NUS INVESTMENT SOCIETY

IMAX Corporation (NYSE: IMAX)

BUY: US$22.42 (+41.5%)

Equity Research Department – TMT

Date: 30 March 2024

Analysts

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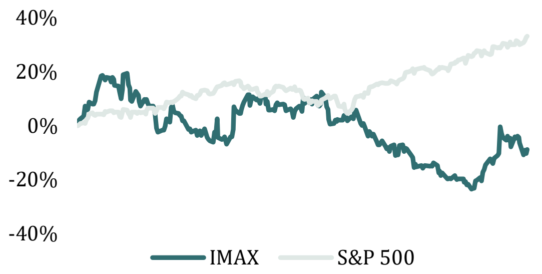
Basic Information

Last Closed Price	US$15.85
12M Target Price	US$22.42
+/- Potential	*+41.5%*
GICS Sector	Entertainment
GICS Sub-Industry	Movies & Entertainment

1Y Performance against S&P 500



Source: S&P Capital IQ

Company Description

IMAX is a Canadian entertainment technology company, specializing in motion-picture technologies and PLF motion-picture presentations. Founded in 1967, it is primarily involved in the segments of Content Solutions and Technology Products & Services.

Key Financials

Market Cap	US$836.63m
Basic Shares O/S	55.15m
Free Float	80.5%
52-Wk High-Low	US$13.20 - US$21.82
Fiscal Year End	31-Dec

(US$ M)	FY22A	FY23A	FY24E	FY25E
Revenue	301	375	408	429
Gr Rate (%)	*18.0%*	*24.6%*	*8.9%*	*5.4%*
Op. Income	(19)	168	220	219
Margin (%)	*(6.3%)*	*44.7%*	*53.9%*	*50.9%*
ROE (%)	*(6.0%)*	*9.6%*	*14.4%*	*13.5%*
D/E	0.8	0.7	0.5	0.2

Key Executives

Richard Gelfond	Chief Executive Officer
Natasha Fernandes	Chief Financial Officer
Pablo Calamera	Chief Technology Officer

We are initiating coverage on **IMAX Corporation ("IMAX")** with a **BUY** rating and a **US$22.42** **(+41.5%)** 12M price target.

FY23 Earnings Highlights

- Total Revenue grew 25% yoy to US$375m in 2023 from US$301m in 2022.
- IMAX Global Box Office sales grew 24% yoy from US$850.1m 2022 to US$1.1b in 2023.
- Global Installations of IMAX equipment and technology grew 39% yoy from 92 in 2022 to 128 in 2023.
- Adjusted EBITDA Margin grew from 31.8% yoy in 2022 to 38.4% in 2023.
- Net income grew by a staggering 16.3x yoy from US$3.2m in 2022 to US$52.1m in 2023.

Investment Thesis

- **The IMAX experience is irreplaceable.** Keeping IMAX relevant in an increasingly competitive market where consumers are spoilt for choice
- **International expansion is set to propel IMAX on a new growth trajectory post-pandemic,** while existing systems installed in Greater China pre-pandemic lay the groundwork for expanding margins
- **IMAX's hyper focus on technology positions them well ahead of their competitive rivals.** Hence taking advantage of traditional thinking peers who lack significant innovation

Catalysts

- Release of strong tentpole offerings will catalyse box office growth and share price appreciation
- Effective management of backlog will allow IMAX to surpass upcoming earnings expectations
- Earnings surprise for 1Q24 and FY24 going forward

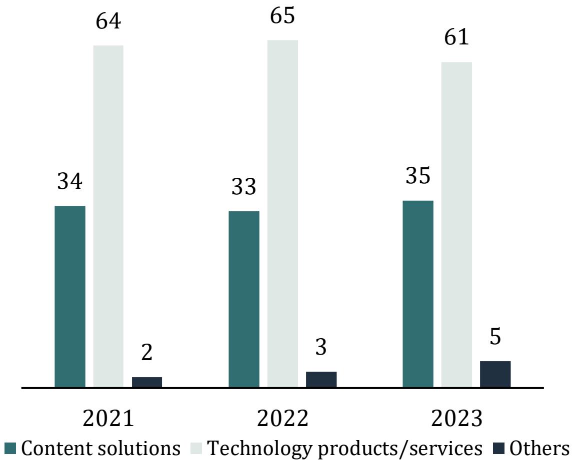
Valuations

Our 12M price target at the date of coverage is **US$22.42.** This was derived from a 60-40 blend of (1) **discounted cash flow** and (2) **relative valuation** of trading comparables with the **EV/EBITDA multiple.**

Investment Risks

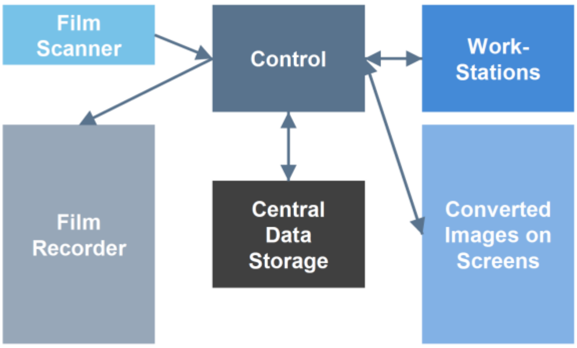
- **Market Risk 1:** Shortening theatrical window can increase the supply of blockbuster movies from streaming services, dampen top-line growth from GBO.
- **Business Risk 1:** Sluggish Chinese consumption going into 2024, along with a slowing in new screen installations may dampen top-line growth, hampering valuation.
- **Business Risk 2:** Stiff competition from premium large-format peers may hamper IMAX's future plans for international expansion

Figure 1: Revenue Mix by Segment (%)



Source: Company filings

Figure 2: IMAX's DMR Process



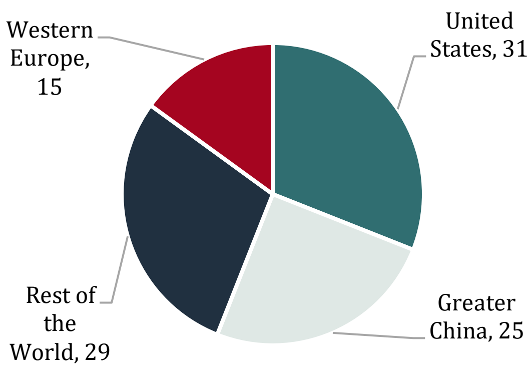
Source: Company presentations

Figure 3: IMAX's Fleet of Film Equipment

Suite of high-quality offerings for filmmakers. IMAX stands as the Gold Standard in the industry.

Source: Company presentations

Figure 4: Revenue Mix by Geography (FY23 %)



Source: Company filings

Company Overview

IMAX is the leading global entertainment technology company, specializing in motion-picture technologies and large-format motion-picture presentations. Founded in 1967, they have a strong global footprint, and their well-known Digital Media Remastering ("DMR") process has resulted in decades of ground-breaking advancements in filmmaking. They mainly operate in the cinema industry but are currently expanding their indirect exposure into the on-demand streaming services segment. IMAX has more than 1,700 IMAX theatres in 80+ countries and is one of the industry leaders.

A Healthy Revenue Mix

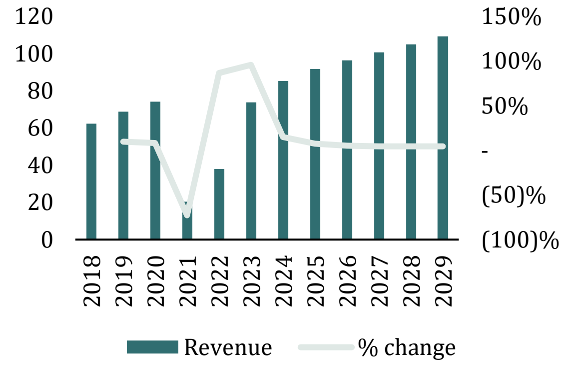
IMAX has a slice in almost every segment in the industry. From providing the equipment for filmmaking, the technology needed for post-processing, and the actual visuals in the end product in cinemas. IMAX derives most of their revenue from their Technology products and services line at 61% of their total topline in FY23 (Figure 1). Mainly through their DMR process. In which, they use processor-based server farming and compressing via hardware from Intel and software from Red Hat to digitally enhance images from films in a cost-effective manner. This has resulted in vast time and cost savings for filmmakers (Figure 2). They also have a fleet of film equipment such as cameras, encoding hardware, film screens, and projection equipment which are sold to cinemas globally (Figure 3). They cement themselves as the gold standard in the industry, winning many awards such as a technology and Scientific Emmy in 2023 for their improvements in post-processing quality and speed.

IMAX also provides content solutions to big films before release so as to be able to provide high-quality images and an overall vastly improved user experience for film goers. This segment makes up 35% of their total revenue in FY23, while other service offerings such as their newly released SaaS digital encoding platform IMAX StreamSmart makes up 5% of their total revenue in the same period. While making most of their revenue from the United States at 31% of FY23 revenue, IMAX also has decent exposure in Greater China at 25% (Figure 4) which we note to be significantly higher than peer rivals. Expansion overseas was done during the COVID-19 era during a relatively low interest rate environment, which caused IMAX to amass a vast inventory of backlog systems in present day.

FY23 Earnings Review

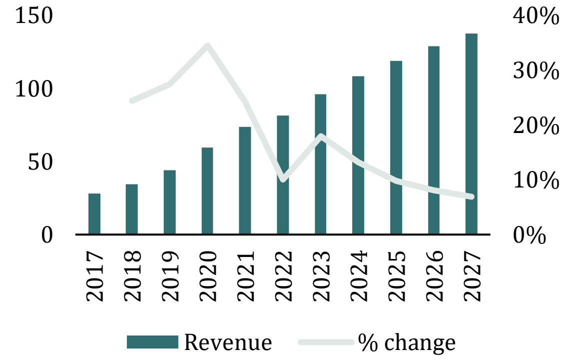
- Total Revenue grew 25% yoy to US$375m in 2023 from US$301m in 2022.
- IMAX Global Box Office sales grew 24% yoy from US$850.1m 2022 to US$1.1b in 2023.
- Global Installations of IMAX equipment and technology grew 39% yoy from 92 in 2022 to 128 in 2023.
- Adjusted EBITDA Margin grew from 31.8% yoy in 2022 to 38.4% in 2023.
- Net income grew by a staggering 16.3x yoy from US$3.2m in 2022 to US$52.1m in 2023.
- Operating Cash Flow grew by 3.5x yoy from US$17.0m in 2022 to US$59.0m in 2023 and Free cash flow in 2023 stands at US$25.8m.
- IMAX repurchased 1,604 thousand shares in 2023. Management has disclosed a comprehensive plan to continuously repurchase shares.

Figure 5: Revenue and Growth in the Cinema Market



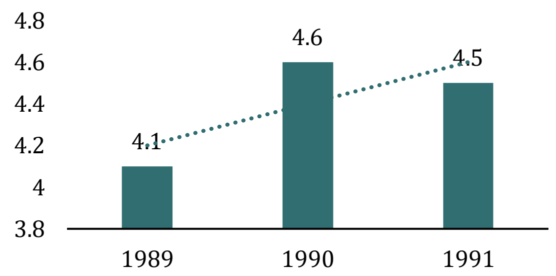
Source: Statista

Figure 6: Revenue and Growth in the On-Demand Streaming Services Market



Source: Statista

Figure 7: Resilience of the Cinema Industry During the Release of Cable TV Around the Late 1980s (US and Canada Revenue in US$b)



Source: Motion Picture Association ("MPA") 2022 Theme Report

Figure 9: Recent High-Profile Films

Source: Images from Wikicommons

Figure 10: Upcoming High-Profile Films

Industry Outlook

The global entertainment and cinema industry is projected to register a compound annual growth rate ("CAGR") of 5.14% from 2024 to 2029, with a forecasted market size of US$109.1b (Figure 5). This level of growth is expected for a "sunset" industry. However, it is important to consider the resilience that the cinema industry has historically shown against the backdrop of external threats. Be that as it may, we do note that the industry is driven by a strong incorporation of next generation technology, greater focus on user experience, and the rise of exclusivity of offerings. These factors place the cinema industry as a whole in a decent position to be able to capture strong demand by consumers over the next few years.

Not all hope is lost, the cinema industry is strong and growing

The on-demand video streaming service industry, championed by firms such as Netflix and Disney (Disney+), has been growing decently and seen a spike during the COVID-19 pandemic, reaching growth rates of 35+% (Figure 6). Many posit that this spells the death of the cinema industry, we note that this is far from the whole story.

It is important to consider the fact that the cinema industry has historically shown a strong display of resiliency against external threats. For instance, during the release of Cable TV around the late 1980s, the cinema industry actually saw growth from 1989 to 1991 (Figure 7). This trend is true during the Global Financial Crisis in 2008 as well as during the recent rise of smartphone era film viewing.

Therefore, it is clear via indicative evidence that the cinema industry is more resilient upon closer inspection. This could indicate an innate preference by consumers to view films in a theatre as compared to smartphone viewing through on-demand streaming services.

Understanding the customer journey: Why do people go to the movies?

The cinema industry still sees growth and strong demand mainly due to the unique customer experience it provides. Consumers tend to prefer watching films for the first time in film theatres. There is no doubt that the cinema industry still has a profound impact on consumers and how they view entertainment media as a whole. The rise in the demand for cinema going could be contributed to the vast array of record-breaking and highly popular films that were released recently (Figure 9). For instance, in July of 2023, Gerta Gerwig's "Barbie" had a first day opening box office of US$70.5m. Additionally, Christopher Nolan's "Oppenheimer" released around the same time opened with US$33.2m during its first day opening in box offices. With upcoming releases such as the third instalment of "Avatar" and the "Joker" sequel, it is evident that the collection of potentially ground-breaking films is far from exhausted (Figure 10). This positions the cinema industry to be able to capture substantial demand from consumers who want to view thought-provoking and exciting releases on the highest quality platform available – the movie screen.

Chief tactic in the industry to enhance user experience hinges on the effective leveraging of technology

The cinema industry has been using various technological advancements to enhance the customer experience and compete with the convenience of at-home streaming services. For instance, PVR cinemas have introduced diverse formats like Gold Class for luxury experiences, IMAX for immersive visuals, and 4DX for multi-sensory experiences that includes motion, wind, and scent to complement the onscreen action. The use of haptic technology, such as D-Box systems,

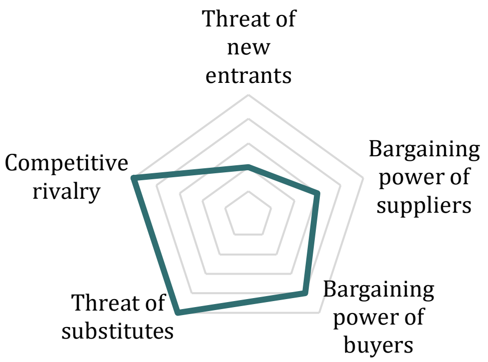
Source: Images from Wikicommons

Figure 11: Areas in Which Technology Has Been Used to Enhance User Experience

Visual and Audio	Comfort
IMAX Technology	USB Charging Ports
Dolby Surround Sound	Call Button
4DX Multi-Sense	LED Lamps
D-Box Systems	Impairment Aid

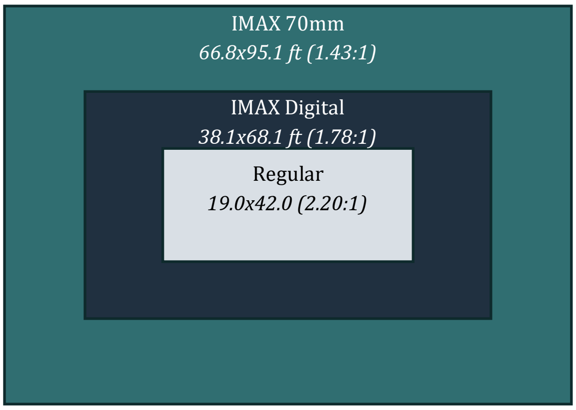
Source: PricewaterhouseCoopers

Figure 12: Porter's Five Forces Analysis



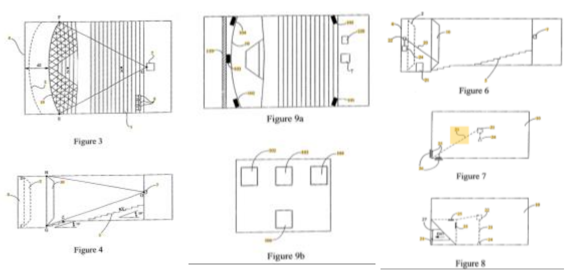
Source: Team Analysis

Figure 13: Screen comparison



Source: Company filings

Figure 14: Patented theatre dimensions



Source: Google Patents

Figure 15: Non-Superhero Films Top 20 IMAX Films by Lifetime Gross (USD m)

No	Title	Gross	Genre

adds a new layer of engagement with motion-seating and 4-D effects that allow viewers to "feel" the movie, we note that this offers an experience distinct from on-demand streaming services.

Furthermore, offering a more luxury experience has become an important part of the cinematic experience. Cinemas now offer seats with features such as USB charging ports, LED lamps, and even call buttons for in-seat service, transforming the simple act of watching a movie into a premium service that prioritizes comfort and convenience.

In general, the cinema industry sees technological advancements used in two main areas, to improve the visual and audio quality of the films themselves and to improve the comfort of cinema goers (Figure 11). We note that IMAX's influences are vastly more aligned with the former, as cinemas utilise IMAX's technology products, services, and content solutions to provide a more immersive and holistic viewing experience for users.

Porter's Five Forces

Illustrating the points below using the Porter's Five Forces diagram (Figure 12), we observe that IMAX faces low threat from new entrants, high bargaining power of suppliers, high threat of substitutes, high levels of competition, and a relatively moderate level of bargaining power of buyers. The industry has been disrupted by the significant improvements in technologies which has resulted in the prevalence of on-demand streaming services.

Threat of New Entrants – Low

The cinema industry requires significant initial capital investment to establish theatres, acquire equipment, and secure film distribution rights. This acts as a barrier to entry for new entrants. Established cinema chains benefit from economies of scale in purchasing, marketing, and operations, making it difficult for new entrants to compete on cost.

Bargaining Power of Suppliers – High

Film studios and distributors hold significant bargaining power over cinemas, as they control access to popular movie titles and distribution channels. Cinemas must negotiate licensing agreements and revenue-sharing terms, which can impact profitability. Suppliers of cinema equipment, such as projectors, sound systems, and seating, may have moderate bargaining power, although there are multiple suppliers in the market.

Bargaining Power of Buyers – Moderate

Consumers have moderate bargaining power in the cinema industry. While individual moviegoers have limited influence on ticket prices, they can choose among competing theaters based on factors such as location, ticket prices, amenities, and movie selection. The availability of alternative entertainment options, such as streaming services, home theaters, and outdoor activities, gives consumers more choices and bargaining power.

Threat of Substitutes – High

Streaming platforms like Netflix, Amazon Prime Video, and Disney+ offer convenient and affordable alternatives to traditional cinema-going, posing a significant threat to the industry. Advances in home entertainment technology have made it possible for consumers to enjoy high-quality movie experiences from the comfort of their homes, reducing the need to visit cinemas.

1	Star Wars: The Force Awakens (2015)	937	Sci-fi
3	Avatar (2019)	750	Sci-fi
4	Top Gun: Maverick (2022)	719	Action
7	Jurassic World (2015)	652	Action
9	Star Wars: The Last Jedi (2017)	620	Sci-fi
10	Incredibles 2 (2018)	609	Animation
11	The Lion King (2019)	544	Children's
13	Rogue One: A Star Wars Story (2016)	532	Sci-fi
14	Star Wars: The Rise of Skywalker (2019)	515	Sci-fi
15	Beauty and the Beast (2017)	504	Fantasy
16	Finding Dory (2016)	486	Animation
17	Frozen II (2019)	477	Animation
20	Toy Story 4 (2019)	434	Animation

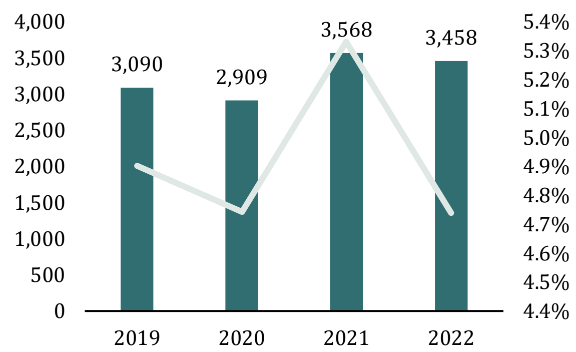
Source: IMDbPro

Figure 16: Upcoming releases for 2024

Date	Title	Genre
Apr	Godzilla x Kong: The New Empire	Action
Apr	Spy x Family Code: White	Animation
May	The Fall Guy	Comedy
May	Kingdom of The Planet of The Apes	Action
May	Furiosa: A Mad Max Sage	Action
Jun	Inside Out 2	Animation
Jun	A Quiet Place: Day One	Horror
Oct	Joker: Folie à Deux	Antihero
Nov	Venom 3	Antihero

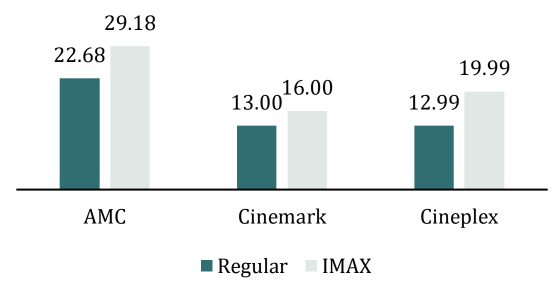
Source: Company filings

Figure 17: Average annual expenditure on entertainment (USD)



Source: Consumer Expenditure Surveys

Figure 18: Adult ticket price comparison for Godzilla x Kong (USD)



Intensity of Competitive Rivalry – High

The cinema industry is highly competitive, with multiple players vying for market share. Competitors include large cinema chains, independent theaters, and alternative entertainment providers. Price competition among cinemas is common, particularly in markets with multiple theaters in close proximity. In the context of IMAX, competition for film technology and equipment is strong as well due to vast amounts of research & development ("R&D") that has been invested by key rivals such as Sony.

Investment Thesis

1. The IMAX experience is irreplaceable – keeping IMAX relevant in an increasingly competitive market where consumers are spoilt for choice

<u>IMAX is golden in the silver screen – no other large-format theatres come close</u>

The entertainment industry is undergoing an experience revolution. In a market where consumers place a premium on immersion, IMAX stands head and shoulders above its premium large-format ("PLF") peers.

Firstly, IMAX enjoys proprietary aspect ratios of 1.90:1 and 1.43:1. This provides up to 67% more image than traditional screens (Figure 13), thus offering an unparalleled level of immersion into the scene being captured. Next, regarding the viewing experience itself, IMAX leverages patented technology. Its best-in-class dual projection system regardless of distance from projector to screen enables consistently excellent visuals to be displayed, regardless of theatre. Furthermore, classic IMAX theatres differ significantly from conventional theatres because audiences sit much closer to the screen. This is only enabled by the high effective resolution of IMAX cameras. Additionally, seats run at a steep angle, so audiences face the screen directly, with rows being within one screen height (Figure 14). Unlike conventional theatres where seating runs far above that, IMAX enables audiences to enjoy the best viewing angles.

While the sell-side acknowledges stiff competition from other PLF screens, we remain more supportive of IMAX's capabilities and offerings. Moreover, given that these intentional designs are protected by patents, we believe that IMAX's competitive advantage is well-protected for the foreseeable future. This gives us strong confidence in the company's ability to consistently attract moviegoers over the forecast period.

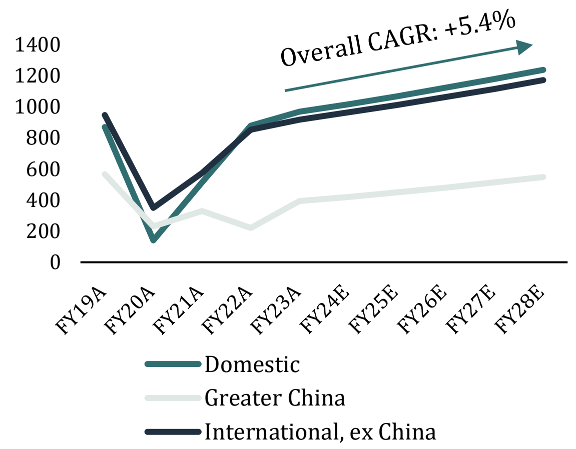
<u>The beginning of a post-pandemic fairytale, thanks to pipeline of strong titles</u>

Sell-side analysts express concerns about uneven recent performance for superhero films that may limit IMAX's multiple expansion. Superhero films have dominated the box office over the past decade, largely thanks to the Marvel Cinematic Universe (MCU) consisting of 33 films since 2008. Leveraging the popularity of this genre has allowed IMAX to significantly boost its top line in the past, such as through enhancing older entries like *Iron Man* for re-releases and leasing out certified IMAX cameras for the filming of newer ones like *Civil War, Infinity War, Endgame, Shang-Chi* and *Eternals* – all of which have turned out to be box office successes.

Unfortunately, the genre has now gone into a tailspin. Indeed, high-budget movies like *The Marvels* and *Aquaman and the Lost Kingdom* were notoriously poorly received. Superhero fatigue is thus very real – but we posit that IMAX is less exposed to the downsides that arise.

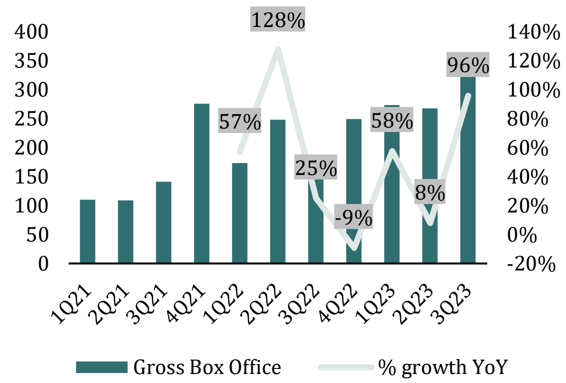
Source: Company websites

Figure 19: Forecasted per screen averages



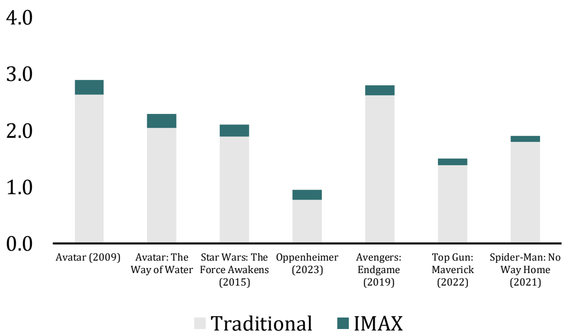
Source: Team estimates

Figure 20: IMAX Quarterly Gross Box Office Results



Source: Company presentations

Figure 21: Top IMAX Films (GBO), in US$bn



Source: Company presentations

This is because IMAX is changing its genre mix to have a good variety of tentpole offerings from different categories. Historically, we note that 13 of its top 20 highest grossing films do not fall within the superhero genre (Figure 15). Recent signs also align with this trend of diversifying away from comic book characters: the sci-fi sequel *Dune: Part 2* has grossed over US$500m since its release this February. And its upcoming tentpole offerings once again largely fall outside the scope of traditional superhero films (Figure 16).

Additionally, we note that IMAX's technologies in terms of production and projection lend themselves to enhancing the viewing experience of many different genres of films. Besides just bringing the MCU's flashy computer-generated characters to life, the large formats and top-of-the-line projection technology are integral to creating immersive environments and world-building – and are part of what made *Dune: Part 2* such a hit. As reported by Variety, 20% of *Dune's* ticket sales were from IMAX – a far jump from the ~10% IMAX enjoyed in the past. We thus believe IMAX is in pole position to reduce its concentration risk from superhero films, and successfully continue to diversify into other genres.

Hence in the light of IMAX's impressive track record and its planned releases, we believe the sell-side is underestimating the company's future earnings potential. We thus believe slight multiple expansion is within reason – IMAX is currently trading at 12.1x EV/EBITDA and our model forecasts an implied EV/EBITDA of 13.0x.

<u>Broad appeal reels in all sorts of consumers – allowing IMAX to maintain strong future growth now and for the foreseeable future</u>

Looking forward, IMAX's planned releases target various demographics, allowing it to capture a large portion of its total addressable market. Its strategy of backing films across the action, animation, and comedy genres allows it to cater to broad audiences with mass appeal (Figure 16). Furthermore, funflation is on the rise – consumers are willing to pay a premium for entertainment experiences. US consumer expenditure trends show stable expenditure on entertainment at ~5% total expenditure, marked by a jump in 2022 due to pent-up demand from the pandemic (Figure 17). A 2024 survey from McKinsey shows that 21% of respondents are more willing to splurge on out-of-home entertainment – lending us conviction to believe that this stability will continue to set the stage for IMAX to flourish.

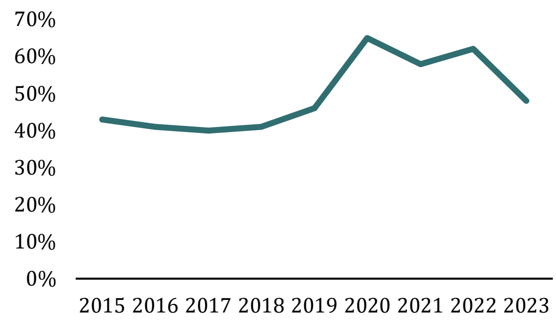
Given IMAX's market leadership, IMAX offerings also command a premium over standard theatre tickets (Figure 18). We believe this strong pricing power will remain and following this train of thought, we forecast a rise in per screen averages at a CAGR of 5.4% (Figure 19) throughout the forecast period. This CAGR was forecasted with a conservative 5.1% y-o-y growth in the domestic and international ex-China segments in line with cinema's overall growth, and blended this with a higher 7.0% y-o-y rate from the Greater China region to reflect our next thesis.

2. International expansion is set to propel IMAX on a new growth trajectory post-pandemic, while existing systems installed in Greater China pre-pandemic lay the groundwork for expanding margins.

<u>System installation momentum to continue in the near-term, supported by recovering consumer demand in international markets and steady pipeline</u>

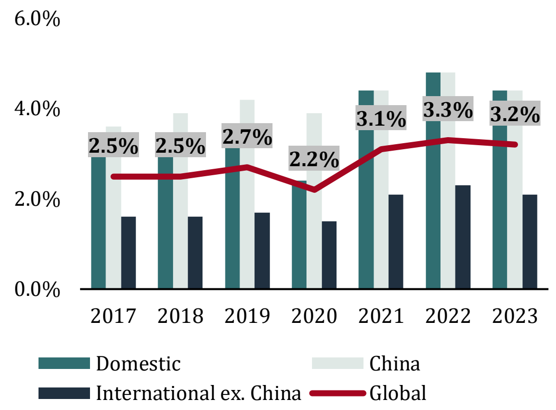
We remain bullish on outlook for installations due to increased visibility into FY25 for network growth internationally. We continue to see strong demand for new/upgraded IMAX systems, due to the recovering box office and resilient consumer demand as mentioned above. 3.2% of total receipts at the global box office was achieved at

Figure 22: Top 15 films as % of IMAX's GBO



Source: Company presentations, Bloomberg

Figure 23: IMAX Box Office Market Share



Source: Company presentations

Figure 24: Deal Signings by quarter

Source: Company presentations

Figure 25: IMAX Signings Announcement Timeline

Announcement Date	Exhibitor/Location	No. of New Systems
20 October 2023	Hengdian Films, China	20
17 October 2023	GSC, RoW	13
10 October 2023	NCG Cinemas, Domestic	3
25 July 2023	Cineplex, Canada	5
2 March 2023	Cineplexx, Europe	3
27 October 2022	AMC Cinemas, Saudi Arabia	6
17 October 2022	Wanda, China	9

Source: Company presentations

an IMAX location (Figure 23), despite only taking up 1% of total screens worldwide – testament to its competitive advantages, such as superior customer viewing experience and proprietary technology. Furthermore, despite economic risk, the cinema industry is known to be historically recession proof, with greater consumer willingness to spend an additional $5 for premium formats relative to more expensive items like restaurants. IMAX demonstrates a steady pipeline of system installations, with an influx of new signings in domestic and international markets alike. IMAX enjoyed its best 4Q since 2015, with 32 new signings (Figure 24). In particular, IMAX recently announced its largest deal since 2020 with an agreement for 20 new systems with Hengdian Films in China, a signal that Chinese demand could show recovery in the near-term (Figure 25). Meanwhile, IMAX announced a deal with Cineplex to add an additional 5 IMAX systems and two upgrades through Canada, and renewed agreement terms for 24 existing locations till FY28. Given that signings are a 6-12 month forward indicator for installs, we anticipate accelerating install momentum going into 2024, factored into our valuation with higher system install assumptions than street estimates. System installation momentum is further supported by healthy existing backlog (i.e. signings for installations and upgrades not yet delivered), with 404 systems in its backlog in FY23, up from 361 at the end of FY22 (Figure 26), along with new system upgrades that provide a steady source of recurring revenue. Management has provided better visibility into IMAX's network expansion, providing an early look into FY25, along with FY24 guidance of system installs of 120-150. This may serve to spur investor confidence, boosting share price in the near term.

<u>Room for expanding footprint more than available, with China and Rest of World markets presenting significant growth opportunities</u>

While we acknowledge the street's view that domestic expansion is inadvertently slowing, amid fewer cinema openings due to exhibitors struggling with high capex, and the recent underperformance of tent-pole films, we view that IMAX's growth story is far from over (Figure 27), with growth opportunity lying in underpenetrated ROW markets, such as SE Asia, India, Japan, Korea, LatAm, and EU. Furthermore, the street harbours low expectations for China, given that the region has majority of IMAX's net systems installed yet remains to be the largest source of revenue. However, we view that the Greater China region remains a jewel in the crown, as IMAX has laid the groundwork for further margin expansion with pre-install activity pre-pandemic.

IMAX's network expansion momentum is set to accelerate, with IMAX increasing its worldwide total addressable market (TAM) in its FY24 guidance (for the first time since 2019) by 300 new zones to 3,619 from 3,300, a 9% increase to its market potential (Figure 28). This can be attributed to the under-penetration of rest of the world markets (excluding Greater China), at a penetration rate of 33%, as compared to global penetration of 47% with current installed systems – significant growth opportunity therefore lies in international (ROW) markets, with a long runway to boost system-lease and joint-venture revenue.

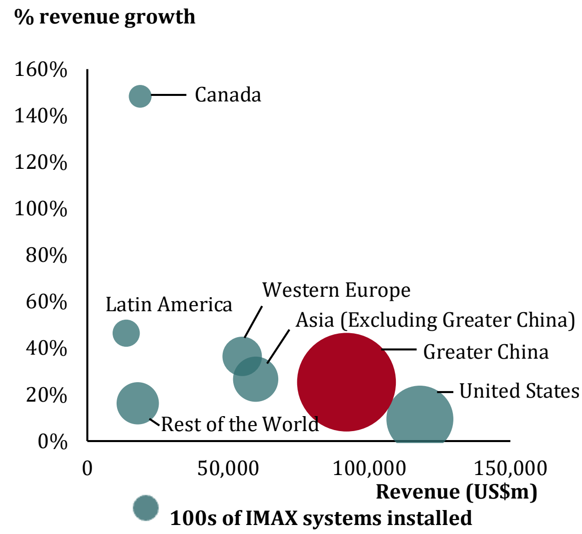
While we recognise that China's performance may not recover to pre-pandemic levels in the near term, due to headwinds like poor consumer confidence and more pragmatic spending, a shift to more local-language blockbusters is filling the gap. Increasing focus on local language content (Figure 29) is set to drive demand in key growth markets (China and ROW). IMAX introduced 59 local language titles in 2023, marking a 64% growth YoY, grossing 20% of GBO, with more titles expected in 2024. Similarly, this has driven record RoW IMAX system signings, with 77 RoW signings in 2023, with 12 coming in Japan, one of the highest PSA markets. Therefore, this move is set to boost per screen averages in RoW and China, boosting top-line growth as RoW takes a bigger slice of the pie. Given that network expansion

Figure 26: IMAX system backlog by deal type as of FY23

	No. of Systems		Dollar Value In US$ '000	
	New	Upgrade	New	Upgrade
Sales Arrangements	148	16	158,318	16,068
Hybrid JRSA	102	1	76,173	910
Traditional JRSA	132	51	425	1,975
Total	**382**	**68**	**234,916**	**18,953**

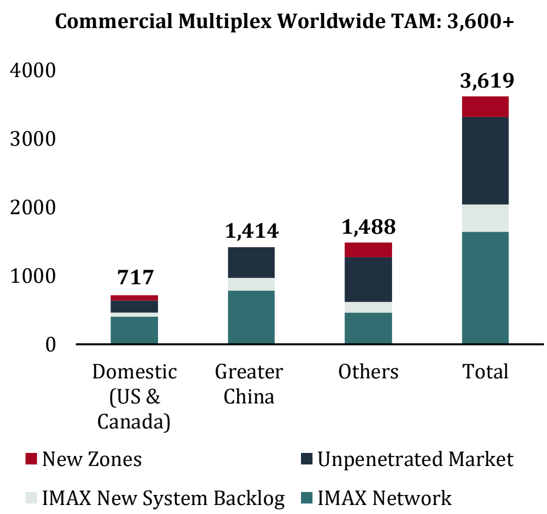
Source: Company presentations

Figure 27: IMAX Revenue and Network Breakdown by Geography in FY22



Source: Company presentations

Figure 28: IMAX's Total Addressable Market based on updated zoning analysis (in terms of number of movie screens



Source: Company presentations

has been carried out in China pre-pandemic, any uptick in GBO will be purely accretive to margins. Additionally, the introduction of local language films act as an alternative revenue driver, as domestic movie-goers demonstrate a growing appetite for high-budget foreign films, like India's "Pathaan", or Japan's "The First Slam Dunk", based on post-pandemic attendance trends, further boosting IMAX's top-line.

<u>Asset-light model confers cost-advantages and strong bottom-line growth</u>

Lastly, we point to IMAX's asset-light model which positions IMAX to expand its network without incurring significant capital expenditure and boost margins sustainably in the long-term (Figure 30). In addition to a fixed rental fee from system installation, IMAX enjoys strong recurring revenue through joint revenue sharing agreements (JRSAs), where cinemas share a percentage of the box office proceeds shown on the IMAX network, along with remastering, where IMAX takes a cut from the filming studio. Thus, IMAX's performance is inadvertently tied to GBO performance, positioning it to benefit from recovering GBO and solid slate continuing into 2024. However, majority of fixed costs are only incurred during system installation or upgrades, therefore allowing for considerable margin expansion, where EBITDA is forecasted to rise to 31.6% by FY28E, from 29.5% in FY23 (Figure 37).

3. IMAX's hyper focus on technology positions them well ahead of their competitive rivals, taking advantage of traditional thinking peers who lack significant innovation

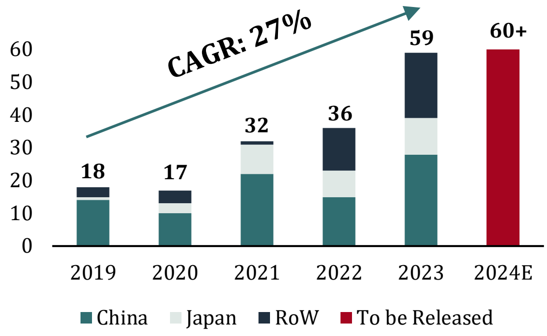
<u>On a comparative basis: The picture is crystal clear</u>

IMAX's relentless pursuit of leaps in technological advancements and development has resulted in them attaining key competitive advantages that place them ahead of peers such as Sony and Cinemark.

Chiefly, when diving deeper into IMAX's technology and equipment segment, it is evident that their high spending would yield long-term results and benefits. For instance, Christopher Nolan's 2023 smash hit "Oppenheimer" was shot on the latest IMAX 15/70 frame film camera line, resulting in a projected image quality of 18K. In comparison, Sony's most advanced film camera, the Venice 2, has recording capabilities of up to 8K (Figure 31 and Figure 32). In an industry where film quality and viewer experience are vital, having exclusive technologies that enable for a vast increase in quality vis a vis their peers, IMAX have paved their way to improving their intangible brand value and hence improving their standing with notoriously harsh consumers. Furthermore, we note that some of the biggest and most credited films of recent history have used IMAX technology and equipment. 2008's "The Dark Knight", 2014's "Interstellar", and 2018's "Avengers: Infinity War" are some of the biggest films to have been released recently and all of them were shot using IMAX cameras. IMAX continues to grow themselves as the preferred partner for big name films and this no doubt improves their intangible brand value.

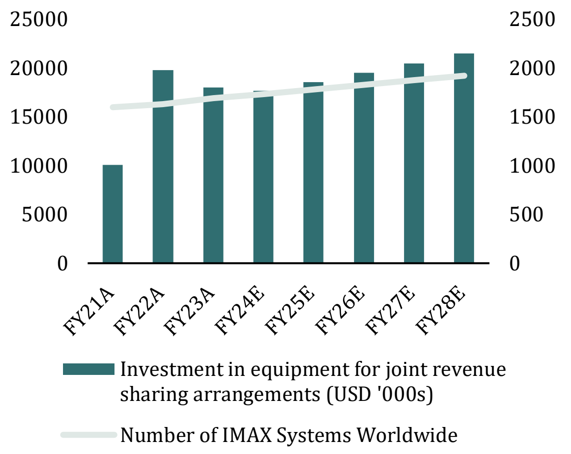
The sell-side tends to view IMAX's large spending as a cash drain as R&D, especially into a field which has seemingly reached a bottleneck for improvements, is seen as mostly wasteful. However, we note that IMAX's vast spending on technology and content solutions indicates a healthy outlook, as this signals the long-term nature of their strategic plans. Thus, we view the short-term "cash drains" as a necessary evil to position their branding well ahead of their rivals in the longer-term. We believe that this strong foothold in the film equipment and solutions area would provide IMAX with an average growth of 10.8% in their system sales and rentals segment throughout the forecast

Figure 29: IMAX's Local Language Titles



Source: Company presentations

Figure 30: IMAX's forecasted capex and network expansion



Source: Team estimates

Figure 31: IMAX's Film Equipment Offering the Highest Quality in the Industry

Source: Company presentations

Figure 32: Film Equipment Offerings by Competitive Rivals

Source: Sony company presentations, ARRI company presentations

period (Figure 33). As well as the aforementioned, rise in per screen averages at a CAGR of 5.4% during the same period.

<u>Unique positioning to hedge against adverse conditions: The name of the game is Recurring Revenue</u>

IMAX has also leveraged their expertise in technology to partner with streaming giants such as Disney, Amazon, and RakutenTV. IMAX's VisionScience is at the heart of their recent indirect entry into the on-demand streaming industry. By utilizing "next generation AI" software and their StreamSmart service line, they have carved a targeted customer base by helping streaming media firms save over US$25m annually across 22,000+ titles.

In essence, IMAX sells their technology as a SaaS package to streaming companies to allow them to optimize their encoding of image quality before release to streaming customers. This gives IMAX the extremely unique advantage of having a foot in the door in the streaming industry and allows them to hedge against any potential implications in the cinema industry (Figure 34). Thus, giving IMAX a special buffer on their topline, placing them in a safer position vis a vis their peers by providing an additional source of recurring revenue that would only continue to expand as the demand for streaming services grow, all at a relatively low cost. We note that this has a double positive effect as it not only provides a stable source of recurring revenue, but it also improves their standing with streaming partners, which can expand their provision of IMAX's own exclusive film releases such as their exclusive documentaries and "local language" content. This creates a substantial double positive effect, where a flywheel of benefits is created in order to provide ample multi-faceted growth (Figure 35).

IMAX's extreme spending on technology and development can be argued by many to "not move the needle" but it is important to consider that the technology products and services segment is already 61% of their total revenue, and we expect growth in the margins to upgrade by a factor of 120 basis points yoy. Overall, the view that IMAX's technology spending is draining their cash forgoes the long-term impact that these strategies are meant to have and places an overemphasis on recent events that ultimately may not implicate IMAX's competitive positioning and ability to generate meaningful cashflows to investors.

Catalysts

Release of strong tentpole offerings will catalyse box office growth and share price appreciation.

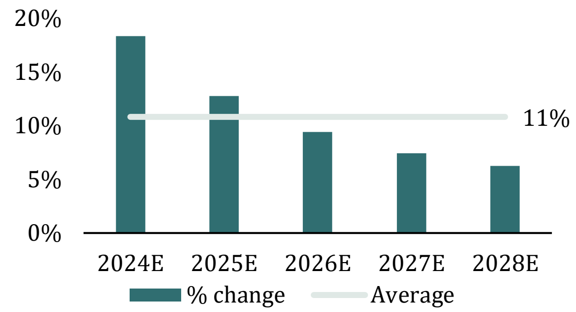
IMAX has benefitted significantly from high-profile titles. In the week after theatre release, last year's *Oppenheimer* saw IMAX share's jump 13.6% while this year's *Dune: Part Two* saw 12.0% share price spikes. With a strong pipeline of movies in the offing specifically designed for IMAX screens, we foresee such trends to continue over the next 12 months in line with thesis 1 (Figure 16).

Effective management of backlog will allow IMAX to surpass upcoming earnings expectations.

Positive directional commentary on system installs and accelerating momentum of backlog management will allow for accelerating network growth above Street consensus. Clearing its backlog indicates improved operational efficiency, boosting investor confidence in IMAX's ability to meet future network expansion targets.

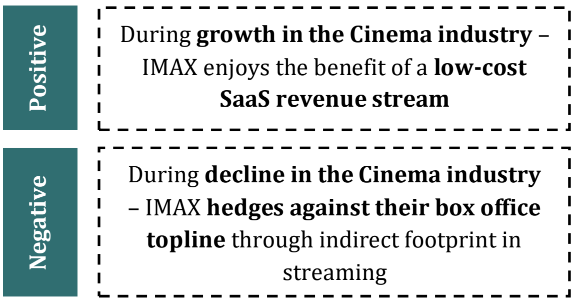
Earnings surprise for 1Q24 and FY24 going forward.

Figure 33: % Growth in IMAX's System Sales and Rental Segment (Forecast Period)



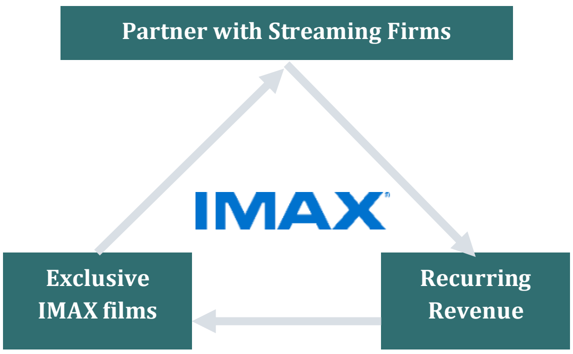
Source: Team Analysis

Figure 34: IMAX's Topline Hedge Strategy Potential



Source: Team Analysis

Figure 35: Double Positive Effect for IMAX's Various Revenue Streams



Source: Team Analysis

Figure 36: Key Financial Metrics

(US$m)	FY22A	FY23A	FY24E	FY25E
Growth				
Rev.	301	375	408	430
Gr Rate (%)	18.0%	24.6%	8.9%	5.4%
Profitability				
Gross Margin (%)	52.0%	57.2%	63.8%	64.3%
EBITDA Margin (%)	17.2%	29.5%	29.0%	29.6%
Profit Margin (%)	(6.6%)	8.8%	14.2%	14.6%
Efficiency				
ROA (%)	(2.4%)	4.1%	7.1%	7.7%
Liquidity				
Current Ratio	1.7	1.9	1.8	1.8
Leverage				
D/E	0.8	0.7	0.5	0.2

Source: Team analysis

For FY24, management guided GBO in line with FY23, with system installs of 120-150, and AEBITDA margins of high 30s%. management also provided early guidance on FY25, with revenue growth of at least HSD%, driven by accelerating GBO and MSD network growth, resulting in margins of ~40%, or 200bps above Street consensus. We believe that a positive earnings report with faster installations due to streamlined backlog, rising per screen average etc that beat expectations will serve as a catalyst to drive upside in IMAX's share price, similar to past earnings surprises. Further management guidance for 2024-25 on GBO, installs and EBITDA margins also provides increasing visibility into IMAX's growth trajectory and potential margin expansion, boosting investor confidence.

Financial Analysis

Comeback of the century – margins are expected to normalise to pre-pandemic levels

Unsurprisingly, IMAX was hit terribly during the pandemic, booking losses in FY20 and FY21. With moviegoers returning to cinemas, we expect margins to normalise over the next 5 years.

Furthermore, with more joint-revenue sharing agreements in place, we note that IMAX benefits from an asset-lite business model. The uptick in such IMAX theatres under JRSA schemes gives us confidence in projecting slight net income margin expansion of 150 bps from 14.8% pre-pandemic to 16.3% in FY28.

Strong revenue growth allows for quick paydown of debt

We forecast revenue to grow from US$374.8m in FY23 to US$493.2m in FY28. This revenue CAGR of 5.6% over the next 5 years from which slightly outpaces the industry's 5.1%, which is consistent with our bullish stance on IMAX's prospects as argued above.

We note that strong growth allows IMAX to generate strong cash flows, which can be put towards paying down its revolving line of credit. Upon fully repaying revolver borrowings in FY26, as well as the maturity of convertible notes and other borrowings in the year prior, we appreciate that IMAX can enjoy a debt-free capital structure – effectively returning to the pre-pandemic status quo.

Valuation

Valuation Price Target: **US$22.42 (+41.5%).**

Our target price was derived from a blended average of share values calculated from Discounted Cash Flow ("DCF") Analysis and Comparable Companies Analysis, based on NTM EV/EBITDA multiples.

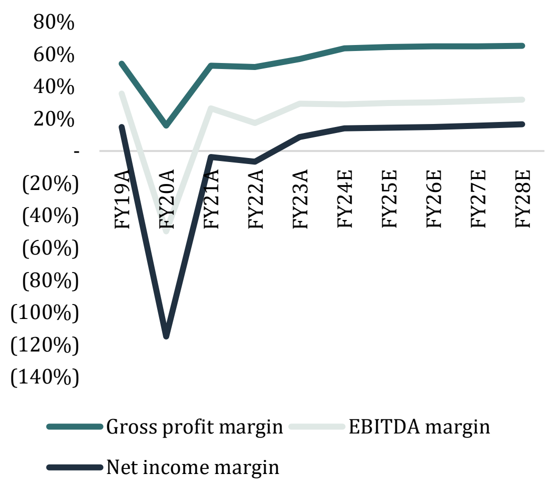
Intrinsic Valuation (60% of overall weightage)

DCF analysis was used to derive the intrinsic value of IMAX, using the Gordon Growth model. Unlevered free cash flows were discounted using weighted average cost of capital ("WACC") over a five-year period from FY24 to FY28.

<u>Revenue Build</u>

For Content Solutions, we adopted a bottom-up approach by projecting IMAX gross box office as a function of the IMAX multiplex theatre network and per screen averages. In line with thesis 2, we forecast more rapid expansion in Greater China as compared to domestically, with a CAGR of 2.0% for the former throughout the forecast period. We then assigned royalty fees on the box office

Fig 37: Margin Performance



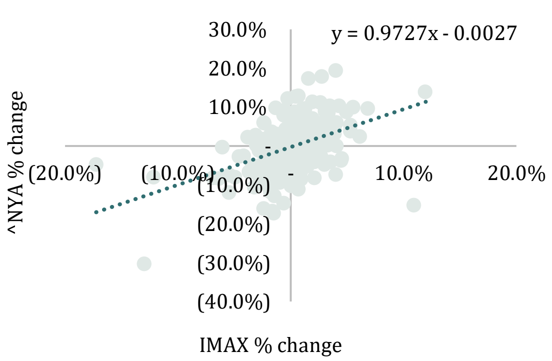
Source: Team analysis

Figure 38: WACC Parameters

WACC Variables		
Input	**Rate (%)**	**Source**
Cost of Equity		
Equity Ratio	76.8	IMAX Capital Structure
Risk Free Rate	4.257	U.S. 5Y Treasury
Beta	0.973	5Y Regression Beta
Adj. Beta	0.982	-
Equity Risk Premium	4.60	Damodaran
Cost of Equity	9.8	CAPM
Cost of Debt		
Debt Ratio	23.2	IMAX's Capital Structure
Risk Free Rate	4.257	U.S. 5Y Treasury
Default Spread	1.0	Synthetic Ratings
Tax Rate	28.3	Historical Tax Rate
After-Tax Cost of Debt	6.70	-
WACC		
WACC	9.1	-

Source: Team estimates

Figure 39: 5Y Regression Beta



Source: Yahoo! Finance

receipts, with IMAX taking away a smaller proportion in China as a result of higher import taxes in the region.

For Technology Products & Services, we projected both sales and rental figures by drawing down on IMAX's multiplex theatre backlog at a rate consistent with historicals. We also calculated the ASP for both arrangements to derive the revenue for this segment.

Our revenue growth with CAGR of 5.6% over the next 5 years is predominantly driven by strong performance in IMAX's Content Solutions segment, in line with theses 1 and 2.

<u>Cost of Goods Sold</u>

Cost of goods sold was mainly projected as a % of revenue as we expect these costs to remain fairly constant.

<u>WACC</u>

The regression beta of 0.973 was derived from the slope of the line of best fit correlating IMAX's historical 5Y weekly returns against the NYSE Composite (Figure 39). We then obtained an adjusted beta of 0.982 to reflect forward-looking assumptions. Equity risk premium of 4.6% was the implied equity risk premium from sovereign debt ratings derived from Professor Damodaran's research. Our analysis of IMAX's dependency on notable directors like Christopher Nolan, as well as the inevitable risk from streaming services, led us to assign a conservative specific risk premium of 1.0%. CAPM was then used to calculate the cost of equity, which was 9.8%.

The risk-free rate used in our calculation is the 5Y US Treasury, which is 4.257% at the time of writing. Tax rate was taken to be 28.3% which is in line with IMAX's historical effective tax rate; cost of debt of 6.7% was derived from the implied spread from the historical average risk-free rate based on its expected interest coverage ratio.

<u>Terminal Value</u>

We used the Gordon Growth model with a terminal growth rate of 2.0%. We believe this growth rate is reasonable because it is in line with GDP growth experienced in developed nations of 2-3%.

Relative Valuation (40% of overall weightage)

As IMAX dabbles across all parts of the movie production value chain, there is no company that engages in the same few business segments; there is no company that is directly comparable to IMAX. As such, we adopted a tiered approach to our relative valuation. We assigned a lower overall weightage to our relative valuation due to the weaker comps set that had fewer peers – this resulted in a wide spread of multiples (Figure 41).

Upstream, we identified relevant movie equipment manufacturers and distributors, as a proxy for IMAX's Technology Products & Services segment. Downstream, we looked at Cinema Operators & Film Distributors, to compare against IMAX's Content Solutions business.

We derived key financial ratios for each of the comparable companies and assigned weightages to each tier based on the FY2022 revenue contribution of the aforementioned segments to IMAX's topline. In our valuation, we erred on the side of caution, taking the median NTM EV/EBITDA multiple of 9.70x.

Looking at the comps, we also note that IMAX has been trading at an discount (LTM EV/EBITDA of 12.10x compared to median peers' 16.66x), suggesting potential upside opportunities.

Figure 40: Comparable Firms

Cinema Operators (35.1%)		
AMC	CINEMARK	CINEPLEX
EVERYMAN	万达传媒 WANDA MEDIA	
Movie Equipment (64.9%)		
IMAGICA GROUP	media one Global Entertainment Limited	SONY

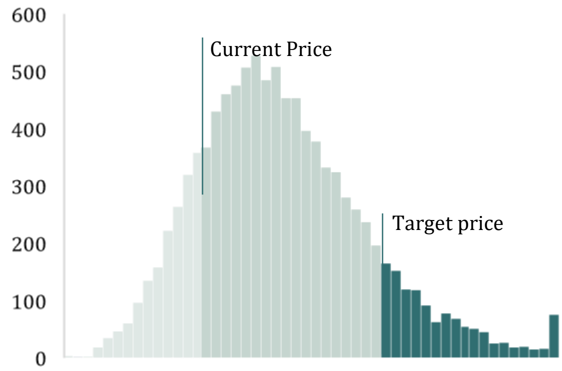
Source(s): Capital IQ, Team analysis

Figure 41: Blended Multiples (x)

EV/EBITDA		
	LTM	**NTM**
75^{th} pth	23.80	9.73
Median	16.66	9.70
25^{th} pth	9.10	9.12

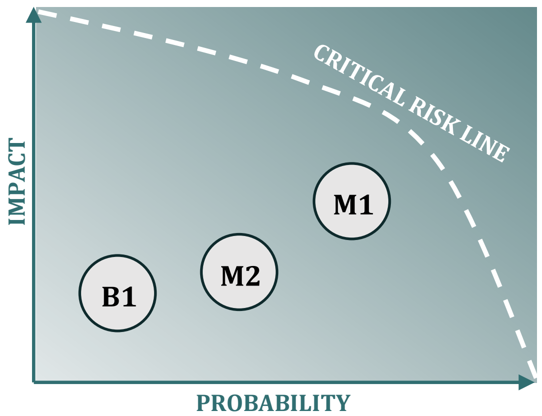
Source(s): Capital IQ, Team estimates

Figure 42: Monte Carlo Simulation



Source: Team analysis

Figure 43: Investment Risks



Source: Team estimates

Blended Target Price

The implied share price derived from the DCF valuation was then blended with the one derived from our relative valuation by simple average. We note that our target price is in line with IMAX's 52-week performance, suggesting that our projections are well within reason.

Stress Tests

Monte Carlo Simulation

We also conducted a Monte Carlo simulation (Figure 42) over 10,000 iterations, by sensitising key DCF assumptions such as WACC and terminal growth rate. 83% of iterations were above the current share price and 12% were above our own target price – lending us confidence in our BUY recommendation.

Investment Risks

Business Risk 1 (B1)

Shortening theatrical window can increase the supply of blockbuster movies from streaming services, dampen top-line growth from GBO. As Hollywood studios abandon the traditional 90-day windows between movies showing exclusively in theatres and heading to streaming/VOD solutions post-pandemic, revenue streams from GBO may be dampened. The average window for theatrical exclusivity now stands at 30 days, limiting box office ticket sales . For instance, Universal forged an agreement with AMC Theatres and Cinemark to release films on PVOD only 17 days after theatrical release, while films that open over $50 million can move to home availability after 31 days. Prominent examples of blockbusters like Suicide Squad, Godzilla vs Kong, and Marvel's Black Widow were released simultaneously on in theatres and on-demand (day-and-date), significantly affecting box office numbers.

Mitigation: Shorter exclusive windows offset by studio demand. Nevertheless, IMAX still stands to gain, as studios now focus on generating buzz to increase box office revenue within the shortened theatrical window, increasing studio demand for films shot using IMAX proprietary technology. Case in point, summer blockbuster *Oppenheimer* was primarily being branded as ideal to watch on IMAX 70-millimeter screens. Furthermore, shortening exclusive windows are less of a concern for IMAX as it typically runs a film across its network for less than four weeks (with the exception of some films like *Oppenheimer* with longer windows). In the longer term, streaming companies may also provide more content for theatres as films cycle to streaming services faster, to make up for the shortened window.

Market Risk 1 (M1)

Sluggish Chinese consumption going into 2024, along with a slowing in new screen installations may hamper valuation. IMAX is heavily exposed to Greater China at ~40% of revenue, thus a slowdown in economic activity due to poor consumer confidence triggered by issues on the real estate front can limit IMAX's international growth opportunities. Stagnant consumer consumption may limit gross box office ticket sales, which may have spill over effects if exhibitors lower demand for new screen installations or new signings into backlog.

Mitigation: IMAX's expanding its geographic footprint beyond Greater China reduces its reliance on any single market, building resilience against market-specific downturns. Furthermore, the broadening of IMAX's content portfolio beyond blockbuster Hollywood films to include local language films can serve as a buffer, as it attracts a wider consumer base and strengthens demand in China/RoW markets, maintaining its growth trajectory. Additionally, we note that despite economic risk, the cinema industry is known to be historically recession proof, with greater consumer willingness to spend an additional $5 for premium formats relative to more expensive items like restaurants. Furthermore, the Chinese economy is showing signs of recovery, with services consumption largely driving a recovery in overall consumption. Increased signings for system installations in China also signals improving demand for premium formats.

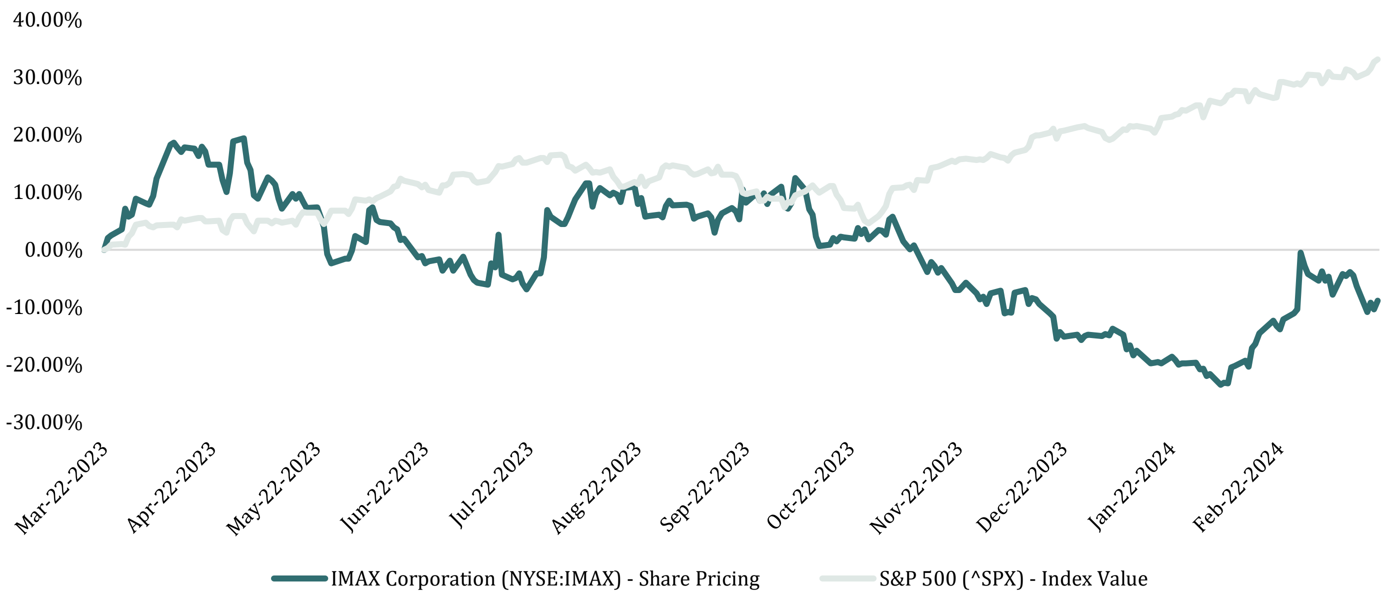
Business Risk 2 (B2)

Stiff competition from premium large-format peers, including emerging PLF brands and exhibitors developing their own technology, may dampen new system installations and decrease IMAX's total addressable market. This competitive landscape is shaped by companies like Dolby, and cinema chains like Vue and Odeon launching their own PLF brands to avoid joint revenue sharing agreements (JSRA) with IMAX.

Mitigation: We remain confident in IMAX's competitive advantage over its PLF peers, due to proprietary technology that provide superior viewing experiences, and blockbuster movies that are filmed exclusively in IMAX, which warrants IMAX systems installations, should cinemas want a share of the pie. We stand by IMAX's ability to attract moviegoers over the forecast period, further supported by its strong movie slate.

Disclaimer

Appendix A: 1Y Performance against S&P 500



Appendix B: Sell-side Consensus

Consensus Rating	4.45	**12M Target Price**	21.60
Buys	81.8%	**Total Buy Recs**	9
Holds	9.1%	**Total Hold Recs**	1
Sells	9.1%	**Total Sell Recs**	1
Return Potential	37.5%	**LTM Return**	-13.9%

Firm Name	Analyst	Recommendation	Target Price
B Riley Securities	Eric Wold	Buy	25.00
Zacks	Team Coverage	Neutral	17.00
Barrington Research	James C Goss	Outperform	24.00
Macquarie	Chad Beynon	Outperform	24.00
Wedbush	Alicia Reese	Outperform	22.00
ROTH MKM	Eric O Handler	Buy	22.00
JP Morgan	David Karnovsky	Neutral	18.00
Wells Fargo	Omar Mejias	Overweight	20.00
Benchmark Co., LLC	Michael Hickey	Buy	22.00
Goldman Sachs	Stephen Laszczyk	Sell	14.00
Rosenblatt Securities	Steven B Frankel	Buy	25.00
Sadif Investment	Team Coverage	Strong Sell	13.63
Morningstar	Matthew Dolgin	Buy	21.00
ISS-EVA	ISS EVA Equity Research	Hold	

Appendix C: Football Field Analysis