

HEALTHCARE SECTOR SPECIALIST

MODERN DENTAL GROUP

(3600 HK)

Global provider of low cost dental prosthetics

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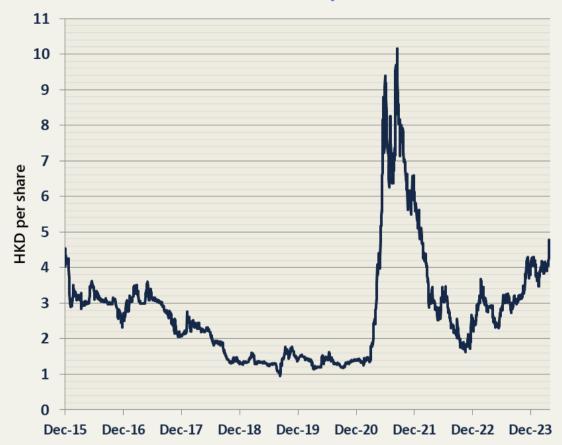
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Elevator pitch



- Modern Dental Group (MDG) is a low cost dental laboratory company. In a very fragmented market the company is the largest global player in terms of labs and distribution network.
- Due to the HK bear this non-cyclical high quality small cap can be bought at 2025 expected EV/EBITDA below 6x and P/E below 10x including an expected forward dividend above 3.5%.
- Riding on the tailwind of a larger elderly population in need of dental care, MDG has grown revenue with a 15% CAGR the past 10 years.
- The Covid lockdowns in China distorted/masked a stable trend of revenue growth and especially margin recovery. The expectation would be that the market gradually gives the stock a higher multiple as the quality of cash flow stability becomes more evident.
- With improving margins, reinvestment of it's strong cash-flow and bolt on acquisitions MDG is likely to outgrow the market as a strong compounder stock. The past years the stock has very significantly outperformed the Hang Seng Index.
- A new clear aligner product which can be pushed in its distribution network is a free call option on the upside.

Modern Dental Group Share Price



Company summary



- Modern Dental Group (MDG) started as an OEM manufacturer of dental prosthetics in Shenzhen China. Through cheap labor and cost efficient production it outcompeted local dental technicians and won much of the local market. It then turned internationally and outcompeted locally based dental labs on price.
- MDG used the significant cash flow generated and IPO proceeds to buy many of the distributors that MDG cooperated with. It also expanded its local dental laboratory presence, especially in North America.
- Transformed to a global leader in low cost dental prosthetics and a unique two tier model with both local laboratories and cost efficient production in China.
- Unusual structure where two families control the company (Chan family 50% and Ngai family 17%). Increases likelihood that company is run with all shareholders in mind.
- Rides on the tailwind of an aging (wealthy) population. The global dental service market expected to grow at a 5% CAGR until 2032.
- The process for teeth replacement is going through a major shift with usage of digital tools instead of physical molds. This strengthens MDG position in the market and should also be margin accretive. Currently ~45% of MDG cases are received digitally.
- The Covid period was tough for many smaller competitors with lumpy sales due to lockdowns. MDG seems to have emerged a stronger company by weathering the storm.

Capital Structure	
Market Cap (HK\$ MM)	4,497
Enterprise Value (HK\$ MM)	4,663
Shares outstanding (MM)	947
Net Debt/EBITDA	0.24x
Growth	
Last 3-Yr Rev CAGR	11.0%
Last 3-Yr EBITDA CAGR	22.6%
Last 3-Yr EPS CAGR	55.9%
Efficiency	
LTM EBIT Margin	16.9%
LTMROA	9.0%
LTMROE	16.2%
Valuation	
NTM EV/EBITDA	5.92x
NTM P/E	9.71x
Dividend Yield	3.2%
Last 3-Yr Share count	-2.6%

Company history



- 1986 Founding of Modern Dental Laboratory by dental technician Ben Chan, the company manufactures and distributes dental prosthetic devices in Hong Kong.
- 1991 His brother Michael who is also a dental technician joins the company.
- 1992 Production line move to Shenzhen, China.
- 1996 Godfrey Ngai who teaches as an instructor dental technologist at the University of Hong Kong and a good friend of the brothers is invited to join the group and becomes a major shareholder. The same year Ben and his family emigrates to Canada (before the 1997 handover).
- 2000 and 2001 Business relationships with European distributors established.
- **2005** New production facility built in Shenzhen.
- 2011 Ben Chan and his family returns to Hong Kong.
- 2013 Generating steady cash flow of +US\$20m a number of dental distributors in Europe and Australia are acquired.
- 2015 IPO at HK\$4.15 per share adding about US\$80m cash. Further distributor acquired in Europe and Australia.
- 2016 Major dental lab group (MicroDental) acquired in USA for US\$65m.
- 2021 A new generation leading the company sons of the founding brothers were promoted to Chair (Ronald) and Vice-Chairman (Alwin).
- 2022 Alwin, son of Michael decides for personal reasons to leave the company.
- 2022 Clear aligner Trioclear is introduced.

Business overview



- MDG manufactures teeth replacements / prosthetics of different types and ships them to the dentist.
- Largest segment is Fixed Prosthetics like crowns, these are normally milled and then hand painted to color match other teeth, the color is set by putting the crown through a furnace. The average selling price is (ASP) HK\$1,838 per case, meaning more than one million cases are produced annually.
- Second largest segment is Removable prosthetics like dentures. These will have various production methods, the old way is through a wax model build a whole set of teeth, more recently some type of 3D printing is also utilized. The ASP is HK\$1,265.
- Third segment is other devices used for example for aligning teeth, sports guards etc. ASP is HK\$660.
- Clear aligners is fourth new potentially larger product segment.
 Produced in a 24h fully automated production line. Sales so far is modest at HK\$34m. ASP is much higher at HK\$6,820.

Fixed Prosthetics

HK\$1,985m



Removable Prosthetics

HK\$713m



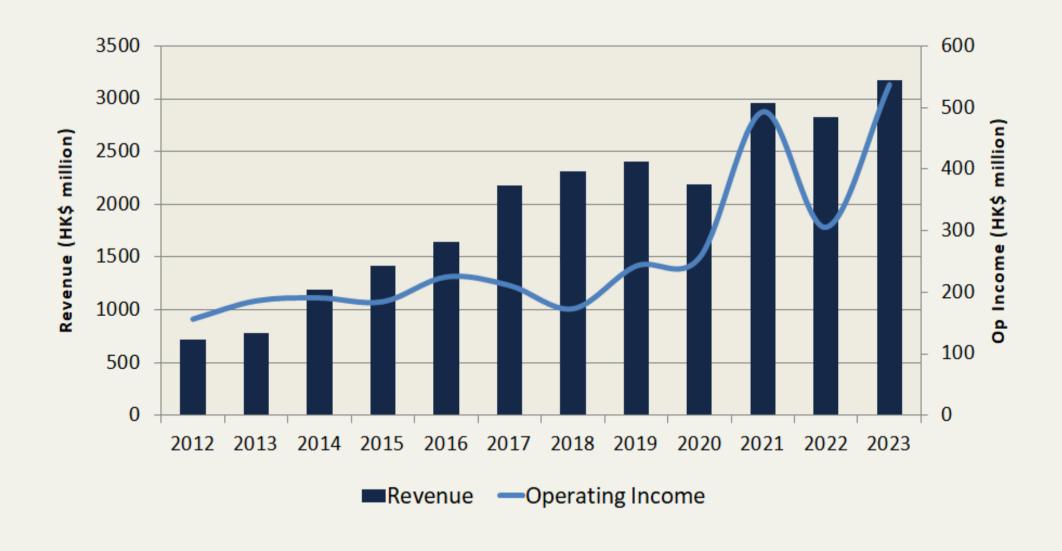
Other Custom-made Devices*
(such as orthodontics devices, sports
guards and anti-snoring devices)

HK\$284m



Growth in revenue and profit has been impressive

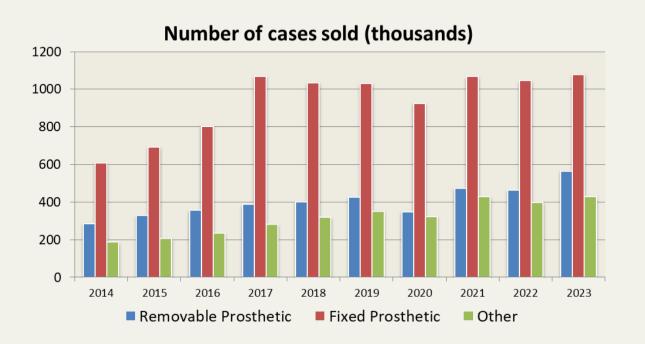


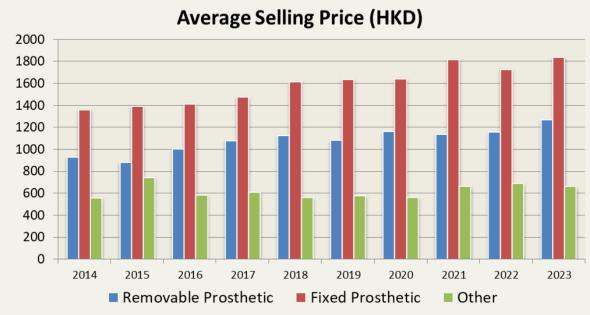


Revenue breakdown



- The major growth period in sold cases ended 2017, this partly explains why the stock multiple re-rated downwards since then.
- The last 5 year revenue CAGR of 5.4% for core products can be broken down into a 3.4% CAGR of number of sold cases and a volume weighted ASP increase with a CAGR of 2.0%.
- As shown below recent growth mostly comes from removable prosthetics with some help from ASP increases for Fixed Prosthetics.
 Given that Europe is the largest region, there is some ASP sensitivity to the EUR.
- That Fixed Prosthetic growth has been stalling is somewhat worrisome given that the underlying total market is growing. To be further explored under the Competition slide.

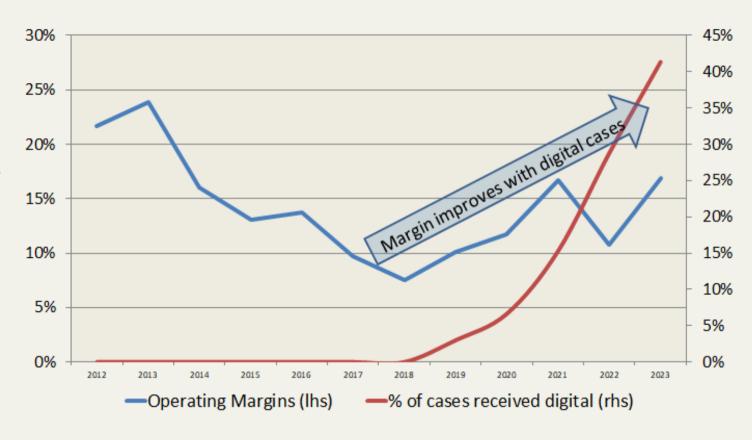




Margin improvement – big part of the story



- In the past years margin improvement has driven the valuation of the stock more than revenue growth.
- MDG themselves points to the digitalization of the industry as a main contributor to the margin improvement. The 2023 overall percentage of cases received digitally was 41.4% which means that at year end the rate was ~45%. It's highly likely this number moves towards 80-90% in the coming years and further boosting the margin.
- The core business has operating margins above 20% as seen back in 2012-2013. This was diluted as the company bought distribution and local labs, some of them initially loss making.
- Part of the margin story is also increased profitability per sold unit. The weak labor market in China should mean less pressure on wage growth for technicians. As MDG can start to leverage its market position and digital trend continues



^{*} Margins were lower in 2022 due to Covid lockdowns in Mainland China, affecting the production facilities

^{**} There is no data on percentage of digital cases before 2020 (assumed 3% in 2019 and 0% before)

Markets / Regions



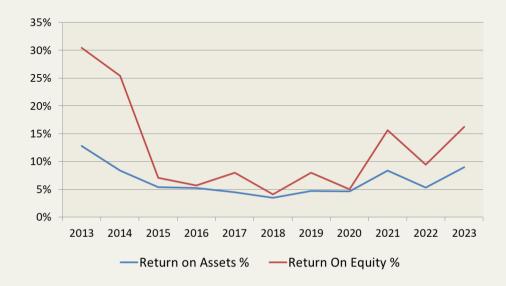
- In the European region MDG has the largest self-owned distribution network and strongest growth.
 This is clearly the region MDG is winning market share.
- North America has been a turnaround region since large MicroDental lab purchase and has improved more on margin than sales volume.
- China has a lot of potential in terms of market size and projected growth, but here other local dental labs will probably compete harder. The recent government move to central procurement could favor larger players like MDG but would also put pressure on margins.



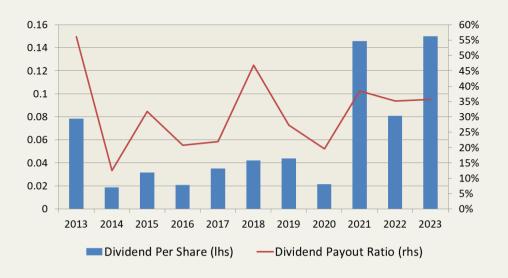
Return metrics



- ROA metrics are weighted down by Goodwill from acquisitions.
- Thanks to the strong margin improvements the ROE has established itself above a respectable 15%. 2022 was lower due to Covid lockdowns affecting production in China.



- Payout ratio for now to target about 35%.
- On top of the dividend the company has bought back around 1% of shares outstanding per year.
- With a forward looking dividend yield at about 3.5% + share buybacks of 1% it offers a decent direct return to investors.



Terminology



- Dental Laboratory A support function to the dentist which provide services in terms of designing and creating mainly dental prosthetics. Historically this was a fully manual process building up prosthetics from impressions and wax models of the mouth and manually drilling out crown out of raw blocks. In later years the process has for many products become automatized and digital. Dentures (grandma's false teeth) are still to a large degree done from soft wax models.
- Local laboratory A dental laboratory located in the same country or nearby country as where the dentist office is located.
- **Dental Prosthetics** Are the cover (crowns/bridges) that protects the nerve root or the removable devices that functions as your teeth (dentures). The crowns are complementary to for example the dental implant (titanium screw) and is the cover that goes on top of the screw/abutment. More commonly the crown is placed on what is left of the tooth.
- CAD/CAM Computer Aided Design / Computer Aided Manufacturing is used to design and manufacture dental restorations, especially dental prostheses like crowns, veneers and bridges. CAD software makes detailed 3D models and CAM through CNC milling machines or 3D printers makes the 3D model into a physical object.
- Intra oral scanner A large pen like object with a camera at the end, which scans the mouth and builds a 3D model which can be further refined in a CAD tool.

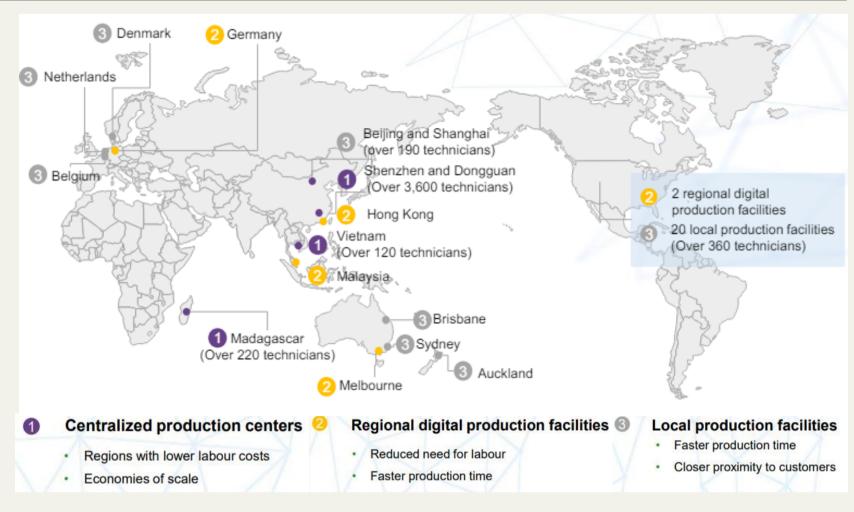




MDG Production footprint



- Main production hub and core center is in Mainland China close to the Hong Kong border. To reduce cost technicians has for many years been moving from Shenzhen to nearby city Dongguan.
- Large presence of technicians in the US after acquisition of MicroDental for US\$65m. This has been a successful turnaround story as MicroDental was significantly loss making at purchase.
- Latest expansion is in Vietnam, partly to hedge against US sanction risk. Opening ceremony held in March 2024.
- Regional medium sized production facilities are also available in central Europe and Australia.
- Madagascar has an old center which does not seem to be further expanded on.



Source: Modern Dental 2023 Results Investor Presentation

MDG Distribution footprint



- Home market Hong Kong very large market share (>55%) and 100% of Government orders.
- Leader in very fragmented markets, opportunity to further consolidate.

Overview of market position

Market	Position	Share
Hong Kong	No.1	>55%
Australia	No.1	>10%
Netherlands	No.2	>6.3%
Norway	No.2	>5%
Belgium	No.1	>2.9%
France	No.1	>1.2%
USA	No.2	>1.0%
Germany	No.3	>0.5%



Source: Modern Dental 2023 Interim Results Investor Presentation

Acquisitions



- The transformation from a low cost dental lab in China to a global player cost about HK\$1.2 billion to execute.
- Steady pace of acquisitions from pre-IPO up until 2017. Around that time the company was also almost tapped out in terms of leverage which was around 2.5x EBITDA.
- Since 2017 focus have been on improving the businesses bought. Op margins bottomed at 9.7% in 2017 and steadily improved since.
- The going price for both dental labs and distributors seems to be around 1x Sales.
- The easy money era probably increased acquisition prices and as MDG itself was trading at a very low multiple, the share buybacks and dividend payments done has been a decent alternative to further acquisitions.
- One would like to see the pace of acquisitions picking up again as MDG cash flow is strong and leverage ratio now is very low at 0.24x EBITDA.

Major Acquisitions - All distribution but one								
Date	Company	Countries	Туре	Purchase Price	Revenue at the time			
Feb-17	CDI Dental & Supply AB	Sweden	Distribution and Lab	4m EUR	4.3m EUR			
Oct-16	RTFP Dental Inc (MicroDental)	USA	Dental Lab	65m USD	68m USD			
Mar-15	SCDL Group	Australia	Distribution	12.5m AUD	Not Disclosed			
		Holland, Belgium,						
Apr-14	Elysee Group	Denmark & Spain	Distribution	29.9m EUR	34m EUR			
Nov-13	Permadental Group	Germany	Distribution	30.2m EUR	18m EUR			

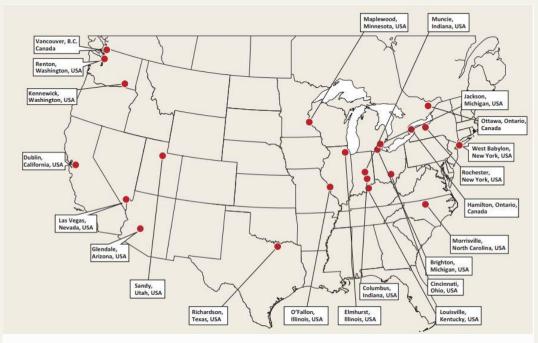
Minor bolt on Dental Lab acquisitions

Date	Company	Countries	Туре	Purchase Price	Revenue at the time		
Dec-21	Apex Digital Dental	Malaysia	Dental Lab	2.1m MYR	2.1m MYR		
Jul-21	Swift Dental Laboratory	Australia	Dental Lab	0.8m AUD	1.1m AUD		
Jan-17	Schmidt Dentalkeramik APS	Denmark	Dental Lab	Not Disclosed	0.85m EUR		
Dec-16	Ratiodental Zahnmanufaktur	Germany	Dental Lab	1m EUR	Not Disclosed		
Jun-16	Slater Dental Studios	Australia	Dental Lab	Not Disclosed	Not Disclosed		
May-14	Sundance laboratory	USA	Dental Lab	1.9m USD	3.3m USD		
Jul-13	Quantum Dental	Canada	Dental Lab	2.6m CAD	Not Disclosed		
	Total approximate acquisitions cost (excluding earnouts):				1.2 billion HKD		

Acquisitions - MicroDental



- Only larger dental lab acquisition made. Famous dental lab MicroDental gave MDG a local presence in North America, which was previously almost non-existent.
- Acquired 2016 and was losing HK\$ -73m annually. To put in perspective MDG 2015 Net Income was HK\$83m.
- Until this day mostly been a turnaround story as the revenue growth has been very modest for MicroDental and NA as a whole (including sales from China into NA)
- But profitability has improved significantly since 2016 HK\$73m loss to HK\$16.7m profit the past two years (2021 record Covid-rebound year profit was Hk\$44m). The operating margin of 9% is still significantly lagging the total groups of ~17%.
- As profitability has been restored one would expect MDG to start to focus more on growth. A new low cost dental lab in Vietnam (to reduce any geopolitical risks) is currently being setup to service NA, possibly the last puzzle piece before we see a return to stronger growth.



MAC

What kind of **porcelain veneers** do Hollywood A-listers have? Most celebrities use MAC veneers designed and manufactured by the MicroDental Laboratory. However, MACs are only provided to select clients, meaning only a reputable **Beverly Hills cosmetic dentist** will be able to offer them.

MAC veneers are made of pressed ceramics which is similar to the Empress and the Emax of Ivoclar. MACs provide the most realistic teeth appearance by using up to 16 hues in their color matching process. Other veneers are limited to a maximum of four hues.

Management / Family overview



Chan family (in total 49.6% of shares through jointly owned company)

- Mr. Chan Kwun Pan, Ben aged 65 (Founder of the group and dental technician. He is father to Ronald and Edith and brother to Michael)
 - Dr Chan Yik-long, Ronald aged 36 (Chairman of the Board, and SEA Region General Manager, CEO for clear aligner business)
 - Ms. Chan Yik Yu, Edith aged 35 (Chief Marketing Officer)
- Mr. Chan Kwun Fung, Michael aged 68 (Joined brother Ben in 1991, Dental technician and father to Alex)
 - Mr. Chan Chi Yuen, Alex aged 38 (Chairman and legal representative of certain subsidiaries, runs daily operations of the largest laboratory in Shenzhen)

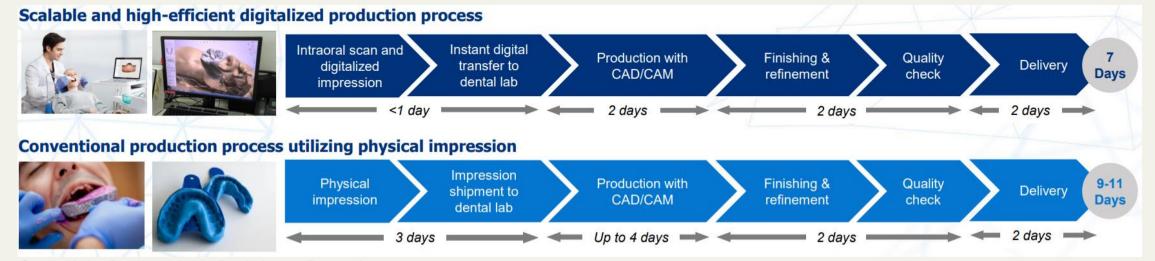
Ngai family (in total 16.9% of shares)

- Mr. Ngai Shing Kin, Godfrey aged 74 (Chief Executive Officer, HK University lecturer and dental technician invited to joined group in 1996. Father to Alwin holds 10.3% of shares)
 - Mr. Ngai Chi Ho, Alwin aged 45 (Previous COO left for personal reasons in 2022 holds 6.6% of shares)

Digital workflow improves operational efficiency



- Short turnaround thanks to digital workflow mean less time using temporary covers or abutments, improving the customer experience and reducing the advantage a local dental laboratory has.
- Digital models means more accurate scans and reduced re-make rates, which improves profit margins and less unhappy end customers who need to come back for another set of physical impressions + waiting time.
- Currently ~45% of cases are received digitally and the rapid uptake of intra oral scanners among dentist means that MDG will soon receive majority of its cases digitally.
- Digital workflow means skills of technicians has moved from working with hands to modeling in CAD software.



Source: Modern Dental 2023 Interim Results Investor Presentation

Trioclear - clear aligner opportunity



- Huge market opportunity with global market valued at 6bn USD and growing fast.
- Money spent to buy distribution can be significantly leveraged for Trioclear. Its clear visiting homepages of its many distributors (Elysee, CDI, Southern Cross, Labocast, etc.) that a push for TrioClear is happening.
- Initial wobble with product launch, went from soft/medium/hard aligners to only soft & hard. Software to plan teeth movement exist but should be behind large competitors who spent a lot on software (Al planning etc).
- Production line is now fully automated to support larger volumes and 510k FDA received already in 2021.
- Still a long road to convince dentists to go with a smaller unknown brand instead of market leader Invisalign or a larger competitors like Straumann's Clear Correct. Hurdle would also be the in-house software which most likely is inferior to more developed products. There are examples of mid sized companies like Envista who have successfully rolled out their own clear aligners.
- There must be a clear value proposition with still good patient outcomes. From early price lists seen Trioclear is priced at below half of Invisalign prices (depending on dentist own price add-ons). ASP for MDG is currently HK\$6,800.
- Sales is still modest and it seems a first physical product push will happen in April 2024 at 3 day Hong Kong/China symposium (max 140 participants). Local language sales material is also available since quite recently.
- A peer comparison is HK listed AngelAlign with 3x MCAP of MDG which is a #1 clear aligner company in China. They sold 245k cases in 2023 at an ASP of HK\$6024. If MDG globally could reach a similar sales level of cases, at current ASP that mean HK\$1.67bn in revenue, roughly 50% of MDG current sales.



Competitors



- Larger local laboratories are the major competitors as they hold a strong partnership with the local dentist. In USA as an example a consolidation has happened as smaller sole technicians have struggled with capex for machinery. The number of dental laboratories have halved from 12800 to 6500 between 2001 and 2019. The number of local lab workers have been more or less stable.
 - Examples of large laboratories: National Dentex Corporation, Patterson, Keating Dental Lab,
- As mentioned earlier the Fixed Prosthetics growth for MDG has stalled the last few years, one reason for that could be the competition from technology which offers better and better solutions for the dentist to produce at least more simple crowns and veneers in-house with a milling machine. This trend is likely to continue and could be a headwind to look out for.
- There are many small to medium sized dental laboratories in countries like China, Philippines and India which competes on price. Just in China it's estimated there are around 100 dental labs, most of them with below 150 technicians.
 - DentCare in India with over 4000 technicians is the largest competitor found, they do not have the same presence globally as MDG through local dental labs or their own distributors.
 - Jiahong Dental (previously listed) stands out with some distribution cooperation in Germany, France, USA and Sweden.
 - Others are Chinese labs like Cosmetic Dental Lab and World Medical Technology with about 300 technicians each.
- Although MDG also offer local labs there is a huge amount of smaller such competitors spread out around the world.
 They can offer a faster turnaround, better discussion with the dentist on more complex cases which might require some back and forth to resolve.

Competitive advantages / Moats



- Self owned distribution network and presence through local labs puts MDG in a different position than other low cost dental labs. The client is not the patient in the dentist chair, the client for MDG is the dentist. After all very few patients would question the dentist on where the prosthetic is sourced from. By building a strong relationship with the dentist through local distribution and local labs one can gain the trust of the dentist to expand the cooperation.
- Unique two tier model where dentist can choose to get product products from MDG local dental labs or lower cost product from China. Creating an offering neither the local or low cost lab competitor can easily replicate.
- Scale of MDG China laboratory 3600 technicians vs. most competitors except one Indian competitor where most labs run with below 300 technicians.
- Machinery to mill and 3D print are costly investments again scale is an advantage especially over local small/medium sized laboratories.
- Thanks to MDG distribution network new products like the clear aligner can be pushed directly to dentists. Competition is high with many larger companies making a push for their clear aligner product but none of them are currently focusing on lower cost option. MDG can potentially come in as low cost producer of clear aligners and still make decent margins on the product.
- Cooperation with listed Arrail Group which runs dental clinics all over China. Could potentially be one of the first customers also for the TrioClear clear aligner.



Governance and capital allocation

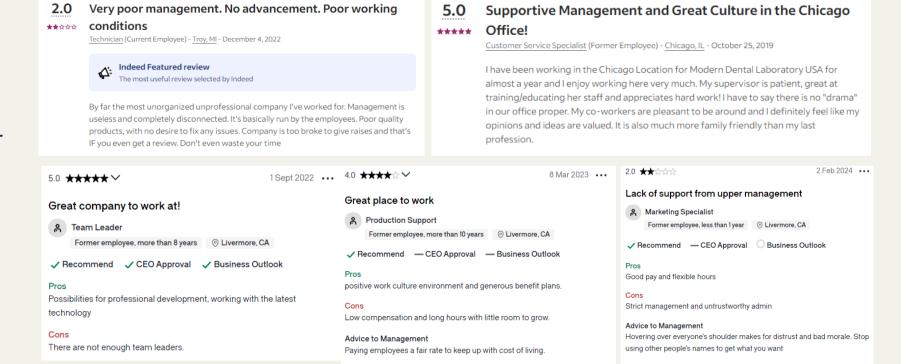


- Family run business means the sons and daughter of the founders have been promoted to lead the company.
- Under the family leaders, there are many country/region leaders who run the business on a day to day basis.
- If the new generation are competent leaders is yet to be determined. The new generation has been instrumental in pioneering the clear aligner business, which is a innovative attempt to grow a new business category.
- Pre IPO in 2012-2013 the company consisted of a more pure Chinese dental lab business, this was highly cash generative (Free Cash Flow Margins 15-20%). Purchasing their global network of distribution and dental labs was highly dilutive in terms of cash flow, as these companies just added topline but little to no profits.
- One can argue the spending spree the company went on was bad capital allocation, at least short term it was. But long term the company has put itself in a unique position in the value chain, emerging as a much stronger company than just any other large dental lab with a low cost work force.
- Management has managed to improve margins in some of their purchased businesses, especially it's US dental lab asset, which was significantly loss making at purchase. The past few years has seen free cash flow margins recover and MDG seems to be able to leverage it's position in the market regaining its cash flow margins and outgrowing the market.
- The company pays a decent dividend, initiated share buybacks when the share price was weak in the Hong Kong stock market downturn and seems to be able to do bolt on acquisitions and improve the businesses they purchase. Overall all these qualities are unusual to find in a Hong Kong small cap, rating this company far above average in terms of governance and capital allocation.

Glassdoor / Indeed reviews mixed



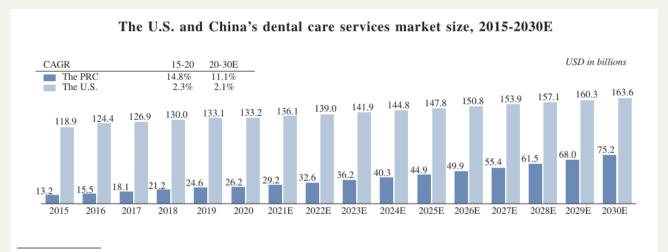
- Hard to draw conclusions from reviews as the organization is highly decentralized.
- Working at a distributor in Sweden has very little in common with a dental lab worker in USA or China.
- Seeing mixed reviews is not surprising as a larger organization like this mostly like have both underperforming and outstanding teams.



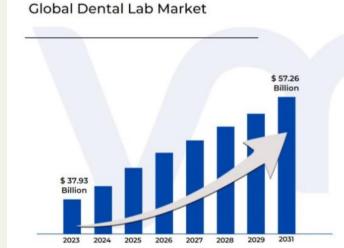
Industry trends



- Global dental services market valued at US\$432bn in 2022 is expected to grow around 5% CAGR with quite some variation between regions, U.S the largest market grows most slowly, EU second largest around average growth and EM at above average. The need for dental care is the worlds largest unmet healthcare need. In 2018 oral diseases accounted for €90 billion in direct costs (treatment expenditure) in the 28 EU member countries, thereby ranking third behind costs for diabetes (€119 billion) and heart diseases (€111 billion).
- With 3D printing and other technologies further reducing product costs, demand will step up as it is just a function of dental care being too expensive for a large part of the population. A low cost producer like MDG is at the forefront of this.
- Dental Lab Market is expected to grow roughly in-line with the wider dental market. Forecasts of growth vary between 4-6% CAGR. The research reports focuses more on the equipment sales to dental laboratories rather than the sales from labs to dentist clinics.



Sources: the American Dental Association; annual reports of listed companies; China Health Statistics Yearbook; the CIC Report





Peer comparison – no other listed dental lab



					Trailing 2023 Multiples			
Company Peers	Ticker	Sales	Business Type	Mkt Cap (US\$m)	EV/Sales	EV/EBIT	P/E	Div yield
Modern Dental Group	3600.HK	Global	Laboratories	566	1.5	9.6	12.4	2.4%
Arrial Group	6639.HK	China	Clinics	319	1.5	-21.7	-23.4	0%
AngelAlign	6699.HK	China	Clear aligners	1,595	4.1	63.6	51.5	0%
Envista	NVST	Global	Implants, consumables & clear aligners	3,430	1.9	13.6	22.3	0%
Henry Schein	HSIC	Global	Consumables, clear aligners & medical supplies	9,105	1.1	16.0	22.6	0%
Align Technology	ALGN	Global	Clear aligners	22,498	5.2	33.1	58.2	0%
Shofu inc	7979.T	Global	Dental materials	335	1.3	11.0	19.2	1.9%
Nakanishi	7716.T	Global	Dental drills	1,177	3.3	11.7	8.2	2.0%
Average Ex Modern Dental Group				5,494	2.6	18.2	22.7	0.6%
Median Ex Modern Dental (Group			1,595	1.9	13.6	22.3	0.0%

Sell-side research and estimate table



- Limited Sell-side research coverage, estimates are based from two analysts.
- Recent (10th April) sell-side from CGS International rates MDG a buy with price target HK\$5.88.

Comments from CGS International:

- "They expect Europe and Australia to drive FY24F revenue growth as the firm maintains its market dominance in the dentist market's digitalization trend."
- "Modern Dental increased its production capacity by over 50% in FY22-23 by expanding capacity of its Dongguan laboratory and setting
 up new facilities in Vietnam. Due to enhanced production capability, CGSI believes Modern Dental should improve production efficiency
 and decrease product costs in FY24F."

Actuals & Forward Estimates	12/31/21 A	12/31/22 A	12/31/23 A	12/31/24 E	12/31/25 E	12/31/26 E
Revenue	2,955	2,830	3,172	3,516	3,906	4,319
Cost of Goods Sold	1,404	1,446	1,472	1,622	1,799	1,996
Gross Profit	1,551	1,384	1,700	1,893	2,107	2,324
EBITDA	629	454	694	788	877	962
EBIT / Operating Income	494	306	539	620	710	796
Net Income Normalized	383	222	404	464	539	610
EPS (GAAP)	0.38	0.23	0.42	0.49	0.57	0.64
P/E	12.6	20.9	11.4	9.8	8.4	7.5
EV/EBIT	9.3	15.0	8.5	7.4	6.4	5.7

Downside risks



- The company relies on high quality products made by thousands of dental technicians. Poor leadership and/or production issues could deteriorate the companies image and loss of market share.
- Same-day cost efficient production in-house at the dentist (picture below). All algorithms and advanced 3D printing, milling machines and furnaces that can produce a finished replacement without the need of human involvement. This would fully commoditize the production without need for skilled labor that can plan the placement, shaping and coloring of the tooth replacement. Meaning a dentist would just scan the mouth and wait for the replacement to be produced. Probably to some degree we are already seeing this with milling machines sitting in-house with the dentist, producing same day crown and veneers. This could explain why MDG fixed prosthetic sales volumes have stalled lately.
- As only ~45% of MDG customers have even moved from clay mold impressions to sending digital CAD files. The likelihood that the dentists themselves would acquire advanced AI machinery is currently low. The risk is rather that competing labs with enough capital can acquire such machinery (would it be available in the future). This could potentially level the playing field where MDG currently has strong advantages against it competition with a big group of highly skilled dental technicians. Such development could also mean high capital costs for MDG to invest in machinery.



Share price



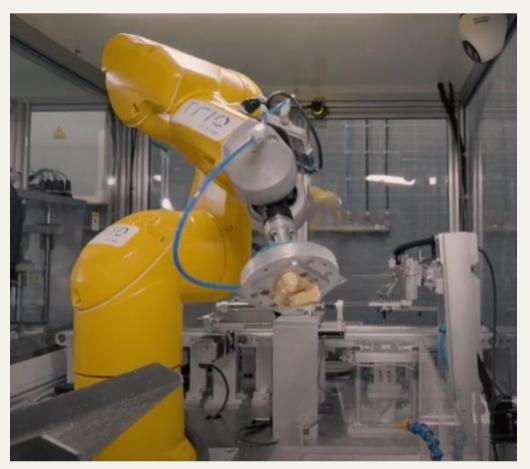
Modern Dental Group Share Price



Catalysts



- Share of cases received digitally continues on current trend and pushes margins higher.
- Favorable outcome from Chinese Central Procurement, this could mean significant volume increases (although at a lower ASP). The unmet need for dental care among China's vast elderly population is a massive opportunity.
- Favorable bolt on acquisitions as debt level has come down significantly.
- Lift-off in clear aligner sales, early signs that Netherlands and Belgium are fore-runner markets (marketing materials and Google trends).



TrioClear's fully automated production line

Conclusion



- Uniquely positioned dental lab company a mix of low cost production + local labs & distribution all under one roof.
- Leadership executed strongly since company inception and moved from a medium sized dental lab in China, into the only global dental lab player in the market. They have even proven they can purchase assets in Europe and USA and improve their business significantly.
- Clear Aligners with an ASP of HK\$6,800 is the blue sky upside for the company. If the company can just win some local markets and become a major clear aligner player there that would bring significant revenue and upside to the stock price. Competitor AngelAlign is only big in one market (China) and is valued 3x MDG.
- Long runway for growth with strong tailwind of increasing elderly population and potential for market consolidation.
- Even with such a strong track record, cash generation and very positive growth runway, the company is trading at very undemanding price multiples (2025 expected EV/EBITDA below 6x and P/E under 10x).
- From the dentists perspective it's hard to motivate to bring the dental laboratory inhouse, even with further technical advancements. The moat from MDG perspective is the capital intensity to buy machinery and that a dental technicians can serve many dental clinics (full workload). The natural conclusion for a dentist from price perspective is to outsource the work to a dental lab. Luxury dental services can afford sub-optimal usage of equipment and technicians to give a faster turnaround for clients. This will likely stay a niche luxury service. As soon as work is out-sourced the question of price per product becomes more relevant. MDG can offer the most comprehensive options, from low cost all the way to the highest quality locally produced products. With scale they can also win on price and the track record shows that they have historically done just that.

