider FcRns to be the largest threat to longer-term demand, we do not anticipate a slowdown in demand growth for Ig. CS estimates 2020 Ig sales to be around US\$12.8bn, of which over 75% comes from the major three companies.

We understand that CIDP accounts for ~24% of Ig volume usage based on CSL data suggesting global sales in this indication of >US\$3bn in 2020. Based on 41,000 CIDP patients (see Figure 23), this would suggest a net price of only US\$73,000, but this would be made up of patients taking Ig regularly and 15-30% of patients who we understand only need a single course of treatment. Ig is the key earnings driver for the major plasma players, with Ig sales accounting for 44% of group sales in the last financial year for CSL, and we estimate 70% of group PharmaValues' NPV. Grifols has more limited sales disclosure and we estimate Ig accounts for ~42% for sales and 43% of NPV. For Takeda, we estimate 10% for sales and 15% for group NPV.

FcRn: A new treatment option

In basic terms, FcRn therapeutic agents look to interfere with the natural recycling function of IgG antibodies as a method to increase clearance of circulating IgG (both "good" and "bad" antibodies) and thus reduce the overall concentration of autoantibodies ("bad antibodies"). argenx is the only company currently pursuing the CIDP indication for its FcRn efgartigimod, announcing its Ph2/3 go-ahead decision on 1 Feb 2021. UCB announced it was discontinuing development of its FcRn in CIDP post Ph2 and instead will initiate studies in two new (undisclosed) neuro-inflammatory diseases.

We model a 70% probability of success of efgartigimod in the CIDP ADHERE Ph2/3 trial, where statistical success is aided by the trial design. The trial includes a run-in period where patients withdraw from prior treatment and show a worsening of the disease before commencing randomised treatment.

Estimating the addressable population for FcRn in CIDP is challenging given the limited understanding of autoantibodies involved in disease pathogenesis. Based on Grifols' data, we estimate there are 100k CIDP patients with clinically meaningful disease in the US but only 50% are diagnosed (50k patients). In total, it is believed 30-40% of CIDP patients have autoantibodies and thus could be receptive to FcRn agents, but noting that specific antigens and related autoantibodies (IgG4) have been found in only 10% of patients. As such, efgartigimod would need to demonstrate efficacy in patients with other IgG autoantibodies to increase penetration. We understand argenx will be assessing autoantibodies levels for post-hoc analysis in the P2/3 study.

CIDP is a rare autoimmune disease; Ig is the current preferred therapeutic option

CIDP accounts for ~24% of Ig usage

FcRns a potential new treatment for CIDP

FcRns could address up to 40% of CIDP market; we forecast 25% penetration

In total, we forecast FcRns penetrating 25% of its addressable CIDP patient market, and taking 10% (~5k patients) of the total CIDP patient market by 2030 (which implies as much as ~20-30% share using lower prevalence/addressable patient assumptions). We forecast argenx efgartigimod launching for CIDP in 2025 and achieving peak sales of US\$1.2bn.

Proprietary survey: Doctors supportive of FcRn as a treatment option for CIDP

We surveyed 50 neurologists who treat CIDP patients in the US and are knowledgeable of the FcRn clinical trials for CIDP. We asked the doctors questions about current clinical practice and treatment of CIDP, and their thoughts on the FcRn clinical trials. In total, doctors are supportive of FcRn as a treatment option for CIDP and believe there is a 56% probability of success. The neurologists believe FcRns could address 25-50% of the CIDP population, in line with our estimates.

In total, 65% of doctors would recommend using FcRns over Ig assuming similar efficacy and clinical trial success. Within five years post launch, doctors anticipate that FcRns could capture 30% of treatment share away from IVIg due to quicker/easier administration. However, we caveat that the results may carry an inherent bias in favour of FcRns as there was a selection criteria that the doctors had to be familiar with the FcRn clinical trials. We believe that the familiarity with possible new treatments suggests that these doctors are likely to be early adopters, and that even after detailing post launch there would be cohort of doctors who would be more hesitant of any new treatment.

PID & SID to drive Ig growth; forecasting 8-9% Ig volume growth p.a. out to 2030

FcRns cannot be utilised in the management of Primary or Secondary Immunodeficiency (PID/SID), which together account for ~44% of Ig use today. These are diseases where patients lack immunoglobulins and Ig therapy is used to top up antibodies to help prevent infection.

While PID is a rare disease, there has been >20% increase in diagnosis rates between 2013 and 2018 and we note it now incorporates >400 disorders (vs >200 disorders only four years ago, according to clinical studies). Additionally, some studies suggest SID is estimated to be 30x more common than PID, yet Ig usage for SID remains below that of PID. We forecast 10% p.a. Ig volume growth within the PID indication and 12% p.a. Ig volume growth in SID indication, based on the rise in disorders, awareness of the disease and acknowledgement that Ig is the primary treatment.

We forecast 8-9% p.a. volume growth in Ig to 2030, even allowing for FcRns to take 10% of the CIDP. In a worst-case scenario where CIDP takes captures 40% of overall CIDP (i.e. 100% penetration of its addressable market), we forecast Ig growth of ~7% p.a. from 2025-30.

- For CSL we forecast 10% Ig sales CAGR to 2030, assuming price/mix benefit and market share gains. For CSL we estimate that 70% of PharmaValues' NPV is accounted for by Ig and 90% by overall plasma products.
- For Grifols we forecast a 7% CAGR to 2030, reflecting near-term challenges due to COVID and a strong recovery in collection volumes/sales from 2022, with increasing trade up to the sub cut version Xembify, and growing use in PID/SID. For Grifols, we estimate that 43% of PharmaValues' NPV is accounted for by Ig and 77% by overall plasma products.
- For Takeda, we assume a 7% CAGR; historically, there has been a more limited investment in collection centres that if not addressed would see raw material shortage limit sales. We note, however, that GAMMAGARD is not formally indicated for CIDP so should be less exposed for FcRn success. The Takeda CFO recently discussed increasing disclosure surrounding this division, which we assume means that Takeda now believes that it is on the right track to improve returns. For Takeda, we estimate that 15% of PharmaValues' NPV is accounted for by Ig and 20% by overall plasma products.

Proprietary survey shows US neurologists support for FcRns as a treatment for CIDP

FcRns cannot be utilised in PID or SID

In the short term, we do not believe FcRns would be used off-label for CIDP, assuming an initial launch in Myasthenia Gravis (MG), even with upcoming plasma shortages, due to limited real-life knowledge of FcRns and no completed clinical trials within CIDP.

Supply will struggle to keep up with demand

In the medium term, we believe the greatest risk to the plasma industry remains its ability to source enough supply to meet demand. We estimate that the COVID-19 pandemic could cause a ~20-25mn litre shortfall in industry collections over 2020 and 2021 (~20%) and it would take time for inventories to be replenished across the supply chain once collections return. To meet global demand by 2030, we estimate US collection centres need to increase by 80-90 p.a. between 2020 and 2025 and then up to 120 centres p.a. by 2030 (vs an average of ~67 collection centre additions p.a. over 2015-20). This assumes all growth is driven from the US.

In order for supply to match demand, in our view, regulations change needs to occur in countries ex-US to ensure incentives (monetary rewards) are offered for plasma donations in order to encourage people to become donors. We also see opportunities for the nomogram (the rules on amounts and frequency of donation) to potentially change to increase ex US supply.

Largest risk to plasma industry remains supply, not demand

Stock implications: Upgrade CSL & Grifols to OUTPERFORM (from Neutral); retain NEUTRAL on ARGX

We upgrade [CSL \(TP A\\$315\)](#) and [Grifols \(TP €25\)](#) to OUTPERFORM (from Neutral). We maintain our OUTPERFORM rating on Takeda (plasma- derived therapeutics make up ~25% of Takeda's NPV). In our view, the market's concern that FcRns would structurally impact Ig demand is unwarranted with CIDP ~24% of Ig volume usage today, yet PID/SID is nearly twice the market size (~44% of Ig) and growing.

We have trimmed our near-term EPS for CSL and Grifols reflecting a consistent assumption of higher donor fees, but see EPS weakness as a temporary, COVID-19 impact.

With long-term Ig demand, all three of the main players should be able to retain their all-important "balanced demand" across their broad product portfolios. With a requirement to invest heavily to sustain raw material supplies, we could see a further squeezing out of smaller players and we see valuation upside for all three stocks from the current levels.

We remain NEUTRAL on ARGX, since we believe the current valuation already reflects a robust commercial opportunity in CIDP, while some uncertainty on broad utility of the class in the indication remains.

Valuation comparison

Figure 13: Valuation table for CS Coverage companies. PEs and PharmaValues EV/NPV

	Quoted Currency				PE				NPV/Share					
	Ccy	Price	TP	Ent.	2020	2021	2022	2023	Mkt Drug	R&D	Other	total	EV/ NPV	Equity NPV/Shr
				Value \$m										
Plasma Fractionators														
Grifols	EUR	21.7	25.0	25,292	36.3	20.8	16.1	13.1	27.0	2.4	6.7	36.2	0.88	26.6
CSL	AUD	260	315	92,323	43.7	40.0	43.5	35.3	155.1	2.9	0.0	158	1.83	144.6
Takeda	JPY	4306	5500	90,794	11.1	32.0	18.7	15.3	6494	500	104	7098	0.89	5023
Hualan Biological Engineering Inc.	CNY	39.4	45	10,766	43.0	36.0	31.7							
China Biologic Products, Inc.	USD	117.9	119	3,970	22.8	20.9	19.3							
Green Cross Corp	KRW	381500	257000	4,223	34.4	47.2								
Average					27.8	34.0	23.2	15.3	0.89					
Potential Disruptors														
argenx	USD	307.1	283	13,370	-26.4	-17.8	-20.7	-28.2	0.1	171.0	0	171.1	1.61	199.1
Johnson & Johnson	USD	161	193	431,926	20.0	16.9	15.4	14.1	63.2	11.2	71.0	145	1.17	136.2
Alexion Pharmaceuticals Incorporated	USD	155	190	34,252	12.4	11.8	10.9	10.7	136	49	0	185	0.84	181
UCB	EUR	81	90	19,352	15.2	14.4	19.1	17.9	72	31	0	104	0.86	97
Average (ex argenx)					15.9	14.4	15.1	14.2	1.12					

Note EV is based on EV used in Credit Suisse PharmaValues database; Source: Company data, PharmaValues, Credit Suisse estimates

CIDP: A rare & difficult to diagnose disease

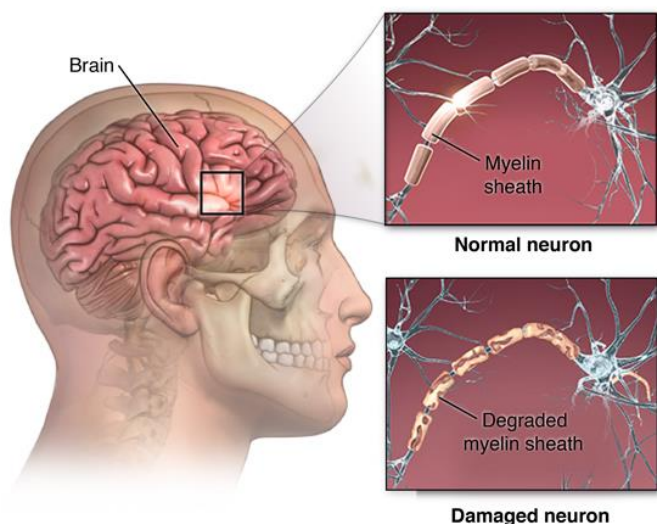
Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) is a progressive or relapsing disease affecting the peripheral nerves (i.e. nerves that sit outside the brain or spinal cord). Polyneuropathy means several nerves are involved and it usually affects both sides of the body by the same degree.

CIDP is rare, with ~100,000 people in the US suffering from the “clinically meaningful” disease (according to Grifols data). Grifols estimates that only 50% are diagnosed (~50k) but most receive treatment (~95%) with the majority getting Ig (~75% in US, ~40% ex-US). The company estimates an additional ~25,000 patients suffer from CIDP ex-US (Germany, the UK and Canada). The disease can affect any age group, and onset can begin during any decade in life. However, CIDP affects twice as many males as females, and the average age of onset is 50 years.

The cause of CIDP remains unknown, but it is widely accepted that it is an autoimmune disease. It is thought that cells associated with the immunity system, which normally protect the body from foreign infection, incorrectly attack the peripheral nerves in the body (i.e. arms and legs) and destroy their protective covering, known as the myelin sheath.

As a result, the affected nerves fail to respond, or respond only weakly, to stimuli causing numbing, tingling, pain, progressive muscle weakness, loss of reflexes, fatigue and abnormal sensations. The likelihood of progression of the disease is high.

Figure 14: CIDP – damaged myelin sheath



Source: CSHS

Not only is CIDP difficult to diagnose, it can go undiagnosed for months or years, either because symptoms aren't prominent enough or because non-debilitating symptoms in the early stages make it difficult to make a definitive diagnosis. In addition, according to recent studies, CIDP is misdiagnosed in up to 50% of cases, with alternative diagnoses given such as motor neuron disease, diabetic and inherited polyneuropathy, and even conditions clinically distinguishable from CIDP such as fibromyalgia or multiple sclerosis.

Therapeutic options are limited: Ig still favoured

We note that therapeutic options for the treatment of CIDP are limited and include IVIg, plasma exchange and/or corticosteroids. Grifols estimates that ~75% of CIDP patients receive Ig in the US and ~40% ex-US (Canada, the UK and Germany). The European Federation of Neurological Societies has published guidelines regarding management of CIDP.

Initial management:

- Patients with very mild symptoms that do not or only slightly interfere with activities of daily living may be monitored without treatment;
- Treatment with steroids or IVIg should be offered to patients with moderate or severe disability;
- IVIg is often the first choice, as improvement can be rapid; the usual first dose of IVIg is 2.0 g/kg given over two to five consecutive days;
- Contra-indications to steroids would influence the choice towards IVIg and vice versa. For pure motor CIDP, IVIg treatment should be the first choice and if steroids are used, patients should be monitored closely for deterioration;
- Therapy of patients with CIDP requires individualised assessment of treatment response (15-30% of patients require only a single course of IVIg).

For long-term management:

- No evidence-based guidelines are available, as no trials have systematically assessed long-term management;
- IVIg given in doses of 1 g/kg over 1–2 days every 3 weeks have been shown to be efficacious over 24 (and possibly 48) weeks but the appropriate dose needs to be individualised (usually 0.4–1.2 g/kg every 2–6 weeks).
- If a patient becomes stable on a regimen of intermittent IVIg, the dose (or frequency) of IVIg should be reduced periodically to establish the need for ongoing therapy because patients may need less IVIg than they receive or potentially none at all.

In 2018, FDA approved Hizentra (CSL) as the first SCIg therapy for CIDP. Hizentra has orphan drug status for CIDP and as such, is the only SCIg approved for this indication. Key properties of FDA-approved Ig products are depicted in Figure 15.

Bar for efficacy

Grifols added CIDP to the Gammunex IV label in 2008. CSL added both an IV (Privigen) and SC product (Hizentra) in 2017.

Grifols' Ph3 [ICE](#) trial enrolled 117 trials into a placebo-controlled cross-over study where patients received IVIg or placebo every three weeks up to 24 weeks. Gamunex-C (IVIg) showed 100% of responders (n=30) dosed in the study achieved maximal response by week 24 measured in INCAT disability scores. In the extension period of the study, 87% of patients receiving Gamunex-C remained relapse free (vs 55% for placebo) at 48 weeks. We understand argenx views the ICE study as the potential bar for efficacy for FcRns coming to the market.

CSL's Ph3 PATH study for Hizentra (SCIg) was the largest controlled CIDP study ever performed. The PATH trial (SCIg) ran between March 2012 and September 2016. It assessed 276 patients, with 245 entering the rough equivalent of the run-in period (~11% ineligible), where 38 subjects withdrew from study (~16%), and another 35 subjects (17%) withdrawing during the restabilisation period (roughly equivalent to Stage A of the ongoing ADHERE trial), with a total of 172 patients actually randomised.

Some 81% of patients on high dose and 67% on low dose of Hizentra (SCIG) remained relapse free (after initial Privigen stabilisation). Median Inflammatory Neuropathy Cause and Treatment (INCAT), grip strength and Medical Research Council (MRC) sum scores remained stable in both SCIG groups and deteriorated in the placebo group.

Figure 15: Properties of FDA approved CSL & Grifols Ig products for CIDP (note Takeda's Gammagard is not labelled for CIDP)

	IVIg	SCIg
Formulations	10% caprylate/chromatography purified liquid (Gamunex-C) 10% liquid (Privigen)	20% liquid (Hizentra)
Dose	Loading dose: 2g/kg (20mL/kg) in divided doses over 2 to 4 consecutive days Maintenance dose: 1 g/kg (10mL/kg) administered in 1 or 2 infusions on consecutive days	0.2 g/kg (1 mL/kg) in 1 or 2 sessions over 1 or 2 consecutive days. If symptoms worsen, resume IVIG and restart SCIG at 0.4 g/kg administered in 2 sessions over 1 or 2 consecutive days
Infusion rate and volume	Initial: 0.5 mg/kg/min (0.005mL/kg/min) or 2 mg/kg/min (0.02 mL/kg/min) Maximum: 8 mg/kg/min (0.08 mL/kg/min)	Maximum of 8 infusion sites. Initial volume: 20 mL/site Maximum volume 50 mL/site Initial rate: 20 mL/h Maximum rate: 50 mL/h
Frequency	Every 3 weeks	Weekly
Common adverse effects (incidence >5% in Ph3 Clinical trial)	Gamunex: headache (27%), pyrexia (13%), hypertension (6%), chills (7%), nausea, rash (both 5%); arthralgia, asthenia (both 5%) Privigen: headache (28.6%); asthenia, hypertension (both 14.3%); nausea, extremity pain (both 10.7%), hemolysis, flu-like illness, leukopenia, rash (all 7.1%) ^a	Headache (24.5%); diarrhea (10.2%); fatigue, back pain, nausea, extremity pain, cough (all 8.2%); vomiting, upper abdominal pain, migraine, pain (all 6.1%)

Source: Company data, Credit Suisse estimates

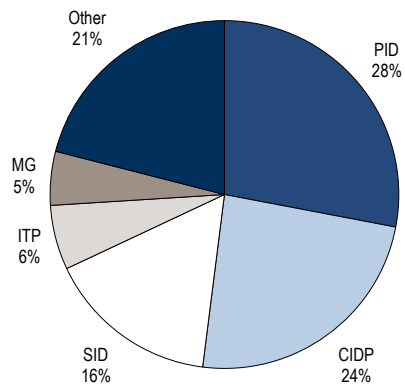
CIDP accounts for 24% of Ig usage

CIDP accounts for ~24% of Ig usage. Ig is the key earnings driver for the global plasma players, with Ig sales accounting for 44%, CSe 42% and 10% of group sales in the last financial year for CSL, Grifols and Takeda, respectively. In our survey, doctors noted that they felt the products were largely interchangeable and noted using Gammagard, despite the product not having a formal CIDP claim on its US label.

Not only is CIDP one of the larger indications for Ig usage, it has also been a key growth driver of Ig in recent years. According to all plasma industry stakeholders, global Ig demand growth continues to run at 9-10% p.a., ahead of the historical 6-8% p.a. growth rate, as a result of sustained robust demand. We believe the market considers FcRns to be the biggest risk to Ig demand in the medium term. We assess the risk in the following section.

Figure 16: PID & CIDP have the highest usage levels ...

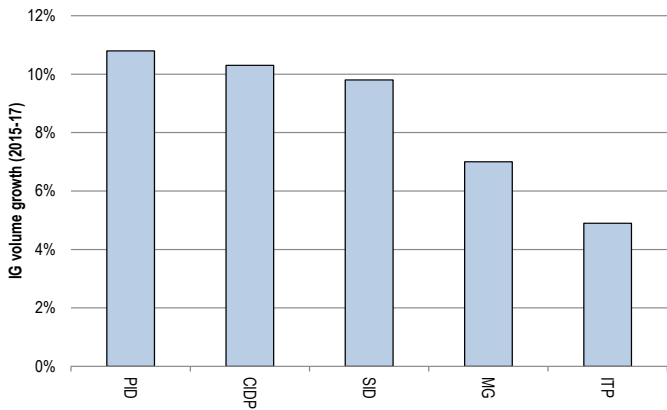
Ig use by indications



Source: CSL, Credit Suisse estimates

Figure 17: ... with the highest volume growth

Ig volume growth by key indication – 2015-17



Source: Grifols, Credit Suisse research

FcRn: A new treatment option

Background into FcRns

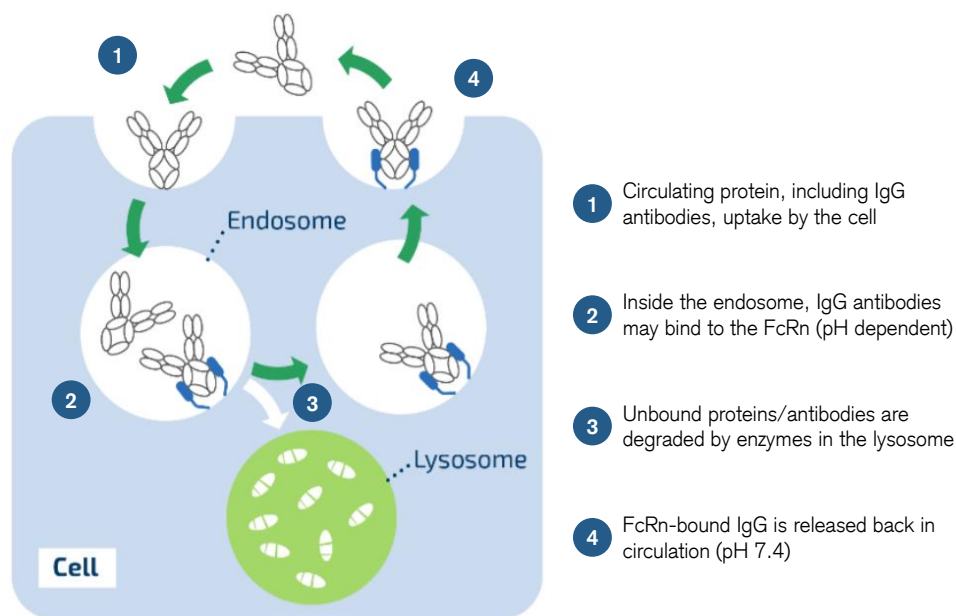
There are five antibodies/immunoglobulins (Ig) classes produced by our immune systems, with IgG being the most common. Autoimmune diseases are often caused by the presence of “bad antibodies” (pathogenic autoantibodies) that attack healthy cells/tissue. Therapeutic approaches for these conditions usually rely on strategies to reduce the autoantibody production or increase the autoantibody clearance.

Current standards of care for autoimmune diseases have several drawbacks, such as adverse events from prolonged exposure to corticosteroids/immunomodulators. Or with use of plasma-derived Ig, doses required are high and often require frequent/repeat administration. As such, there is a need for new therapeutic options and this is where FcRn therapies come in.

FcRn (neonatal Fc Receptor) is expressed in the vascular endothelium (lining of blood vessels) and is involved in several processes related to IgG, most notably the recycling of IgG antibodies in the system. In basic terms, FcRn therapeutic agents look to interfere with the natural recycling function as a method to increase clearance of circulating IgG (both “good” and “bad” antibodies) and thus reduce the overall concentration of autoantibodies (“bad antibodies”).

As shown in Figure 18, the FcRn is responsible for recycling IgG antibodies by interacting with the Fc region of the antibody and accounts for the extended half-life relative to other isotypes (i.e., IgA, IgM).

Figure 18: FcRn are responsible for the long half-life of IgG antibodies



Source: argenx

FcRns cannot be used for PID & SID

There are several FcRn agents in the pipeline across multiple indications. argenx is furthest along in development for its FcRn, efgartigimod, which is expected to come to market in late 2021 for its first indication myasthenia gravis (MG). See table below (Figure 19) for the current landscape.

MG and ITP are the areas with greatest FcRn competition but represent only ~10% of IVIg use today, and thus not of great concern to plasma manufacturers in our view.

Importantly, FcRns cannot be utilised in the management of Primary or Secondary Immunodeficiency (PID/SID), where the majority of Ig is used today (~44%), as these are diseases where patients have suboptimal immune systems and as such, Ig therapy is used to top up antibodies to help prevent infection in these patients. As an example with SID, patients with hematological disorders may intrinsically have or develop hypogammaglobulinemia (where the immune system does not produce enough immunoglobulins) off the back of receiving immune modulating drugs, such as CD20 antibodies (Rituxan, etc.). In severe cases of SID, Ig therapy is used to replace the Ig that the body is failing to make itself. FcRn therapies cannot act as Ig replacement, and thus are not in development for these indications.

Figure 19: Competitive landscape for FcRn and complement inhibitors across Ig indications

Disease	% of Ig use today (by volume)*	FcRn					Complement inhibitors			Hypersialylated IG
		efgartigimod (argenx)	rozanolixizumab (UCB)	nipocalimab/M281 (Momenta/JNJ)	ALXN1830 (Alexion/AZN)	IMVT-1401 (Immunovant)	Soliris (Alexion/AZN)	Ultomiris (Alexion/AZN)	Zilucoplan (UCB)	
Primary Immunodeficiency (PID)	28%	x	x	x	x	x	x	x	x	x
Secondary Immunodeficiency (SID)	16%	x	x	x	x	x	x	x	x	x
Myasthenia Gravis (MG)	4-5%	Filed	P3	P2	P2 to start in 2021	P2	Marketed	P3	P3	x
Immune thrombocytopenia (ITP)	5-6%	P3	P3	x	x	x	x	x	x	P1/2
Chronic Inflammatory Demyelinating Polyneuropathy (CIDP)	24%	P2/3	Discontinued P2	x	x	P2 to start in 2021	x	x	x	P2 to start in 2021
Other	21%		To move into 2 additional neuro-inflammatory diseases (undisclosed)	warm autoimmune hemolytic anemia (P2/3) Hemolytic Disease of Fetus and Newborn (HDFN) (P2)	warm autoimmune hemolytic anemia & MG (to move to P2 in 2021)	warm autoimmune hemolytic anemia (P2 - paused) Thyroid Eye Disease (P2 - paused)	NMO (marketed) aHUS (marketed) PNH (marketed)	aHUS (marketed) PNH (marketed) ALS (P3) NMO (P3) TMA (P3)	P2 in Immune-Mediated Necrotizing Myopathy (IMNM)	
Next Catalyst		Approval in MG (PDUFA December 17th 2021)	Announcement of studies in new indications	P2/3 readout in warm autoimmune anemia (mid-21)	P2 start in MG/WAIHA in 2H21	Outcome of safety analysis (lipid changes) & update on clinical program	Soliris IV GBS P3 to start (Japan only) in 1H21	P3 readout in MG in 2H21	P3 readout 2H21 in MG	CIDP study to start in 2021

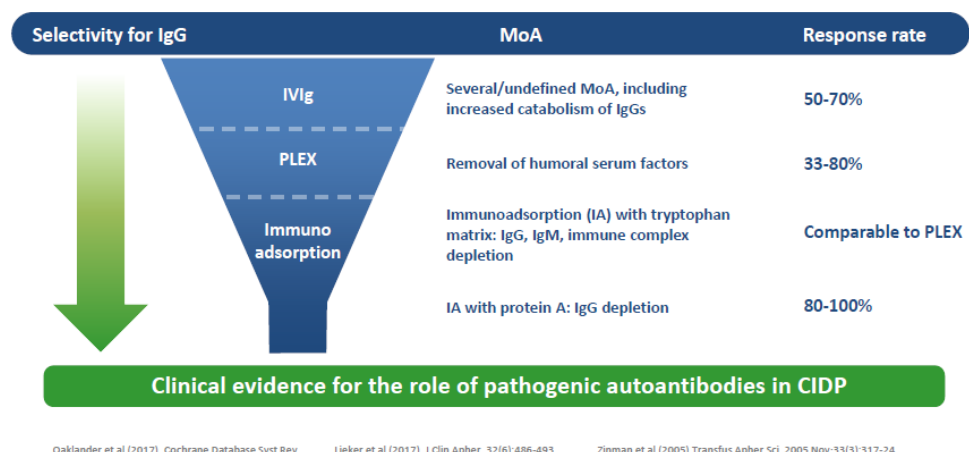
*according to CSL 2019 data

Source: Company data, Credit Suisse estimates

FcRns in treating CIDP

Despite the complex disease pathology for CIDP, there is clinical evidence that implies the involvement of pathogenic IgG antibodies (Figure 20). IVIg is generally the least specific approach, but through a number of mechanisms is able to deliver favourable efficacy. Extrapolating IVIg results to FcRn is somewhat limited given the high specificity of the class—it is not clear what IVIg mechanism or combination is responsible for the bulk of efficacy.

FcRn agents are likely to have higher response rates when administered to the appropriate population; however, identification of patients that would benefit from FcRn approach is not well understood. It is believed a subset of patients (~10%) have anti-paranodal IgG4 antibodies and could potentially benefit from FcRn.

Figure 20: FcRn is more selective but may limit addressable population

Source: Company data

UCB stepped out of the CIDP race

At its FY20 results in February 2021, UCB commented that whilst it had sufficient P2 data to move to a P3 study in CIDP, the company ultimately viewed FcRns as only able to benefit a small portion of the CIDP population and thus it has chosen to prioritise two new neuro-inflammatory indications (undisclosed) instead. The company stated its literature review highlighted only a subset of CIDP patients that are thought to have autoantibody-driven disease (~20-30%) and to date there are no clinical biomarkers to identify these patients.

JNJ may enter P2 for CIDP in 2021 with hypersialylated IG

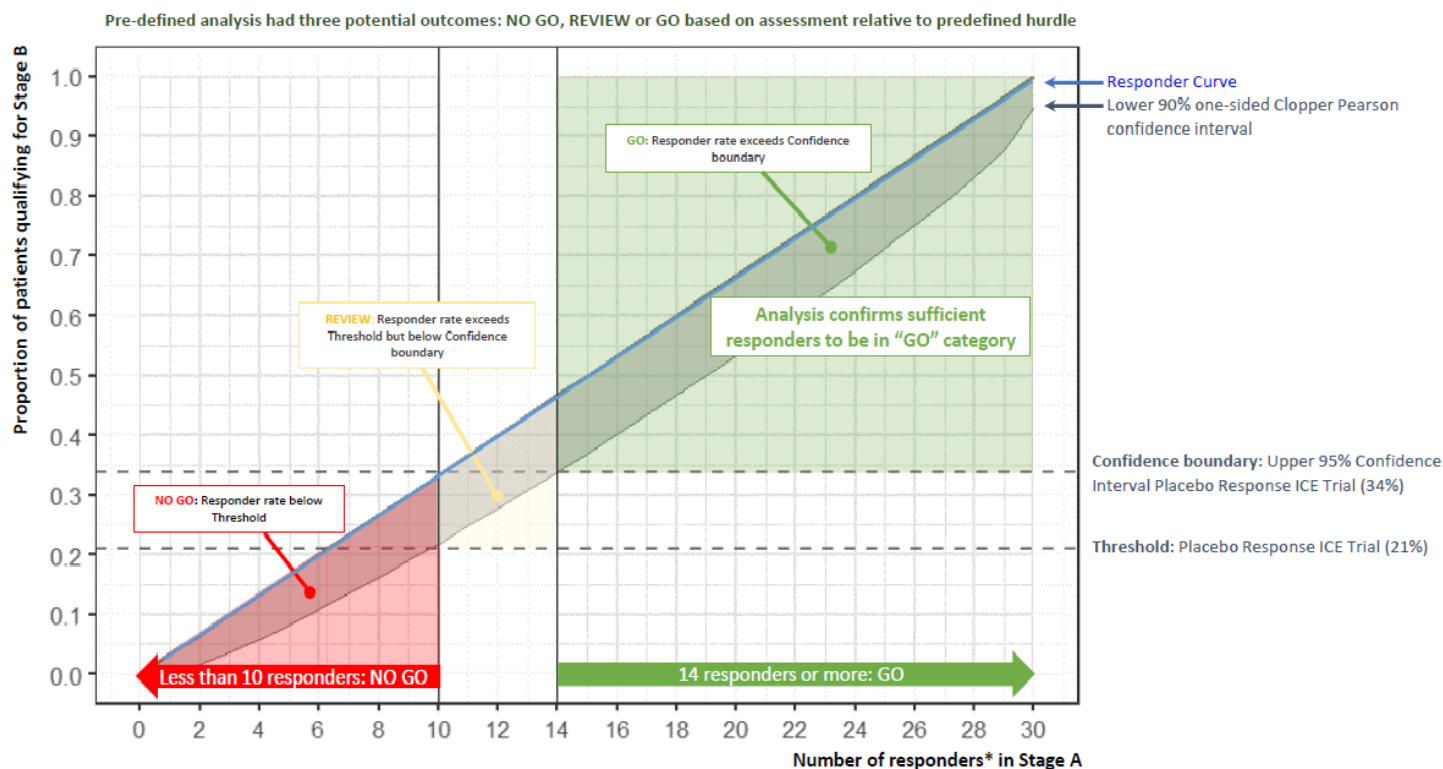
JNJ acquired Momenta last year, with the deal including full global rights to its FcRn nipocalimab (M281) as well as its pipeline hypersialylated Ig product M254. While JNJ believes its acquired FcRn molecule could be best-in-class, the current development is focused in myasthenia gravis, hemolytic disease of the fetus and newborn, and warm autoimmune anemia. However, we understand the company intends to move its hypersialylated product M254 into P2 development in CIDP in 2021 (P1/2 study in ITP already ongoing). M254 is an engineered immunoglobulin which has shown a ten-fold increase in potency vs conventional Ig in preclinical data but is yet to be proven in clinical trials. Furthermore, conventional Ig is the pre-cursor to producing M254, although no exclusive supply partnership with a global plasma manufacturer has been announced.

argenx the only one left in FcRn development in CIDP

argenx is the only company currently pursuing the CIDP indication for its FcRn, efgartigimod, announcing its go-ahead decision on 1 February 2021. Other competitors are expected to announce development in new indications in 2021 and may decide to pursue CIDP at any point. We note both UCB and argenx have made their decisions from around n=30 patients worth of clinical data. Development is ongoing in lead indications, MG and ITP, from which we expect data later this year.

Go/No Go Decision

ARGX announced that its Ph2/3 ADHERE trial met the minimum threshold in the Stage-A portion of the trial. This decision was based on the first 30 subjects in Stage A where responses in at least 14 patients would inform the decision (Figure 21). Minimum thresholds for the decision were based on the SCIG [ICE trial](#): response rate active 54% vs. placebo 21% after 24 weeks (n=117). ARGX expects to enroll the remaining Stage A patients in 70-80 sites globally (enrollment of up to 130 patients total).

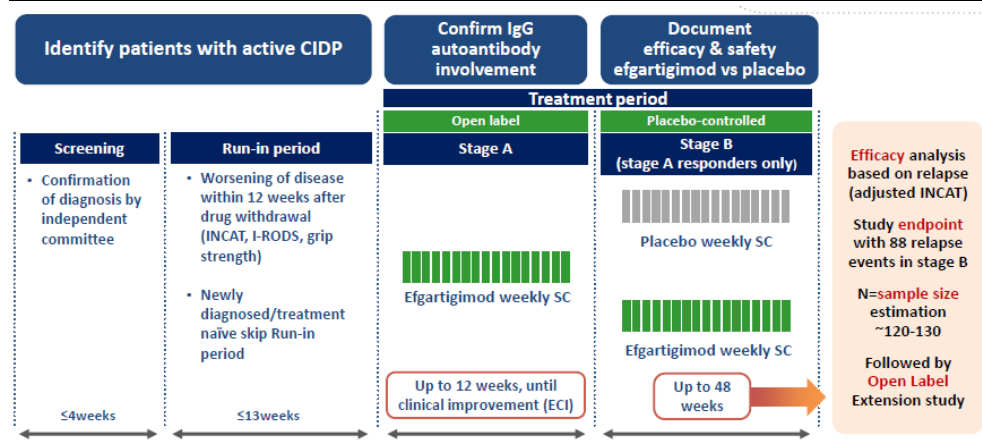
Figure 21: Go/No Go Decision for Ph2 ADHERE Trial

Source: Company data

Argenx set up for success in CIDP with study design

We currently model a 70% probability of success for efgartigimod. We believe that the design of the registration-enabling Ph2a ADHERE trial gives efgartigimod the best opportunity for success. The design leverages learnings from previous CIDP trials (Ph3 SCIg [PATH](#) trial) to minimise trial risk, and goes the extra mile to more clearly try to establish efgartigimod's potential benefit in CIDP.

Importantly, the trial is set up to include only patients with active disease through a withdrawal period and only Stage A responders are able to enter Stage B. In the trial, treatment-experienced patients enrolled in Stage A must show a worsening of disease (based on INCAT, iRODS, or mean grip strength) after treatment withdrawal during the run-in period, before receiving efgartigimod during stage A. This helps to select the patients that are most likely to respond, while also helping to account for factors resulting from the heterogeneity of the disease (i.e. disease course and clinical expression). Overall, the ADHERE trial design may deliver favourable results even with the biology of CIDP still unclear—evidenced by the recent Go/No Go decision that Stage A met the minimum threshold to move forward. The phases of the study are depicted in Figure 22 below.

Figure 22: Ph2 ADHERE study designed to clearly establish potential benefit

Source: Company data

FcRn opportunity in CIDP

We believe, if proven safe for chronic use, the potential for efgartigimod in CIDP is substantial (>US\$1bn+), particularly given the high utilisation of IVIg in CIDP (~75% of treated US CIDP patients). Critical to our assumptions is the ability of efgartigimod to capture a larger share of the addressable population (~19k US patients). Recall that specific antigens and related autoantibodies have only been identified in ~10% of patients; therefore, efgartigimod would need to demonstrate efficacy in patients with other IgG autoantibodies in order to gain a meaningful competitive footing.

In our view, the commercial argument for FcRn remains somewhat incomplete at this point. We do believe that efgartigimod (and other FcRn agents, if ultimately developed) support a reasonable commercial case; however, there are several “unknowns” that would likely influence our view on the broader commercial uptake.

Pricing

The ultimate price point for FcRn agents is likely to influence the competitiveness of the class. FcRn that is priced at a substantial premium to Standard of Care (SoC) may add pressure for FcRn agents to deliver compelling efficacy. While pricing more in line with IVIg could gain more traction from a payer perspective. More broadly, the longer dosing interval and lower healthcare utilisation costs (vs. clinic infusions) are likely to provide a compelling argument even if efficacy is comparable to SoC.

We will likely gain greater clarity on FcRn pricing if efgartigimod is approved in gMG (PDUFA 17 December 2021); ARGX has stated that price per vial across all indications would be the same. We conservatively estimate annual net pricing for efgartigimod at US\$175,000; ARGX has mentioned only a wide band of pricing.

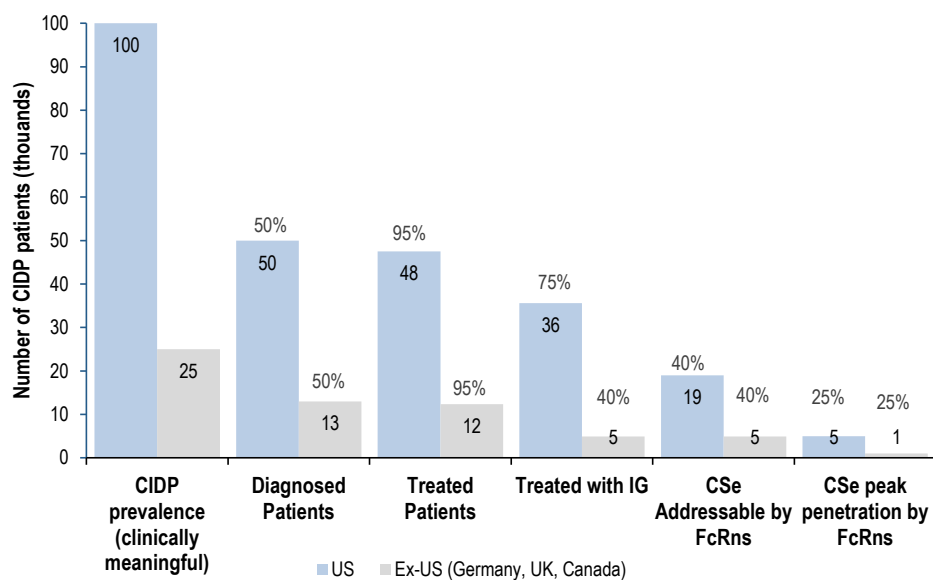
Addressable Population

Estimating the addressable population for FcRn in CIDP is challenging given the limited understanding of autoantibodies involved in disease pathogenesis.

Based on data from Grifols, we estimate there are 100k CIDP patients with clinically meaningful disease in the US but only 50% of these patients are diagnosed (50k). Of those diagnosed, the majority of patients (~95%) receive treatment and of those treated, most (~75% in the US) get Ig. We assume ~40% of treated patients represents the addressable market for FcRn therapies (~19k patients in the US), based on comments that 30-40% of CIDP patients have autoantibodies and thus may be amenable to treatment (Figure 24).

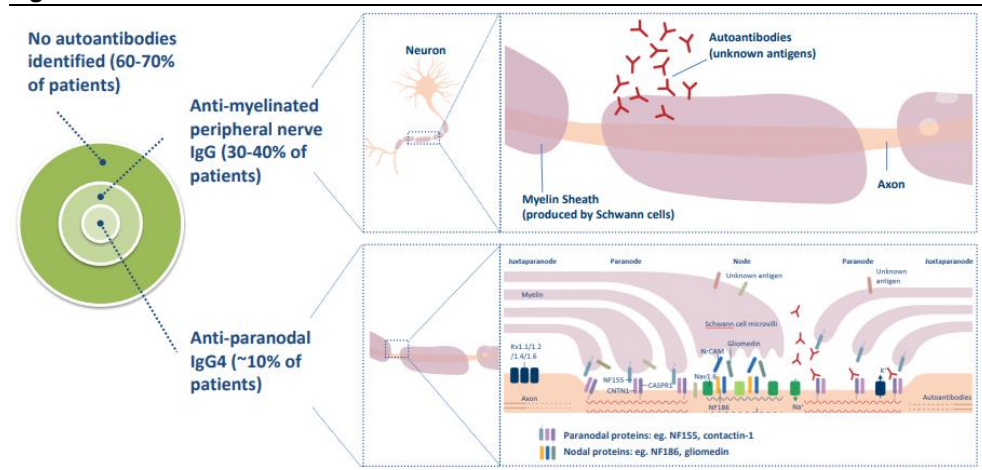
We assume FcRns could capture at peak 25% of this ~19k addressable market, with argenx assuming a 100% market share in early years where it is likely to be the only approved FcRn on the market. Whilst our peak penetration of 25% of the addressable market may be viewed as conservative, there remain many unknowns regarding potential penetration. In total, we forecast FcRns taking 10% of the total CIDP which also aligns with the proportion of patients that have anti-paranodal IgG4 autoantibodies (this implies as much as ~20-30% peak share using lower prevalence/addressable patient assumptions). Efgartigimod would need to demonstrate efficacy in patients with other IgG autoantibodies to increase penetration of its addressable market.

Figure 23: CIDP global opportunity for Ig/FcRns



Source: Company data, Credit Suisse estimates

Figure 24: Direct evidence for autoantibodies in CIDP



Source: Company data

Label

Given that FcRn is a novel class, much remains to be seen with regards to efgartigimod's label. However, a broad label for efgartigimod (if approved) would likely give support to a stronger commercial argument. Even if the precise population is not completely understood in clinical trials (for efgartigimod), a broad label could gain share as physicians experiment with efgartigimod as a new agent with better convenience.

Depending on pricing/clinical profile, we believe FcRn antagonists may offer improvements to IVIg on convenience, tolerability (given single MOA), and less disruption from supply/quality issues. IVIg administration can be cumbersome, and quite costly for these patients (high doses, potentially chronically). ARGX expects the injection volume for the weekly SC ENHANZE formulation at 5.5mL, which the company believes can be delivered as fast as one minute. In comparison, KOLs we spoke with stated the average infusion time is ~3 hours.

In total, we forecast a 2025E launch, with 70% POS of US\$1.2bn in CIDP.

Figure 25: IVIg versus FcRn antagonists' trade-off

IVIg/SCIg Infusion		FcRn Antagonism
✓ Well-established in clinical practice	↔	Long-term safety to be established; positive efficacy PoC
✓ Several mechanisms of action	↔	Single mechanism of action
✗ Dosing regimen may be cumbersome		✓ Potential for improved dosing regimen
✗ Human plasma derived; supply/quality issues in the past		✓ Standardized biologic manufacturing process

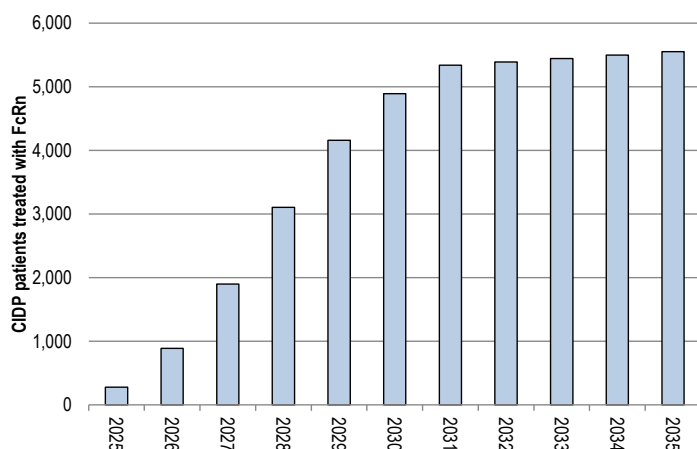
Typical IVIg Treatment Cycle – 2g/kg over 2-5 days, ~3+hrs infusion time per day

Average Drug WAC Cost per Cycle = 70 kg x 2 g/kg x ~\$130*/g = \$18,200

Source: Credit Suisse

Figure 26: Steady build of FcRn patients ...

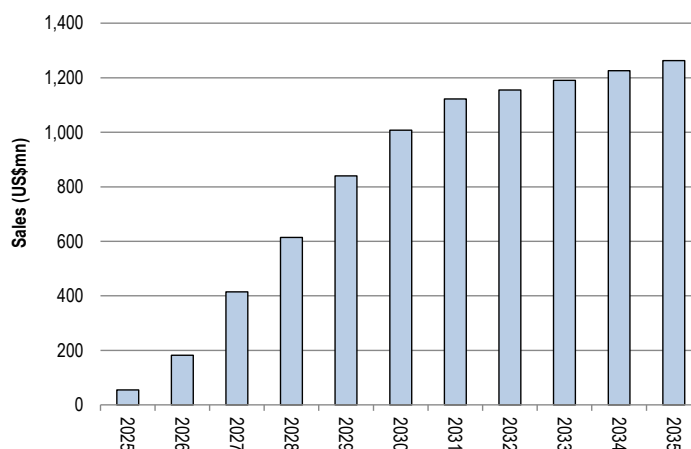
CIDP patients treated with FcRn



Source: Credit Suisse estimates

Figure 27: ... and steady increase in sales for ARGX

ARGX efgartigimod sales in CIDP (US\$mn)



Source: Credit Suisse estimates

Proprietary survey: Doctors supportive of FcRn as a treatment option for CIDP

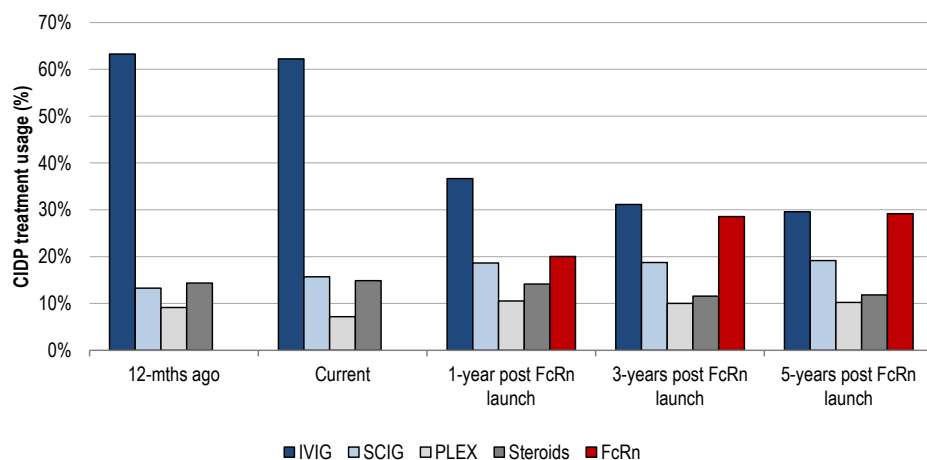
We surveyed 50 neurologists who treat CIDP patients in the US and are knowledgeable of the FcRn clinical trials for CIDP. The doctors were spread across 26 states and on average treated 36 CIDP patients (median = 20). We asked the doctors questions around current clinical practice and treatment of CIDP and their thoughts on the FcRn clinical trials. In total, doctors are supportive of FcRn as a treatment option for CIDP and believe there is a 56% probability of success.

We caveat that the results may carry an inherent bias in favour of FcRns as there was a selection criteria that the doctors had to be familiar with the FcRn clinical trials. We believe there could be a subset of the doctor population who would not be aware of the trials and would therefore be more hesitant of any new treatment.

Our key findings:

- IVIg remains overwhelmingly the most preferred treatment for CIDP with 60% of patients currently treated with this method. Only 15% of patients are treated with subcutaneous Ig, with this expected to grow to ~20% in the medium term. Of the three major IVIg brands (Privigen - CSL, Gamunex - Grifols and Gammagard -Takeda), there is little distinction in preference from doctors but Hizentra (CSL) remains overwhelmingly the most preferred subcutaneous brand, due in part to it having orphan drug designation for CIDP and being the only SCIg with treatment for CIDP on label.
- On average, doctors believe the FcRn clinical trials have a 56% (50% median) probability of success, with FcRns able to address ~25-50% of the CIDP population. The high clinical trial success is in part based on argenx trial design, with the run-in period requiring a worsening of the disease where a more severe baseline would ensure increase the chance of statistical success. However, 85% of doctors believe that the inclusion of naïve patients helps to mitigate potential bias.
- In total, 65% of doctors would recommend using FcRns over IGg assuming clinical trial success. The key reason for using FcRns over IVIg would be due to quicker/easier administration.
- Within five years post launch, doctors anticipate that FcRns could capture 30% of treatment share away from IVIg.

Figure 28: CIDP treatment usage by type



Source: Credit Suisse estimates

Please speak to the team if you would like detailed survey results

PID & SID are already larger than CIDP and demand is growing faster with no threat from FcRns

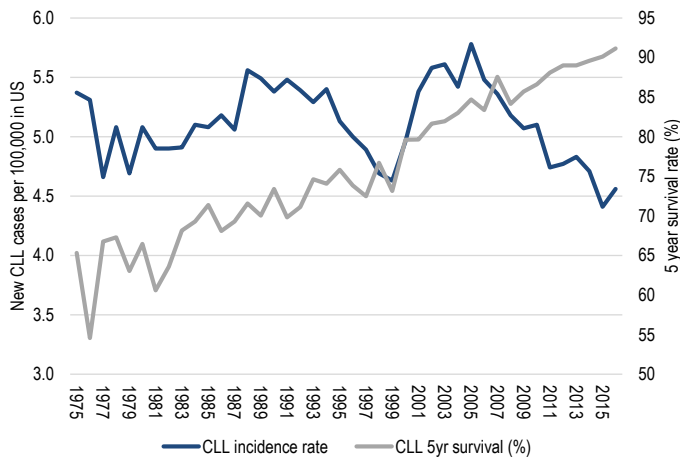
We acknowledge the potential introduction of FcRns creates a threat to Ig usage within the CIDP indication. Based on our industry analysis as per above, we believe FcRns could take a 10% share of CIDP patients away from IVIg by 2030.

However, we believe there is still scope for significant growth in the other Ig indications which would enable the global Ig market to continue to grow at high single digits out to 2030. In particular, we believe future growth would come from the expanding PID and SID indications, where Ig treatment is still underpenetrated.

- **PID:** Primary immunodeficiency is a large heterogeneous group of disorders which are a result of defects in the immune system development/function and are often hereditary. The prevalence/incidence of primary immunodeficiency (PID) is not well understood, given the ever broadening definition of the disease (now >400 disorders but only four years ago included >200 disorders). Whilst pilot screening programmes exist in more developed countries, genetic/IgG serum levels are far from routine testing for all neonates and thus PID remains underdiagnosed. However, with increasing awareness and broader access to better/cheaper diagnostics, we expect the incidence rate of PID to continue to grow.
 - PID is considered relatively common with an incidence of 1:10,000, with the majority of patients presenting in early childhood. A 2018 report noted a >20% increase in diagnosis rates between 2013 and 2018.
 - Ig replacement therapy is the mainstay for patients with adaptive PID disorders (although is also used in some innate PID patients). As much of 50-70% of PID patients receive Ig replacement therapy (a 2014 report suggested 2/3 of patients on Ig were receiving IVIg formulation) in Europe/US.
 - With the growth in PID disorders, awareness of the disease and acknowledgement that Ig is the primary treatment, this presents substantial opportunity for continued strong growth in Ig usage within this indication.
- **SID:** The prevalence and burden of SID is substantial and increasing. Some studies suggest SID is estimated to be 30x more common than PID, yet Ig usage for SID remains below PID.
 - Secondary immunodeficiency occurs in the majority of patients with hematological malignancies, such as chronic lymphocytic *leukemia* (CLL) and Multiple Myeloma (MM), either as a result of disease-related effects on the immune system or as a side effect of the treatment. Hematological malignancies such as CLL, MM, and lymphoma are commonly associated with hypogammaglobinemia. According to market research, ~40-55% of all patients with SID that receive Ig stem from patients with CLL and MM.
 - Chronic lymphocytic leukemia is one of the most common leukemias, with an annual incidence of 4.7 in 100,000. Up to 85% of these generate hypogammaglobulinemia.
 - Multiple myeloma has an annual incidence of 6.6 cases per 100,000 persons in the US. Secondary immunodeficiency is also common in MM, occurring in 45-83% of patients with MM.
 - In particular, we note both the rising five-year survival rate for CLL and MM over the past decade with the introduction of more efficacious cancer treatments and patients living longer. This is likely to be a key factor driving rising Ig usage in these indications.

Figure 29: Rising survival rate from CLL over past decade ...

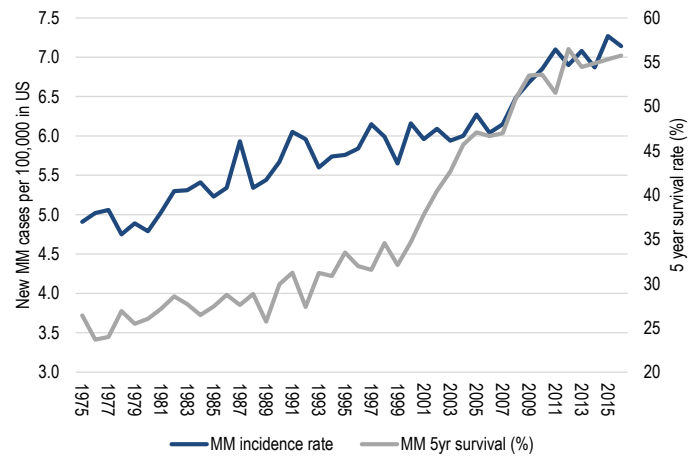
CLL incidence rate vs CLL 5-year survival rate (%)



Source: SEER, Credit Suisse research

Figure 30: ... and for MM too

MM incidence rate vs MM year survival rate (%)



Source: SEER, Credit Suisse research

- In primary immunodeficiency (PID), Ig replacement therapy (IgRT) for infection prevention is well-established and supported by a wealth of clinical data. On the contrary, very little evidence-based data is available on the challenges surrounding the use of IgRT in secondary immune deficiencies (SID) and most published guidelines are mere extrapolations from the experience in PID.
- However, we note the European Medicines Agency (EMA) updated its guidelines in 2018 on the use of IVIg to specifically address secondary immunodeficiency, recommending its use for “secondary immunodeficiencies in patients who suffer from severe or recurrent bacterial infections, ineffective antibiotic treatment and either proven specific antibody failure (failure to mount at least a 2-fold rise in IgG antibody titer to pneumococcal polysaccharide and polypeptide antigen vaccines) or serum IgG level of <4 g/L”. Its recommended dose is 0.2–0.4 g/kg every 3–4 weeks. Indeed, there is also increasing evidence that SCIG offers an efficacious and efficient treatment option for secondary antibody deficiency.

We expect continued growth in usage for “other” conditions as well which includes other neurologic conditions, infectious related diseases and atopic diseases.

In addition to this increased penetration of treating PID/SID, we also believe Ig demand would be driven by:

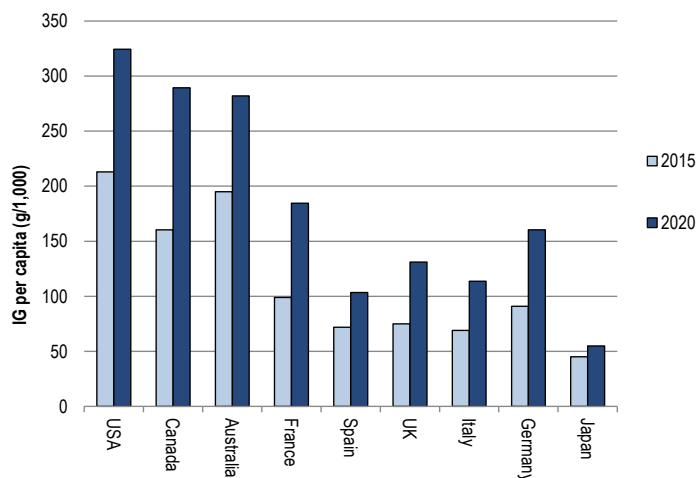
- **Ageing** (and hence increase in weight) of patients with PID (usually a childhood/adolescent diagnosis).
- **Increased dosing** of Ig in patients with certain diseases relative to historical usage or what is indicated on-label due to perceived increased clinical benefits.

Usage by country indicates opportunity for further growth in many developed markets

The US, Australia and Canada represent the largest Ig-per-capita using countries. Other developed countries significantly lag behind in terms of absolute Ig usage per capita (particularly Japan), yet growth rates in each of the countries are consistently at the high-single-digit level. As such, we see significant opportunity for further strong Ig growth from these other developed markets in coming years, which would be driven by increased awareness of the diseases and Ig as well as access to product.

Figure 31: US, Canada and Australia high users of IG ...

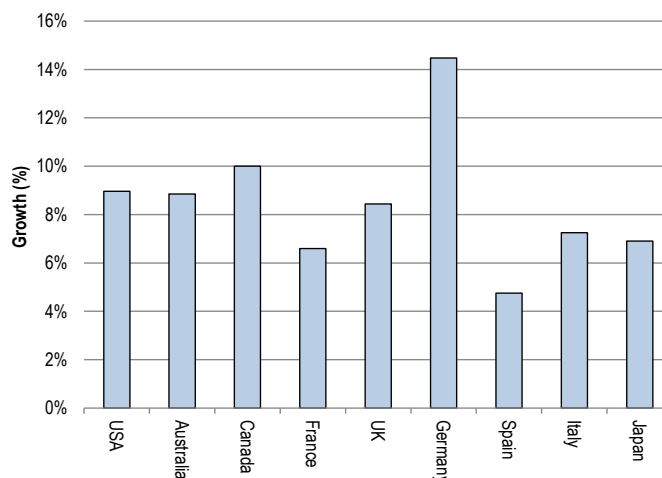
Ig per capita - 2015, 2020e - key countries



Source: PPTA, Grifols, MRB, Credit Suisse estimates

Figure 32: ... with robust growth across key markets

Ig per capita CAGR - key countries, 2010-2020e



Source: PPTA, Grifols, MRB, Credit Suisse estimates

Incorporating the FcRn threat into our Ig forecasts

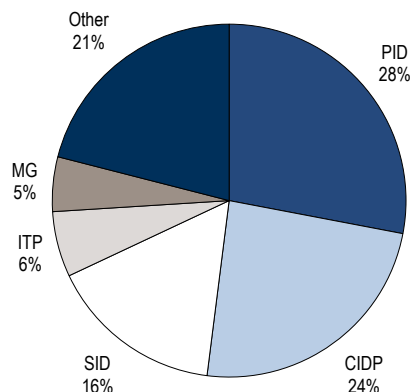
Based on the above analysis, we forecast Ig usage out to 2030 by indication to include the threat of FcRns into our forecasts. Our analysis excludes the temporary supply impact due to COVID, assuming this issue is resolved by 2025 and it causes no change to underlying demand.

Key assumptions:

- **PID:** Expect usage to increase 10% p.a. to 2030 based on a growing number of sub-indications, aging/population growth and increased awareness.
- **CIDP:** We forecast 10% p.a. growth until 2025 but forecast by 2030 FcRns to capture a 10% share from IG, with launch by 2025. We do not believe FcRns would be used off-label for CIDP post the launch in FcRns in MG, even with upcoming plasma shortages, due to limited real life knowledge of FcRns and no trials completed.
- **SID:** We forecast 12% p.a. growth to 2030, assuming SID usage grows in excess of PID, given increased prevalence relative to PID but lower penetration.
- **MG/ITP:** We forecast FcRns to take a 30% share of the MG market by 2025 and ~45% share by 2030, assuming the underlying market continues to grow at ~5% p.a. For ITP, we assume FcRns would capture a 30% share of the market by 2030.

Figure 33: Currently, CIDP makes up 24% of Ig usage ...

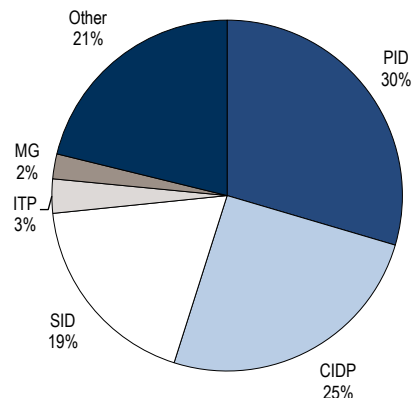
Ig usage by indication – current



Source: Company data, Credit Suisse estimates

Figure 34: ... and CIDP expected to grow to 25% in 2025

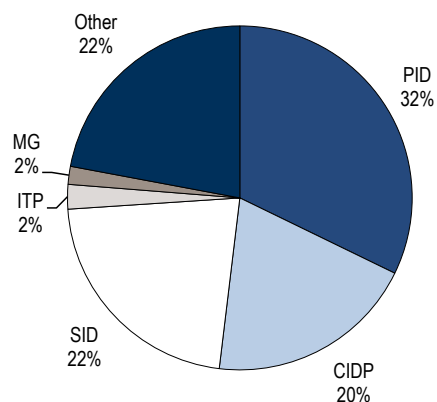
Ig usage by indication – 2025 [CS estimates]



Source: Credit Suisse estimates

Figure 35: Forecast CIDP at 20% of Ig usage by 2030 ...

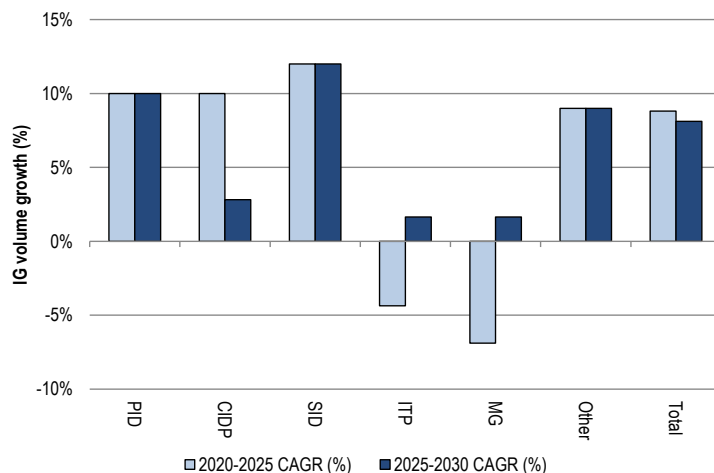
Ig usage by indication – 2030 (CS estimates)



Source: Company data, Credit Suisse estimates

Figure 36: ... with increasing growth from SID

Ig volume growth CAGR (%)



Source: Credit Suisse estimates

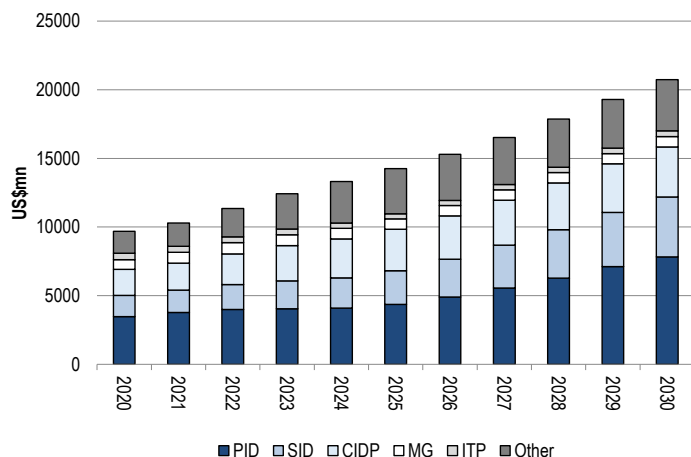
As depicted above, we forecast industry Ig volume growth of 8-9% p.a. out to 2030 (excluding plasma supply disruption in the next 12-18 months due to COVID-19). For CSL we forecast 10% Ig sales CAGR from 2025-30, with CSL benefiting from small price/mix benefit as well being a market leader.

For Grifols, we model a 7% Ig sales CAGR from 2020-30, including softness expected in 2021/22 reflecting the COVID-19 impact on collection volumes. We expect Grifols to also benefit from a positive mix shift from IV Gamunex to SC Xembify, which is still relatively early in its launch (launched 2019) vs CSL's Hizentra and Takeda's Cuvitru.

For Takeda, we model 7% Ig sales growth. However, we note no formal indication by CIDP doctors in our survey, who reported using Gammagard, as overall their most preferred IVIg brand. We also note that when moving from Gammagard IV to SC delivery, the label notes that the dosage should be increased by ~30% and this suggests a positive value trade-up as more patients move from IV to SC delivery. We believe that under Shire ownership they may not have been sufficient investment in collection centres to secure an adequate raw material supply and so we err on the side of caution for growth until we see more evidence of success.

Figure 37: Rising Ig sales for CSL ...

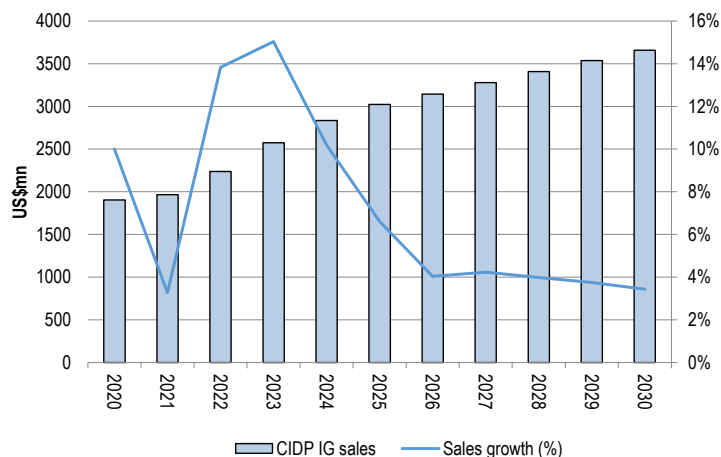
CSL, Grifols, Takeda – Ig sales by indication (US\$mn) combined



Source: Company data, Credit Suisse estimates

Figure 38: ... slowing growth for CIDP

CSL, Grifols, Takeda – Ig sales for CIDP (US\$mn) combined, growth (%)



Source: Company data, Credit Suisse estimates

Scenario analysis

The key risk to our analysis is the level of penetration FcRns could have in the CIDP market. We run three further scenarios assessing various levels of peak penetration by 2030.

- **Base case:** We assume FcRns penetrate 25% of its addressable market (40% of CIDP) at peak, ultimately taking 10% share of CIDP market by 2030 (which implies as much as ~20-30% share using lower prevalence/addressable patient assumptions). ***In total, we estimate 8.1% Ig volume CAGR between 2025 and 2030.*** In this scenario, we forecast CIDP would account for 20% of Ig sales in 2030.
- **Scenario 1:** We assume FcRns penetrate 50% of their addressable market (40% of CIDP) at peak, ultimately taking a 20% share of the CIDP market by 2030 (which implies as much as ~45-55% share using lower prevalence/addressable patient assumptions). ***In total, we estimate a 7.6% Ig volume CAGR between 2025 and 2030.*** In this scenario, we forecast CIDP would account for 18% of Ig sales in 2030.
- **Scenario 2:** We assume FcRns penetrate 75% of their addressable market (40% of CIDP) at peak, ultimately taking a 30% share of the CIDP market by 2030 (which implies as much as ~70-80% share using lower prevalence/addressable patient assumptions). ***In total, we estimate a 7.1% Ig volume CAGR between 2025 and 2030.*** In this scenario, we forecast CIDP would account for 16% of Ig sales in 2030.
- **Scenario 3:** We assume FcRns penetrate 100% of its addressable market (40% of the CIDP) at peak, ultimately taking a 40% share of the CIDP market by 2030 (which implies ~100% share using lower prevalence/addressable patient assumptions). ***In total, we estimate a 6.7% Ig volume CAGR between 2025 and 2030.*** In this scenario, we forecast CIDP would account for 14% of Ig sales in 2030.

Whilst we note that Scenario 3 is highly unlikely, in all scenarios we still forecast high single-digit Ig volume growth for the industry, noting that this factors in higher dosing (shift to SCIg) and higher compliance per patient, in addition to new patient growth.

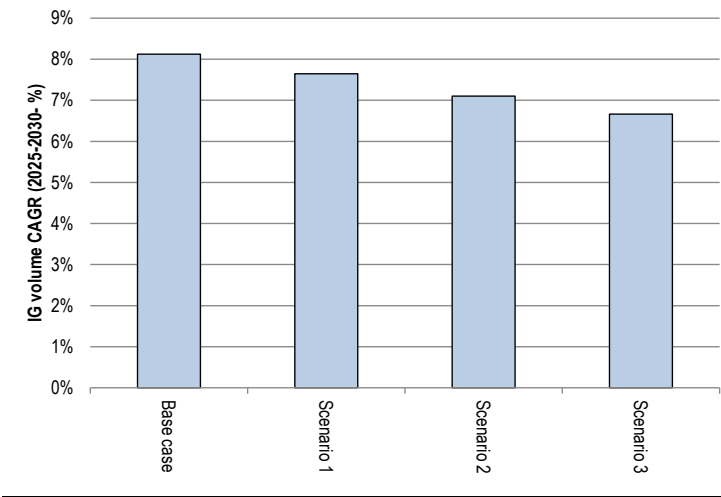
These scenarios are volume based only and do not factor in price, as pricing analysis creates a lot of complexity. We expect higher pricing from a greater shift to SCIg from IVIg. According to our doctor survey, doctors use SCIg to treat ~15% of patients. On average, SCIg volume is typically 30% higher vs IVIg and SCIg pricing can be 20% higher than IVIg.

From a country perspective, we note low single-digit lg price rises (~1% p.a.) in the US when supply/demand has been relatively balanced. Price rises in RoW have generally been higher than the US (high single digits) given that these are typically tender markets. However, historically RoW lg pricing has been typically 20%+ cheaper than US lg, but we believe this gap is starting to converge with the current tight supply. With FcRns likely to take share away from the US CIDP market, product may shift towards RoW, at a lower average price.

In aggregate, we believe the industry is likely to continue to see low single-digit lg price rises, on average.

Figure 39: Still forecast high lg volume growth ...

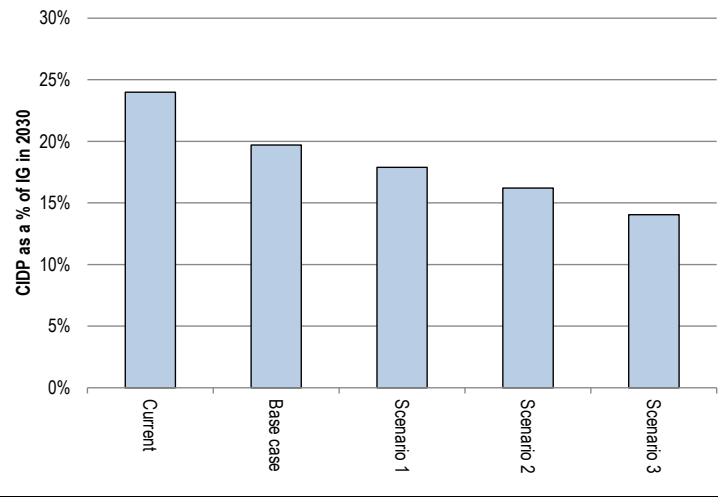
Scenario analysis – lg volume CAGR 2025-2030 (%)



Source: Company data, Credit Suisse estimates

Figure 40: ... even in scenarios of greater FcRn penetration

Scenario analysis – CIDP as a % of lg sales in 2030



Source: Company data, Credit Suisse estimates

Supply to struggle to keep up with demand

Using our global Ig demand forecasts per above, we assess the number of donors and centres needed to cater for the demand up to 2030. Our assumptions assume the majority of plasma is sourced from the US (~65%), with no single other country materially contributing to global plasma supply.

With plasma collections falling 20%+ in the past 12 months due to the COVID-19 pandemic, we do believe the industry would be in a shortage in the short term which would take time to resolve. We forecast plasma collections returning back to pre-COVID-19 levels by the end of 2021. We estimate there was a ~10mn-15mn litre plasma collection shortfall in 2020, and by the end of 2021, this is likely to expand to ~20mn-25mn litres. While some of the demand of the product over this time would be lost, hospitals and distributors would need to replenish inventories once plasma volumes do return.

In the medium term, we believe supply would struggle to keep up with demand.

Collection centres

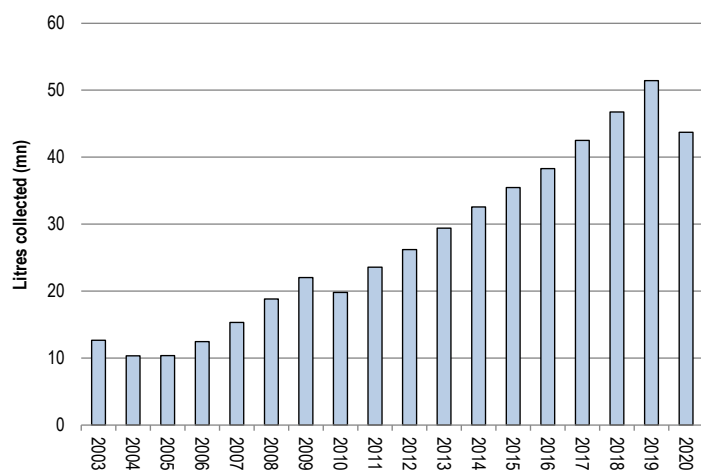
- To meet global demand by 2030, we estimate US collection centres need to increase by 80-90 p.a. between 2020 and 2025 and then up to 120 centres p.a. by 2030. This assumes litres/centre rebounds back to ~63k litres/centre by 2024, after having taken a dip in 2020 due to the pandemic. This implies that by 2030, the number of US collection centres would need to double the current footprint in order to collect sufficient plasma to meet demand.
- While CSL is forecasting 30-40 collection centre openings per year, we do not believe the other plasma companies are doing enough to satisfy the requirements, remembering that it takes 2-3 years for a collection centre to fully ramp up.
- Grifols' strategy of acquiring plasma centres aids its own plasma supply but does not assist in increasing industry supply. Grifols had 312 centres globally at end-2020, with 15% of these outside the US. Of the c. 17 added during 2020 we believe the vast majority were externally acquired with minimal new centres opening. Grifols recently acquired 25 US sites from BPL, further adding to its current total. We anticipate total collection centres rise to 435 by 2025, 369 of which would be in the US (representing +23% CAGR over 2017-25).
- Takeda plans to increase its plasma supply by 65% by 2024 (vs 2018's baseline), implying ~9% p.a. growth and we understand that 16 centres were added in the nine months to December 2020.

Donors

- If we assume no change in the number of annual donations per donor, the number of active donors has to increase to 7.5mn donors by 2030 (from ~3mn donors currently) representing ~2% of the US population if it were to come solely from the US. In reality, we do expect some growth to come from ex-the US but at a slower rate than the US.

Figure 41: US plasma donations hit in 2020 ...

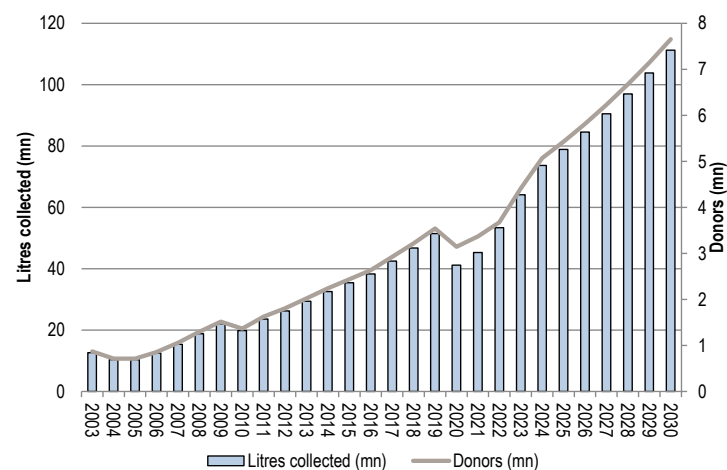
US Plasma donations (mn L)



Source: PPTA, Credit Suisse estimates

Figure 42: ... rise in plasma donations needed to meet demand

US plasma donations (mn L) & plasma donors (mn) required to meet demand in 2030



Source: PPTA, Credit Suisse estimates

US being the sole provider of plasma is unsustainable

While global demand for Ig continues to expand, in our view, it is growing faster than the US market would be able to supply. In order for supply to match demand, in our view there needs to be regulation changes in countries ex-the US to ensure incentives (monetary rewards) are offered for plasma donations to incentivise people to become donors. If this were to occur, in our view CSL would be proactive in establishing presence in any potential markets that do open up to paid plasma collections.

Grifols highlighted at its recent CMD its ongoing efforts to diversify its collections away from the US. It has its strategic alliance with Shanghai RAAS (26.2% equity stake) in China, where there are 41 donor centres across 11 provinces – although this is currently seven for domestic use only. In addition, Grifols has 49 sites in Germany (43 + six from Plasmavita) and Austria as well as agreements in Spain (25 sites), Canada (eight sites), Italy (four sites), Slovakia (11 sites) and Czech Republic (24 sites).

Potential for ex-the US incentives, although no regulatory changes seen yet

At the PPTA meeting held back in October 2020, there was a call to action to allow donor incentives outside of the US, although we understand no progress has been made on legislative changes to date. However, incremental changes are occurring in the industry. We would flag the example of the UK, where regulators have taken a U turn on its plasma donation rules, allowing convalescent donations from those who have recovered from COVID-19. All plasma donation was previously banned in the UK off the back of the CJD (“mad cow disease”) issue 20 years ago and the UK has since imported plasma from overseas. We see this as step in the right direction; however without incentives, we believe that the rate of donations would be unlikely to grow fast enough to match demand.

In our view, if regulations ex-the US become consistent with the US, efficiency between the centres could be matched and there would be greater incentive for the plasma manufacturers to expand throughout Europe. CSL has previously commented that without a paid donation model, plasma collection centres ex-the US have a lower efficiency relative to the US. However, we understand Grifols does not see the same difference in efficiency between its US and ex-US sites; however, we would note that Grifols has a higher critical mass of sites outside of the US vs CSL.

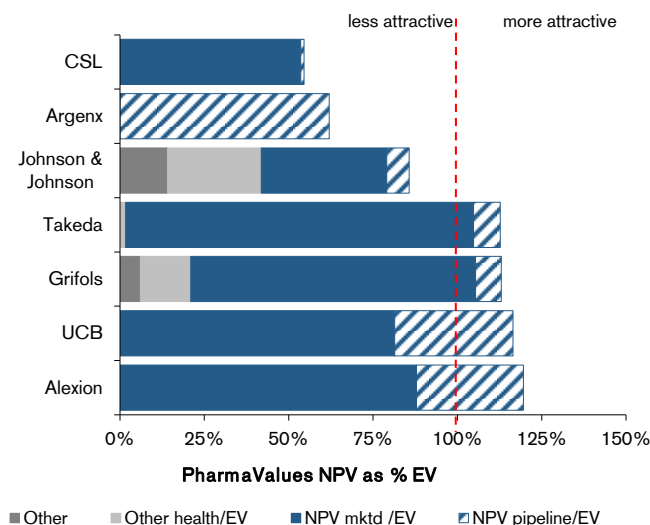
Stock implications: Upgrade CSL & Grifols to OUTPERFORM; retain NEUTRAL on ARGX

Ig and Other plasma in context for major players

In this section, we assess the importance of Ig and other plasma products to the NPV of the three major plasma fractionators outside of China, and also highlight the contribution to group value of exposure to competitors to Ig in our universe. The data is extracted from the CS PharmaValues' database which applies a standardised NPV approach to all of the companies in our coverage universe. Please contact a member of the CS team for more information or direct access.

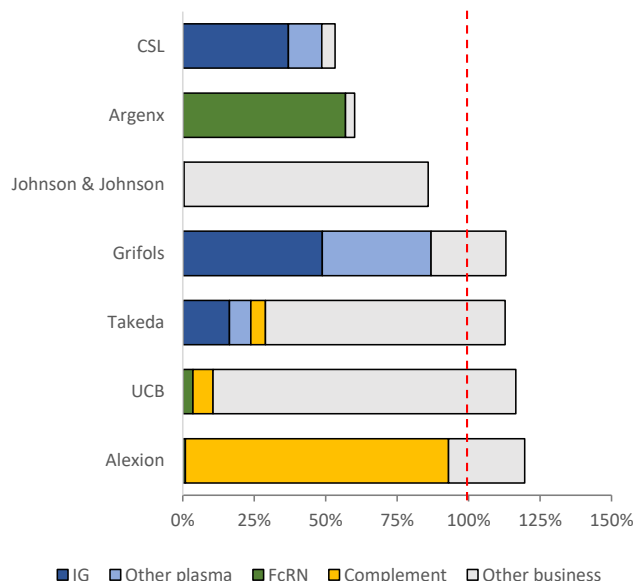
We understand that CIDP accounts for ~24% of Ig usage based on CSL data. Ig is the key earnings driver for the plasma players, with Ig sales accounting for 44% of group sales in the last financial year for CSL and CSe 42% for Grifols and 10% for Takeda. At the NPV level, we see Ig accounting for ~70% of group NPV for CSL (with all plasma products c. 90%). For Grifols, we see Ig accounts for 43% of NPV and all plasma products 77%. For Takeda, we see Ig accounting for ~15% of NPV and all plasma products ~20% of group NPV. In Figure 4444 we show the data not as percentage of the NPV but as a percentage of current group EV.

Figure 43: NPV as % of EV



Source: Company data, Credit Suisse PharmaValues' estimates

Figure 44: NPV as a % of EV, contribution to value of relevant categories, highlighting contribution of Ig



Source: Company data, Credit Suisse PharmaValues' estimates

Although we cover China Biologic Products (rated NEUTRAL ahead of the planned merger with parent to take it private) and Hualan Biologic Engineering (NEUTRAL, TP Rmb45) both major domestic Chinese plasma players, we have excluded them from this analysis given the wholly domestic nature of their operations.

Upgrading CSL and Grifols

Within our global coverage, we upgrade [CSL \(TP A\\$315\)](#) and [Grifols \(TP €25\)](#) to OUTPERFORM (from Neutral). We retain the OUTPERFORM rating for Takeda and NEUTRAL rating for argenx.

For plasma manufacturers, specifically CSL and Grifols which are most exposed to Ig:

- We see the market's concern that FcRns would structurally impact IG demand as unwarranted with CIDP ~24% of Ig volume usage today, yet PID/SID is nearly twice the market size (~44% of Ig) and growing.
- The short-term EPS weakness is a temporary COVID-19 impact and with long-term Ig demand remaining robust, we see valuation upside for both stocks from the current levels.
- For **CSL**, despite sitting at the bottom of the market for FY22 and seeing a risk of ST consensus earnings downgrades, we believe this is a one-off COVID-19 impact and should be looked through, given the LT IG demand outlook remains strong with FcRns having a limited impact. The recent underperformance provides valuation upside.
- For **Grifols**, the recent de-rating of the stock relative to EU peers is overdone, in our view, and we are now more confident in the robust long-term growth for the Ig business.
- We also have an OUTPERFORM rating on **Takeda**; however, plasma-derived therapeutics only make up ~25% of Takeda NPV and thus CIDP market dynamics have less effect.

For FcRn companies:

- We remain NEUTRAL on **ARGX**, since we believe the current valuation already reflects a robust commercial opportunity in CIDP, while some uncertainty on broad utility of the class in the indication remains.

CSL (Outperform; A\$315 TP)

- **Forecasting IG sales CAGR +10% for 2025-30 with muted FcRn risk:** In our view, the market's concern that FcRns would structurally change IG demand is unwarranted with CIDP ~24% of IG usage, yet PID/SID is nearly twice the market size (~44% of IG) and growing. argenx is the only company pursuing a FcRn CIDP indication. We estimate the FcRn addressable market is up to ~40% of the CIDP patient population, yet specific autoantibodies (IgG4) have only been found in 10% of patients. We factor FcRns taking 10% share of the CIDP market by 2030, yet still believe IG volume would grow at 8% p.a. due to rising awareness, access and sub-indications of PID/SID. For CSL, we forecast 10% IG sales CAGR in 2025-30, in line with industry forecasts and including ~2% price/mix benefit. In a bear case where FcRns capture 40% of the CIDP market, we forecast IG volume CAGR of ~7% p.a. for 2025-30.
- **Proprietary survey shows neurologists are supportive of limited FcRn addressable market:** We surveyed 50 US neurologists who treat CIDP patients. While doctors are supportive of FcRn as a treatment option for CIDP and see a 56% probability of trial success, they believe it would only address 25-50% of CIDP patients, in line with our forecasts.
- **Downside risk to FY22 due to temporary COVID-19 related supply shortage:** We forecast IG revenue growth of -12% in 1H22, but a recovery in 2H22 for sales to be -2% for FY22. We forecast CSL Behring's gross margin down 170bps in FY22 to 55.6%, with NPAT -8% in FY22, lowering estimates ~1-2%. We sit 11% below consensus in FY22.
- **Valuation upside emerges:** CSL has underperformed the market by 8% since its 1H21 result and trades at a 70% P/E premium to XJI, below its two- and five-year averages. As the vaccine rollout progresses and stimulus packages ease, plasma collections are likely to return and this would be a key positive catalyst for the stock. Despite sitting at the bottom of the market for FY22 and seeing the risk of ST consensus earnings downgrades, we believe

this is a one-off COVID-19 impact and should be looked through, given the LT IG demand outlook remains strong, with FcRns having a limited impact. **We upgrade our rating to an OUTPERFORM (from Neutral) & lower our TP to A\$315 (from A\$320).**

Grifols (Outperform; €25 TP)

- **We upgrade Grifols to OUTPERFORM (from Neutral) and raise our TP to €25 (from €24).** Grifols is one of three global blood plasma fractionators. We see the recent de-rating of -9% YTD relative to plasma peers (flat YTD), and EU specialty pharma peers (-5% YTD) as overdone.
- **Plasma collection disruption only temporary.** We expect a rapid recovery in collection volumes from mid-2021 as COVID-19 restrictions ease. We see short-term margin pressure in 2021/22 (from higher cost/litre). We cut our earnings by -6%/-7% in 2021/22 based on more granular insights from our global colleagues on costs and collection volume expectations for the industry. We do expect a strong rebound in margin from 2023 onwards.
- **FcRn threat muted.** We see the fear of novel competitor products' (FcRn inhibitors) entry as unwarranted, with limited impact to Grifols' key drug immunoglobulin (IG) growth in some indications. We have conducted a proprietary survey of 50 neurologists to confirm our thesis that FcRn's are suitable for use in only c. 30% of CIDP patients. CIDP is a neuro-inflammatory condition where c. 24% of Ig volume is used today.
- **Robust long-term growth.** The industry has grown Ig sales by 9-10% p.a. (above historical rates of 6-8% growth p.a) in recent years. We forecast a 7% CAGR to 2030 for Ig for Grifols, driven by an aging population, increased use in other indications where there is no meaningful prospect of a competitor and value trade-up with growing use of the more convenient sub cutaneous formulation. We raise our 2025/26 sales by 1-2% to reflect this.
- **Catalysts:** H-Ig readout in COVID (1H21) and Albumin Liver disease P3 readouts (4Q21).
Risks: Extended COVID disruption to plasma collection; greater-than-expected competitive pressures from FcRn or hypersialylated IG; positive data for Vertex VX-864 in AATD
- **Valuation.** Grifols trades at a multi-year P/E relative low relative to closest peer CSL. With a P/E of 16.1x 2022 EPS vs CSL's 43.5x, a -63% discount to CSL. It trades on a 10% discount to EU Specialty peers and on an EV/NPV of 0.88 vs the same peers of 1.04.







Appendix

Figure 45: FcRn inhibitors in clinical trials

Company	Product	Trials / Indications	Identifier	Status
argenx	Efgartigimod	gMG Ph3 (IV) - ADAPT	NCT03669588	Awaiting regulatory decision; PDUFA: Dec. 17, 2021
		gMG Ph3 (SC) - ADAPTsc	NCT04735432	Open for enrollment
		ITP Ph3 (IV) - ADVANCE	NCT04188379	Ongoing, Data expected 2021
		ITP Ph3 (SC) - ADVANCE+	NCT04225156	Open for enrollment
		CIDP Ph2/3 (SC) - ADHERE	NCT04281472	Ongoing (Stage A)
		PV Ph3 (SC) - ADDRESS+	NCT04598477	Not yet recruiting
		PV Ph2 (IV)	NCT03334058	Complete
		gMG Ph2 (IV)	NCT02965573	Complete
		ITP Ph2 (IV)	NCT03102593	Complete
		Healthy Volunteers - SC ENHANZE	NCT04073589	Complete
		Healthy Volunteers - SC	NCT03334084	Complete
		Healthy Volunteers	NCT03457649	Complete
UCB	Rozanolixizumab	gMG Ph3	NCT03971422	Open for enrollment
		ITP Ph3 - myOpportunITy2	NCT04224688	Open for enrollment
		ITP Ph3 - myOpportunITy1	NCT04200456	Open for enrollment
		CIDP Ph2 - MYCIDPchoice	NCT03861481	Suspended program
		ITP Ph2	NCT02718716	Complete
		gMG Ph2	NCT03052751	Complete
		Healthy Volunteers	NCT03859219	Complete
		Healthy Volunteers	NCT02220153	Complete
Alexion	ALXN1830 (SYNT001)	wAIHA Ph2 (SC)	-	Expected to start in 2021 pending HV (SC) study in New Zealand
		gMG Ph2 (SC)	-	Expected to start in 2021 pending HV (SC) study in New Zealand
		Healthy Volunteers (SC)	-	Terminated (due to COVID-19); enrolling in New Zealand trial
		WAIHA Ph1b/2 (IV)	NCT03075878	Terminated (due to COVID-19)
		PV/PF Ph1b/2	NCT03075904	Terminated
		Healthy Volunteers	NCT03643627	Complete
JNJ/Momenta	Nipocalimab (M281)	gMG Ph2 - VIVACITY-MG	NCT03772587	Complete
		wAIHA Ph2/3 - ENERGY	NCT04119050	Open for enrollment
		HDFN Ph2 - UNITY	NCT03842189	Open for enrollment
		Healthy Volunteers	NCT02828046	Complete
Immunovant	IMVT-1401	gMG Ph3 (SC)	-	Expected to start in 2021
		gMG Ph2a (SC) - ASCEND MG	NCT03863080	Complete
		Graves' Ophthalmopathy Ph2b (SC) - ASCEND GO-2	NCT03938545	Temporarily suspended (update expected Q2 2021)
		Graves' Ophthalmopathy Ph2a (SC) - ASCEND GO-1	NCT03922321	Complete
		WAIHA Ph2a (SC) - ASCEND WAIHA	NCT04253236	Temporarily suspended (update expected Q2 2021)
		Healthy Volunteers	NCT03971916	Complete

Source: Company data, Credit Suisse research

Figure 46: Summary of FcRn Ig lowering and safety/tolerability data

Company											
Product Candidate		IMVT-1401		Nipocalimab (M281)		Rozanolixizumab		Efgartigimod		ALXN1830 (SYNT001)	
Design		human IgG1 mAb (agly or ADCC mutant)		human IgG1 agly mAb		humanized IgG4 mAb		human IgG1 Fc-fragment ABDEG mutation (doesn't engage Fcγ receptors)		humanized IgG4 mAb	
Binding	Affinity	pH 7.4 pH 6.0	0.31 nM / 2.93 nM 0.24 nM / 0.99 nM	44 pM 29 pM		34 pM 23 pM		320 nM 14.2 nM		1.19 nM 0.87 nM	
	IV	• NA		• Single ascending dose demonstrated dose response and up to 80% IgG reduction • Multi-dose at the 30mg/kg levels achieved sustained 100% receptor occupancy and mean IgG reduction of 84%		• IgG concentrations in the serum were reduced by up to 50%		• IgG reduction ~50% achieved in 1 week; up to 85% maximum reduction; after the last dosing, IgG levels remain reduced by 50% or more for a period of 3 weeks and return to baseline in > 1 month		• Total IgG was reduced in a dose-dependent manner up to ~50% in the 30 mg/kg dose group ~5 days post-dosing	
IgG Lowering Healthy Volunteers		SC	• 47% average reduction following single SC dose of 765 mg • 78.4% average maximum reduction in the 680 mg weekly SC cohort • 62.7% average maximum reduction in the 340 mg weekly SC cohort	• NA		• The SC route of administration of rozanolixizumab up to 7mg/kg in humans demonstrated more favorable safety and tolerability profile than the IV route		• SC formulation - steady state 50% IgG reduction achieved with weekly dosing (300 mg fixed dose)		• NA	
Safety/Tolerability (Healthy Volunteers)											
Headache		MD: 10% (2/16) vs 0% pbo		MAD: 8.3% (1/12 active) vs 75% (3/4 pbo) SAD: 8.3% (2/24 active) vs 0% pbo		IV: 56% (10/18) SC: 28% (5/18) Pbo: 29% (2/7)		MAD: 17% (4/24) SAD: 20% (4/20) Pbo: 22% (4/18)		Active: 35% (8/23) Pbo: na (only 1/8 pts reported an TEAE)	
GI Disorders		Nausea - 6.25% (1/16), 25% (1/4 pbo) Diarrhea - 12.5% (2/16), 0% (pbo)		Nausea - MAD: 8.3% (1/12 active) vs 0% pbo		Vomiting - 39% (7/18 IV), 11% (2/18 SC), 0% (pbo) Nausea - 39% (7/18 IV), 0% (SC), 0% (pbo) Diarrhea - 17% (3/18 IV), 17% (3/18 SC), 0% (pbo)		Nausea - SAD: 5% (1/20)		na	
ADA		SAD: 8 subjects out of 61 in the SAD portion tested positive for low levels of ADA (3 of these subjects tested positive for ADA at baseline) MD: No MAD subject developed confirmed ADA to IMVT-1401 through the last sampling timepoint; 5 weeks after the last dose		SAD: 12% (4/34) of M281-treated subjects; no subjects were positive for neutralizing antibody MD: 31% (5/16, four in M281-treated subjects and one in a placebo-treated subject). The four M281-treated MD subjects were neutralizing antibody positive.		ADA-positive subjects were detectable across all rozanolixizumab treatment groups (9/18 IV, 8/18 SC). However, detectable ADAs (above the limit of quantification of the assay) were observed in only five subjects.		"Limited number" of samples in both active and pbo had positive ADA titers. Signals typically were just above the detection limit of the assay and were only found once during the study for most subjects.		na	
Additional Findings		Two SAEs reported, neither considered related to study drug		There were no severe TEAEs or serious AEs. One subject experienced transiently elevated alanine aminotransferase.		Severe TEAEs of headache (n = 3) and back pain (n = 1) were reported by four subjects, all in the roza 7mg/kg IV group. SC route of administration of roza has a more favorable safety and tolerability profile than the IV route.		One SAE (hyperventilation) was reported, considered unlikely to be related to the study drug. No efgartigimod-related SAE or any other AE leading to discontinuation of treatment was reported.		One TEAE (headache) of severity grade 2, was reported. There were no grade 3 or 4 TEAEs or serious AEs.	
Impact on Albumin		Dose dependent albumin reduction (20% in the 4-week 340 mg cohort and 31% in the 4-week 680 mg cohort)		~20% reduction at day 28		Modest decrease in mean albumin concentration over time after both IV and SC, but no stat-sig difference from pbo and values remained within normal range		No significant decrease in albumin serum levels		No effect observed on serum concentrations of albumin	

Source: Company data, Credit Suisse research

New Hope Corporation

Market pricing on the up and dividends resumed

Diversified Metals & Mining | Results

NHC.AX

Target price (12M, A\$)

1.30

Neutral

- **Solid set of 1H numbers; 2H to be stronger:** NHC's 1H21 underlying numbers were a small beat vs CS and consensus, reflective of better than assumed realised pricing. Whilst net debt only marginally reduced to ~A\$265mn from ~A\$290mn (excluding leases), the benefit of stronger pricing is on the doorstep and we expect NHC's gearing to fall further from the current 14%. The resumption of dividends was earlier than our expectations but in hindsight no surprise given the market backdrop, with a fully franked A4cps prudently taking advantage of some of the ~A\$500mn franking credit balance (as at July 2020). We adjust our forecasts to reflect the stronger result and resumption of dividends and with a suite of minor modelling adjustments sees our earnings lift ~20% in FY21 (from a low base), with downgrades in later years on higher D&A (<3% EBITDA impact). Our A\$1.30/sh NPV-based target price suggests NHC is fairly priced but we acknowledge with consensus upgrades likely, more dividends to come and a far better pricing backdrop the upside risk is far more visible as we sit today versus the downside.
- **Tight market backdrop:** Similar to peers, NHC's market commentary noted strong demand and far more favourable pricing, without even taking into account the current weather events (which were said to have made little impact on NHC thus far). Whilst we continue to run a NEWC price forecast of US\$80/t this half, the number increasingly looks undercooked with the YTD price hovering ~US\$86/t. Pending demand holds up as strongly as it is, recent weather impacts are only likely to tighten the market further.
- **Catalysts/risks (ex-commodity prices):** 1) Acland progress - Land Court hearing date reserved for November; 2) Colton potential litigation; 3) Bengalla performance; 4) Capital management; 5) Carrying values for ex-coal segments; 6) M&A.
- **View:** No change to our TP, rating or view. If we were holders there's no way we'd be selling with NHC somewhat a value option on Acland and a tightening market backdrop but not without some uncertainty (Stage 3; Colton; potential M&A). We prefer WHC given the higher operation and financial leverage at this point in time.

Price (23 Mar, A\$)	1.34
Market cap (A\$mn)	1,119.5
Yr avg. mthly trading (A\$mn)	85.7
Projected return:	
Capital gain (%)	-3.3
Dividend yield (net %)	5.7
Total return (%)	2.4

Research Analysts

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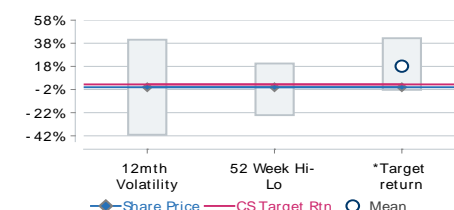
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Financial and valuation metrics

Year	7/20A	7/21E	7/22E	7/23E
Revenue (A\$ mn)	1,084	935	768	694
EBITDA (A\$ mn)	290	259	255	182
EBIT (A\$ mn)	139	119	146	78
Net Income (Adj.) (A\$ mn)	84	69	87	40
EPS (Adj.) (Ac)	10.08	8.33	10.50	4.84
Change from previous EPS (%)	n.a.	19.6	(11.1)	(17.0)
EPS growth (%)	(68.8)	(17.4)	26.1	(53.9)
Consensus EPS (Ac)	10.10	6.30	9.60	9.60
P/E (x)	13.3	16.2	12.8	27.8
Dividends (Ac)	6.00	9.00	7.00	4.00
Dividend yield (%)	4.5	6.7	5.2	3.0
Price/Book (x)	0.6	0.7	0.7	0.7
Net debt/EBITDA (x)	1.3	1.1	0.9	1.7

Source: Company data, Refinitiv, Credit Suisse estimates

Total return forecast in perspective



Source: Company data, Refinitiv, Credit Suisse estimates

Performance	1M	3M	12M
Absolute (%)	8.03	-3.58	31.86
Relative (%)	8.64	-5.23	-16.67

New Hope Corporation (NHC.AX / NHC AU)

Price (23 Mar 2021): **A\$1.345**Target Price: **A\$1.3**Analyst: **Sam Webb**Rating: **Neutral**

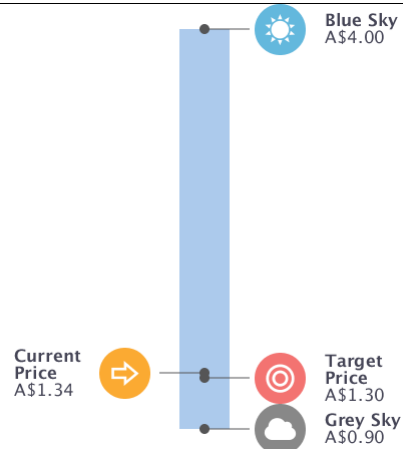
Income Statement	7/20A	7/21E	7/22E	7/23E
Revenue	1,084	935	768	694
EBITDA	290	259	255	182
Depr. & Amort.	(151)	(139)	(109)	(104)
EBIT	139	119	146	78
Associates	-	-	-	-
Net interest exp.	(19)	(21)	(21)	(20)
Other	0	0	0	0
Profit before tax	120	99	125	58
Income tax	(36)	(29)	(37)	(17)
Profit after tax	84	69	87	40
Minorities	-	-	-	-
Preferred dividends	-	-	-	-
Associates & Other	0	0	0	0
Normalised NPAT	84	69	87	40
Unusual item after tax	(241)	(56)	0	0
Net profit (Reported)	(157)	13	87	40
Cash Flow	7/20A	7/21E	7/22E	7/23E
EBIT	139	119	146	78
Net Interest	(16)	(19)	(21)	(20)
Depr & Amort	151	139	109	104
Tax Paid	(27)	(0)	(44)	(32)
Change in Working capital	33	4	5	14
Other cash and non-cash items	(25)	(6)	9	9
Operating cashflow	255	238	205	154
Capex	(100)	(59)	(87)	(171)
Capex - expansionary	(43)	(5)	(47)	(129)
Capex - Maintenance	(58)	(54)	(40)	(42)
Acquisitions & Invest	-	-	-	-
Asset sale proceeds	0	2	0	0
Other	-	-	-	-
Investing cashflow	(109)	(70)	(96)	(181)
Dividends paid	(125)	(33)	(67)	(50)
Equity raised	0	0	0	0
Net borrowings	0	20	0	0
Other financing cash in/(outflows)	(11)	(7)	0	0
Financing cashflow	(136)	(20)	(67)	(50)
Total cashflow	11	148	42	(77)
Adjustments	0	(1)	0	0
Movement in cash/equivalents	12	147	42	(77)
Balance Sheet	7/20A	7/21E	7/22E	7/23E
Cash & equivalents	70	218	260	183
Inventories	81	79	60	52
Receivables	64	66	50	43
Other current assets	62	86	86	86
Current assets	277	449	456	364
Property, plant & equip.	2,085	2,014	1,992	2,058
Intangibles	0	0	0	0
Other non-current assets	184	176	176	176
Non-current assets	2,269	2,190	2,168	2,235
Total assets	2,546	2,639	2,624	2,599
Payables	82	87	56	56
Interest bearing debt	439	491	491	491
Other liabilities	299	363	357	342
Total liabilities	820	941	904	889
Net assets	1,725	1,699	1,720	1,710
Ordinary equity	1,725	1,699	1,720	1,710
Minority interests	0	0	0	0
Preferred capital	-	-	-	-
Total shareholder funds	1,725	1,699	1,720	1,710
Net Debt	369	273	231	308
Earnings	7/20A	7/21E	7/22E	7/23E
Equiv. FPO (period avg) (mn)	833	833	833	833
EPS (CS adj.) (A\$)	0.1	0.1	0.1	0.0
EPS growth (%)	(68.8)	(17.4)	26.1	(53.9)
DPS (A\$)	0.1	0.1	0.1	0.0
Dividend Payout (%)	59.5	108.1	66.7	82.6
Free CFPS (A\$)	0.2	0.2	0.2	0.1

Source: Company data, Refinitiv, Credit Suisse estimates

Company Background

New Hope is an Australian company whose principal activities, together with the associated companies, are coal mining exploration, development, production, processing, associated transport infrastructure and ancillary activities, and investments.

Blue/Grey Sky Scenario



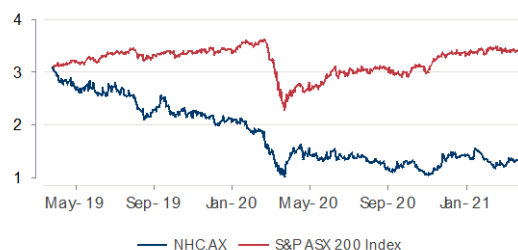
Our Blue Sky Scenario (A\$) 4.00

Our blue sky valuation (~A\$4.00/share) assumes a complete de-risking of the Acland project (via Stage 3), plus a premium to assumed thermal coal prices over the longer term.

Our Grey Sky Scenario (A\$) 0.90

Our grey sky valuation (~A\$0.90/share) is derived from risk weighting Acland Stage 3 to zero and running US\$50/t thermal coal prices out to the end of 2025.

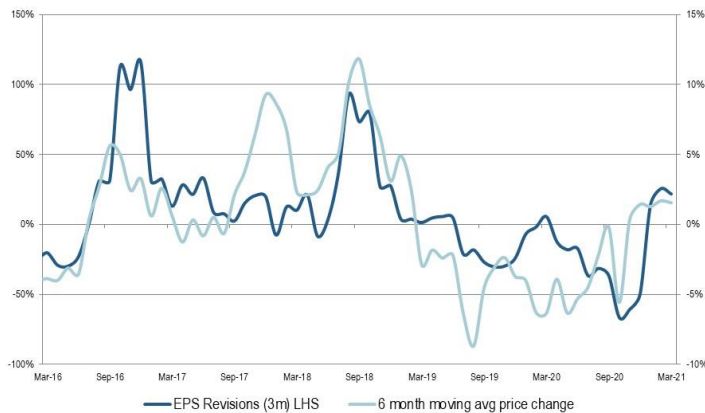
Share price performance



On 23-Mar-2021 the S&P ASX 200 Index closed at 6752.5
On 23-Mar-2021 the spot exchange rate was A\$1.29/US\$1

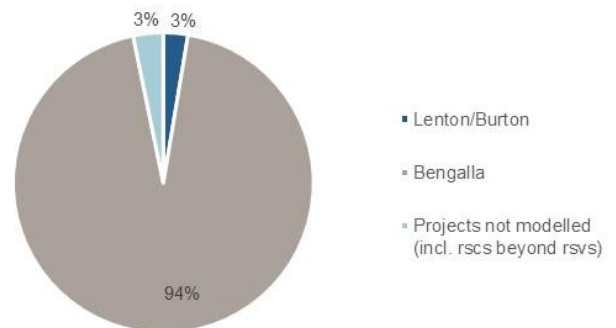
Key charts

Figure 1: NHC EPS changes vs share price change



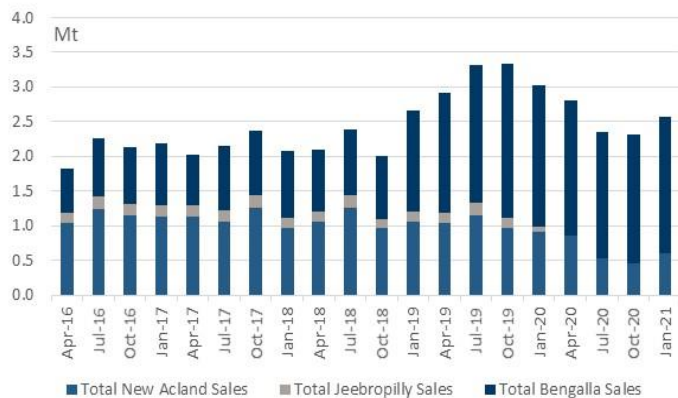
Source: Refinitiv Datastream

Figure 2: NHC NPV split



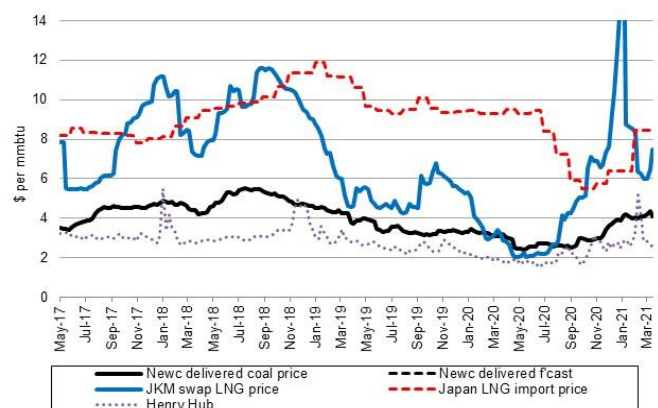
Source: Credit Suisse estimates

Figure 3: NHC sales profile



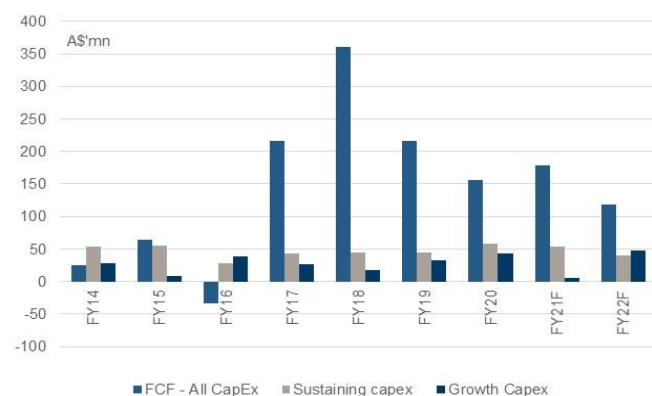
Source: Company data

Figure 4: Delivered coal vs spot LNG prices in Japan - \$/mmbtu



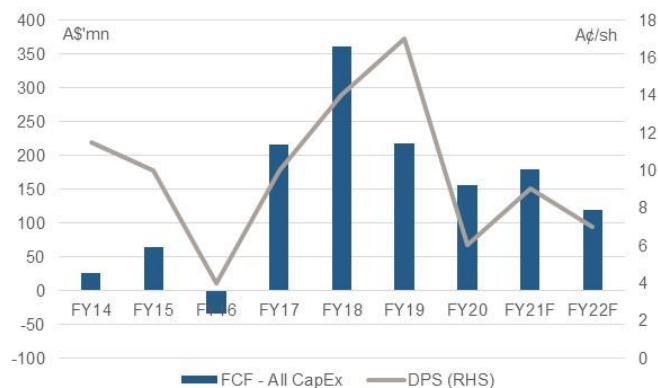
Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse estimates

Figure 5: NHC FCF & capex



Source: Credit Suisse estimates; Company data

Figure 6: NHC dividend profile



Source: Credit Suisse estimates; Company data

NHC – NPV and earnings changes

Figure 7: NPV

	Unrisked Valuation		Risk Weighted Valuation		Risk Weighting
	A\$m	A\$/sh	A\$m	A\$/sh	
Lenton/Burton	82	0.10	41	0.05	50%
Bengalla	1,459	1.75	1,459	1.75	100%
Projects not modelled (incl. rscs beyond rsvs)	100	0.12	100	0.06	50%
NHC Coal	1,641	1.97	1,600	1.86	
Energy (Bridgeport)	4	0.01	4	0.01	
Corporate/ Other	-77	-0.09	-77	-0.09	
Rehab & other provisions as at Jan-21	-264	-0.32	-264	-0.32	
Total mining enterprise	1,304	1.57	1,263	1.46	
Net debt @ Jan '22 f/cast	-163	-0.20	-163	-0.20	
Total equity value	1,141	1.37	1,100	1.30	

Source: Credit Suisse estimates. Our NPV assumes no expansion/value for New Acland.

Figure 8: Earnings changes

Earnings revisions	CS FY21F			CS FY22F			CS FY23F		
	Old	New	Ch %	Old	New	Ch %	Old	New	Ch %
Sales revenue (\$mn)	862.5	934.7	8%	740.6	768.1	4%	668.3	694.0	4%
EBITDA (\$mn)	221.3	258.7	17%	260.4	254.8	-2%	187.7	182.3	-3%
D&A (\$ mn)	-116.5	-139.4	20%	-99.0	-109.1	10%	-98.5	-104.4	6%
EBIT (\$mn)	104.8	119.3	14%	161.4	145.7	-10%	89.3	78.0	-13%
Underlying NPAT (\$mn)	57.9	69.3	20%	98.3	87.4	-11%	48.6	40.3	-17%
EPS (¢)	7.0	8.3	20%	11.8	10.5	-11%	5.8	4.8	-17%
DPS (¢)	0.0	9.0	na	0.0	7.0	na	5.0	4.0	-20%

Source: Company data, Credit Suisse estimates

Credit Suisse Commodity price assumptions

Figure 9: CS Commodity price assumptions

	2020					2021					2022				2022	2023	2024	LT
	Yr Avg	Q1 (f)	Q2 (f)	Q3 (f)	Q4 (f)	Yr Avg (f)	Q1 (f)	Q2 (f)	Q3 (f)	Q4 (f)	Yr Avg (f)	Yr Avg (f)	Yr Avg (f)	Yr Avg (f)	Yr Avg (f)	Yr Avg (f)	Yr Avg (f)	(real)
Iron ore																		
Iron ore fines - 62% - China CFR (US\$/t)	109	170	170	140	120	150	125	130	115	110	120	90	85	75				
Iron ore - 58% low Al, China CFR (US\$/t)	98	156	156	126	108	137	111	116	102	98	107	78	74	65				
Iron ore - 58% high Al, China CFR (US\$/t)	90	146	146	118	101	128	99	103	91	87	95	72	68	62				
Iron ore - 65% China CFR (US\$/t)	121	187	187	159	136	167	144	150	133	127	139	104	98	86				
Freight																		
Capesize WA-China (US\$/t)	6.6	10	11	10	10	10	11	11	11	11	11	11	12	15				
Handysize Aust-China (US\$/t)	17	21	21	20	20	21	21	21	21	21	21	21	22	30				
Coking Coal																		
Hard coking coal (US\$/t)	125	150	140	130	130	138	150	150	140	140	145	155	160	160				
Semi soft coal (US\$/t)	92	113	105	98	98	104	107	107	99	99	103	111	114	105				
PCI coal (US\$/t)	98	120	112	104	104	110	116	116	108	108	112	120	123	120				
Thermal Coal																		
Newcastle - 6000kcal FOB US\$/t	58	85	75	65	75	75	80	70	65	65	70	65	65	75				
Newcastle high-ash - 5500kcal FOB US\$/t	43	54	50	45	50	50	55	48	45	45	48	45	45	62				
Manganese																		
Manganese Ore - 44% (\$/dmtu)	4.77	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.58	4.50				
Base Metals																		
Copper (US\$/t)	6,175	7,930	8,160	7,720	7,275	7,771	7,060	7,060	7,060	7,060	7,060	6,620	6,836	6,600				
Aluminium (US\$/t)	1,704	1,975	2,000	1,900	1,900	1,944	1,900	1,900	1,900	1,900	1,900	1,900	1,901	2,866				
Aluminium - Mid West Premium	274	309	309	309	309	309	331	331	331	331	331	313	295	175				
Aluminium - Japan Premium	102	103	104	105	106	107	107	108	109	109	110	109	114	110				
Aluminium - Rotterdam Premium	101	101	102	103	104	102	105	106	107	107	106	109	114	110				
Alumina spot (US\$/t)	270	305	295	300	300	300	320	320	320	320	320	330	330	400				
Bauxite - China CIF (US\$/t)	43	45	45	45	45	45	46	46	46	46	46	48	48	55				
Nickel (US\$/t)	13,783	17,640	17,200	15,880	15,000	16,430	15,000	15,000	15,000	15,000	15,000	15,000	15,439	14,775				
Lead (US\$/t)	1,824	2,145	2,067	2,028	2,028	2,067	2,028	2,028	2,028	2,028	2,028	2,080	2,072	2,000				
Zinc (US\$/t)	2,265	2,750	2,650	2,600	2,600	2,650	2,600	2,600	2,600	2,600	2,600	2,600	2,590	2,400				
Mineral Sands																		
Zircon (US\$/t)	1,275	1,360	1,360	1,360	1,360	1,360	1,340	1,340	1,340	1,340	1,340	1,340	1,290	1,250				
Rutile (US\$/t)	1,221	1,250	1,300	1,300	1,200	1,263	1,200	1,250	1,250	1,200	1,225	1,250	1,250	1,250				
Synthetic Rutile (US\$/t)	750	800	800	800	800	800	850	850	850	850	850	850	850	1,100				
Ilmenite (Sulfate) (US\$/t)	160	170	170	170	170	170	180	180	180	180	180	183	190	200				
TiO2 slag SA Chloride 86% (US\$/t)	1,021	1,050	1,100	1,100	1,000	1,063	1,000	1,050	1,050	1,000	1,025	928	969	1,000				
Precious Metals																		
Gold (US\$/oz)	1,773	1,800	1,850	1,950	2,000	1,900	2,100	2,100	2,100	2,100	2,100	1,800	1,783	1,400				
Silver (US\$/oz)	20.39	26.00	26.00	25.00	25.00	25.50	20.00	20.00	20.00	20.00	20.00	18.00	18.37	16.50				
Lithium																		
Lithium Carbonate	5,745	6,900	6,900	7,250	7,250	7,075	7,500	8,000	8,500	9,000	8,250	9,500	9,912	11,000				
Oil & Gas																		
Crude oil - Brent (\$/bbl)	43	55	58	62	60	59	63	63	63	63	63	60	61	60				
Gas - Henry Hub (\$/mmbtu)	2.00	2.75	2.75	2.75	2.75	2.75	2.50	2.50	2.50	2.50	2.50	2.50	2.54	2.50				
Commodity Currencies																		
AUD/USD	0.69	0.78	0.80	0.76	0.76	0.78	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75				

Source: Credit Suisse estimates

Sigma Healthcare

Cost outs flowing through earnings

Healthcare Facilities | Increase Target Price

SIG.AX

Target price (12M, A\$)
0.73
Outperform

- **Retain OUTPERFORM:** We forecast SIG achieving EBITDA CAGR of 10% between FY21-FY24F, having generated 40% EBITDA growth in FY21. This is driven by cost outs, increased efficiencies and continued above market growth in its retail and wholesale division. Regulatory headwinds have diminished following the finalisation of the 7CPA, where the increased funding to the CSO is offsetting PBS pricing reforms. Additionally, SIG now has ~50% exposure to non-PBS earnings streams and this diversification in the Hospital and 3PL/4PL space should allow for continued margin expansion. The stock trades on 19x 12-mth forward CS EPS, below its 2- and 5-year averages. We lower our EBITDA estimates 7% in FY22 and 3% in FY23 but continue to forecast SIG beating its A\$100mn EBITDA target in FY23. We raise our FY24 EBITDA forecasts 2%. **We retain our OUTPERFORM and raise TP to A\$0.73 (from A\$0.70)** due to model roll forward.
- **End of capex investment cycle leaves sufficient BS capacity for growth:** SIG has strengthened its balance sheet, with Net Debt/EBITDA at 0.6x in FY21 (vs 2.4x in FY20). We believe it will continue to look at pursuing growth opportunities and acquisitions in the Hospital and 3PL/4PL space, where it will be supported by ample DC capacity.
- **Project Pivot savings complete; focus now turns to digital transformation:** SIG completed its A\$100mn cost out program by the end of FY21, in line with its original guidance. Benefits will continue to be realized in FY22. Focus now turns to SIG's digital transformation and in particular the implementation of its ERP system (due to be complete in Q4 2021) as this will provide the next round of efficiency savings.
- **Strong earnings result but weak cash flow:** SIG reported FY21 underlying EBITDA of A\$83.2mn, up 40% YoY, above CSe of A\$80.7mn. Wholesale distribution sales (ex. CW) +11.4% (vs market +3.1%) and like-for-like retail sales +11.7%. The Board reinstated its dividend and is targeting a 70% fully franked dividend payout ratio. The cash result disappointed with gross cash conversion of 18% as SIG holds greater inventory. However, we do expect this to improve post COVID. No FY22 earnings guidance was provided.

Previous target price (12M, A\$)	0.70
Price (23 Mar, A\$)	0.70
Market cap (A\$m)	741.5
Yr avg. mthly trading (A\$m)	22.8
Projected return:	
Capital gain (%)	4.3
Dividend yield (net %)	3.4
Total return (%)	7.7

Research Analysts

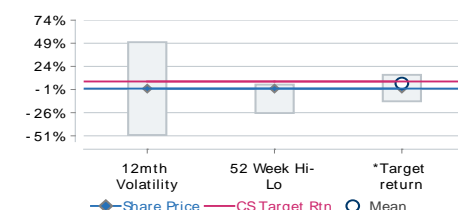
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Financial and valuation metrics

Year	1/21A	1/22E	1/23E	1/24E
Revenue (A\$ mn)	3,400	3,566	3,683	3,768
EBITDA (A\$ mn)	83	92	102	111
EBIT (A\$ mn)	52	58	70	84
Net Income (Adj.) (A\$ mn)	29	33	42	53
EPS (Adj.) (Ac)	2.89	3.27	4.13	5.28
Change from previous EPS (%)	n.a.	(25.4)	(16.9)	
EPS growth (%)	130.2	13.1	26.1	28.0
Consensus EPS (Ac)	2.70	3.50	4.00	4.20
P/E (x)	24.2	21.4	17.0	13.3
Dividends (Ac)	1.00	2.29	2.89	3.70
Dividend yield (%)	1.4	3.3	4.1	5.3
Price/Book (x)	1.3	1.3	1.3	1.2
Net debt/EBITDA (x)	0.7	0.3	(0.1)	(0.3)

Source: Company data, Refinitiv, Credit Suisse estimates

Total return forecast in perspective



Source: Company data, Refinitiv, Credit Suisse estimates

Performance	1M	3M	12M
Absolute (%)	2.94	13.82	2.94
Relative (%)	3.65	12.28	-45.44

Sigma Healthcare (SIG.AX / SIG AU)

Price (23 Mar 2021): **A\$0.7**Target Price: (from A\$0.7) **A\$0.73**Analyst: **Gretel Janu**Rating: **Outperform**

Income Statement	1/21A	1/22E	1/23E	1/24E
Revenue	3,400	3,566	3,683	3,768
EBITDA	83	92	102	111
Depr. & Amort.	(31)	(33)	(32)	(27)
EBIT	52	58	70	84
Associates	0	0	0	0
Net interest exp.	(11)	(10)	(10)	(9)
Other	0	0	0	0
Profit before tax	41	48	60	75
Income tax	(10)	(13)	(17)	(21)
Profit after tax	31	35	43	54
Minorities	(2)	(2)	(2)	(1)
Preferred dividends	-	-	-	-
Associates & Other	0	0	0	0
Normalised NPAT	29	33	42	53
Unusual item after tax	52	(5)	0	0
Net profit (Reported)	81	28	42	53
Balance Sheet	1/21A	1/22E	1/23E	1/24E
Cash & equivalents	16	51	82	112
Inventories	349	334	344	352
Receivables	327	329	340	348
Other current assets	10	10	10	10
Current assets	702	724	775	821
Property, plant & equip.	194	208	192	181
Intangibles	253	247	241	235
Other non-current assets	57	57	57	57
Non-current assets	503	512	490	473
Total assets	1,206	1,236	1,265	1,294
Payables	426	444	457	467
Interest bearing debt	75	75	75	75
Other liabilities	169	169	169	169
Total liabilities	671	688	702	712
Net assets	535	548	563	583
Ordinary equity	534	545	559	577
Minority interests	1	2	4	5
Preferred capital	-	-	-	-
Total shareholder funds	535	548	563	583
Net Debt	59	25	(6)	(37)
Cash Flow	1/21A	1/22E	1/23E	1/24E
EBIT	52	58	70	84
Net Interest	(7)	(10)	(10)	(9)
Depr & Amort	31	33	32	27
Tax Paid	5	(13)	(17)	(21)
Change in Working capital	(54)	30	(7)	(5)
Other cash and non-cash items	(14)	0	0	(0)
Operating cash flow	12	98	69	76
Capex	(77)	(42)	(10)	(10)
Capex - expansionary	0	0	0	0
Capex - Maintenance	(77)	(42)	(10)	(10)
Acquisitions & Invest	(6)	0	0	0
Asset sale proceeds	182	0	0	0
Other	-	-	-	-
Investing cash flow	99	(42)	(10)	(10)
Dividends paid	(2)	(22)	(28)	(35)
Equity raised	0	0	0	0
Net borrowings	(250)	0	0	0
Other financing cash in/(outflows)	(14)	0	0	0
Financing cash flow	(266)	(22)	(28)	(35)
Total cash flow	(154)	35	31	30
Adjustments	(0)	0	0	0
Movement in cash/equivalents	(154)	35	31	30

Source: Company data, Credit Suisse estimates

Earnings	1/21A	1/22E	1/23E	1/24E
Equiv. FPO (period avg) (mn)	1,007	1,007	1,007	1,007
EPS (CS adj.) (c)	2.9	3.3	4.1	5.3
EPS growth (%)	130.2	13.1	26.1	28.0
DPS (c)	1.0	2.3	2.9	3.7
Dividend Payout (%)	34.6	70.0	70.0	70.0
Free CFPS (c)	(6.4)	5.6	5.8	6.5
Valuation	1/21A	1/22E	1/23E	1/24E
P/E (CS) (x)	24.2	21.4	17.0	13.3
PEG (x)	0.2	1.6	0.7	0.5
EV/EBIT (x)	15.3	13.1	10.5	8.4
EV/EBITDA (x)	9.6	8.4	7.2	6.3
Dividend Yield (%)	1.4	3.3	4.1	5.3
FCF Yield (%)	(9.2)	8.0	8.3	9.3
Price to book (x)	1.3	1.3	1.3	1.2
Returns	1/21A	1/22E	1/23E	1/24E
Return on Equity (%)	5.5	6.0	7.4	9.2
Profit Margin (%)	0.9	0.9	1.1	1.4
Asset Turnover (x)	2.8	2.9	2.9	2.9
Equity Multiplier (x)	2.3	2.3	2.3	2.2
Return on Assets (%)	2.4	2.7	3.3	4.1
Return on Invested Cap. (%)	6.7	7.4	9.1	11.2
Gearing	1/21A	1/22E	1/23E	1/24E
ND/ND+E (%)	10.0	4.3	Net Cash	Net Cash
Net Debt to EBITDA (x)	0.7	0.3	Net Cash	Net Cash
Int Cover (EBITDA) (x)	7.3	9.0	10.4	11.8
Int Cover (EBIT) (x)	4.6	5.7	7.1	9.0
Capex to Sales (%)	2.3	1.2	0.3	0.3
Capex to Depr (%)	306.2	152.0	37.8	49.7

Share price performance



On 23-Mar-2021 the S&P ASX 200 Index closed at 6745.4

On 23-Mar-2021 the spot exchange rate was A\$1.3/US\$1

SIG FY21 result snapshot

Figure 1: SIG FY21 result snapshot

A\$m	FY20	FY21	FY21/20	FY21F	Variance	Comment
Sales revenue	3,244.3	3,400.4	4.8%	3,395.8	0.1%	Sales (ex-CW) +11.4%
Other revenue and income	98.1	109.0	11.1%	104.4	4.4%	
Total Revenue and income	3,342.4	3,509.4	5.0%	3,500.2	0.3%	
Operating expenses	-3,282.8	-3,426.2	4.4%	-3,419.5	0.2%	
EBITDA	59.6	83.2	39.6%	80.7	3.1%	Above CS estimates
D&A	-25.9	-31.0	19.8%	-34.3	-9.7%	
O&I	1.4	-2.1		-2.4		
EBIT	33.7	50.1	48.6%	46.4	8.0%	Above CS estimates
Net Interest	-12.7	-11.5	-9.5%	-9.5	21.5%	
Profit before Tax	21.0	38.6	83.7%	36.9	4.6%	Above CS estimates
Tax	-8.5	-9.5	11.8%	-9.6	-0.7%	
Normalised Profit	12.5	29.1	132.5%	27.3	6.4%	Above CS estimates
Abnormal items (post-tax)	-24.8	30.7		-10.9		Includes gain on sale of assets
Statutory net profit	-12.3	59.8	-587.5%	16.4	264.1%	
Summary	1H20	1H21	1H21/20	1H21F	Variance	
EPS ¢	1.3	3.0	134.7%	2.7	7.4%	
DPS ¢	1.0	1.0	0.0%	0.0		Reinstated its final dividend
Franking %	100%	100%	0.0%	100%	0.0%	
Payout %	80%	34%	-45.7%	0%	33.9%	
Tax Rate %	40.4%	24.6%	-15.8%	25.9%	-1.3%	
Gross margin (%)	6.6%	7.0%	0.4%	7.2%	-0.2%	
EBIT margin (%)	1.0%	1.4%	0.4%	1.3%	0.1%	
Cash flows						
Operating cash flows	200.6	12.5	-94%	-19.0	200.6	
Capex	-57.1	-77.0	35%	-87.8	-57.1	
Free cash flow	143.5	-64.6	-145%	-106.8	143.5	
Gross cash flow/EBITDA	3.63x	0.18%	-3.45x	-0.05x	3.63x	Weak gross cash conversion

Source: Company data, Credit Suisse estimates

Earnings changes and valuation

Following the release of SIG's FY21 result, we have made a number of changes to our forecasts resulting in us lowering our FY22 and FY23 EBITDA estimates by 7% and 3% respectively, we make minor earnings upgrades to our FY24 EBITDA estimates. Key adjustments include:

- **Revenue:** Minor changes to PBS revenue forecasts, continue to believe SIG grows ahead of market.
- **Operating costs:** We believe SIG's path to its A\$100mn EBITDA target will be more spread out with SIG still seeing the annualised benefits in FY22 from its completed Project Pivot program. In FY23 we do believe SIG will see rising efficiencies from its automated warehouses and implementation of its ERP system.
- **Interest costs:** We raise our net interest costs in line with management's commentary.
- **Dividend:** We now forecast 70% payout ratio in line with management's commentary.

Our target price increases to A\$0.73 due to model roll forward and we maintain an OUTPERFORM rating. SIG is trading at ~19x 12-mth forward earnings, below its 5-year average and at a discount to the market.

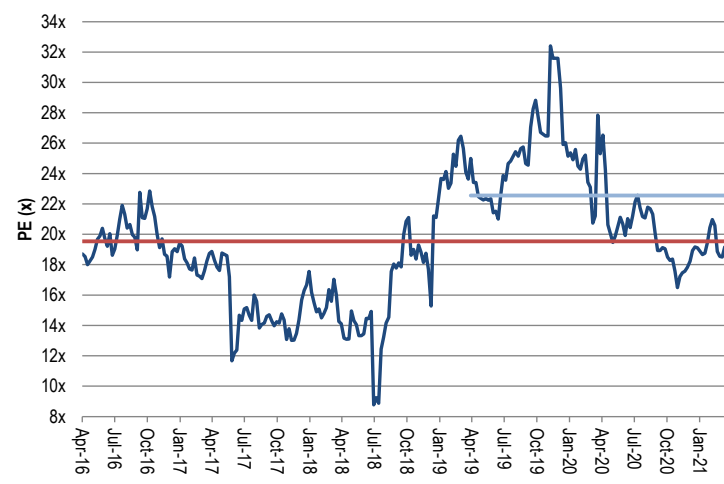
Figure 2: SIG earnings changes

	FY22F			FY23F			FY24F		
	Old	New	Ch %	Old	New	Ch %	Old	New	Ch %
Sales revenue	3,583	3,566	-0.5%	3,729	3,683	-1.3%	3,844	3,768	-2.0%
EBITDA	98.4	91.8	-6.7%	105.8	102.2	-3.4%	109.3	111.1	1.7%
NPAT (\$mn)	43.7	33.0	-24.6%	49.5	41.6	-15.9%	58.8	53.2	-9.5%
EPS (¢)	4.4	3.3	-25.4%	5.0	4.1	-16.9%	5.9	5.3	-10.5%
DPS (¢)	3.7	2.3	-38.2%	4.2	2.9	-31.6%	5.0	3.7	-26.3%

Source: Company data, Credit Suisse estimates

Figure 3: SIG P/E below historic averages...

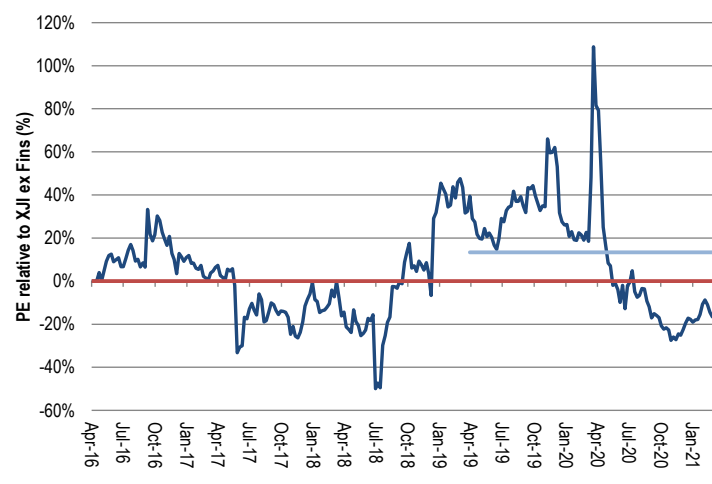
SIG – PE (x), consensus estimates



Source: Company data, I/B/E/S, Credit Suisse estimates

Figure 4: ...and trading at a discount to the market

SIG PE relative to ASX200 Industrials (ex. Fins) (%)



Source: Company data, I/B/E/S, Credit Suisse estimates

Key operational charts

Figure 5: Revenue improving from FY20 trough levels...

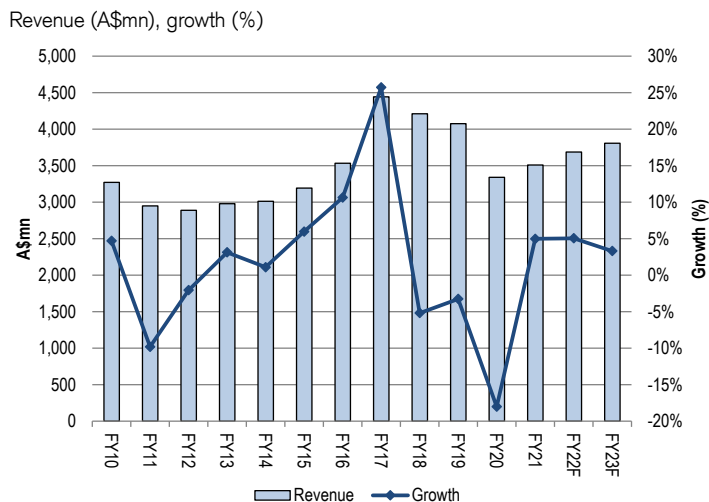


Figure 6: ...and large improvements in EBITDA going forward

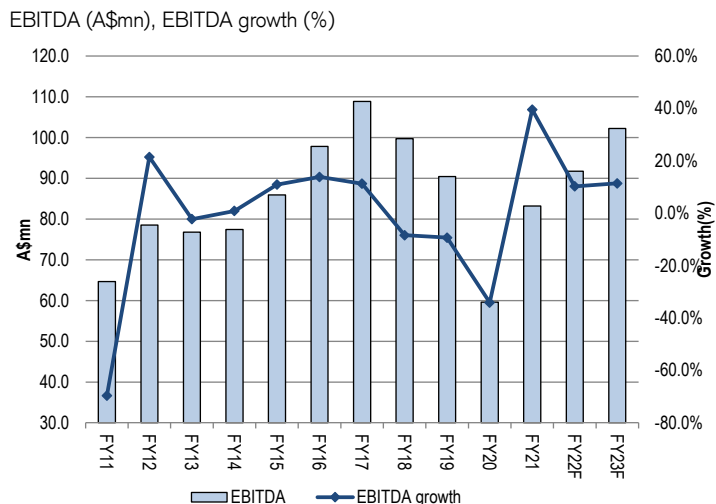


Figure 7: Higher warehousing costs...

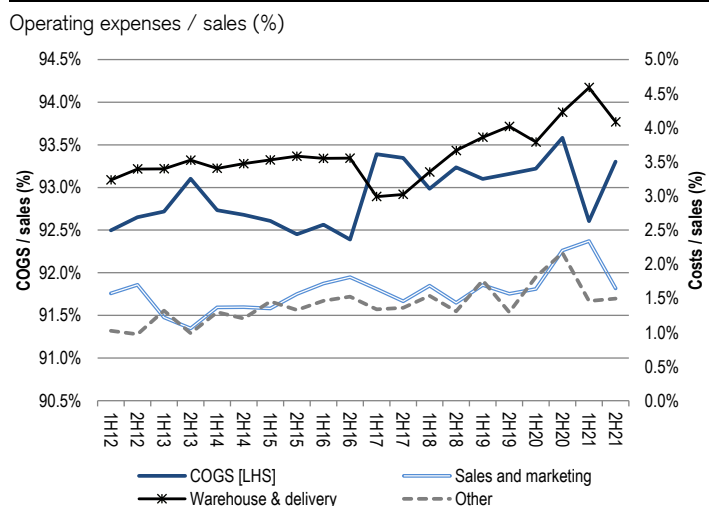


Figure 8: ...cash conversion days at 31 (ex Hep-C)

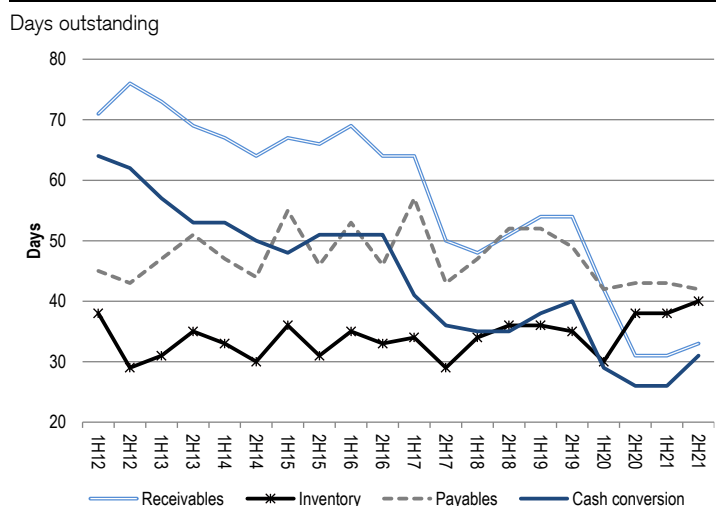


Figure 9: Dividend reinstated...

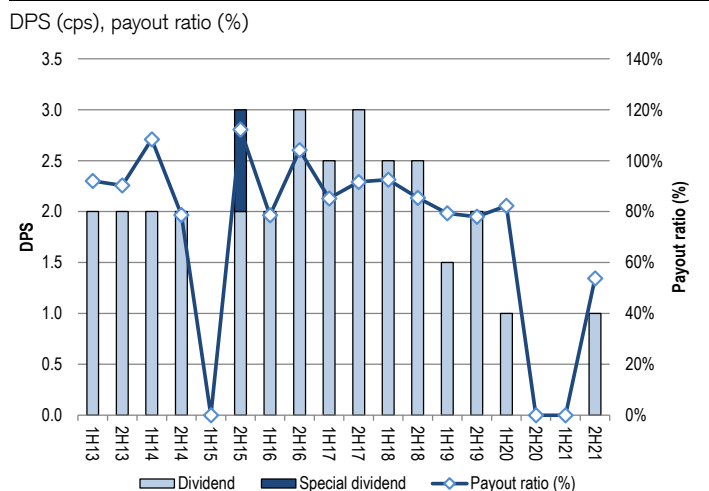
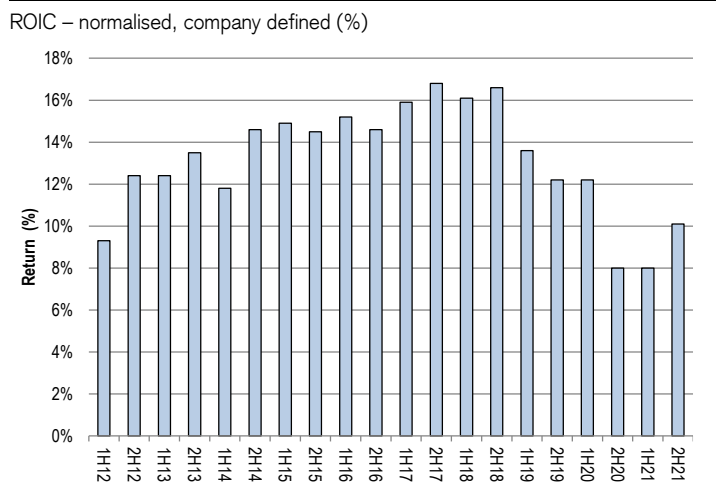


Figure 10: ...ROIC down in 2H21



Source for both charts: Company data, Credit Suisse estimates

Whitehaven Coal

FY21 guidance revisions

Diversified Metals & Mining | Comment

WHC.AX

Target price (12M, A\$)

1.95

Outperform^[M]

■ **Volumes impacted on a few fronts:** Post identification of faults at the SL1 shiploader at the Port of Newcastle rendering both shiploaders now inactive, Newcastle Coal Infrastructure Group (NCIG) has halted activity, anticipating a two-week repair period. With the downtime at NCIG, longer time navigating through the fault at Narrabri than was expected and the risk from the heavy rainfall the region is experiencing, WHC is now expecting 0.5-1Mt of less managed coal sales, downgrading its full year guidance slightly to 18.5 – 19Mt (19 – 20Mt). Despite the challenges which are largely outside WHC's control, pleasingly unit cost guidance was left unchanged at A\$69-72/t. Whilst operations at Maules are largely unchanged and going well, Narrabri is yet again the challenge, with the LW move now to take place towards the end of the JunQ which will see the final panel mined before moving to the shallower ground and the 200 series. Whilst downgrades are not ideal, we expect further thermal price spikes as supply is impacted by the weather events and with an already tight market, spot prices have surged above US\$100/t quickly. Given the pricing strength, NEWC benchmark now sits above CS and consensus estimates and pending no further volume impacts are forthcoming, will more than offset today's marginal downgrade to sales volumes. Remains our top pick - A\$1.95/sh Target price and Outperform rating unchanged.

■ **Key catalysts and risks:** 1) Coal prices (+ AUD); 2) Narrabri operating performance; 3) Weather impacts/delays to production/shipments/logistics; 4) Progress at Narrabri (Stage 3), Vickery, Maules (16Mtpa option) and Winchester South.

■ **View:** Whilst we by no means discount the ongoing weather risk as the full impact remains to be determined, we think WHC can outperform given the strong operational leverage (versus say NHC). WHC remains our top pick despite volume risks, with upside to consensus earnings expectations on the back of rising coal prices.

Price (23 Mar, A\$)	1.74
Market cap (A\$m)	1,791.6
Yr avg. mthly trading (A\$m)	316.0
Projected return:	
Capital gain (%)	12.4
Dividend yield (net %)	0.8
Total return (%)	13.1

[M] = Stock Considered Volatile (see Disclosure Appendix)

Research Analysts

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Financial and valuation metrics

Year	6/20A	6/21E	6/22E	6/23E
Revenue (A\$ mn)	1,722	1,589	1,882	1,793
EBITDA (A\$ mn)	306	287	487	364
EBIT (A\$ mn)	81	7	183	55
Net Income (Adj.) (A\$ mn)	30	(40)	89	2
EPS (Adj.) (Ac)	2.99	(3.98)	8.94	0.23
Change from previous EPS (%)	n.a.	n.m	0.0	0.0
EPS growth (%)	(94.7)	n.m	n.m	(97.5)
Consensus EPS (Ac)	3.00	(6.10)	5.90	10.90
P/E (x)	57.9	(43.6)	19.4	768.8
Dividends (Ac)	1.50	0.00	1.79	0.10
Dividend yield (%)	0.9	0.0	1.0	0.1
Price/Book (x)	0.5	0.5	0.5	0.5
Net debt/EBITDA (x)	3.0	2.7	1.1	1.2

Source: Company data, Refinitiv, Credit Suisse estimates

Total return forecast in perspective



Source: Company data, Refinitiv, Credit Suisse estimates

Performance	1M	3M	12M
Absolute (%)	14.52	5.47	4.20
Relative (%)	15.23	3.93	-44.18

Whitehaven Coal (WHC.AX / WHC AU)

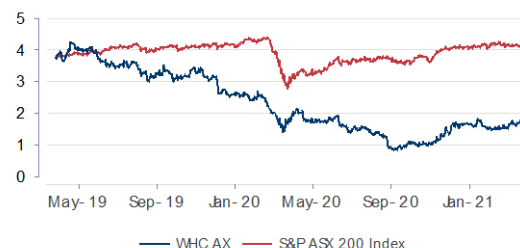
Price (23 Mar 2021): **A\$1.735**Target Price: **A\$1.95**Analyst: **Sam Webb**Rating: **Outperform [V]**

Income Statement	6/20A	6/21E	6/22E	6/23E
Revenue	1,722	1,589	1,882	1,793
EBITDA	306	287	487	364
Depr. & Amort.	(225)	(280)	(303)	(308)
EBIT	81	7	183	55
Associates	-	-	-	-
Net interest exp.	(39)	(60)	(56)	(52)
Other	0	0	0	0
Profit before tax	42	(53)	128	3
Income tax	(12)	14	(38)	(1)
Profit after tax	30	(40)	89	2
Minorities	-	-	-	-
Preferred dividends	-	-	-	-
Associates & Other	0	0	0	0
Normalised NPAT	30	(40)	89	2
Unusual item after tax	0	0	0	0
Net profit (Reported)	30	(40)	89	2
Balance Sheet	6/20A	6/21E	6/22E	6/23E
Cash & equivalents	107	209	254	251
Inventories	176	146	145	156
Receivables	129	108	107	116
Other current assets	22	8	8	8
Current assets	433	471	514	531
Property, plant & equip.	4,155	3,975	3,832	3,689
Intangibles	23	23	23	23
Other non-current assets	601	610	610	610
Non-current assets	4,779	4,608	4,465	4,322
Total assets	5,212	5,079	4,979	4,853
Payables	189	177	174	178
Interest bearing debt	1,025	985	785	685
Other liabilities	748	683	683	683
Total liabilities	1,962	1,845	1,642	1,546
Net assets	3,250	3,234	3,337	3,308
Ordinary equity	3,250	3,234	3,337	3,308
Minority interests	0	0	0	0
Preferred capital	-	-	-	-
Total shareholder funds	3,250	3,234	3,337	3,308
Net Debt (Excl. Leases)	787	663	419	322
Cash Flow	6/20A	6/21E	6/22E	6/23E
EBIT	81	7	183	55
Net Interest	(30)	(51)	(56)	(52)
Depr & Amort	225	280	303	308
Tax Paid	(14)	12	(25)	(1)
Change in Working capital	(8)	39	(2)	(16)
Other cash and non-cash items	(108)	(20)	0	0
Operating cash flow	146	266	405	295
Capex	(191)	(86)	(143)	(149)
Capex - expansionary	(129)	(23)	(64)	(69)
Capex - Maintenance	(62)	(63)	(79)	(80)
Acquisitions & Invest	(77)	(29)	(17)	(17)
Asset sale proceeds	0	0	0	0
Other	-	-	-	-
Investing cash flow	(268)	(115)	(160)	(166)
Dividends paid	(312)	0	0	(32)
Equity raised	0	0	0	0
Net borrowings	518	(5)	(200)	(100)
Other financing cash in/(outflows)	(97)	(44)	0	0
Financing cash flow	109	(49)	(200)	(132)
Total cash flow	(13)	103	45	(3)
Adjustments	0	0	0	0
Movement in cash/equivalents	(13)	103	45	(3)

Source: Company data, Credit Suisse estimates

Earnings	6/20A	6/21E	6/22E	6/23E
Equiv. FPO (period avg) (mn)	1,003	999	999	999
EPS (CS adj.) (c)	3.0	(4.0)	8.9	0.2
EPS growth (%)	(94.7)	(232.9)	324.8	(97.5)
DPS (c)	1.5	0.0	1.8	0.1
Dividend Payout (%)	50.1	-0.0	20.0	43.9
Free CFPS (c)	8.4	20.4	32.6	21.5
Valuation	6/20A	6/21E	6/22E	6/23E
P/E (CS) (x)	57.9	(43.6)	19.4	768.8
PEG (x)	(0.6)	0.2	0.1	(7.9)
EV/EBIT (x)	33.3	364.8	12.7	40.4
EV/EBITDA (x)	8.9	9.0	4.8	6.1
Dividend Yield (%)	0.9	0.0	1.0	0.1
FCF Yield (%)	4.9	11.7	18.8	12.4
Price to book (x)	0.5	0.5	0.5	0.5
Returns	6/20A	6/21E	6/22E	6/23E
Return on Equity (%)	0.9	(1.2)	2.7	0.1
Profit Margin (%)	1.7	(2.5)	4.7	0.1
Asset Turnover (x)	0.3	0.3	0.4	0.4
Equity Multiplier (x)	1.6	1.6	1.5	1.5
Return on Assets (%)	0.6	(0.8)	1.8	0.0
Return on Invested Cap. (%)	1.4	0.1	3.3	1.0
Gearing	6/20A	6/21E	6/22E	6/23E
ND/ND+E excl. Leases (%)	19.5	17.0	11.1	8.9
Net Debt to EBITDA excl. Leases (x)	2.6	2.3	0.9	0.9
Int Cover (EBITDA) (x)	7.8	4.7	8.7	7.0
Int Cover (EBIT) (x)	2.1	0.1	3.3	1.1
Capex to Sales (%)	11.1	5.4	7.6	8.3
Capex to Depr (%)	84.9	30.6	47.1	48.3

Share price performance

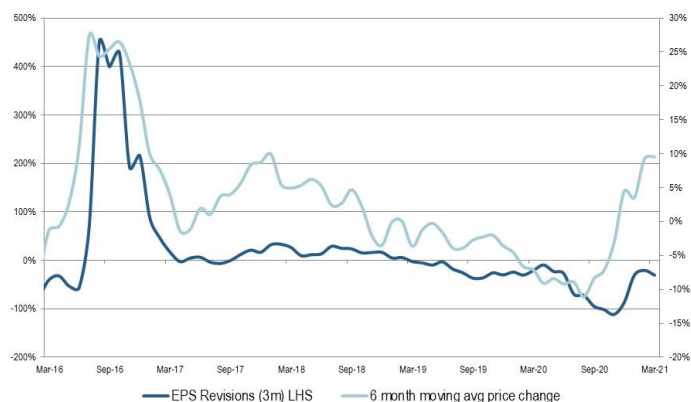


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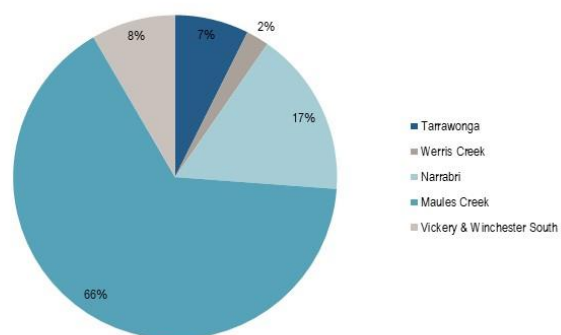
Key Charts

Figure 1: WHC Eps changes vs share price



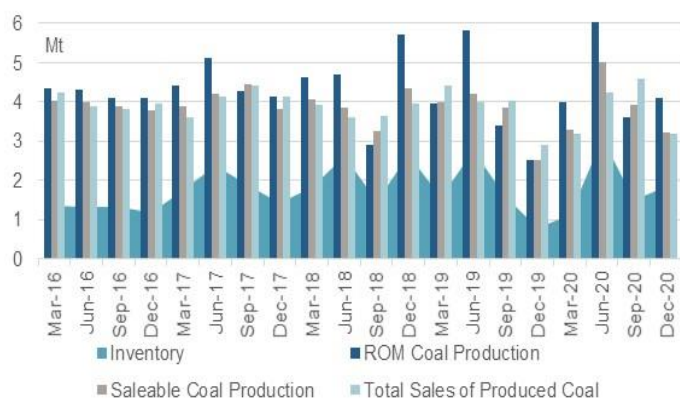
Source: Refinitiv Datastream

Figure 2: WHC NPV Split



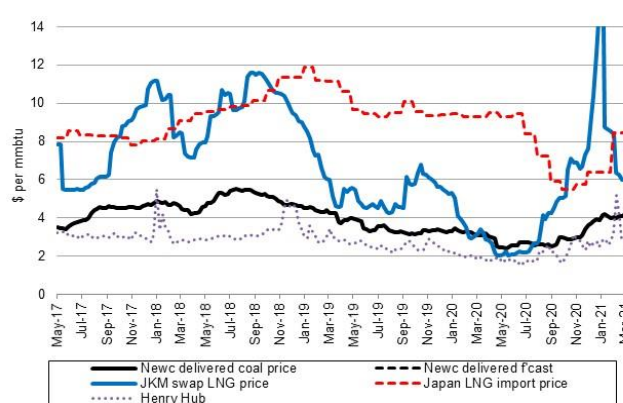
Source: Credit Suisse estimates

Figure 3: WHC Production & Sales (equity share)



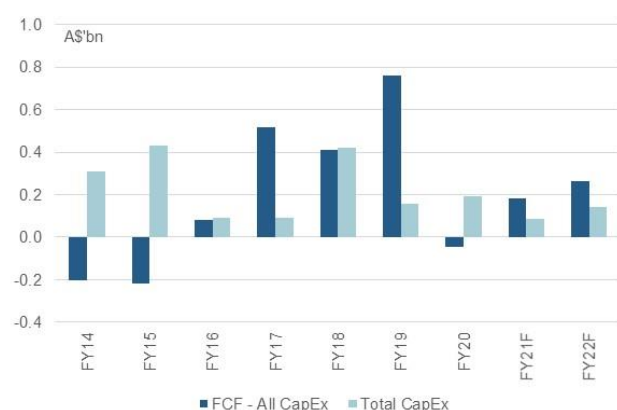
Source: Company data

Figure 4: Delivered coal vs spot LNG prices in Japan - \$/mmbtu



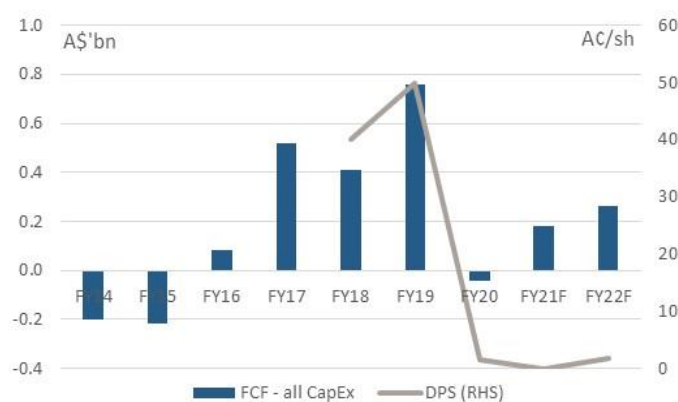
Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse estimates

Figure 5: WHC FCF & Capex Profile



Source: Credit Suisse estimates; Company data

Figure 6: WHC Dividend Profile



Source: Credit Suisse estimates; Company data

WHC – NPV

Figure 7: NPV

Valuation summary	Unrisked Valuation		Risk Weighted Valuation		Risk Weighting
	A\$m	A\$/sh	A\$m	A\$/sh	
Tarrawonga	244	0.24	244	0.24	100%
Werris Creek	75	0.07	75	0.07	100%
Narrabri	546	0.54	546	0.54	100%
Maules Creek	2,162	2.16	2,162	2.16	100%
Vickery & Winchester South	1,112	1.11	278	0.28	25%
WHC Project Valuation	4,139	4.13	3,305	3.29	
Corporate / exploration / other	-281	-0.28	-281	-0.28	
Total mining EV	3,858	3.85	3,024	3.01	
Provisions (Non-current, last reported)	-223	-0.22	-223	-0.22	
Net debt (Dec, 2021)	-546	-0.54	-546	-0.54	
Total equity value	3,088	3.08	2,254	2.20	

Source: Credit Suisse estimates

Figure 8: CS Commodity price assumptions

	2020 Yr Avg	Q1 (f)	Q2 (f)	Q3 (f)	Q4 (f)	2021 Yr Avg (f)	Q1 (f)	Q2 (f)	Q3 (f)	Q4 (f)	2022 Yr Avg (f)	2023 Yr Avg (f)	2024 Yr Avg (f)	LT (real)
Iron ore														
Iron ore fines - 62% - China CFR (US\$/t)	109	170	170	140	120	150	125	130	115	110	120	90	85	75
Iron ore - 58% low AI, China CFR (US\$/t)	98	156	156	126	108	137	111	116	102	98	107	78	74	65
Iron ore - 58% high AI, China CFR (US\$/t)	90	146	146	118	101	128	99	103	91	87	95	72	68	62
Iron ore - 65% China CFR (US\$/t)	121	187	187	159	136	167	144	150	133	127	139	104	98	86
Freight														
Capesize WA-China (US\$/t)	6.6	10	11	10	10	10	11	11	11	11	11	11	12	15
Handysize Aust-China (US\$/t)	17	21	21	20	20	21	21	21	21	21	21	21	22	30
Coking Coal														
Hard coking coal (US\$/t)	125	150	140	130	130	138	150	150	140	140	145	155	160	160
Semi soft coal (US\$/t)	92	113	105	98	98	104	107	107	99	99	103	111	114	105
PCI coal (US\$/t)	98	120	112	104	104	110	116	116	108	108	112	120	123	120
Thermal Coal														
Newcastle - 6000kcal FOB US\$/t	58	85	75	65	75	75	80	70	65	65	70	65	65	75
Newcastle high-ash - 5500kcal FOB US\$/t	43	54	50	45	50	50	55	48	45	45	48	45	45	62
Manganese														
Manganese Ore - 44% (\$/dmtu)	4.77	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.58	4.50
Base Metals														
Copper (US\$/t)	6,175	7,930	8,160	7,720	7,275	7,771	7,060	7,060	7,060	7,060	7,060	6,620	6,836	6,600
Aluminium (US\$/t)	1,704	1,975	2,000	1,900	1,900	1,944	1,900	1,900	1,900	1,900	1,900	1,900	1,901	2,866
Aluminium - Mid West Premium	274	309	309	309	309	309	331	331	331	331	331	313	295	175
Aluminium - Japan Premium	102	103	104	105	106	107	107	108	109	109	110	109	114	110
Aluminium - Rotterdam Premium	101	101	102	103	104	102	105	106	107	107	106	109	114	110
Alumina spot (US\$/t)	270	305	295	300	300	300	320	320	320	320	320	330	330	400
Bauxite - China CIF (US\$/t)	43	45	45	45	45	45	46	46	46	46	46	48	48	55
Nickel (US\$/t)	13,783	17,640	17,200	15,880	15,000	16,430	15,000	15,000	15,000	15,000	15,000	15,000	15,439	14,775
Lead (US\$/t)	1,824	2,145	2,067	2,028	2,028	2,067	2,028	2,028	2,028	2,028	2,028	2,080	2,072	2,000
Zinc (US\$/t)	2,265	2,750	2,650	2,600	2,600	2,650	2,600	2,600	2,600	2,600	2,600	2,600	2,590	2,400
Mineral Sands														
Zircon (US\$/t)	1,275	1,360	1,360	1,360	1,360	1,360	1,340	1,340	1,340	1,340	1,340	1,340	1,290	1,250
Rutile (US\$/t)	1,221	1,250	1,300	1,300	1,200	1,263	1,200	1,250	1,250	1,200	1,225	1,250	1,250	1,250
Synthetic Rutile (US\$/t)	750	800	800	800	800	800	850	850	850	850	850	850	850	1,100
Ilmenite (Sulfate) (US\$/t)	160	170	170	170	170	170	180	180	180	180	180	183	190	200
TiO2 slag SA Chloride 86% (US\$/t)	1,021	1,050	1,100	1,100	1,000	1,063	1,000	1,050	1,050	1,000	1,025	928	969	1,000
Precious Metals														
Gold (US\$/oz)	1,773	1,800	1,850	1,950	2,000	1,900	2,100	2,100	2,100	2,100	2,100	1,800	1,783	1,400
Silver (US\$/oz)	20.39	26.00	26.00	25.00	25.00	25.50	20.00	20.00	20.00	20.00	20.00	18.00	18.37	16.50
Lithium														
Lithium Carbonate	5,745	6,900	6,900	7,250	7,250	7,075	7,500	8,000	8,500	9,000	8,250	9,500	9,912	11,000
Oil & Gas														
Crude oil - Brent (\$/bbl)	43	55	58	62	60	59	63	63	63	63	63	60	61	60
Gas - Henry Hub (\$/mmbtu)	2.00	2.75	2.75	2.75	2.75	2.75	2.50	2.50	2.50	2.50	2.50	2.50	2.54	2.50
Commodity Currencies														
AUD/USD	0.69	0.78	0.80	0.76	0.76	0.78	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75

Source: Credit Suisse estimates

Australian ESG

Rio outlines response to Juukan

Thematic Research | Environmental, Social and Governance (ESG) Research

Environmental, Social and Governance (ESG) Research

Today (23 Mar) we attended the Rio Tinto (RIO.AX) investor briefing on its *Community & Social Performance: Cultural Heritage*. Key takeaways included:

- **Tone from the top:** In his introductory remarks, the new Chief Executive Jakob Stausholm was clear that the destruction of the caves at Juukan Gorge “should never have happened” and the company would seek to repair its relationship with indigenous groups. A large part of the statements, and indeed the overall rhetoric of the event, focused on acknowledging past mistakes. RIO had “failed to uphold [its] values” and had not achieved “genuine partnerships with the Traditional Owners.” The new management team clearly wants a re-set post Juukan Gorge; however, in our view, the tenor was more about drawing a line in the sand. In truth, RIO is still bedding down its new social performance function and strategy and, with a big step-up in funding for social performance, there will be more detail to follow on the pathway forward. Of the tangible aspects communicated so far, a new Indigenous Advisory Group has been formed and more detail was provided on the new governance structure that will be implemented to oversee social performance.
- **Indigenous Advisory Group:** The IAG aims to bring diversity & breadth of views to support and challenge key social performance considerations and decisions. The 5-8 members will provide input on how to redevelop industry leading land use agreements with Indigenous groups. An aspiration to return to sector leading best practice was set. Additionally, US\$50m will be invested in an Indigenous leadership program. To date, over 200 employees are participating in the development program, with 62 senior leaders and indigenous employees engaging in a two-way mentoring program. Since August 2020, the Indigenous leadership program has doubled the number of Indigenous leaders from 7 to 15.
- **Back to the future governance structure:** Citing procedural failures as a key cause of the Juukan incident, a refreshed governance structure included “three lines of defence.” Sitting within the Sustainability Committee, chaired by board member Megan Clark AC, the first line of defence is [mine site] Operations, with the responsibility for Traditional Owner relationships returning to General Managers at the asset level, as they were prior to the changes in 2015. Genuine partnerships will be a focus at all levels of operations to ensure ongoing consultation on decision-making. The Communities and Social Performance (CSP) Function will now be the second line of defence, responsible for conducting internal assessment and regular reviews of asset performance against standards, training and development. The final line of defence is the Group Internal Audit of control effectiveness. Finally, significant changes will be made to the bonus structure, incorporating both ESG and CSP objectives and performance assessment.
- **Less clear on international impact and response:** When questioned on the cascading impact of Juukan on stakeholder relations at other operations, the management team was less clear, noting major differences in approaches in different jurisdictions. Resolution Copper was referred to as a very “unique situation” and the CEO was more sanguine than expected given the recent rejection of the Environmental Impact Assessment (EIA) by the US Forest Service. The rejection of the EIA means that the prior approval under the Trump administration is rescinded and the US Department of Agriculture, which is the competence authority with ultimate responsibility for the decision, has set an indefinite interregnum on next steps in the process. It remained unclear whether the revamped approach to social performance would be universally applied across all jurisdictions, partly because of the drastically different regulatory frameworks.

Credit Suisse Environmental, Social and Governance (ESG) research seeks to focus on sustainability and accountability factors that are then integrated into the investment process.

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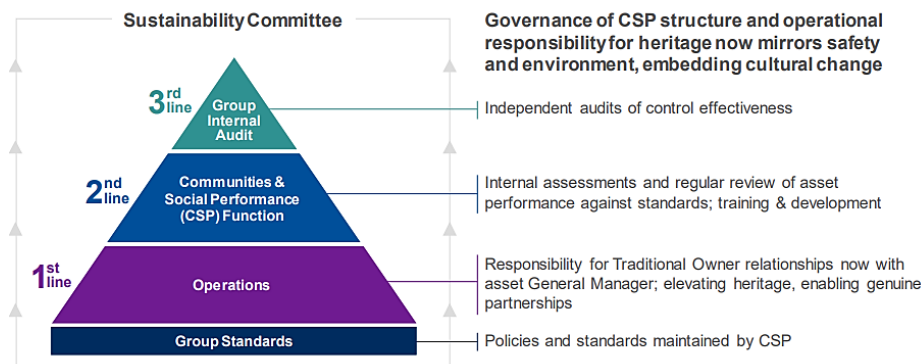
- **Looking forward:** Rio acknowledged “impeccable” ESG and social licence as essential to the business, and committed to stronger protocols to ensure an event like Juukan Gorge cannot happen again. One of the concluding sentiments was a clear aspiration to be reinstated as the industry leader in indigenous relations. Only time will reveal if this new approach will be enough to achieve that.

Figure 1: Rio actions to ensure changes are effective

<p>1. Progress and implementation</p> <ul style="list-style-type: none"> Reporting to the Board every two months Discussion at Exco and Australian SteerCo monthly Iron ore leadership review implementation plans fortnightly Internal audit programme Escalation of approvals of high significance to CEO and Board 	<p>3. Ongoing dialogue with Traditional Owners</p> <ul style="list-style-type: none"> Indigenous Advisory Group Regular day to day interaction: striving for genuine partnership at asset level
<p>2. Traditional Owners' perception of results from our changes</p> <ul style="list-style-type: none"> Regular site visits – i.e. Sustainability Chair to visit Pilbara three times in 2021 Indigenous Advisory Group 	<p>4. Global application</p> <ul style="list-style-type: none"> CSP global standard setting and programme monitoring considering local legislative framework and context
	<p>5. External reporting and engagement</p> <ul style="list-style-type: none"> Chair engagement with Indigenous leaders via roundtables and other forums Regular reporting covering progress on implementation, activities, stakeholder feedback and future priorities

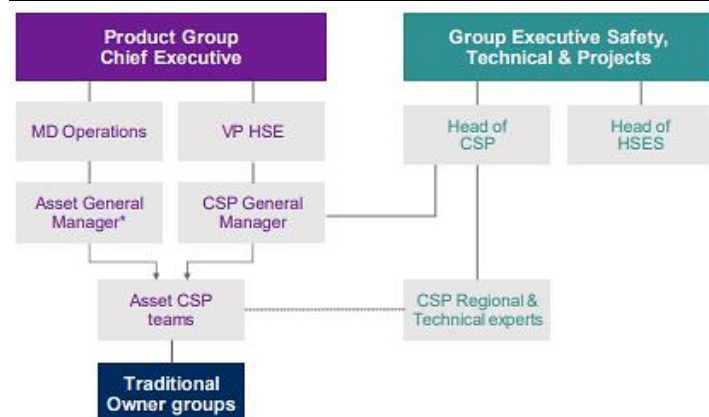
Source: Company data

Figure 2: Three lines of defence



Source: Company data

Figure 3: Structure of the Communities and Social Performance Function



Source: Company data

Figure 4: 2021 priorities framed by five areas

01	Team capability	<ul style="list-style-type: none"> - Recruiting to complement existing technical capability to bring up to 18-20 full time equivalent roles - Building of cultural awareness and competence
02	Skills & training	<ul style="list-style-type: none"> - H1 2021 training programme development, with H2 rollout - Skills assessment; integrated development plans before end 2021 - Establish Community of Practice for sharing of best practices globally
03	Assurance	<ul style="list-style-type: none"> - 25 Business Conformance Audits (BCAs) to be conducted by asset/site independent CSP auditors on-site or remotely - Growing our own auditor pool (12+) and improving effectiveness of audits
04	Systems	<ul style="list-style-type: none"> - System design and implementation of a single CSP incident management system before end 2021
05	Standards and risk management	<ul style="list-style-type: none"> - Global standards refresh and rollout before end 2021 - Risk review of group controls across function and assets; integration into assurance/reporting

Source: Company data

Credit Suisse Ratings – Australia

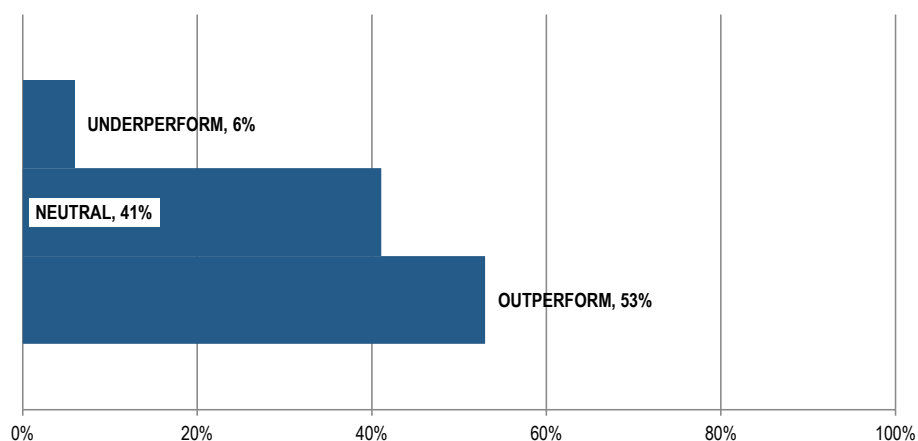
As of Tuesday, 23 March 2021

RATINGS

Figure 2: Credit Suisse stock ratings – distribution

Research Analysts

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See Figure 3 for ratings on each stock covered by Credit Suisse, ranked by expected total return.

Source: Credit Suisse estimates

Stock ratings

Individual stock ratings are determined by the projected total return on a stock relative to absolute return benchmarks.

Analysts project a 12-month target share price for each stock. The capital gain or loss implied by the 12-month target share price, along with the analyst's projected prospective dividend yield, generates the analyst's projected total return for a given stock.

The absolute return required to achieve an Outperform rating is greater than or equal to 7.5%, and to achieve an Underperform rating is less than or equal to 5.0%. A Neutral rating requires a projected total return within the range of -5.0% and +15.0%. Thus, there is an overlapping range for the Neutral rating band (see Figure 2). The overlapping rating range allows analysts to assign a rating that puts their projected total return in the context of associated risks

Figure 3: Rating system parameters

	ETR Range
Outperform	$\geq 7.5\%$
Neutral (<i>overlaps with Outperform and Underperform</i>)	-5% - 15.0%
Underperform	$\leq 5.0\%$

Source: Credit Suisse Research, Australia

Given the dynamic nature of share prices an analyst's rating can become out of sync with the projected total return as the share price moves. The rating must only be viewed as valid with respect to projected total return at the time of rating or target price changes.

Figure 4: Ranking by projected total return

Code	Share Price	Target Price	Total Return**	Rating^
NCZ.AX	\$0.18	\$0.45	177%	OUTPERFORM
RRL.AX	\$3.07	\$5.10	70%	OUTPERFORM
SBM.AX	\$2.02	\$3.30	65%	OUTPERFORM
CRN.AX	\$1.02	\$1.60	60%	OUTPERFORM
KGN.AX	\$13.33	\$20.85	59%	OUTPERFORM
IFM.AX	\$1.51	\$2.30	56%	OUTPERFORM
NST.AX	\$9.93	\$14.75	51%	OUTPERFORM
IFL.AX	\$3.56	\$4.95	45%	OUTPERFORM
NCM.AX	\$24.80	\$33.90	39%	OUTPERFORM
AQZ.AX	\$3.98	\$5.40	38%	OUTPERFORM
SWM.AX	\$0.51	\$0.70	37%	OUTPERFORM
WGN.AX	\$1.86	\$2.50	36%	OUTPERFORM
APT.AX	\$107.14	\$145.00	35%	OUTPERFORM
CAJ.AX	\$0.33	\$0.43	35%	OUTPERFORM
FMG.AX	\$19.40	\$23.50	34%	OUTPERFORM
SFR.AX	\$5.66	\$7.20	33%	OUTPERFORM
ALU.AX	\$26.76	\$35.00	32%	OUTPERFORM
MMS.AX	\$11.16	\$14.00	32%	OUTPERFORM
OML.AX	\$1.75	\$2.30	31%	OUTPERFORM
ADB.AX	\$7.40	\$9.70	31%	OUTPERFORM
ASB.AX	\$2.20	\$2.75	30%	OUTPERFORM
DRR.AX	\$3.89	\$4.80	30%	OUTPERFORM
SUL.AX	\$11.73	\$14.64	29%	OUTPERFORM
QBE.AX	\$9.59	\$11.80	28%	OUTPERFORM
ALX.AX	\$5.89	\$7.20	27%	OUTPERFORM
HUM.AX	\$0.97	\$1.20	27%	NEUTRAL
SKI.AX	\$2.20	\$2.65	26%	OUTPERFORM
AWC.AX	\$1.68	\$2.00	26%	OUTPERFORM
CIM.AX	\$18.16	\$21.90	25%	NEUTRAL
DBI.AX	\$2.14	\$2.50	25%	OUTPERFORM
LFG.AX	\$7.45	\$8.90	25%	OUTPERFORM
COL.AX	\$15.79	\$19.04	25%	NEUTRAL
HTI.AX	\$1.76	\$2.10	24%	OUTPERFORM
BXB.AX	\$10.30	\$12.50	24%	OUTPERFORM
OGC.AX	\$2.11	\$2.60	24%	OUTPERFORM
PRJ.AX	\$1.21	\$1.45	24%	OUTPERFORM
ORI.AX	\$13.94	\$16.84	24%	OUTPERFORM
RIO.AX	\$107.76	\$124.00	23%	OUTPERFORM
EVN.AX	\$4.28	\$5.10	23%	OUTPERFORM
IRE.AX	\$9.30	\$11.00	23%	OUTPERFORM
SXYDA.AX	\$2.93	\$3.52	23%	OUTPERFORM
MFG.AX	\$45.21	\$53.00	22%	NEUTRAL
CSL.AX	\$261.00	\$315.00	22%	OUTPERFORM
SUN.AX	\$9.88	\$11.40	21%	OUTPERFORM
TLS.AX	\$3.33	\$3.85	20%	OUTPERFORM
MND.AX	\$10.52	\$12.15	20%	NEUTRAL
ING.AX	\$3.43	\$3.95	20%	OUTPERFORM
MTS.AX	\$3.55	\$4.08	20%	OUTPERFORM
WSA.AX	\$2.06	\$2.45	19%	OUTPERFORM
RMD.AX	\$24.95	\$29.50	19%	OUTPERFORM
DOW.AX	\$5.17	\$5.95	19%	OUTPERFORM
GUD.AX	\$12.23	\$14.00	19%	OUTPERFORM
ABP.AX	\$2.72	\$3.04	18%	OUTPERFORM
BAP.AX	\$7.35	\$8.50	18%	OUTPERFORM
SIQ.AX	\$6.46	\$7.24	18%	OUTPERFORM
CWN.AX	\$11.85	\$13.50	18%	OUTPERFORM
WPL.AX	\$24.47	\$27.57	18%	OUTPERFORM
SDF.AX	\$3.84	\$4.40	17%	OUTPERFORM
SHL.AX	\$34.91	\$40.00	17%	OUTPERFORM
COE.AX	\$0.29	\$0.34	17%	NEUTRAL
PPT.AX	\$33.18	\$37.00	17%	OUTPERFORM
WTC.AX	\$27.45	\$32.00	17%	NEUTRAL
PBH.AX	\$13.71	\$16.00	17%	NEUTRAL
MPL.AX	\$2.90	\$3.25	16%	OUTPERFORM
TGR.AX	\$3.48	\$3.90	16%	OUTPERFORM
DHG.AX	\$4.34	\$5.00	16%	NEUTRAL
IAG.AX	\$4.78	\$5.35	16%	OUTPERFORM
BOQ.AX	\$8.51	\$9.50	16%	OUTPERFORM
RWC.AX	\$4.42	\$5.00	16%	OUTPERFORM
SVW.AX	\$22.43	\$25.40	15%	OUTPERFORM
JBH.AX	\$51.49	\$57.03	15%	NEUTRAL
WES.AX	\$51.10	\$57.04	15%	NEUTRAL
ALD.AX	\$24.56	\$27.50	15%	NEUTRAL
SYR.AX	\$1.09	\$1.25	15%	NEUTRAL
GWA.AX	\$2.86	\$3.15	15%	NEUTRAL
CAR.AX	\$18.14	\$20.20	14%	NEUTRAL
GOZ.AX	\$3.28	\$3.54	14%	OUTPERFORM
NEC.AX	\$2.94	\$3.25	14%	OUTPERFORM
GMG.AX	\$17.48	\$19.62	14%	OUTPERFORM
ECK.AX	\$1.86	\$2.05	14%	OUTPERFORM
BPT.AX	\$1.74	\$1.96	14%	OUTPERFORM
COR.AX	\$3.73	\$3.99	13%	OUTPERFORM
APA.AX	\$9.99	\$10.80	13%	OUTPERFORM
COH.AX	\$205.43	\$230.00	13%	NEUTRAL
WHC.AX	\$1.74	\$1.95	13%	OUTPERFORM
HUB.AX	\$24.07	\$27.00	13%	OUTPERFORM
BRG.AX	\$27.08	\$30.20	13%	NEUTRAL
CHC.AX	\$12.91	\$14.14	13%	NEUTRAL
COF.AX	\$2.05	\$2.14	12%	OUTPERFORM
XRO.AX	\$121.11	\$136.00	12%	OUTPERFORM
IDX.AX	\$4.58	\$5.00	12%	NEUTRAL

Source: ASX, CS estimates. Correct as of 9PM AET on 23 March 2021.

**Projected capital gain or loss plus gross dividend yield.

Figure 3: Ranking by projected total return (continued)

Code	Share Price	Target Price	Total Return**	Rating^
MGR.AX	\$2.44	\$2.63	12%	OUTPERFORM
SEK.AX	\$27.63	\$30.50	12%	OUTPERFORM
AST.AX	\$1.84	\$1.95	12%	NEUTRAL
AUB.AX	\$18.43	\$20.00	11%	OUTPERFORM
NWL.AX	\$15.95	\$17.50	11%	NEUTRAL
AMC.AX	\$14.76	\$15.70	11%	NEUTRAL
GNC.AX	\$4.71	\$5.06	11%	NEUTRAL
ANZ.AX	\$28.00	\$29.50	11%	OUTPERFORM
NXT.AX	\$10.77	\$11.90	10%	NEUTRAL
APX.AX	\$18.20	\$20.00	10%	NEUTRAL
DXS.AX	\$9.45	\$9.92	10%	OUTPERFORM
GPT.AX	\$4.57	\$4.78	10%	OUTPERFORM
CTD.AX	\$20.18	\$22.00	9%	OUTPERFORM
WBC.AX	\$24.43	\$25.50	9%	OUTPERFORM
HUO.AX	\$2.52	\$2.70	9%	NEUTRAL
360.AX	\$4.96	\$5.40	9%	OUTPERFORM
S32.AX	\$2.71	\$2.90	9%	OUTPERFORM
NAB.AX	\$25.94	\$27.00	9%	OUTPERFORM
BSL.AX	\$18.58	\$20.00	8%	OUTPERFORM
JHX.AX	\$37.89	\$40.00	8%	NEUTRAL
RHC.AX	\$67.13	\$71.00	8%	NEUTRAL
SIG.AX	\$0.70	\$0.73	8%	OUTPERFORM
BEN.AX	\$9.63	\$9.80	8%	NEUTRAL
ORE.AX	\$4.65	\$5.00	8%	NEUTRAL
ARB.AX	\$34.96	\$37.00	8%	NEUTRAL
VCX.AX	\$1.67	\$1.69	7%	NEUTRAL
CIP.AX	\$3.18	\$3.24	7%	NEUTRAL
PDL.AX	\$6.42	\$6.50	7%	NEUTRAL
NHF.AX	\$5.31	\$5.50	7%	NEUTRAL
SCP.AX	\$2.46	\$2.50	7%	NEUTRAL
SCG.AX	\$2.91	\$2.97	7%	NEUTRAL
SGP.AX	\$4.39	\$4.42	7%	NEUTRAL
LLC.AX	\$13.03	\$13.47	7%	OUTPERFORM
CGC.AX	\$4.55	\$4.70	6%	NEUTRAL
WOW.AX	\$39.70	\$40.80	6%	NEUTRAL
CGF.AX	\$6.50	\$6.65	6%	OUTPERFORM
TCL.AX	\$12.74	\$13.00	6%	NEUTRAL
TWE.AX	\$10.92	\$11.30	6%	NEUTRAL
CWY.AX	\$2.23	\$2.30	5%	NEUTRAL
HLS.AX	\$4.14	\$4.25	5%	OUTPERFORM
VEA.AX	\$1.72	\$1.78	5%	NEUTRAL
CSR.AX	\$5.53	\$5.60	5%	OUTPERFORM
IGO.AX	\$6.25	\$6.40	4%	NEUTRAL
TPG.AX	\$6.90	\$7.05	4%	NEUTRAL
PMV.AX	\$23.22	\$23.09	4%	NEUTRAL
RIC.AX	\$1.15	\$1.15	4%	OUTPERFORM
NWS.AX	\$31.65	\$32.50	4%	OUTPERFORM
ASX.AX	\$70.74	\$71.00	3%	NEUTRAL
REA.AX	\$134.05	\$136.70	3%	UNDERPERFORM
UMG.AX	\$4.17	\$4.21	3%	OUTPERFORM
NUF.AX	\$4.93	\$5.00	3%	NEUTRAL
ALL.AX	\$34.16	\$34.50	3%	OUTPERFORM
CBA.AX	\$84.77	\$85.00	2%	NEUTRAL
QUB.AX	\$3.00	\$3.00	2%	NEUTRAL
NHC.AX	\$1.35	\$1.30	2%	NEUTRAL
ARF.AX	\$3.14	\$3.04	2%	NEUTRAL
BIN.AX	\$3.14	\$3.15	2%	NEUTRAL
SGR.AX	\$3.88	\$3.85	1%	NEUTRAL
ORG.AX	\$4.78	\$4.60	1%	NEUTRAL
HVN.AX	\$5.84	\$5.65	1%	NEUTRAL
SGM.AX	\$13.66	\$13.35	0%	NEUTRAL
STO.AX	\$7.17	\$7.01	0%	NEUTRAL
AGL.AX	\$10.47	\$9.70	-1%	UNDERPERFORM
BHP.AX	\$44.95	\$42.00	-1%	NEUTRAL
BKL.AX	\$82.59	\$80.00	-1%	NEUTRAL
TAH.AX	\$4.82	\$4.60	-1%	NEUTRAL
MOG.AX	\$151.02	\$145.00	-2%	NEUTRAL
IPL.AX	\$2.84	\$2.73	-2%	NEUTRAL
PLS.AX	\$0.98	\$0.95	-3%	NEUTRAL
WOR.AX	\$10.71	\$10.00	-3%	NEUTRAL
STX.AX	\$0.32	\$0.31	-3%	OUTPERFORM
PTM.AX	\$4.90	\$4.50	-3%	NEUTRAL
ORA.AX	\$3.01	\$2.80	-3%	NEUTRAL
BLD.AX	\$5.40	\$5.05	-4%	NEUTRAL
CPU.AX	\$14.99	\$13.90	-4%	NEUTRAL
HMC.AX	\$4.40	\$3.90	-4%	NEUTRAL
WEB.AX	\$5.94	\$5.40	-9%	OUTPERFORM
APE.AX	\$14.64	\$13.00	-10%	NEUTRAL
PGH.AX	\$3.52	\$2.95	-12%	NEUTRAL
MYX.AX	\$0.37	\$0.32	-12%	NEUTRAL
ABC.AX	\$3.10	\$2.60	-13%	UNDERPERFORM
OSH.AX	\$4.26	\$3.61	-13%	UNDERPERFORM
API.AX	\$1.30	\$1.05	-14%	NEUTRAL
ILU.AX	\$6.84	\$5.70	-15%	UNDERPERFORM
SYD.AX	\$6.02	\$5.00	-15%	UNDERPERFORM
FLT.AX	\$18.90	\$15.44	-18%	UNDERPERFORM
QAN.AX	\$5.21	\$4.15	-20%	UNDERPERFORM
DMP.AX	\$96.90	\$71.11	-25%	UNDERPERFORM
OZL.AX	\$22.58	\$16.15	-27%	UNDERPERFORM

Source: ASX, CS estimates. Correct as of 9PM AET on 23 March 2021.

**Projected capital gain or loss plus gross dividend yield.

Top 100 Earnings & Dividends

Research Analyst
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24 March 2021

As at 23 March 2021	Ticker	Year to	Rating	Share Price \$	12M Tgt \$	Mkt Cap \$m	2021 \$m	NPAT 2022 \$m	2023 \$m	2021 €	EPS 2022 €	2023 €	2021 x	2022 x	2023 x	Relative PE 2021 %	2022 %	2023 %	2021 €	2022 €	2023 €	2021 %	2022 %	2023 %	2021 x	2022 x	2023 x	Fkg 2022 %	Analyst Name	
Energy																														
Ampol Limited	ALD	31-Dec	NTRL	24.56	27.50	5,853	259.6	397.1	450.6	107.4	166.1	188.4	22.9	14.8	13.0	142.2	91.0	77.1	59.7	92.0	104.3	2.4	3.7	4.2	8.3	6.7	6.1	100	Grant Saligari	
Beach Energy	BPT	30-Jun	OPFM	1.74	1.96	3,970	312.0	393.1	486.0	13.7	17.2	21.3	12.7	10.1	8.2	79.2	62.2	48.4	2.0	2.0	2.0	1.1	1.1	1.1	4.5	3.8	3.2	100	Saul Kavonic	
Origin Energy	ORG	30-Jun	NTRL	4.78	4.60	8,419	335.3	474.0	605.2	19.0	26.9	34.3	25.1	17.8	13.9	156.2	109.4	82.4	25.0	25.0	27.0	5.2	5.2	5.6	6.4	5.7	5.1	0	Peter Wilson	
Oil Search	OSH	31-Dec	UPFM	4.26	3.61	6,806	342.5	514.7	538.6	16.2	24.3	25.4	20.2	13.5	12.9	125.9	82.9	76.1	7.3	10.9	11.4	2.2	3.3	3.5	8.6	6.5	6.6	0	Saul Kavonic	
Santos Ltd	STO	31-Dec	NTRL	7.17	7.01	11,484	749.9	946.9	798.6	35.7	45.1	38.1	15.4	12.2	14.5	95.9	75.2	85.7	9.8	10.6	8.5	1.8	1.9	1.5	6.3	5.5	6.2	100	Saul Kavonic	
Worley	WOR	30-Jun	NTRL	10.71	10.00	5,591	213.8	289.7	314.3	40.8	55.4	60.1	26.2	19.3	17.8	163.1	119.0	105.4	44.4	38.8	42.1	4.1	3.6	3.9	10.3	8.4	7.6	0	Saul Kavonic	
Woodside Petroleum	WPL	31-Dec	OPFM	24.47	27.57	18,104	1,121.7	968.4	1,088.2	119.8	103.4	116.2	15.7	18.2	16.2	97.6	111.9	95.7	95.9	82.8	93.0	5.1	4.4	4.9	5.8	6.3	5.8	100	Saul Kavonic	
Sector Aggregate													17.8	15.2	14.3				3.5	3.5	3.8	6.6	6.0	5.8						
Materials - Chemicals																														
Inclitec Pivot	IPL	30-Sep	NTRL	2.84	2.73	5,516	194.9	277.6	357.6	10.0	14.3	18.4	28.3	19.9	15.4	176.1	122.4	91.3	5.2	7.4	9.6	1.8	2.6	3.4	9.3	7.7	6.7	50	Grant Saligari	
Orica	ORI	30-Sep	OPFM	13.94	16.84	5,673	188.5	342.8	391.9	46.3	84.1	96.2	30.1	16.6	14.5	187.3	101.9	85.7	29.7	55.0	62.9	2.1	3.9	4.5	8.9	6.9	6.4	30	Grant Saligari	
Sector Aggregate													29.2	18.1	14.9				2.0	3.3	3.9	9.1	7.3	6.5						
Materials - Construction Materials																														
Boral	BLD	30-Jun	NTRL	5.40	5.05	6,619	289.1	353.8	406.5	24.2	29.6	34.0	22.3	18.2	15.9	138.8	112.2	93.9	0.0	16.5	19.0	0.0	3.1	3.5	7.5	7.5	6.8	50	Peter Wilson	
James Hardie Industries plc	JHX	31-Mar	NTRL	37.89	40.00	12,940	447.4	548.1	640.5	100.6	123.3	144.0	29.0	23.6	20.2	180.0	145.4	119.6	70.0	74.0	87.0	2.4	2.5	3.0	18.1	15.5	13.5	0	Peter Wilson	
Sector Aggregate													27.0	21.8	18.8				1.7	2.7	3.1	13.1	11.9	10.6						
Materials - Containers & Packaging																														
Amcor	AMC	30-Jun	NTRL	14.76	15.70	18,411	1,165.6	1,251.6	1,289.4	74.7	81.9	87.4	15.2	13.8	13.0	94.5	85.2	76.8	49.0	53.0	57.0	4.3	4.7	5.0	11.7	11.1	10.7	0	Larry Gandler	
Orora	ORA	30-Jun	NTRL	3.01	2.80	2,768	153.6	161.8	172.1	16.5	18.5	19.7	18.2	16.2	15.3	113.3	99.9	90.3	12.0	13.3	13.8	4.0	4.4	4.6	9.0	8.5	8.0	40	Larry Gandler	
Materials - Metals & Mining																														
Alumina Limited	AWC	31-Dec	OPFM	1.68	2.00	3,737	218.9	286.6	335.7	7.5	9.9	11.6	17.1	13.0	11.1	106.1	80.2	65.8	7.6	9.5	10.8	5.9	7.4	8.4	17.1	13.1	11.2	100	Sam Webb	
BHP Group Limited	BHP	30-Jun	NTRL	44.95	42.00	161,770	16,312.3	15,707.2	12,464.7	321.8	309.9	245.9	10.7	11.2	14.1	66.8	68.6	83.1	273.7	155.3	123.2	7.9	4.5	3.6	4.9	5.1	5.9	100	Sam Webb	
BlueScope Steel	BSL	30-Jun	OPFM	18.58	20.00	9,361	917.1	941.3	771.0	180.5	188.8	161.1	10.3	9.8	11.5	64.0	60.6	68.2	14.0	14.0	14.0	0.8	0.8	0.8	4.9	4.6	5.1	0	Nick Herbert	
Evolution Mining Limited	EVN	30-Jun	OPFM	4.28	5.10	7,313	459.3	678.0	645.2	26.8	39.5	37.6	16.0	10.8	11.4	99.3	66.7	67.4	11.5	19.9	8.3	2.7	4.7	1.9	7.2	5.1	5.3	100	Nick Herbert	
Fortescue Metals Group Ltd	FMG	30-Jun	OPFM	19.40	23.50	45,928	10,045.9	7,088.1	4,893.3	326.3	230.2	158.9	4.6	6.5	9.4	28.4	39.9	55.5	261.2	166.0	113.3	17.5	11.1	7.6	2.8	4.0	5.3	100	Sam Webb	
IGO Limited	IGO	30-Jun	NTRL	6.25	6.40	4,733	149.9	214.6	251.4	21.1	28.7	33.6	29.6	21.8	18.6	183.9	134.0	110.0	6.0	12.0	12.0	1.0	1.9	1.9	7.6	5.7	5.1	0	Nick Herbert	
Newcrest Mining	NCM	30-Jun	OPFM	24.80	33.90	15,571	1,256.3	1,626.0	1,429.3	153.7	198.5	174.5	12.4	9.6	10.9	77.2	59.1	64.6	40.0	45.0	15.0	2.1	2.4	0.8	6.2	5.1	5.8	0	Nick Herbert	
Northern Star Resources Ltd	NST	30-Jun	OPFM	9.93	14.75	11,553	912.9	1,711.5	1,588.7	95.7	146.8	136.2	10.4	6.8	7.3	64.5	41.6	43.1	20.3	26.3	26.3	2.0	2.7	2.7	6.1	3.5	3.3	0	Nick Herbert	
OZ Minerals	OZL	31-Dec	UPFM	22.58	16.15	7,491	365.5	469.6	321.0	112.1	144.1	98.5	20.1	15.7	22.9	125.2	96.4	135.6	25.0	23.0	23.0	1.1	1.0	1.0	9.0	7.6	9.3	100	Nick Herbert	
Rio Tinto	RIO	31-Dec	OPFM	107.76	124.00	123,675	19,707.3	15,299.0	10,154.8	1209.6	939.0	623.3	6.9	8.8	13.3	42.6	54.3	78.6	718.9	560.7	369.1	8.7	6.8	4.5	3.3	3.9	5.2	100	Sam Webb	
South 32	S32	30-Jun	OPFM	2.71	2.90	9,948	432.1	418.8	479.8	9.1	9.0	10.3	22.8	23.2	20.3	141.9	143.0	120.0	3.9	3.6	4.1	1.9	1.7	2.0	6.3	6.4	5.6	100	Sam Webb	
Sector Aggregate													8.2	9.7	12.9				8.3	5.7	4.1	4.0	4.8	5.6						
Industrials - Capital Goods																														
Reliance Worldwide	RWC	30-Jun	OPFM	4.42	5.00	3,492	185.3	181.7	190.3	23.2	22.7	23.8	19.1	19.5	18.6	118.7	119.8	110.0	11.5	10.5	11.0	2.6	2.4	2.5	11.8	11.5	10.8	100	Peter Wilson	
Sector Aggregate													19.1	19.5	18.6				2.6	2.4	2.5	11.8	11.5	10.8						
Industrials - Commercial & Professional Services																														
ALS Ltd	ALQ	31-Mar	OPFM	9.78	10.40	4,718	180.5	222.9	231.7	37.2	45.9	47.7	26.3	21.3	20.5	163.6	131.1	121.2	18.8	27.7	28.8	1.9	2.8	2.9	12.9	11.0	10.4	100	Paul Butler	
Brambles	BXB	30-Jun	OPFM	10.30	12.50	11,603	579.9	613.8	644.2	38.3	42.8	46.2	20.7	18.5	17.2	128.5	113.9	101.5	27.4	30.3	32.7	2.7	3.0	3.2	7.5	7.5	7.0	30	Paul Butler	
Cleanaway Waste Management	CWY	30-Jun	NTRL	2.23	2.30	4,589	158.6	187.9	207.3	7.7	9.1	10.1	28.9	24.4	22.1	179.8	150.3	130.9	4.4	5.0	5.5	2.0	2.3	2.5	10.3	9.0	8.2	100	Paul Butler	
Downer EDI	DOW	30-Jun	OPFM	5.17	5.95	3,626	204.1	244.8	273.7	31.5	34.9	39.0	16.4	14.8	13.3	102.0	91.2	78.4	17.2	20.9	23.0	3.3	4.0	4.4	5.7	5.5	5.1	50	Matthew Nicholas	
Sector Aggregate													21.4	19.2	17.7				2.5	3.0	3.2	8.0	7.8	7.3						
Industrials - Transportation																														
Atlas Arteria	ALX	31-Dec	OPFM	5.89	7.20	5,649	199.5	311.7	337.2	20.8	32.5	35.2	28.3	18.1	16.8	176.0	111.5	99.1	27.0	35.5	50.6	4.6	6.0	8.6	20.4	15.4	14.2	0	Paul Butler	
Aurizon	AZJ	30-Jun	OPFM	3.88	5.55	7,142	524.2	560.8	616.7	28.0	31.5	35.7	13.9	12.3	10.9	86.3	75.8	64.3	28.0	31.5	35.7	7.2	8.1	9.2	7.4	7.3	6.9	70	Paul Butler	
Qantas	QAN	30-Jun	UPFM	5.21	4.15	9,826	1,509.9	233.0	746.9	-81.0	12.5	40.1	n.m	41.7	13.0	n.m	256.5	76.9	0.0	0.0	0.0	0.0	0.0	0.0	25.9	5.8	4.6	100	Paul Butler	
Qube Holdings Limited	QUB	30-Jun	NTRL	3.00	3.00	5,708	120.6	183.9	207.2	6.4	10.5	12.9	46.9	28.4	23.2	291.6	175.1	137.2	5.8	6.9	7.7	1.9	2.3	2.6	17.2	17.1	14.6	100	Paul Butler	
Sydney Airport	SYD	31-Dec	UPFM	6.02	5.00	16,246	129.5	235.1	394.1	-4.8	8.7	14.6	n.m	69.1	41.2	n.m	425.2	243.8	8.0	24.5	31.3	1.3	4.1	5.2	44.2	22.8	19.2	50	Paul Butler	
Transurban	TCL	30-Jun	NTRL	12.74	13.00	34,884	-	559.8	189.1	430.7	-20.5	6.9	15.8	n.m	n.m	80.6	n.m	n.m	476.7	33.8	50.4	58.1	2.7	4.0	4.6	25.4	20.0	18.0	14	Paul Butler
Sector Aggregate													n.m	45.3	28.1				2.5	3.9	4.7	21.5	13.7	11.8						

Top 100 Earnings & Dividends (continued)

As at 23 March 2021	Ticker	Year to	Rating	Share Price \$	12M Tgt \$	Mkt Cap \$m	NPAT 2021 \$m	NPAT 2022 \$m	NPAT 2023 \$m	EPS 2021 €	EPS 2022 €	EPS 2023 €	PE 2021 x	PE 2022 x	PE 2023 x	Relative PE 2021 %	Relative PE 2022 %	Relative PE 2023 %	Dividend 2021 €	Dividend 2022 €	Dividend 2023 €	Dividend Yield 2021 %	Dividend Yield 2022 %	Dividend Yield 2023 %	EBITDA Multiple 2021 x	EBITDA Multiple 2022 x	EBITDA Multiple 2023 x	F'kg 2022 %	Analyst Name	
Consumer Discretionary - Consumer Durables & Apparel																														
Consumer Discretionary - Consumer Services																														
Aristocrat Leisure	ALL	30-Sep	OPFM	34.16	34.50	21,813	618.2	913.7	1,054.1	96.8	143.1	171.8	35.3	23.9	19.9	219.4	146.9	117.6	40.0	64.0	77.0	1.2	1.9	2.3	18.7	14.1	13.4	75	Larry Gandler	
Crown	CWN	30-Jun	OPFM	11.85	13.50	8,024	-	13.4	259.2	383.7	-2.0	38.3	56.7	n.m	31.0	20.9	n.m	190.5	123.7	0.0	60.0	60.0	0.0	5.1	5.1	26.6	10.8	8.4	50	Larry Gandler
Dominio's Pizza Enterprises	DMP	30-Jun	UPFM	96.90	71.11	8,384	183.2	205.9	227.8	211.7	237.8	263.1	45.8	40.8	36.8	284.5	250.8	217.8	158.8	166.6	184.3	1.6	1.7	1.9	22.7	20.8	18.8	50	Grant Salgari	
Star Entertainment Group	SGR	30-Jun	NTRL	3.88	3.85	3,559	109.0	167.2	211.7	11.4	17.5	22.2	33.9	22.1	17.5	210.7	136.1	103.3	0.0	12.0	16.0	0.0	3.1	4.1	11.2	9.2	8.8	100	Larry Gandler	
Tabcorp Holdings	TAH	30-Jun	NTRL	4.82	4.60	10,708	364.0	439.8	475.4	16.6	19.8	21.4	29.0	24.4	22.5	180.4	149.9	133.3	13.5	16.0	18.0	2.8	3.3	3.7	12.0	10.7	10.1	100	Larry Gandler	
Sector Aggregate													41.6	26.5	22.0							1.3	2.7	3.1	17.2	12.9	11.7			
Consumer Discretionary - Retailing																														
JB Hi-Fi	JBH	30-Jun	NTRL	51.49	57.03	5,915	467.5	374.3	363.8	404.1	323.6	314.5	12.7	15.9	16.4	79.2	97.9	96.8	264.8	212.0	206.0	5.1	4.1	4.0	7.3	8.4	8.4	100	Grant Salgari	
Wesfarmers	WES	30-Jun	NTRL	51.10	57.04	57,939	2,325.7	2,283.3	2,366.7	205.2	201.2	208.5	24.9	25.4	24.5	154.8	156.3	144.9	168.4	181.2	169.3	3.3	3.5	3.3	12.9	13.0	12.6	100	Grant Salgari	
Sector Aggregate													22.9	24.1	23.4							3.5	3.6	3.4	12.1	12.4	12.0			
Consumer Staples - Food & Drug Retailing																														
Coles Group Limited	COL	30-Jun	NTRL	15.79	19.04	21,063	1,038.2	1,118.7	1,135.4	77.8	83.9	85.1	20.3	18.8	18.6	126.1	115.9	109.7	63.5	69.1	70.1	4.0	4.4	4.4	8.8	8.5	8.4	100	Grant Salgari	
Woolworths	WOW	30-Jun	NTRL	39.70	40.80	50,235	1,993.9	2,071.8	2,222.9	157.9	163.7	175.7	25.1	24.2	22.6	156.3	149.2	133.7	114.1	119.7	128.4	2.9	3.0	3.2	10.5	10.2	9.7	100	Grant Salgari	
Sector Aggregate													23.5	22.3	21.2							3.2	3.4	3.6	10.0	9.6	9.3			
Consumer Staples - Food Beverage & Tobacco																														
Coca-Cola Amatl	CCL	31-Dec	RSTR	13.43		9,723	364.4	403.5	443.3	50.3	55.7	61.2	26.7	24.1	21.9	165.9	148.3	129.7	41.0	45.0	50.0	3.1	3.4	3.7	11.7	11.0	10.4	60	Larry Gandler	
Treasury Wine	TWE	30-Jun	NTRL	10.92	11.30	7,878	286.7	247.8	318.3	39.7	34.2	43.9	27.5	31.9	24.9	171.2	196.3	147.2	23.0	23.0	29.0	2.1	2.1	2.7	12.9	13.4	11.5	100	Larry Gandler	
Sector Aggregate													27.1	27.1	23.2							2.6	2.8	3.2	12.2	12.0	10.9			
Health Care																														
Ansell Limited	ANN	30-Jun	OPFM	38.84	47.00	3,838	215.0	225.8	227.1	163.7	170.6	170.4	18.2	17.5	17.5	113.4	107.7	103.7	68.2	77.0	76.0	2.3	2.6	2.5	11.3	10.6	10.3	0	Gretel Janu	
Cochlear	COH	30-Jun	NTRL	205.43	230.00	13,506	239.5	314.3	343.4	364.4	478.2	522.5	56.4	43.0	39.3	350.5	264.3	232.5	219.0	311.0	365.0	1.1	1.5	1.8	32.1	25.5	24.6	0	Gretel Janu	
CSL Ltd	CSL	30-Jun	OPFM	261.00	315.00	91,335	2,299.0	2,110.4	2,594.4	503.7	463.3	571.6	39.8	43.3	35.1	247.7	266.5	207.6	168.0	202.0	256.0	0.8	1.0	1.3	27.0	28.7	23.7	0	Gretel Janu	
Ramsay Health Care	RHC	30-Jun	NTRL	67.13	71.00	15,365	452.8	634.8	699.6	194.1	273.6	302.0	34.6	24.5	22.2	215.0	151.0	131.5	123.5	154.0	169.0	1.8	2.3	2.5	11.3	10.0	9.3	100	Gretel Janu	
ResMed Inc.	RMD	30-Jun	OPFM	24.95	29.50	34,478	756.7	840.2	979.4	51.6	56.7	65.4	37.2	33.8	29.3	231.1	208.2	173.6	15.8	16.6	17.4	0.8	0.9	0.9	31.4	28.3	24.4	0	Gretel Janu	
Sonic Healthcare	SHL	30-Jun	OPFM	34.91	40.00	16,682	1,128.6	774.4	769.9	234.4	159.5	157.3	14.9	21.9	22.2	92.6	134.7	131.3	93.0	97.0	95.0	2.7	2.8	2.7	7.6	9.2	9.0	30	Gretel Janu	
Sector Aggregate													34.4	35.2	30.5							1.1	1.3	1.5	21.1	21.1	18.7			
Financials - Banks																														
ANZ Banking Group	ANZ	30-Sep	OPFM	28.00	29.50	79,675	6,491.5	6,451.0	7,001.8	207.5	207.7	228.3	13.5	13.5	12.3	83.9	82.9	72.5	148.3	148.6	163.9	5.3	5.3	5.9	n.m	n.m	n.m	100	Jarrod Martin	
Bendigo and Adelaide Bank	BEN	30-Jun	NTRL	9.63	9.80	5,117	424.6	442.9	461.5	66.1	66.2	68.6	14.6	14.5	14.0	90.5	89.5	83.1	50.1	56.5	58.5	5.2	5.9	6.1	n.m	n.m	n.m	100	Jarrod Martin	
Bank of Queensland	BOQ	31-Aug	OPFM	8.51	9.50	5,442	328.5	337.1	467.4	52.1	49.9	68.2	16.3	17.1	12.5	101.6	104.9	73.8	35.4	35.6	49.4	4.2	4.2	5.8	n.m	n.m	n.m	100	Jarrod Martin	
Commonwealth Bank Australia	CBA	30-Jun	NTRL	84.77	85.00	150,390	7,903.9	8,285.5	8,710.1	427.4	450.6	480.5	19.8	18.8	17.6	123.3	115.8	104.3	310.1	330.2	379.4	3.7	3.9	4.5	n.m	n.m	n.m	100	Jarrod Martin	
National Australia Bank	NAB	30-Sep	OPFM	25.94	27.00	85,566	5,481.3	5,947.1	6,295.3	158.6	172.0	183.3	16.4	15.1	14.1	101.7	92.8	83.7	108.6	127.0	135.6	4.2	4.9	5.2	n.m	n.m	n.m	100	Jarrod Martin	
Westpac	WBC	30-Sep	OPFM	24.43	25.50	89,624	6,415.1	6,788.9	7,791.8	164.7	174.2	202.5	14.8	14.0	12.1	92.2	86.3	71.3	122.7	129.9	151.7	5.0	5.3	6.2	n.m	n.m	n.m	100	Jarrod Martin	
Sector Aggregate													16.3	15.6	14.2							4.4	4.7	5.3	6.3	4.2	7.5			

Source: Company data, Refinitiv, Credit Suisse estimates

Top 100 Earnings & Dividends (continued)

As at 23 March 2021	Ticker	Year to	Rating	Share Price \$	12M Tgt \$	Mkt Cap \$m	2021 \$m	NPAT 2022 \$m	2023 \$m	2021 EPS \$	2022 EPS \$	2023 EPS \$	2021 PE x	2022 PE x	2023 PE x	2021 Relative PE %	2022 Relative PE %	2023 Relative PE %	2021 Dividend \$	2022 Dividend \$	2023 Dividend \$	2021 Dividend Yield %	2022 Dividend Yield %	2023 Dividend Yield %	2021 EBITDA Multiple x	2022 EBITDA Multiple x	2023 EBITDA Multiple x	F'kg 2022 %	Analyst Name	
Financials - Diversified Financials																														
AMP Limited	AMP	31-Dec	RSTR	1.40		4,794	288.5	343.8	389.3	8.6	10.4	11.8	16.3	13.4	11.8	101.3	82.5	70.0	2.5	3.5	5.5	1.8	2.5	3.9	75.1	64.6	56.5	100	James Cordukes	
ASX	ASX	30-Jun	NTRL	70.74	71.00	13,695	476.6	465.2	482.8	246.2	240.3	249.4	28.7	29.4	28.4	178.6	181.2	167.8	221.6	216.2	224.4	3.1	3.1	3.2	19.1	19.1	18.4	100	James Cordukes	
Challenger Limited	CGF	30-Jun	OPFM	6.50	6.65	4,391	294.2	341.3	353.2	37.4	42.7	44.0	17.4	15.2	14.8	108.0	93.7	87.4	20.0	23.0	25.0	3.1	3.5	3.8	9.8	8.1	7.5	100	James Cordukes	
Magellan Financial Group	MFG	30-Jun	NTRL	45.21	53.00	8,309	432.6	497.7	574.6	235.7	270.9	312.8	19.2	16.7	14.5	119.2	102.7	85.5	211.7	240.9	272.5	4.7	5.3	6.0	14.1	12.1	10.4	75	James Cordukes	
Macquarie Group	MQG	31-Mar	NTRL	151.02	145.00	54,642	2,936.8	2,995.3	3,284.8	780.4	769.8	831.2	19.4	19.6	18.2	120.3	120.7	107.5	503.3	558.1	604.7	3.3	3.7	4.0	13.4	13.1	12.0	40	Jarrod Marlin	
Sector Aggregate													20.1	19.5	18.0				3.3	3.7	4.1	14.5	13.9	12.7						
Financials - Insurance																														
Insurance Australia Group	IAG	30-Jun	OPFM	4.78	5.35	11,783	-	131.9	758.5	839.6	-4.7	26.5	29.3	n.m	18.0	16.3	n.m	111.0	96.4	20.5	18.5	20.5	4.3	3.9	4.3	n.m	12.0	10.9	0	Doron Kur
Medibank Private Limited	MPL	30-Jun	OPFM	2.90	3.25	7,987	416.3	440.6	435.9	15.1	16.0	15.8	19.2	18.1	18.3	119.3	111.5	108.4	12.4	13.0	13.0	4.3	4.5	4.5	10.2	9.7	9.7	100	Doron Kur	
QBE Insurance Group	QBE	31-Dec	OPFM	9.59	11.80	10,877	679.9	984.5	1,134.6	46.3	67.1	77.3	15.9	11.0	9.5	99.0	67.7	56.4	39.1	55.0	62.9	4.1	5.8	6.6	16.6	11.4	9.9	0	Doron Kur	
Suncorp	SUN	30-Jun	OPFM	9.88	11.40	12,652	973.4	936.8	1,048.7	72.1	69.5	77.5	13.7	14.2	12.7	85.2	87.5	75.4	56.0	55.0	61.0	5.7	5.6	6.2	14.9	15.9	14.6	100	Doron Kur	
Sector Aggregate													22.1	14.3	12.8				4.6	5.0	5.5	19.0	12.1	11.1						
Financials - Real Estate																														
Charter Hall Group	CHC	30-Jun	NTRL	12.91	14.14	6,013	256.6	314.2	314.9	55.1	67.5	67.6	23.4	19.1	19.1	145.7	117.8	112.9	37.9	40.1	42.5	2.9	3.1	3.3	19.0	15.4	15.3	0	Peter Zuk	
Dexus	DXS	30-Jun	OPFM	9.45	9.92	10,164	584.2	589.3	606.0	53.8	55.8	57.5	17.6	16.9	16.4	109.3	104.3	97.2	50.4	50.4	50.9	5.3	5.3	5.4	19.1	19.2	18.8	0	Peter Zuk	
Goodman Group	GMG	30-Jun	OPFM	17.48	19.62	32,293	1,206.1	1,330.6	1,463.8	64.9	70.9	77.2	27.0	24.7	22.6	167.6	151.8	133.9	30.0	30.0	39.0	1.7	1.7	2.2	24.5	22.0	20.2	0	Peter Zuk	
GPT Group	GPT	31-Dec	OPFM	4.57	4.78	8,902	551.8	577.0	591.2	28.8	31.2	31.9	15.9	14.7	14.3	98.8	90.2	84.6	25.0	27.3	28.0	5.5	6.0	6.1	19.7	18.9	18.5	0	Peter Zuk	
Lend Lease	LLC	30-Jun	OPFM	13.03	13.47	8,969	473.5	598.6	718.1	68.8	87.0	104.4	18.9	15.0	12.5	117.7	92.2	73.8	34.5	43.5	52.2	2.6	3.3	4.0	12.0	9.8	8.5	0	Peter Zuk	
Mirvac Group	MGR	30-Jun	OPFM	2.44	2.63	9,608	434.8	509.8	548.8	11.0	13.0	13.9	22.1	18.8	17.5	137.3	115.9	103.5	9.7	9.9	10.6	4.0	4.0	4.3	21.6	19.2	17.9	0	Peter Zuk	
Scentre Group	SCG	31-Dec	NTRL	2.91	2.97	15,104	965.3	1,010.1	-	18.6	19.5	-	15.6	14.9	n.m	97.3	92.0	-	14.0	14.5	-	4.8	5.0	-	17.4	16.9	n.m	0	Peter Zuk	
Stockland Group	SGP	30-Jun	NTRL	4.39	4.42	10,479	666.8	727.3	771.8	27.9	30.5	32.3	15.7	14.4	13.6	97.7	88.7	80.3	24.7	26.1	27.7	5.6	6.0	6.3	16.4	15.4	14.8	0	Peter Zuk	
Vicinity Centres	VCX	30-Jun	NTRL	1.67	1.69	7,580	490.7	537.4	545.4	10.8	11.8	12.0	15.4	14.1	13.9	96.0	86.8	82.2	9.5	9.9	10.1	5.7	6.0	6.1	17.6	16.3	16.0	0	Peter Zuk	
Sector Aggregate													19.4	17.6	16.9				3.8	4.0	4.2	19.0	17.3	16.3						
Information Technology																														
Allium	ALU	30-Jun	OPFM	26.76	35.00	2,700	41.4	49.7	59.3	31.5	37.8	45.2	65.3	54.4	45.6	406.1	335.0	269.5	36.0	34.1	40.7	1.4	1.3	1.5	38.2	32.2	27.2	0	Quinn Pierson	
Alterpay	APT	30-Jun	OPFM	107.14	145.00	30,619	-	60.0	143.5	317.0	-20.7	48.0	105.3	n.m	n.m	n.m	n.m	n.m	601.8	0.0	0.0	0.0	0.0	0.0	0.0	n.m	93.9	54.2	0	James Cordukes
Appen	APX	31-Dec	NTRL	18.20	20.00	2,239	60.3	77.3	94.4	48.5	62.1	75.9	37.5	29.3	24.0	233.4	180.3	141.9	8.4	10.7	13.1	0.5	0.6	0.7	19.1	15.2	12.3	100	Quinn Pierson	
Computershare	CPU	30-Jun	NTRL	14.99	13.90	6,248	281.9	313.7	327.5	52.1	58.0	60.5	22.1	19.9	19.0	137.5	122.3	112.6	43.0	46.0	48.0	2.9	3.1	3.2	12.9	11.7	11.0	100	James Cordukes	
Sector Aggregate													n.m	73.3	55.6				0.5	0.5	0.6	44.9	35.9	28.5						
Media & Entertainment																														
carsales.com.au	CAR	30-Jun	NTRL	18.14	20.20	4,469	145.0	159.1	175.7	59.0	64.5	71.1	30.8	28.1	25.5	191.3	173.0	150.9	53.5	55.8	61.8	2.9	3.1	3.4	19.4	18.1	16.6	100	Enticho Raykovski	
Nine Entertainment	NEC	30-Jun	OPFM	2.94	3.25	5,014	222.5	262.5	312.2	13.0	15.4	18.3	22.5	19.1	16.1	140.1	117.5	95.0	10.0	11.0	13.0	3.4	3.7	4.4	10.1	8.3	7.1	100	Enticho Raykovski	
REA Group	REA	30-Jun	UPFM	134.05	136.70	17,710	320.2	394.6	474.0	242.8	298.9	359.0	55.2	44.9	37.3	343.2	276.0	220.9	121.0	164.0	197.0	0.9	1.2	1.5	33.5	27.9	23.5	100	Enticho Raykovski	
Seek	SEK	30-Jun	OPFM	27.63	30.50	9,754	113.8	179.5	284.2	32.3	50.9	80.5	85.5	54.2	34.3	531.7	333.8	202.9	14.0	42.0	52.0	0.5	1.5	1.9	23.0	17.3	13.9	100	Enticho Raykovski	
Seek	SEK	30-Jun	OPFM	27.63	30.50	9,754	113.8	179.5	284.2	32.3	50.9	80.5	85.5	54.2	34.3	531.7	333.8	202.9	14.0	42.0	52.0	0.5	1.5	1.9	23.0	17.3	13.9	100	Enticho Raykovski	
Seek	SEK	30-Jun	OPFM	27.63	30.50	9,754	113.8	179.5	284.2	32.3	50.9	80.5	85.5	54.2	34.3	531.7	333.8	202.9	14.0	42.0	52.0	0.5	1.5	1.9	23.0	17.3	13.9	100	Enticho Raykovski	
Sector Aggregate													46.0	37.1	29.7				1.4	1.9	2.2	22.0	18.0	15.2						
Communications Services																														
Telstra Corporation	TLS	30-Jun	OPFM	3.33	3.85	39,605	1,932.8	1,842.6	2,073.1	16.3	15.5	17.4	20.5	21.5	19.1	127.4	132.3	113.0	16.0	16.0	16.0	4.8	4.8	4.8	6.9	7.1	6.8	100	Enticho Raykovski	
TPG Telecom	TPG	31-Dec	NTRL	6.90	7.05	12,829	272.1	391.6	467.9	14.6	21.1	25.2	47.1	32.8	27.4	293.1	201.6	162.2	11.0	17.0	20.0	1.6	2.5	2.9	9.2	8.2	7.5	100	Enticho Raykovski	
Sector Aggregate													23.8	23.5	20.6				4.0	4.2	4.3	7.4	7.3	6.9						
Utilities																														
AGL Energy	AGL	30-Jun	UPFM	10.47	9.70	6,523	545.3	394.6	324.4	87.4	63.2	52.0	12.0	16.6	20.1	74.5	101.9	119.1	88.0	63.0	39.0	8.4	6.0	3.7	5.4	5.5	5.6	0	Peter Wilson	
APA Group	APA	30-Jun	OPFM	9.99	10.80	11,787	298.3	354.4	389.2	25.3	30.0	33.0	39.5	33.3	30.3	245.7	204.7	179.1	51.0	53.4	55.9	5.1	5.3	5.6	13.3	12.7	12.4	15	Peter Wilson	
AusNet Services	AST	31-Mar	NTRL	1.84	1.95	6,975	358.8	342.8	-	9.5	8.9	19.9	39.3	20.5	n.m	119.8	126.3	-	9.5	9.8	-	5.2	5.3	-	13.3	13.3	n.m	45	Peter Wilson	
Spark Infrastructure Group	SKI	31-Dec	OPFM	2.20	2.65	3,824	42.9	41.7	-	2.4	2.3	-	90.1	94.4	n.m	560.3	581.1	-	12.5	12.8	-	5.7	5.8	-	19.3	19.2	n.m	25	Peter Wilson	
Sector Aggregate													23.3	25.8	25.7				5.9	5.6	4.9	10.3	10.3	8.7						
Report Average													16.1	16.3	16.9				4.4	4.0	3.8	7.5	6.8	8.4						

Emerging Companies Earnings & Dividends

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24 March 2021

As at 23 March 2021	Ticker	Year to	Rating	Share Price \$	12M Tgt \$	Mkt Cap \$m	NPAT			EPS			PE			Relative PE			Dividend			Dividend Yield			EBITDA Multiple			F'kg 2022	Analyst Name	
							2021 \$m	2022 \$m	2023 \$m	2021 ¢	2022 ¢	2023 ¢	2021 x	2022 x	2023 x	2021 %	2022 %	2023 %	2021 ¢	2022 ¢	2023 ¢	2021 %	2022 %	2023 %	2021 x	2022 x	2023 x	%		
Energy																														
Cooper Energy	COE	30-Jun	NTRL	0.29	0.34	473	-	2.1	43.2	52.8	-0.1	2.5	3.1	n.m	11.4	9.3	n.m	62.9	59.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	3.0	2.2	0	Saul Kavonic
New Hope Corporation	NHC	31-Jul	NTRL	1.35	1.30	1,124	69.3	87.4	40.3	8.3	10.5	4.8	16.2	12.9	27.9	70.4	71.1	176.8	9.0	7.0	4.0	6.7	5.2	3.0	5.4	5.3	7.9	100	Sam Webb	
Strike Energy	STX	30-Jun	OPFM	0.32	0.31	551	-	0.0	-	1.7	-	0.9	0.0	-0.1	-0.1	n.m	n.m	n.m	0.0	0.0	0.0	0.0	0.0	0.0	n.m	n.m	155.5	0	Saul Kavonic	
Senex Energy Limited	SKYDA	30-Jun	OPFM	2.93	3.52	538	5.0	29.3	38.3	2.7	16.0	20.9	n.m	18.3	14.0	463.8	101.3	88.9	10.9	7.0	7.7	3.7	2.4	2.6	9.3	5.7	4.5	100	Peter Liu	
Viva Energy	VEA	31-Dec	NTRL	1.72	1.78	2,757	45.2	179.9	224.9	2.8	11.1	13.9	61.3	15.4	12.3	266.2	85.2	78.2	1.4	5.6	7.0	0.8	3.3	4.1	8.5	6.5	5.9	100	Grant Saligari	
Whitehaven Coal	WHC	30-Jun	OPFM	1.74	1.95	1,792	-	39.8	89.4	2.3	-4.0	8.9	0.2	n.m	19.4	n.m	n.m	107.2	n.m	0.0	1.8	0.1	0.0	1.0	0.1	9.0	4.8	6.1	100	Sam Webb
Sector Aggregate														95.0	16.9	20.4				1.6	2.5	2.2	8.7	5.7	5.8					
Materials - Chemicals																														
Nufarm	NUF	30-Sep	NTRL	4.93	5.00	1,872	33.8	74.4	92.8	8.9	19.5	24.2	55.7	25.3	20.3	241.8	140.1	129.1	3.0	8.0	10.0	0.6	1.6	2.0	6.2	5.1	4.5	0	Grant Saligari	
Materials - Construction Materials																														
Adelaide Brighton	ABC	31-Dec	UPFM	3.10	2.60	2,022	112.8	84.2	99.6	17.2	12.9	15.2	18.0	24.1	20.4	78.0	133.1	129.1	11.0	8.5	10.0	3.5	2.7	3.2	9.4	10.9	9.9	100	Peter Wilson	
CSR	CSR	31-Mar	OPFM	5.53	5.60	2,684	157.9	169.5	159.5	32.5	34.9	32.8	17.0	15.9	16.8	73.9	87.6	106.9	19.5	21.0	23.0	3.5	3.8	4.2	8.1	7.6	7.9	100	Peter Wilson	
Wagners Holding Company Ltd	WGN	30-Jun	OPFM	1.86	2.50	348	11.4	16.2	18.0	6.1	8.6	9.6	30.7	21.5	19.3	133.1	119.1	122.7	0.0	3.4	4.8	0.0	1.8	2.6	10.0	8.3	7.4	100	Peter Wilson	
Materials - Containers & Packaging																														
Pact Group Holdings	PGH	30-Jun	NTRL	3.52	2.95	1,211	79.5	80.9	82.8	23.0	23.4	24.0	15.3	15.0	14.7	66.3	83.0	93.0	8.0	18.0	18.0	2.3	5.1	5.1	6.0	5.9	5.8	65	Larry Gandler	
Materials - Metals & Mining																														
Coronado Global Resources Inc	CRN	31-Dec	OPFM	1.02	1.60	1,080	2.5	72.5	118.2	0.2	5.2	8.5	n.m	14.9	9.1	n.m	82.3	58.0	0.8	4.4	5.6	1.0	5.6	7.2	5.8	3.7	3.0	100	Sam Webb	
Deterra Royalties Limited	DRR	30-Jun	OPFM	3.89	4.80	2,056	80.2	153.3	152.9	15.2	29.0	28.9	25.6	13.4	13.4	111.3	74.1	85.3	11.3	29.0	28.9	2.9	7.5	7.4	17.7	9.3	9.3	100	Sam Webb	
Galaxy Resources Ltd	GXY	31-Dec	UPFM	2.35	2.10	913	-	0.3	1.0	-	20.2	-0.1	0.2	-4.2	n.m	n.m	n.m	0.0	0.0	0.0	0.0	0.0	0.0	0.0	49.5	35.7	40.8	0	Nick Herbert	
Iuka Resources	ILU	31-Dec	UPFM	6.84	5.70	2,892	185.6	265.6	285.2	43.9	62.8	67.5	15.6	10.9	10.1	67.6	60.2	64.3	12.0	24.0	16.0	1.8	3.5	2.3	6.5	4.8	4.5	100	Sam Webb	
New Century Resources	NCZ	30-Jun	OPFM	0.18	0.45	212	46.3	96.3	104.9	3.6	7.3	7.9	4.8	2.4	2.2	20.9	13.3	14.0	1.9	4.0	4.3	11.1	22.7	24.8	3.0	1.5	1.3	100	Nick Herbert	
Nickel Mines	NIC	31-Dec	RSTR	1.34	2.591	177.5	177.5	160.2	272.1	7.1	6.4	10.8	14.6	16.2	9.5	63.4	89.4	60.4	4.0	4.0	5.0	3.9	3.9	4.9	9.3	8.2	4.7	0	Nick Herbert	
OceanaGold Corporation	OGC	31-Dec	OPFM	2.11	2.60	114	76.8	239.4	117.3	10.9	34.0	16.7	14.9	4.8	9.7	64.6	26.4	61.7	1.5	2.0	3.0	0.9	1.2	1.8	1.1	0.2	0.3	0	Nick Herbert	
Orocobre Ltd	ORE	30-Jun	NTRL	4.65	5.00	1,230	-	32.0	-	19.9	42.0	-10.3	-5.8	12.2	n.m	n.m	29.3	n.m	n.m	185.8	0.0	0.0	0.0	0.0	0.0	n.m	59.5	13.0	0	Nick Herbert
Pilbara Minerals Ltd	PLS	30-Jun	NTRL	0.98	0.95	2,839	-	29.1	31.9	105.1	-1.1	1.1	3.6	n.m	89.6	27.2	n.m	495.2	172.7	0.0	0.5	1.8	0.0	0.6	1.8	n.m	34.8	16.2	100	Nick Herbert
Perseus Mining	PRU	30-Jun	OPFM	1.21	1.45	1,478	72.9	255.7	391.6	5.9	21.4	32.7	20.3	5.6	3.7	87.9	31.2	23.4	1.0	6.0	10.0	0.8	5.0	8.3	6.8	2.0	0.8	0	Nick Herbert	
Regis Resources Limited	RRL	30-Jun	OPFM	3.07	5.10	1,572	194.6	407.7	412.2	38.1	79.5	80.3	8.1	3.9	3.8	35.0	21.4	24.2	12.0	12.0	12.0	3.9	3.9	3.9	3.0	1.7	1.2	0	Nick Herbert	
St Barbara Mining	SBM	30-Jun	OPFM	2.02	3.30	1,425	181.4	331.7	317.8	25.7	46.8	44.5	7.8	4.3	4.5	34.1	23.9	28.8	4.0	4.0	13.4	2.0	2.0	6.6	2.8	1.7	1.6	0	Nick Herbert	
Sandfire Resources Limited	SFR	30-Jun	OPFM	5.66	7.20	1,009	214.4	164.8	-	30.3	120.3	92.4	-17.0	4.7	6.1	n.m	20.4	33.8	n.m	38.2	31.3	0.7	6.8	5.5	0.1	0.9	1.7	38.8	100	Nick Herbert
Sims Ltd	SGM	30-Jun	NTRL	13.66	13.35	2,751	92.0	134.5	143.8	45.4	66.4	71.0	30.1	20.6	19.3	130.6	113.8	122.1	24.3	28.0	30.8	1.8	2.1	2.3	8.6	7.0	6.6	100	Nick Herbert	
Syrah Resources	SYR	31-Dec	NTRL	1.09	1.25	417	-	20.1	-	25.2	-	-4.1	-5.1	n.m	n.m	n.m	n.m	n.m	0.0	0.0	0.0	0.0	0.0	0.0	n.m	139.7	n.m	0	Nick Herbert	
Western Areas	WSA	30-Jun	OPFM	2.06	2.45	648	1.5	1.4	17.3	0.5	0.4	5.3	n.m	n.m	38.8	n.m	n.m	246.4	2.0	0.1	1.6	1.0	0.1	0.8	5.9	6.5	5.4	100	Nick Herbert	
Sector Aggregate														20.9	11.9	10.1				2.0	3.2	3.8	6.0	4.1	3.2					
Materials - Paper & Forest Products																														
Sector Aggregate																														
														n.m	n.m	n.m														
Industrials - Capital Goods																														
Austal Limited	ASB	30-Jun	OPFM	2.20	2.75	791	89.8	88.5	85.4	24.8	24.5	23.6	8.9	9.0	9.3	38.5	49.7	59.1	8.7	11.1	10.7	3.9	5.0	4.9	3.6	3.2	2.8	0	William Park	
CIMIC Group Limited	CM	31-Dec	NTRL	18.16	21.90	5,653	423.2	471.6	507.1	135.9	151.5	162.9	13.4	12.0	11.1	80.0	66.3	70.7	85.0	94.7	102.0	4.7	5.2	5.6	7.4	6.9	6.6	100	Matthew Nicholas	
GWA Group Limited	GWA	30-Jun	NTRL	2.86	3.15	756	40.8	47.2	49.0	15.4	17.8	18.5	18.5	16.1	15.5	80.5	88.8	98.1	12.0	13.5	14.0	4.2	4.7	4.9	11.3	10.3	8.6	100	Peter Wilson	
Monadelphous	MND	30-Jun	NTRL	10.52	12.15	996	57.4	66.2	71.1	60.6	69.9	75.1	17.4	15.1	14.0	75.3	83.3	88.9	45.2	52.2	63.8	4.3	5.0	6.1	7.6	6.7	6.2	100	Matthew Nicholas	
Seven Group Holdings	SVW	30-Jun	OPFM	22.43	25.40	7,612	515.6	593.8	659.8	151.9	174.9	194.4	14.8	12.8	11.5	64.1	70.9	73.2	46.0	46.0	46.0	2.1	2.1	2.1	10.8	9.4	8.5	0	Matthew Nicholas	
Sector Aggregate														14.0	12.5	11.5				3.3	3.6	3.9	8.4	7.5	6.9					

Emerging Companies Earnings & Dividends (continued)

As at 23 March 2021	Ticker	Year to	Rating	Share Price \$	12M Tgt \$	Mkt Cap \$m	NPAT			EPS			PE			Relative PE			Dividend			Dividend Yield			EBITDA Multiple			Fkg	Analyst Name			
							2021 \$m	2022 \$m	2023 \$m	2021 ¢	2022 ¢	2023 ¢	2021 x	2022 x	2023 x	2021 %	2022 %	2023 %	2021 ¢	2022 ¢	2023 ¢	2021 %	2022 %	2023 %	2021 x	2022 x	2023 x	2022 %				
Industrials - Commercial & Professional Services																																
Bingo Industries		BIN	30-Jun	NTRL	3.14	3.15	2,057	36.0	67.7	118.5	5.5	10.3	18.1	57.1	30.4	17.3	247.9	167.9	109.9	2.7	4.1	7.3	0.9	1.3	2.3	17.3	12.7	8.9	100	Paul Butler		
McMillan Shakespeare		MMS	30-Jun	OPFM	11.16	14.00	864	79.3	85.8	94.9	101.1	109.5	121.0	11.0	10.2	9.2	47.9	56.4	58.5	61.0	72.0	80.5	5.5	6.5	7.2	7.3	6.5	5.3	100	Paul Buys		
SmartCorp Corporation Ltd		SIQ	31-Dec	OPFM	6.46	7.24	859	70.5	75.8	79.7	52.5	56.4	59.3	12.3	11.5	10.9	53.4	63.3	69.1	35.1	37.7	39.7	5.4	5.8	6.1	8.4	7.6	7.2	100	Paul Buys		
Sector Aggregate														20.5	16.6	13.0				3.0	3.5	4.3	11.1	9.3	7.4							
Industrials - Transportation																																
Alliance Aviation		AQZ	30-Jun	OPFM	3.98	5.40	639	34.2	41.7	52.3	21.4	26.1	32.8	18.6	15.2	12.1	80.7	84.2	77.0	4.7	13.4	16.7	1.2	3.4	4.2	7.9	5.9	4.5	100	Matthew Nicholas		
Dalrymple Bay Infrastructure		DBI	31-Dec	OPFM	2.14	2.50	1,071	39.8	58.5	68.4	8.0	11.7	13.7	26.9	18.3	15.7	116.8	101.2	99.3	18.0	18.4	18.7	8.4	8.6	8.7	16.5	15.4	14.3	0	Paul Butler		
Sector Aggregate														23.1	17.0	14.1				5.7	6.6	7.0	11.7	9.6	7.9							
Consumer Discretionary - Automobiles & Components																																
ARB Corp		ARB	30-Jun	NTRL	34.96	37.00	2,827	91.2	84.7	96.3	114.3	104.7	119.1	30.6	33.4	29.4	132.8	184.6	186.2	56.5	59.0	66.9	1.6	1.7	1.9	18.7	19.7	17.4	100	Matthew Nicholas		
G.U.D. Holdings		GUD	30-Jun	OPFM	12.23	14.00	1,152	64.6	76.3	82.9	70.1	81.4	88.4	17.5	15.0	13.8	75.8	83.1	87.7	49.9	51.8	56.3	4.1	4.2	4.6	12.1	10.3	9.4	100	Matthew Nicholas		
Consumer Discretionary - Consumer Durables & Apparel																																
Breville Group		BRG	30-Jun	NTRL	27.08	30.20	3,763	92.8	104.3	115.1	67.1	75.1	82.9	40.4	36.1	32.7	175.3	199.4	207.3	27.4	30.3	34.4	1.0	1.1	1.3	21.8	19.8	17.8	60	Annabelle Diamond		
Sector Aggregate														40.4	36.1	32.7				1.0	1.1	1.3	21.8	19.8	17.8							
Consumer Discretionary - Consumer Services																																
Corporate Travel Management		CTD	30-Jun	OPFM	20.18	22.00	2,753	-	43.0	90.3	153.6	-33.4	66.2	112.6	n.m	30.5	17.9	n.m	168.5	113.7	0.0	12.3	56.3	0.0	0.6	2.8	n.m	15.6	9.6	100	Quinn Pierson	
Flight Centre		FLT	30-Jun	UPFM	18.90	15.44	3,766	-	207.6	13.8	198.8	-104.3	6.9	99.8	n.m	n.m	18.9	n.m	n.m	120.1	0.0	5.3	59.9	0.0	0.3	3.2	n.m	26.7	9.3	100	Grant Saligari	
Pointsbet		PBH	30-Jun	NTRL	13.71	16.00	2,515	-	155.4	-	28.4	21.2	-53.7	-8.8	7.8	n.m	n.m	n.m	n.m	n.m	n.m	0.0	0.0	0.0	0.0	0.0	0.0	n.m	n.m	33.1	0	Larry Gandler
Sector Aggregate														n.m	n.m	24.6				0.0	0.3	2.2	n.m	28.8	11.7							
Consumer Discretionary - Retailing																																
AP Eagers Limited		APE	31-Dec	NTRL	14.64	13.00	3,762	173.8	199.7	228.0	67.3	77.3	88.3	21.8	18.9	16.6	94.4	104.7	105.2	26.0	38.0	38.0	1.8	2.6	2.6	14.8	13.0	11.5	100	Matthew Nicholas		
Bapcor		BAP	30-Jun	OPFM	7.35	8.50	2,495	123.3	126.0	135.4	36.2	37.0	39.7	20.3	19.9	18.5	88.0	109.9	117.4	16.0	18.0	20.1	2.2	2.5	2.7	12.6	12.1	11.1	100	Matthew Nicholas		
Harvey Norman		HVN	30-Jun	NTRL	5.84	5.65	7,277	677.3	466.8	489.3	54.7	37.6	39.3	10.7	15.5	14.9	46.3	85.9	94.3	33.7	24.1	25.3	5.8	4.1	4.3	7.1	9.3	8.8	100	Grant Saligari		
Kogan.com		KGN	30-Jun	OPFM	13.33	20.85	1,418	58.1	55.0	66.1	55.3	52.1	62.6	24.1	25.6	21.3	104.7	141.5	135.1	35.4	34.0	40.9	2.7	2.6	3.1	15.2	15.3	12.8	100	Annabelle Diamond		
Premier Investments		PMV	25-Jul	NTRL	23.22	23.09	3,689	231.3	188.5	196.0	145.7	118.8	123.5	15.9	19.5	18.8	69.2	108.1	119.3	109.2	95.3	99.0	4.7	4.1	4.3	7.6	8.5	8.3	100	Annabelle Diamond		
Super Retail Group		SUL	30-Jun	OPFM	11.73	14.64	2,649	284.5	209.6	217.4	125.3	92.3	95.8	9.4	12.7	12.2	40.6	70.2	77.7	64.2	49.6	51.3	5.5	4.2	4.4	4.6	5.3	5.1	100	Grant Saligari		
Webjet		WEB	30-Jun	OPFM	5.94	5.40	2,014	-	118.8	24.9	101.7	-31.4	6.6	26.8	n.m	90.2	22.1	n.m	498.7	140.3	0.0	2.2	8.1	0.0	0.4	1.4	n.m	25.4	11.4	100	Quinn Pierson	
Sector Aggregate														16.1	18.4	16.4				3.8	3.3	3.5	9.1	9.8	8.9							

Source: Company data, Refinitiv, Credit Suisse estimates

Emerging Companies Earnings & Dividends (continued)

As at 23 March 2021	Ticker	Year to	Rating	Share Price \$	12M Tgt \$	Mkt Cap \$m	2021 \$m	NPAT 2022 \$m	2023 \$m	2021 €	2022 €	2023 €	2021 x	2022 x	2023 x	2021 %	2022 %	2023 %	2021 €	2022 €	2023 €	2021 %	2022 %	2023 %	2021 x	2022 x	2023 x	F'kg 2022 %	Analyst Name		
Consumer Staples - Food & Drug Retailing																															
Graincorp	GNC	30-Sep	NTRL	4.71	5.06	1,078	79.7	57.0	51.7	34.7	24.8	22.5	13.6	19.0	21.0	58.9	105.1	133.0	19.3	12.9	11.7	4.1	2.7	2.5	5.7	6.5	6.6	100	Grant Salgari		
Metcash	MTS	30-Apr	OPFM	3.55	4.08	3,629	261.1	242.8	258.0	25.6	23.8	25.2	13.9	14.9	14.1	60.3	82.6	89.2	17.6	16.7	17.7	5.0	4.7	5.0	7.5	7.8	7.6	100	Grant Salgari		
Sector Aggregate																															
Consumer Staples - Food Beverage & Tobacco																															
Costa Group Hldg	CGC	31-Dec	NTRL	4.55	4.70	1,824	88.6	93.7	101.9	21.9	23.1	25.0	20.8	19.7	18.2	90.2	109.1	115.6	13.1	13.8	15.0	2.9	3.0	3.3	9.8	9.4	8.5	100	Larry Gandler		
Huon Aquaculture Group Limited	HUO	30-Jun	NTRL	2.52	2.70	277	-	34.8	-	3.1	33.8	-32.8	-2.8	30.7	n.m	n.m	8.2	n.m	n.m	52.0	0.0	7.0	10.0	0.0	2.8	4.0	23.4	6.6	3.2	0	Paul Buys
Inghams Group Limited	ING	30-Jun	OPFM	3.43	3.95	1,275	91.3	99.4	109.8	24.6	26.7	29.5	14.0	12.8	11.6	60.6	70.9	73.7	14.5	16.5	18.5	4.2	4.8	5.4	7.9	7.3	6.7	100	Paul Buys		
Ridley Corporation Limited	RIC	30-Jun	NTRL	1.15	1.15	367	22.0	25.3	28.1	6.9	7.9	8.8	16.7	14.5	13.1	72.5	80.2	83.0	1.5	5.2	5.8	1.3	4.5	5.1	7.2	6.6	6.1	100	Paul Buys		
Tassal Group Limited	TGR	30-Jun	OPFM	3.48	3.90	735	54.9	67.4	75.9	26.0	31.8	35.8	13.4	11.0	9.7	58.1	60.6	61.7	13.5	16.0	18.5	3.9	4.6	5.3	7.9	6.8	6.1	15	Paul Buys		
Unileid Malt Grp	UMG	30-Sep	OPFM	4.17	4.21	1,248	41.8	72.9	78.6	14.0	24.4	26.3	29.8	17.1	15.9	129.5	94.6	100.7	6.7	14.6	15.8	1.6	3.5	3.8	12.2	8.6	8.1	100	Grant Salgari		
Sector Aggregate																															
Consumer Staples - Household & Personal Products																															
Asaleo Care Limited	AHY	31-Dec	NTRL	1.40	1.50	758	40.7	46.2	48.5	7.5	8.5	8.9	18.6	16.4	15.6	80.8	90.6	99.1	5.6	6.4	6.7	4.0	4.6	4.8	9.2	8.4	8.0	25	Larry Gandler		
Blackmores Ltd	BKL	30-Jun	NTRL	82.59	80.00	1,598	25.5	44.1	52.6	131.8	227.4	271.4	62.6	36.3	30.4	271.9	200.8	193.0	90.0	175.0	200.0	1.1	2.1	2.4	24.0	16.8	14.7	100	Larry Gandler		
Sector Aggregate																															
Health Care																															
Australian Pharmaceutical Ind	API	31-Aug	NTRL	1.30	1.05	640	45.1	47.1	49.3	9.1	9.5	10.0	14.3	13.6	13.0	61.9	75.4	82.7	5.8	6.8	7.1	4.5	5.2	5.5	4.4	4.4	4.0	100	Gretel Janu		
Capitol Health Limited	CAJ	30-Jun	OPFM	0.33	0.43	339	17.9	17.3	18.7	1.7	1.7	1.8	18.9	19.5	18.1	81.9	107.9	114.7	1.0	1.4	1.6	3.1	4.4	5.0	9.1	9.1	8.6	100	Matthew Nicholas		
Healus	HLS	30-Jun	OPFM	4.14	4.25	2,579	141.6	116.4	136.5	23.0	19.7	23.9	18.0	21.0	17.3	78.2	116.1	110.0	12.6	9.8	11.6	3.0	2.4	2.8	5.5	6.1	5.7	100	Gretel Janu		
Integral Diagnostics Limited	IDX	30-Jun	NTRL	4.58	5.00	909	41.9	42.1	45.8	21.2	21.2	23.1	21.6	21.6	19.9	94.0	119.5	125.9	10.9	14.2	15.4	2.4	3.1	3.4	12.5	11.9	11.0	100	Matthew Nicholas		
Mayne Pharma	MYX	30-Jun	NTRL	0.37	0.32	613	-	26.8	-	17.6	18.6	-1.8	-1.1	1.2	n.m	n.m	30.1	n.m	n.m	190.7	0.0	0.0	0.6	0.0	0.0	1.7	12.7	11.3	7.0	0	Gretel Janu
Sigma Healthcare	SIG	31-Jan	OPFM	0.70	0.73	741	29.1	33.0	41.6	2.9	3.3	4.1	24.2	21.4	17.0	105.0	118.2	107.6	1.0	2.3	2.9	1.4	3.3	4.1	9.6	8.4	7.2	30	Gretel Janu		
Sector Aggregate																															
Financials - Diversified Financials																															
Eclixp Group	ECX	30-Sep	OPFM	1.86	2.05	603	65.2	52.4	56.8	20.1	16.6	17.5	9.2	11.2	10.6	40.1	61.7	67.3	4.5	8.0	11.0	2.4	4.3	5.9	17.2	22.2	22.9	100	Paul Buys		
HUB24 Limited	HUB	30-Jun	OPFM	24.07	27.00	1,645	18.1	31.2	44.1	26.8	43.9	61.3	89.9	54.8	39.3	390.2	302.9	249.2	11.3	18.8	30.9	0.5	0.8	1.3	52.6	31.9	22.7	100	James Cordukes		
Humm Group	HUM	30-Jun	NTRL	0.97	1.20	480	75.4	72.5	84.4	15.9	14.4	16.8	6.1	6.7	5.8	26.5	37.2	36.7	0.0	5.8	6.7	0.0	5.9	6.9	12.8	14.8	14.6	100	Paul Buys		
IOOF Holdings	IFL	30-Jun	OPFM	3.56	4.95	2,312	131.3	249.1	295.3	22.2	38.3	45.4	16.0	9.3	7.8	69.5	51.4	49.7	13.9	22.8	26.7	3.9	6.4	7.5	12.1	7.4	6.0	100	James Cordukes		
Newearth Group Limited	NWL	30-Jun	NTRL	15.95	17.50	3,889	55.3	66.4	85.6	22.6	27.2	35.1	70.5	58.6	45.4	305.8	323.7	288.0	18.2	21.8	28.2	1.1	1.4	1.8	46.8	38.3	29.7	100	James Cordukes		
Pendal Group Limited	PDL	30-Sep	NTRL	6.42	6.50	2,080	141.4	147.8	163.1	43.8	45.8	50.5	14.7	14.0	12.7	63.6	77.5	80.6	38.0	40.0	44.0	5.9	6.2	6.9	10.5	10.0	8.9	10	James Cordukes		
Perpetual Limited	PPT	30-Jun	OPFM	33.18	37.00	1,875	113.1	130.9	140.6	203.1	232.1	249.4	16.3	14.3	13.3	70.9	79.0	84.4	171.0	181.0	188.0	5.2	5.5	5.7	9.5	8.4	7.8	70	James Cordukes		
Platinum Asset Management	PTM	30-Jun	NTRL	4.90	4.50	2,875	165.8	150.3	156.0	28.4	25.8	26.7	17.2	19.0	18.3	74.8	105.1	116.2	25.0	24.0	26.0	5.1	4.9	5.3	11.7	12.9	12.4	100	James Cordukes		
Sector Aggregate																															
Financials - Insurance																															
AUB Group Limited	AUB	30-Jun	OPFM	18.43	20.00	1,371	55.9	58.9	61.9	74.8	78.3	81.1	24.6	23.6	22.7	106.9	130.2	144.2	54.0	54.0	55.0	2.9	2.9	3.0	12.4	11.8	11.2	100	Matthew Nicholas		
NIB Holdings Limited	NHF	30-Jun	NTRL	5.31	5.50	2,428	134.2	139.7	152.1	29.4	30.6	33.3	18.1	17.4	16.0	78.5	96.0	101.2	18.7	19.8	21.4	3.5	3.7	4.0	12.2	11.5	10.3	100	Doron Kur		
Steadfast Group Ltd	SDF	30-Jun	OPFM	3.84	4.40	3,335	154.0	163.5	168.7	17.8	18.9	19.5	21.6	20.3	19.7	93.6	112.3	124.9	10.4	11.5	6.4	2.7	3.0	1.7	16.3	15.5	15.0	100	Matthew Nicholas		
Sector Aggregate																															
Financials - Real Estate																															
Abacus Property Group	ABP	30-Jun	OPFM	2.72	3.04	2,227	128.3	147.1	155.8	17.4	18.3	19.4	15.6	14.9	14.0	67.8	82.2	89.1	17.0	17.5	18.6	6.3	6.4	6.8	19.3	18.2	17.8	0	Peter Zuk		
Arena REIT	ARF	30-Jun	NTRL	3.14	3.04	1,077	51.8	56.4	59.7	15.2	16.5	17.4	20.7	19.1	18.0	89.8	105.5	114.5	14.8	15.8	16.7	4.7	5.0	5.3	23.1	21.4	20.4	0	Daniel Downes		
Centuria Industrial REIT	CIP	30-Jun	NTRL	3.18	3.24	1,755	90.9	93.8	97.7	17.4	17.0	17.7	18.3	18.7	17.9	79.5	103.2	113.7	17.0	17.5	18.0	5.3	5.5	5.7	22.4	21.7	21.0	0	Daniel Downes		
Centuria Office REIT	COF	30-Jun	OPFM	2.05	2.14	1,055	90.7	79.7	84.8	17.6	15.5	16.5	11.6	13.2	12.4	50.5	73.1	78.9	16.5	16.6	16.7	8.0	8.1	8.1	16.0	18.1	17.1	0	Daniel Downes		
Charter Hall Retail REIT	COR	30-Jun	OPFM	3.73	3.99	2,142	143.4	152.9	155.8	25.1	26.8	27.3	14.8	13.9	13.7	64.4	77.0	86.7	23.4	24.5	25.5	6.3	6.6	6.8	18.1	17.0	16.7	0	Peter Zuk		
Growthpoint Properties	GOZ	30-Jun	OPFM	3.28	3.54	2,533	172.6	179.8	185.2	22.4	23.3	24.0	14.7	14.1	13.7	63.7	77.9	86.7	20.0	20.9	21.4	6.1	6.4	6.5	17.5	16.9	16.5	0	Daniel Downes		
Home Consortium	HMC	30-Jun	NTRL	4.40	3.90	1,277	24.6	31.4	36.3	9.0	10.8	12.5	48.9	40.7	35.2	212.3	224.9	223.2	12.0	13.3	14.6	2.7	3.0	3.3	32.7	28.4	25.2	0	Peter Zuk		
SCA Property Group	SCP	30-Jun	NTRL	2.46	2.50	2,657	146.0	164.2	168.1	13.6	15.3	15.6	18.1	16.1	15.8	78.7	89.2	100.0	12.6	14.0	14.4	5.1	5.7	5.8	20.8	18.9	18.6	0	Peter Zuk		
Sector Aggregate																															
Information Technology																															
Life360 Inc	360	31-Dec	OPFM	4.96	5.40	574	-	2.6	9.8	28.9	-1.7	6.3	18.5	n.m	60.2	20.7	n.m	332.6	131.1	0.0	0.0	0.0	0.0	0.0	0.0	n.m	n.m	n.m	100	Quinn Pierson	
Audinate Group	AD8	30-Jun	OPFM	7.40	9.70	564	-	5.2	-	1.3	2.2	-6.8	-1.7	2.9	n.m	n.m	n.m	n.m	n.m	0.0	0.0	0.0	0.0	0.0	0.0	n.m	95.2	43.5	100	Quinn Pierson	
Infomedia	IFM	2.30	3.00	565	19.1	23.9	28.2	5.1	6.2	7.2	29.8	24.2	20.8	129.2	133.8	131.8	129.2	133.8	131.8	4.1	4.7	5.5	2.7	3.1	3.6	10.2	8.6	7.5	100	Quinn Pierson	
IRESS	IRE	31-Dec	OPFM	9.30	11.00	1,798	76.1	86.0	93.7	39.3	43.7	46.8	23.7	21.3	19.9	102.7	117.6	126.1	44.0	48.0	50.0	4.7	5.2	5.4	13.6	12.4	11.5	40	Quinn Pierson		
Sector Aggregate																															
Media & Entertainment																															
Domain Holdings Australia	DHG	30-Jun	NTRL	4.34	5.00	2,536	28.9	49.2	74.7	5.0	8.4	12.7	87.6	51.7	34.1	380.3	285.8	216.4	2.0	6.7	10.2	0.5	1.5	2.3	27.5	20.4	15.2	100	Entcho Raykovski		
Here There & Everywhere	HT1	31-Dec	OPFM	1.76	2.10	488	27.1	33.8	35.7	9.7	12.1	12.7	18.2	14.5	13.8	78.8	80.4	87.4	7.7	9.7	10.2	4.4	5.5	5.8	7.9	6.2	5.8	100	Entcho Raykovski		
News Corporation	NWS	30-Jun	OPFM	31.65	32.50	16,393	317.9	426.5	525.3	54.3	73.4	91.1	44.8	33.1	26.7	194.4	183.2	169.5	20.0	24.0	28.0	0.8	1.0	1.2	13.0	11.2	9.6	0	Entcho Raykovski		
oOHmedia Limited	OML	31-Dec	OPFM	1.75	2.30	1,048	36.1	68.3	76.8	6.1	11.5	13.0	28.7	15.2	13.5	124.5	83.8	85.6	0.0	0.0	0.0	0.0	0.0	0.0	11.1	7.5	6.7	0	Matthew Nicholas		
Seven West Media	SWM	30-Jun	OPFM	0.51	0.70	784	105.7	119.5	110.0	6.9	7.8	7.1	7.4	6.6	7.1	32.2	36.3	45.3	0.0	0.0	2.0	0.0	0.0	3.9	4.7	4.3	4.3	100	Entcho Raykovski		
Sector Aggregate																															
Telecommunication Services																															
Vocus Communications	VOC	30-Jun	RSTR	5.44		3,379	94.2	109.0	129.4	14.9	17.3	20.5	36.4	31.4	26.5	157.9	173.8	168.0	0.0	8.8	15.6	0.0	1.6	2.9	10.9	10.2	9.5	100			

Sector Aggregates

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24 March 2021

As at 23 March 2021	PE ⁽¹⁾			Median PE ⁽¹⁾⁽³⁾			PE Rel vs ASX 200 ⁽¹⁾			EPS Growth % ⁽¹⁾			Div Yield % ⁽¹⁾			EBIT Multiple ⁽¹⁾			EBITDA Multiple ⁽¹⁾			Sector Weight	
	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	2021	2022	2023	Top 200	Top 300
Energy ⁽²⁾	19.0	15.3	14.5	20.7	15.4	13.9	1.2	0.9	0.9	26.6	24.0	5.1	3.3	3.5	3.7	13.3	11.4	10.8	6.7	6.0	5.8	3.22%	3.10%
Materials ⁽²⁾	8.9	10.2	13.0	17.2	14.8	13.9	0.5	0.6	0.8	55	-13	-21	7.5	5.4	4.1	5.4	6.1	7.5	4.4	4.9	5.7	25.32%	24.41%
Chemicals ⁽²⁾	31.3	18.8	15.5	30.1	19.9	15.4	1.9	1.1	0.9	22	66	21	1.8	3.1	3.7	17.5	12.3	10.4	8.5	6.9	6.1	0.56%	0.54%
Construction Materials ⁽²⁾	23.7	21.2	18.7	20.1	20.9	18.5	1.4	1.3	1.1	20	12	13	2.0	2.8	3.2	17.0	16.5	14.5	11.6	11.2	10.2	1.20%	1.15%
Containers & Packaging ⁽²⁾	15.5	14.1	13.2	17.0	15.0	14.1	0.9	0.9	0.8	18	10	7	4.3	4.6	5.0	16.0	14.8	14.1	11.4	10.7	10.3	0.87%	0.84%
Metals & Mining ⁽²⁾	8.3	9.7	12.7	14.7	10.9	11.4	0.5	0.6	0.8	58	-14	-24	8.0	5.6	4.1	4.9	5.7	7.1	4.1	4.6	5.4	22.43%	21.63%
Paper & Forest Products ⁽²⁾	31.3	18.8	15.5	30.1	19.9	15.4	1.9	1.1	0.9	22	66	21	1.8	3.1	3.7	17.5	12.3	10.4	8.5	6.9	6.1	0.56%	0.54%
Industrials ⁽²⁾	>100	27.4	21.2	16.9	19.1	17.0	6.3	1.7	1.3	114	281	29	2.6	3.6	4.2	30.5	19.5	16.3	13.6	10.8	9.6	5.44%	5.25%
Capital Goods ⁽²⁾	14.6	13.3	12.3	14.8	12.8	11.5	0.9	0.8	0.7	-7	10	8	3.2	3.4	3.6	12.1	10.7	9.9	8.8	8.0	7.4	0.79%	0.76%
Commercial Services & Supplies ⁽²⁾	22.4	19.7	17.7	26.3	21.3	17.3	1.4	1.2	1.1	6	14	11	2.4	2.8	3.1	15.8	14.7	13.1	8.3	8.0	7.3	1.28%	1.23%
Transportation ⁽²⁾	-57.4	45.3	28.1	3.7	35.1	20.0	-3.5	2.8	1.7	33	227	61	2.5	3.9	4.7	105.0	28.5	21.5	21.5	13.7	11.8	3.38%	3.26%
Consumer Discretionary ⁽²⁾	29.0	25.0	21.7	18.9	24.1	19.4	1.8	1.5	1.3	30	16	15	2.5	3.0	3.2	21.7	18.6	16.2	14.2	12.6	11.4	6.65%	6.41%
Automobiles & Components ⁽²⁾	25.1	24.7	22.2	24.0	24.2	21.6	1.5	1.5	1.3	40	2	11	2.3	2.4	2.7	18.3	17.7	15.7	16.1	15.6	14.0	0.17%	0.16%
Consumer Durables & Apparel ⁽²⁾	40.4	36.1	32.7	40.4	36.1	32.7	2.5	2.2	1.9	6	12	10	1.0	1.1	1.3	27.5	24.7	22.3	21.8	19.8	17.8	0.16%	0.15%
Hotels Restaurants & Leisure ⁽²⁾	67.6	29.8	22.3	5.4	27.4	20.4	4.1	1.8	1.3	64	127	33	1.1	2.4	2.9	47.7	21.8	16.7	22.4	14.0	11.7	2.61%	2.52%
Media ⁽²⁾	45.9	35.9	28.6	49.2	38.9	30.3	2.8	2.2	1.7	50	28	25	1.2	1.5	1.8	27.7	22.0	17.3	17.5	14.9	12.6	2.58%	2.49%
Retailing ⁽²⁾	20.6	22.2	21.0	15.9	19.5	18.5	1.2	1.4	1.2	24	-7	6	3.6	3.5	3.4	15.6	16.7	15.8	11.1	11.6	11.0	3.70%	3.57%
Consumer Staples ⁽²⁾	23.3	22.4	20.9	23.0	19.4	19.8	1.4	1.4	1.2	19	4	7	3.1	3.3	3.6	16.9	16.2	15.3	10.2	9.8	9.4	4.23%	4.08%
Food & Drug Retailing ⁽²⁾	22.5	21.8	20.7	17.1	18.9	19.8	1.4	1.3	1.2	23	3	5	3.3	3.5	3.6	16.5	16.0	15.4	9.7	9.5	9.1	3.23%	3.11%
Food Beverage & Tobacco ⁽²⁾	25.2	24.0	20.9	26.7	19.7	18.2	1.5	1.5	1.2	5	5	15	2.7	3.0	3.4	17.5	16.6	14.6	11.6	11.1	10.1	0.93%	0.90%
Health Care ⁽²⁾	33.2	35.2	30.5	34.6	24.5	22.2	2.0	2.1	1.8	16	-6	15	1.1	1.3	1.5	25.5	26.9	23.5	19.9	20.7	18.4	9.21%	8.88%
Financials ⁽²⁾	17.4	16.1	14.6	16.8	16.9	14.6	1.1	1.0	0.9	46	8	10	4.2	4.5	5.1	8.9	6.0	9.2	7.5	5.1	8.4	24.22%	23.36%
Banks ⁽²⁾	16.3	15.6	14.2	15.6	14.8	13.3	1.0	1.0	0.8	44	5	10	4.4	4.7	5.3	7.5	4.9	8.4	6.3	4.2	7.5	17.67%	17.04%
Diversified Financials ⁽²⁾	20.4	19.4	17.8	17.4	16.7	14.8	1.2	1.2	1.1	-3	5	9	3.4	3.7	4.1	15.8	14.8	13.3	14.7	13.8	12.5	4.27%	4.12%
Insurance ⁽²⁾	21.9	14.8	13.4	18.1	18.0	16.3	1.3	0.9	0.8	997	48	11	4.4	4.8	5.2	19.9	13.0	11.9	18.1	12.3	11.2	2.28%	2.20%
Real Estate ⁽²⁾	19.0	17.3	16.6	16.7	15.0	14.3	1.2	1.1	1.0	18	10	7	4.0	4.2	4.4	19.4	17.7	16.8	19.0	17.4	16.4	5.12%	4.93%
Information Technology ⁽²⁾	100.0	69.5	53.4	23.7	55.0	45.8	6.1	4.2	3.2	-4	44	30	0.6	0.6	0.7	72.3	51.0	38.6	42.7	34.5	27.6	3.43%	3.31%
Telecommunication Services ⁽²⁾	24.3	23.8	20.9	36.4	31.4	26.5	1.5	1.5	1.2	4	2	14	3.8	4.1	4.2	19.1	17.8	15.7	7.5	7.5	7.0	2.37%	2.29%
Utilities ⁽²⁾	23.3	25.8	25.7	29.4	26.9	25.2	1.4	1.6	1.5	-17	-10	-5	5.9	5.6	4.9	16.6	16.8	18.3	10.3	10.3	8.7	1.24%	1.19%
20 Leaders	13.4	14.6	16.1	17.9	18.8	17.5	0.8	0.9	0.95	43	-8	-9	5.3	4.5	4.2	7.9	7.9	7.8	6.4	6.4	6.2	na	na
50 Leaders	14.7	15.2	16.2	18.9	18.1	16.9	0.9	0.9	1.0	46	-4	-6	5.0	4.4	4.2	8.9	8.8	8.5	7.0	6.9	6.7	na	na
ASX 100	16.1	16.3	16.9	20.0	19.0	17.7	1.0	1.0	1.0	43	-1	-4	4.4	4.0	3.8	9.6	8.7	11.0	7.5	6.8	8.4	na	na
MidCap 50	24.8	20.2	18.5	22.5	19.5	17.8	1.5	1.2	1.1	21	23	8	2.1	2.7	2.9	13.0	7.6	-27.6	9.2	5.8	-37.3	na	na
S&P/ASX 200 - Industrials	24.2	21.4	19.1	19.2	19.7	18.3	1.5	1.3	1.1	31	13	12	3.1	3.4	3.7	14.6	10.9	13.4	10.9	8.5	10.4	na	na
S&P/ASX 200 - Resources	9.0	10.2	12.9	15.7	13.4	13.1	0.5	0.6	0.8	56	-12	-21	7.5	5.3	4.0	5.3	6.1	7.5	4.3	4.7	5.5	na	na
S&P/ASX 200 - Ind excl BIP	32.9	27.5	23.8	21.6	22.0	19.9	2.0	1.7	1.4	15.9	19.5	15.8	2.3	2.6	2.9	23.2	20.5	17.9	14.3	13.1	11.9	na	na
S&P/ASX 200	16.5	16.4	16.8	19.0	18.9	17.6	1.0	1.0	1.0	42	0	-3	4.3	3.9	3.8	9.9	8.9	11.0	7.7	7.0	8.3	na	na
S&P/ASX 300 - Industrials	24.1	21.3	19.0	19.0	19.1	18.0	1.5	1.3	1.1	31	13	12	3.1	3.4	3.7	14.6	10.9	13.4	10.9	8.5	10.4	na	na
S&P/ASX 300 - Resources	9.1	10.2	13.0	15.7	13.4	13.1	0.5	0.6	0.8	57	-12	-21	7.4	5.3	4.0	5.4	6.1	7.5	4.3	4.7	5.5	na	na
S&P/ASX 300 - Ind excl BIP	32.6	27.3	23.5	20.3	21.0	18.9	2.0	1.7	1.4	16.2	19.4	15.9	2.3	2.7	2.9	23.1	20.4	17.8	14.2	13.1	11.8	na	na
S&P/ASX 300	16.5	16.4	16.8	18.3	18.3	17.3	1.0	1.0	1.0	43	1	-3	4.3	3.9	3.8	9.9	9.0	11.0	7.7	7.0	8.3	na	na
Small Companies ⁽⁴⁾	23.4	18.4	16.1	17.1	16.3	16.3	1.4	1.1	1.0	38	27	14	2.7	3.0	3.4	16.7	13.1	10.7	10.6	8.9	7.7	na	na
Small Industrials	23.1	20.2	17.5	17.4	17.8	17.1	1.4	1.2	1.0	29	14	16	2.8	3.1	3.4	18.0	15.6	13.2	12.2	10.9	9.6	na	na
Small Resources	24.7	12.6	11.5	15.1	14.4	11.2	1.5	0.8	0.7	128	96	9	1.9	3.0	3.4	12.2	7.2	5.5	6.4	4.7	3.8	na	na

(1) Includes all companies covered by Credit Suisse analysts

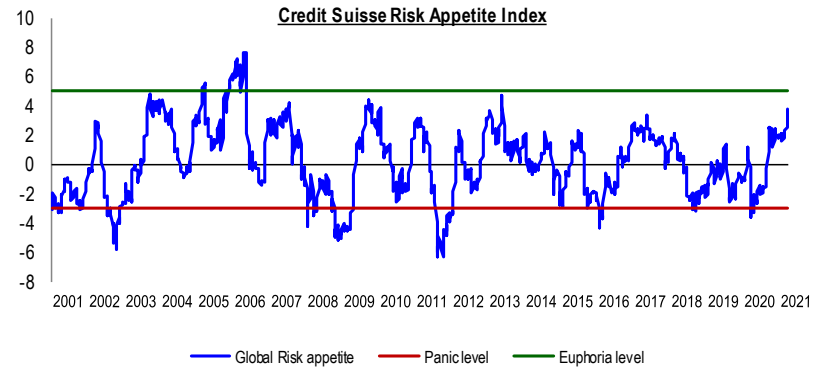
(2) All sectors are based on S&P/ASX200. Companies on restricted list are not included in aggregates

Source: Company data, Refinitiv, Credit Suisse estimates

(3) No weighting applicable

(4) Emerging companies are all companies covered by Credit Suisse excluding top 100 stocks.

Commodities		Current	2021Q1	2021Q2	2021Q3	2021Q4
Aluminium	\$/lb	1.00	0.90	0.91	0.86	0.86
Copper	\$/lb	4.07	3.60	3.70	3.50	3.30
Lead	\$/lb	0.87	0.97	0.94	0.92	0.92
Nickel	\$/lb	7.33	8.00	7.80	7.20	6.80
Zinc	\$/lb	1.27	1.25	1.20	1.18	1.18
Iron Ore Fines (CFR)	\$/t	79.70	170.00	170.00	140.00	120.00
Hard Coking Coal	\$/t		150.00	140.00	130.00	130.00
LV PCI	\$/t		120.00	112.00	104.00	104.00
Thermal Coal	\$/t	61.80	85.00	75.00	65.00	75.00
Oil (brent)	\$/bbl	64.62	50.00	50.00	50.00	50.00
Oil (WTI)	\$/bbl	61.42	45.00	45.00	45.00	45.00
US Natural Gas	\$/mmbtu	2.58	2.75	2.75	2.75	2.75
Uranium	\$/lb		40.80	40.80	40.80	40.80
Gold	\$/oz	1,739	1,950	2,100	2,200	2,200
Silver	\$/oz	25.8	25.0	26.0	25.0	24.0



Source: Refinitiv, Credit Suisse estimates

Companies Mentioned (Price as of 23-Mar-2021)

Agilent (A.N, \$123.61)
Alcoa Corporation (AA.N, \$30.43)
Alexion Pharmaceuticals Incorporated (ALXN.OQ, \$155.25)
Aluminum Corporation Of China Ltd. (601600.SS, Rmb3.94)
Aluminum Corporation Of China Ltd. (2600.HK, HK\$3.37)
Anglo American Plc (AAL.L, 2781.0p)
Antofagasta (ANTO.L, 1721.5p)
AstraZeneca (AZN.L, 7344.0p)
BHP Group Limited (BHPB.L, 2053.0p)
China Coal Energy Company Limited (601898.SS, Rmb5.28)
China Coal Energy Company Limited (1898.HK, HK\$3.36)
Coal India Limited (COAL.BO, Rs135.25)
First Quantum Minerals Ltd. (FM.TO, C\$24.37)
Freeport-McMoRan (FCX.N, \$35.01)
Glencore (GLEN.L, 279.45p)
Grifols (GRLS.MC, €21.7)
Hualan Biological Engineering Inc. (002007.SZ, Rmb39.21)
Immunovant (IMVT.OQ, \$17.17)
JFE (5411.T, ¥1,360)
Jiangxi Copper (600362.SS, Rmb23.3)
Jiangxi Copper (0358.HK, HK\$15.6)
Johnson & Johnson (JNJ.N, \$160.5)
MMG Limited (1208.HK, HK\$4.47)
Mechel (MTL.N, \$1.71)
Norilsk Nickel (NKLq.L, \$30.39)
Norsk Hydro (NHY.OL, Nkr51.78)
POSCO (005490.KS, ₩313,000)
Peabody Energy (BTU.N, \$3.21)
Rio Tinto (RIO.L, 5386.0p)
SAIL (SAIL.BO, Rs72.25)
Southern Copper Corporation (SCCO.N, \$72.08)
Takeda Pharmaceutical (4502.T, ¥4,261)
Tohoku Electric Power (9506.T, ¥1,098)
UCB (UCB.BR, €81.36)
Vale (VALE.N, \$17.01)
Warrior Met Coal Inc. (HCC.N, \$17.71)
argenx (ARGX.OQ, \$307.07)

For details of Australian companies covered by Credit Suisse refer to the Top 100 and Emerging Companies earnings & dividends sheets.

Disclosure Appendix

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The analysts identified in this report each certify, with respect to the companies or securities that the individual analyzes, that (1) the views expressed in this report accurately reflect his or her personal views about all of the subject companies and securities and (2) no part of his or her compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

As of December 10, 2012 Analysts' stock rating are defined as follows:

Outperform (O) : The stock's total return is expected to outperform the relevant benchmark* over the next 12 months.

Neutral (N) : The stock's total return is expected to be in line with the relevant benchmark* over the next 12 months.

Underperform (U) : The stock's total return is expected to underperform the relevant benchmark* over the next 12 months.

**Relevant benchmark by region: As of 10th December 2012, Japanese ratings are based on a stock's total return relative to the analyst's coverage universe which consists of all companies covered by the analyst within the relevant sector, with Outperforms representing the most attractive, Neutrals the less attractive, and Underperforms the least attractive investment opportunities. As of 2nd October 2012, U.S. and Canadian as well as European (excluding Turkey) ratings are based on a stock's total return relative to the analyst's coverage universe which consists of all companies covered by the analyst within the relevant sector, with Outperforms representing the most attractive, Neutrals the less attractive, and Underperforms the least attractive investment opportunities. For Latin America, Turkey and Asia (excluding Japan and Australia), stock ratings are based on a stock's total return relative to the average total return of the relevant country or regional benchmark (India - S&P BSE Sensex Index); prior to 2nd October 2012 U.S. and Canadian ratings were based on (1) a stock's absolute total return potential to its current share price and (2) the relative attractiveness of a stock's total return potential within an analyst's coverage universe. For Australian and New Zealand stocks, the expected total return (ETR) calculation includes 12-month rolling dividend yield. An Outperform rating is assigned where an ETR is greater than or equal to 7.5%; Underperform where an ETR less than or equal to 5%. A Neutral may be assigned where the ETR is between -5% and 15%. The overlapping rating range allows analysts to assign a rating that puts ETR in the context of associated risks. Prior to 18 May 2015, ETR ranges for Outperform and Underperform ratings did not overlap with Neutral thresholds between 15% and 7.5%, which was in operation from 7 July 2011.*

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Analysts' sector weightings are distinct from analysts' stock ratings and are based on the analyst's expectations for the fundamentals and/or valuation of the sector* relative to the group's historic fundamentals and/or valuation:

Overweight : The analyst's expectation for the sector's fundamentals and/or valuation is favorable over the next 12 months.

Market Weight : The analyst's expectation for the sector's fundamentals and/or valuation is neutral over the next 12 months.

Underweight : The analyst's expectation for the sector's fundamentals and/or valuation is cautious over the next 12 months.

**An analyst's coverage sector consists of all companies covered by the analyst within the relevant sector. An analyst may cover multiple sectors.*

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Global Ratings Distribution

Rating	Versus universe (%)	Of which banking clients (%)
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Neutral/Hold*	35%	(27% banking clients)
Underperform/Sell*	11%	(21% banking clients)
Restricted	2%	

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