promontory
investment research

Ørsted A/S
United Therapeutics
Tapestry Inc.

Spring 2024 Equity Report

Foreword

Promontory Investment Research is proud to present its eighteenth equity research report. This spring, our Research Analysts produced high-quality work in six industry coverage pods, and we've selected three reports to share with you: Ørsted A/S, a Danish wind-farm owner and operator; United Therapeutics, a biotechnology company; Tapestry Inc., a multinational luxury fashion holding firm.

Like all of Promontory's previous equity research publications, we take immense pride in the thoroughness and dedication shown by our Research Analysts this quarter. This report marks the culmination of their efforts, and we sincerely hope you will enjoy reading it.

Since the onset of Promontory's winter recruiting cycle, new recruits from the last quarter have successfully leveraged their newly acquired skills after being promoted to Research Analysts. The Teaching Committee—comprising Board members dedicated to supporting these recruits throughout our Basic Financial Training curriculum—has extended their guidance to the Research Analysts' activities.

Alongside our research initiatives, we have continued to nurture an environment that reinforces our commitment to a collaborative, diverse, and close-knit community by enhancing our mentorship initiatives and through a variety of social events. The Board remains steadfast in its promise to prioritize community engagement, understanding that the quality of our reports reflects the strength of our collaborative efforts.

Thank you, as always, for your support and for taking the time to read our reports. We look forward to the future with excitement and invite you to join us on our journey moving forward.

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Natural Resources
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Ørsted A/S

Ørsted is a Danish wind-farm owner and operator. It is the world's largest developer and owner of offshore wind farms, operating in diverse markets such as Europe, the United Kingdom, the United States, and Taiwan. Last year's ~27.0bn DKK impairment on American projects left investors especially bittered amid systemic industry headwinds. However, we believe that Ørsted's new corporate plans and strengthening financial positioning will catalyze investors to reconsider Ørsted beyond recent performance and to view it as it should be: a powerhouse in the ever increasing industry of wind energy, one of the most important sectors of energy as the world transitions to a low-carbon future.

Rating	Positive
Price (04 25 24)	*DKK* **388.90**
Price Target	*DKK* **455.00**
52W Range	*DKK* **248.00 – 679.60**
Market Cap	*DKKmm* **163, 423**
EPS (FY 2023)	*DKK* **(50.11)**
Consensus	*DKK* **440.00**
Ticker	**OMX: Ørsted**

DKK, mm	2023A	2024E	2025E
Revenue	79,255	98,447	91,135
% Growth	(40.08)%	24.22%	1.53%
EBITDA	18,717	30,847	31,707
% Growth	(41.61)%	64.81%	2.79%
Profit (loss)	(20,182)	13,731	13,160
% Growth	(234.58)%	168.04%	(4.16)%
ND/EBITDA	3.23x	2.15x	2.07x
% Growth	171.08%	(33.37)%	(3.71)%

Price Performance Chart, *DKK/sh.*

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Company Overview

Ørsted A/S, known until 2017 as DONG Energy (Dansk Olie & Naturgas), transformed from a state-owned oil and natural gas entity into a global leader in renewable energy. Established in 1973 by the Danish State, the company's inception aimed to lessen Denmark's reliance on Middle Eastern oil by tapping into the North Sea's oil and natural gas resources. This foundational period was critical, especially during the oil crisis of the 1970s, demonstrating the strategic importance of energy independence for Denmark.

The early 1990s marked a pivotal turn towards renewables, with Ørsted leading the charge in wind energy, evidenced by the establishment of the world's first offshore wind farm (Vindeby) in 1991. This shift was part of a broader Danish ambition to pioneer wind energy, spurred by a combination of government policies, including subsidies and research and development support, responding to the global oil shortage and environmental concerns. Ørsted's journey mirrored Denmark's broader energy transition, leveraging decades of progressive energy policy and innovation.

By 2006, reflecting a broader scope beyond oil and gas, DONG Energy emerged from the merger with several Danish energy companies, symbolizing its transformation into a diversified energy firm. This change was a precursor to a more dramatic shift: in 2017, Ørsted divested its oil and gas assets to Ineos and rebranded itself after Hans Christian Ørsted, the Danish physicist who discovered electromagnetism. This rebranding signified the company's full commitment to renewable energy, aligning its identity with the principles of sustainability and innovation that now drive its operations.

Ørsted's aggressive pivot to renewables, particularly offshore wind energy, positioned it as a frontrunner in the global shift towards clean energy. This transition was facilitated through strategic partnerships, acquisitions like Deepwater Wind in 2018 to bolster its U.S. offshore wind presence, and innovative project financing models that enabled rapid expansion and scale. Ørsted's focus has not only contributed to reducing carbon emissions but has also propelled Denmark to the forefront of wind energy innovation, demonstrating the feasibility and profitability of sustainable energy ventures.

Business Segments

Offshore wind:

Ørsted is the world's largest developer and operator of offshore wind farms. Since constructing the world's first offshore wind farm at Vindeby in 1991, Ørsted now has a portfolio of 40 wind farms in seven countries spanning Europe, North America, and Asia. Ørsted also operates the world's single largest wind farm, the Hornsea 2 Offshore Wind Farm, which is found in the North Sea off the coast of Norwich, England. It still has plans to expand into new energy markets such as in Poland where they have recently been awarded two projects to construct and operate wind farms in the Baltic Sea. Currently, 8.9 GW of offshore wind assets have been installed, with a further 10.3 GW under construction or awarded (including projects that have not reached FID). Financially, the offshore segment comprises 73.8% of their '23 EBITDA.

In North America, their offshore projects have been plagued with setbacks and financial difficulties. Almost half the awarded but non-FIDed capacity is in the US where we see inflation and high-interest rates as a headwind that will continue to increase required capex and other project development costs. Despite the Inflation Reduction Act (IRA) ensuring a 30% investment tax-credit (ITC) on the permissible asset base — with the potential for this to increase to 40% — Ørsted will continue to face obstacles in their American expansion. This was exemplified by the fact that in August of 2023, Ørsted recorded a 25.5 billion DKK (3.7 billion USD) impairment on a collection of its American projects, an

event that greatly softened its bottom line. Ørsted's management attributed this to supply-chain issues that faced its manufacturers (Siemens and General Electric), higher inflation, higher interest rates, and difficulties in reaching a 40% ITC.

Having been actively involved in the construction of their wind farms, Ørsted's ability for engineering, procurement, and construction (EPC) in their offshore segment uniquely positions them compared to their competitors, such as RWE and Vattenfall, which contract out a majority of their construction related-work to third parties. Ørsted, on the other hand, is directly involved and contributes to the construction of their projects, meaning that they are in greater control of meeting deadlines ensuring quality. A testament to this fact is that, even during the supply-chain issues of the pandemic, Ørsted was able to deliver Borssele 1 & 2 and Coastal Virginia on time and on budget. However, recently, the manufacturers for Ørsted's wind turbine blades have been facing difficulties amid systemic supply-chain issues.

Onshore wind:
In addition to its large offshore operations, Ørsted also has a presence in onshore wind farms, owning assets in North America and Europe which are able to generate up to 3.8 GW of energy, with a further 100 MW under construction. The US portfolio accounts for 90% of Ørsted's installed capacity, and Europe the remainder. While revenues from the US portfolio are earnt from corporate purchase price agreements (CPPAs), revenues from most of the European portfolio come from government grants, which accounted for 12.8% of total revenues in 2023. Onshore is 15.9% of '23 EBITDA.

In October 2022, Ørsted completed its first farm-down in its onshore segment, selling 50% of four of its US onshore assets (Plum Creek Wind, Willow Creek Wind, Lincoln Land Wind, Muscle Shoals) with a combined capacity of 862MW to Energy Capital Partners. The assets were sold for USD410m. With this, we see the potential for the company to continue its farm-down strategy for recycling capital for further growth.

Bioenergy:
Ørsted, as they are half-owned by the Danish government, makes a vital contribution to the Danish district heating and electricity grids via their Bioenergy division. By using "wood residues from sustainable forestry" Ørsted operates seven combined heat and power (CHP) plants, one heat plant, and one peak load power plant, which has allowed them to successfully largely phase out the use of fossil fuels and natural gas for residential and commercial use in Denmark. Ørsted's bioenergy assets collectively provide around a quarter of Denmark's district heating and a third of the country's thermal power.

In 2006, the company commenced a large-scale programme to convert its coal-fired combined heat and power plants to run on sustainable biomass. This has reduced its coal consumption by 91%, with a goal to hit 100% by 2025. In October 2022, the Danish authorities ordered the company to continue operation of the coal-fired Esbjerg Power Station beyond Q1 2023 and resume operation of a coal-fired unit at the Studstrup Power Station and an oil-fueled unit at Kyndby to ensure the security of electricity supply in the country. The order applies until 30 June 2024, and we expect the company to phase out this production by then. Also in its bioenergy segment, Ørsted has a 33 MW waste-to-energy plant using its patented technology called 'Renescience'. The company has plans to sell this business. Moreover, it sells gas to industrial clients in Denmark and Southern Sweden, but we expect this part of the business to be phased out during this decade in line with their decarbonization and net-zero initiatives. The bioenergy division is 8.14% of '23 EBITDA despite it representing roughly a quarter of Ørsted's revenues.

Power-to-X:
While Ørsted has historically focused on offshore wind, in recent years it has expanded into onshore power and Power-to-X (P2X) — conversion technologies that turn electricity into carbon-neutral synthetic fuels such as hydrogen and ammonia that can be used for a plethora of processes. The company explains it as, "using renewable electricity, for example wind power, to create something else ('X')." With this, the company is diversifying its asset portfolio and targets to be an overall leading renewable energy company. It has begun its P2X portfolio with its 70 MW eMethanol FlagshipONE project in Sweden. The latter reached FID in December 2022 and is expected to commence operations in 2025. It is expected to be able to produce 55,000 tonnes of eMethanol per year — enough energy to power one large container ship. E-methanol is fuel synthesized from renewable hydrogen and biogenic carbon dioxide. Since it is not based on fossil fuels, burning e-methanol does not contribute to carbon dioxide emissions.

Corporate Strategy

Ørsted has ambitious plans to expand its offshore segment by 20-22 GW by 2030, compared to its capacity of 8.9 GW today, in order to reach a goal of ~30 GW of offshore energy production in 2030. As for its onshore segment, it plans to grow by about 9 GW to reach 11-13 GW of total onshore energy production. It has established decent growth platforms in the US and Europe but continues to look for opportunities to further scale up its onshore renewables capacity. These growth targets entail a significant step-up in growth, as, since 2016, Ørsted has seen average annual growth in Offshore of 0.9GW, which is far below the average run-rate per year of ~3.0GW required to reach their goals of installed capacity in 2030.

Ørsted expects to fund its growth plans with recycled capital and debt. Recycled capital includes cash received from operating power plants, contributions from doing construction, and O&M for partners, as well as potential proceeds from farm-downs. Farming down typically entails Ørsted selling 50% of the project ownership to a financial buyer with a lower risk appetite and a lower hurdle rate, such as a utility company earning regulated returns or an institutional buyer. This approach enables Ørsted to intensify its financial performance around the development, bidding on, and construction of projects. This strategy allows Ørsted to use capital raised from farming-down projects to fund new projects.

Management has stated that it does not plan to raise any equity to fund its expansions. The capacity to take on further debt is determined by the company's target of maintaining its credit rating of BBB+/Baa1 and the target of having a "FFO/adjusted net debt" ratio of ~25%+. In

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addition to maintaining its credit rating, dividend commitments to shareholders will be prioritized ahead of funding growth, with the company aiming to increase the dividend paid to shareholders.

The company estimates that Offshore will account for ~80% of the targeted investments and Onshore ~20%. However, with value-chain disruption in the wake of pandemic, high inflation, particularly alongside prolonged permitting processes in the US, capex investments are trending higher than the guidance given in 2021.

However, this is not to say that Ørsted is investing in value-destructive projects. Ørsted's management has continuously reiterated that it targets project IRRs with a 150–300bp spread to the project's WACC.

Revenues

Ørsted's revenue is largely dependent on the energy it produces offshore, onshore and from bioenergy plants, as well as the prices realized for the underlying energy product. We have seen increasing revenue from its renewable plants over time as the installed base of capacity has grown, with a revenue reduction in 2020 due to lower power prices, and also in 2023 due to historically low natural gas prices that significantly impacted the revenues realized for its gas-selling business.

For the offshore segment, generation of power constituted 18.1% of total revenue, sale of power was 43.4%, construction was 11.3%, government grants were 16.3% and other was the remaining 4%. Generation of power is the revenue earned from solely their own wind farms, and revenue is recognized as the power is generated since this is when delivery to the customer occurs. Sale of power includes revenues that are earned via the sale of power sourced from investor PPAs, balancing contracts, and other forms of contracts. The offshore segment was 70.5% of total revenues for 2023.

Practically all of the onshore segment's revenue comes from generation of power. Onshore wind remains a consistently small fraction of revenue, only constituting 3.76% of revenues, Ørsted's core competencies lie in offshore wind. However, last year, the onshore segment reported an EBITDA higher than its revenues, at 2,970 million DKK, attributable to the segment's other operating income.

Ørsted's bioenergy division represented 27.3% of its revenues last year. However, it is important to note that this is a low margin business, with an EBITDA margin of only 7.92%, significantly lower than the EBITDA margin of 23.6% for its offshore segment.

Management

The management of Ørsted is structured into a two-tier system, comprising the Board of Directors and the Group Executive Team, both responsible for the company's affairs. The Group Executive Team, in particular, is pivotal in the day-to-day management, ensuring Ørsted's strategic directions are effectively implemented.

At the helm as Group President and CEO is Mads Nipper, who has led Ørsted since early 2021. Nipper has been instrumental in steering the company through a significant phase of global energy transformation. His leadership is characterized by an ambitious vision to install 50 GW of renewable capacity by 2030 and to position Ørsted as a leader in renewable hydrogen and green fuels. Under his guidance, Ørsted has also emphasized sustainability, setting a target for a net-positive biodiversity impact by 2030 and achieving a science-based net-zero target.

Rasmus Errboe, who serves as Deputy CEO and Chief Commercial Officer (CCO), plays a crucial role in Ørsted's commercial organization. His responsibilities were expanded as part of Ørsted's recent management restructuring aimed at simplifying its structure and enhancing focus on project execution, financial discipline, and operational excellence. This restructuring supports Ørsted's ambitious plans to more than double its installed renewable energy capacity by 2030, with a significant investment program backing these initiatives.

Recent changes to Ørsted's executive management include the implementation of a new organizational structure focused on three geographical regions (Europe, Americas, and APAC) to better align with market needs while leveraging global synergies. This change reflects Ørsted's aim to be closer to its markets and customers, ensuring faster and simpler decision-making processes. It also involved promoting internal talent to head up new business functions, illustrating Ørsted's commitment to nurturing and leveraging in-house expertise.

Recent Developments

One of the major strategic shifts came with Ørsted's decision to cease the development of the Ocean Wind 1 and 2 projects in the U.S. due to adverse developments including supply chain issues and increased interest rates. Instead, Ørsted has shifted focus towards the Revolution Wind project, for which it has taken a final investment decision. This project, expected to start offshore construction in 2024 and complete by 2025, shows Ørsted's commitment to the U.S. renewables market despite challenges.

The Sunrise Wind project in New York, among other projects in Ørsted's US portfolio, faces impairments due to supply chain issues, uncertain progress on ITC guidance, and rising interest rates. These factors led to anticipated impairments of up to DKK 17 billion across Ocean Wind 1, Sunrise Wind, and other projects. The company continues discussions for additional ITC qualifications for Ocean Wind 1 and Sunrise Wind, which, if unsuccessful, could result in further impairments.

To adapt to the changing landscape of the renewable energy sector, Ørsted has made significant adjustments to its business strategy. The company plans to exit several offshore markets, including Norway, Spain, and Portugal, and to deprioritize development activities in Japan. This strategic realignment aims to reduce development costs and create a more robust portfolio of projects. Ørsted is also focusing on making the organization leaner and more efficient, including a reduction of 600-800 positions globally.

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In its pursuit of expanding its renewable energy portfolio, Ørsted has also secured a significant PPA with Bloomberg for the Mockingbird Solar Center in Texas. This 80MW agreement supports Ørsted's largest solar project in the U.S. and advances Bloomberg's commitment to sourcing 100 percent of its electricity from renewable energy by 2025. The project is notable for incorporating conservation efforts to protect native tallgrass prairie, demonstrating Ørsted's commitment to sustainability and biodiversity.

Furthermore, Ørsted is venturing into floating wind technology with the ScotWind project, marking its first large-scale floating wind development project in the world. Located off the coast of Scotland, this gigawatt-scale project exemplifies Ørsted's ambition in floating offshore wind and expands its offshore development pipeline in the UK.

Industry Overview

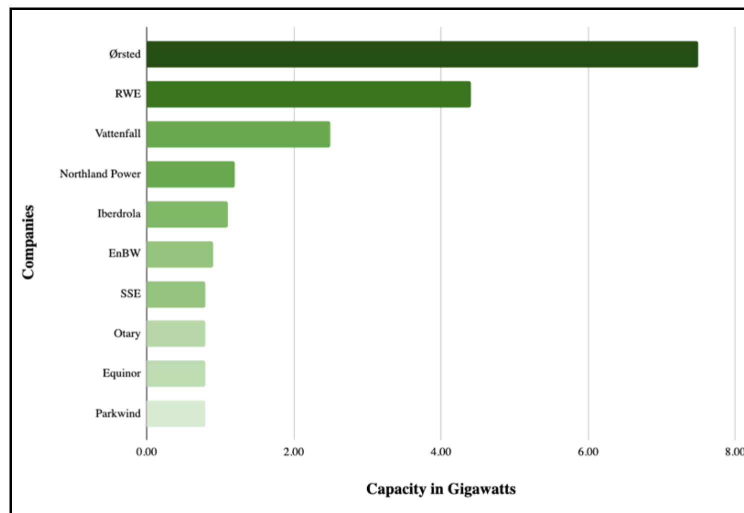
Industry Outlook:

Ørsted is actively engaged in various industries (offshore wind, onshore wind, bio energy, and power-to-x (P2X)), with their main focus being offshore wind energy development. The offshore wind energy industry involves the development, construction, and operation of wind farms located in bodies of water, typically oceans or large lakes. These wind farms (consisting of wind turbines connected to offshore substations through a network of array cables) generate energy taken from the force of the winds out at sea, and transfer the electricity produced to onshore substations and subsequent transmission networks.

Competitive Landscape

The offshore wind energy industry is characterized by high barriers to entry due to the high risk and costs of the development, alongside increasing competition. However, big oil companies that have the funds to allocate more CAPEX to their wind divisions, could potentially become large competitors to Ørsted. The imperative to address climate change is propelling the world towards increased adoption of renewable energy, providing a strong tailwind for the growth of the industry but also driving more companies to enter. Despite some consolidation efforts among major players, the offshore wind energy industry remains somewhat fragmented, with a mix of established companies and new entrants contending for market share and project opportunities. The APAC region dominates offshore wind capacity with nearly 50%, followed by Europe (41%), North America (9%), and LATAM (1%).

Graph 1: Leading offshore wind power developers worldwide (2024) by operating capacity (in gigawatts)



The main competitors of Ørsted within the offshore wind energy industry include RWE (out of Germany), Northland Power (out of Canada), Iberdrola (out of Spain), and EnBW (also out of Germany). Yet being the first mover into this industry (with their first offshore wind farm being created in 1991), Ørsted controls the majority of the market share at around 30%, as well as containing the highest operating capacity in gigawatts.

Value + Cost Drivers:

Companies within the offshore wind producing industry make money is through four main revenue streams: generation of power (sales from energy coming directly from Ørsted), sale of energy (PPAs, balancing agreements, where energy can be sourced by third parties), construction + O&M for the wind farms themselves, and government subsidies. The majority of costs on the other hand come from the construction and maintenance of the wind farms, as well as the cost of power generation. Wind producing companies like Ørsted are quite dependent on wind turbine manufacturing companies like Siemens and GE, highlighted by the fact that in late 2023, Ørsted suffered a 5B Krona impairment because of supply chain issues in its American operations.

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Industry Trends:

New Technological Advancements:
There have been many recent technological advancements within the offshore wind producing industry. One of the most important innovations that has become quite popular as of late are floating turbines; turbines that lie on a floating platform (tension leg, semi-submersible, or spar) rather than being anchored to the seabed, allowing the turbines to be placed much further from the coast (where winds are stronger and more consistent) compared to fixed-support turbines. This will not only expand the available sea space for offshore wind farms, particularly in countries with restricted shallow-water regions, but also reduce the amount of visual pollution in the water, helping with aquatic wildlife, fishing, and shipping lanes. As of the end of 2023, there were only 4 operating fully-floating farms, collectively producing less than 200 MW of energy. However, as the industry gains popularity and momentum, floating wind farms will be poised to become increasingly popular. Other recent technological advancements within the industry include vertical axis wind turbines (VAWT) – which are smaller/cheaper/easier to maintain compared to your typical HAWT turbines and can operate regardless of wind direction – as well as larger turbine sizes allowing for more energy output.

Setbacks in the US:
As of today, the United States only has 42 MW of electricity generated from offshore wind farms. Over the past few years, the Biden Administration has attempted to increase that number through funding/subsidies for numerous offshore wind energy projects, including BOEM's announcement of a new priority Wind Energy Area in the New York Bight, Biden's Inflation Reduction Act, and the Departments of the Interior, Defense, Commerce collaborating to develop wind energy off the coast of Maryland. In fact, the Biden Administration went as far as to announce a goal of deploying 30 GW of offshore wind by 2030, a target that if met, would generate enough power to meet the demand of more than 10 million American homes for a year, and avoid 78 million metric tons of CO2 emissions. However, reality soon struck as the US saw itself facing multiple industry headwinds, including significantly increased costs, supply chain constraints, and challenges with PPA contracts. In late 2023, Ørsted canceled its Ocean Wind I and II projects in New Jersey due to supply chain issues, and in the beginning of 2024, developers of several New York projects asked for renegotiations within their PPA contracts, which could lead to either setbacks or further project cancellations. As the US continues to expand its offshore wind capacity in an effort to meet its goal of 30 GW by 2030, it will look to partner with more companies to create a vast array of projects on both of its coasts.

Investment Thesis

Thesis 1. Short-term Operational Concerns do not compromise Ørsted's long-term cash flow:
Separating short-term substrate from long-term substance will warrant a change in investor sentiment as medium-term growth is yet to be fully appreciated by the market; management's new business plan (especially in regards to de-risking the balance sheet) will catalyze investors to reconsider Ørsted beyond recent performance.

Investors were quick to price-in the fact that Orsted recorded a DKK 26.8bn impairment, with the majority of this relating to the Ocean Wind 1 project which recorded an impairment of DKK ~20.0bn as management took the decision to cease development of the New Jersey based project, at least in the form as it was awarded by the New Jersey Board of Public Utilities. Management ascribed the impairments to a variety of challenges, such as higher costs of capital (the yield on the 10-yr Treasury increasing by ~300 bps. from when the contract was awarded in 2019), cost inflation, supply chain challenges, slow/bureaucratic permitting, and tax credit monetization.

Recent events, such as the impairments and termination of the Ocean Wind 1 project, have surely bittered investor sentiment surrounding Orsted. However, we believe that if investors stop merely judging Orsted based on its recent events and instead start to appreciate Orsted's medium to long term opportunities — that management has very clearly laid out — we could stand to see greater appreciation for Orsted's in the markets. Additionally, investors should also realize that setbacks such as the termination of the Ocean Wind 1 project are not specific to Orsted — it's quite the contrary, with the termination of the BP and Equinor backed 1.2GW New York offshore wind farm — Empire Wind 2 — exemplifying this fact. The entire offshore wind industry has, in recent years, been facing systemic headwinds, attributable to global macroeconomic uncertainty (higher costs of financing projects), historically low natural-gas prices, and warmer than expected winters due to deviations in typical El-Niño atmospheric trends. As we see the offshore wind industry exiting a cyclical downturn, we believe that renewed interest in offshore wind projects could add tailwinds onto an otherwise long-term secular growth trend.

In FY2023 reports, management has presented a new business plan that includes:

- Reducing portfolio risks by exiting certain markets (mostly in Europe) and a re-focused offshore strategy in the United States.
- CapEx reduction and stringent phasing of investments (DKK ~270bn in gross investments)
- Partnership and divestment programmes
- A 3-year dividend holiday (pause of dividends through 2026 with first payment in 2027)
- 150-300 bps. WACC-IRR spread on all projects
- 14% average ROCE through 2030
- Reducing ambition of installed capacity from ~50GW to ~35-38GW to focus on value accretive projects rather than empire building

Renewable Capacity by 2030 (*GW*)

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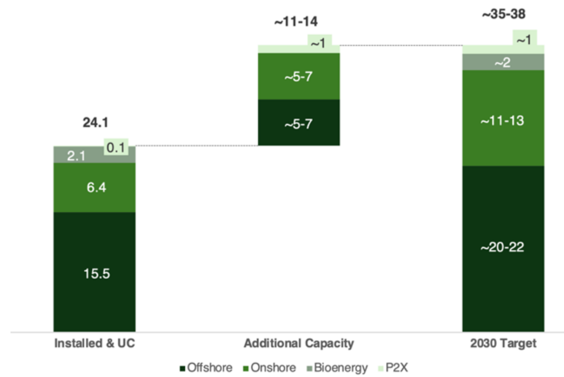
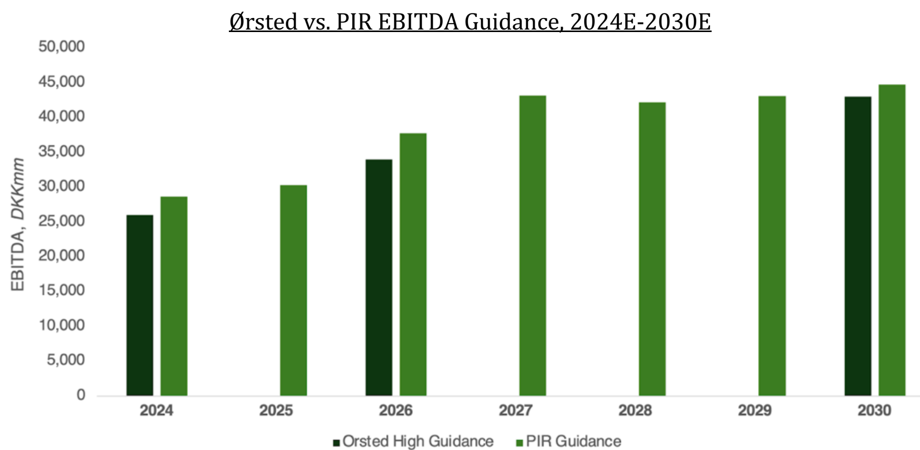


We believe that management's new strategic plans, especially in regards to filling holes in their balance sheet following the impairments could prove to be worthwhile despite the short-term headaches that their new plan will likely cause. We like to note in particular that Orsted has continually highlighted the high-visibility of their new offshore wind program and consequently their high conviction in EBITDA guidance of DKK 23-26bn in 2024 (vs. DKK 18.7bn in 2023), DKK 30-34bn in 2026, and DKK 39-43bn in 2030.

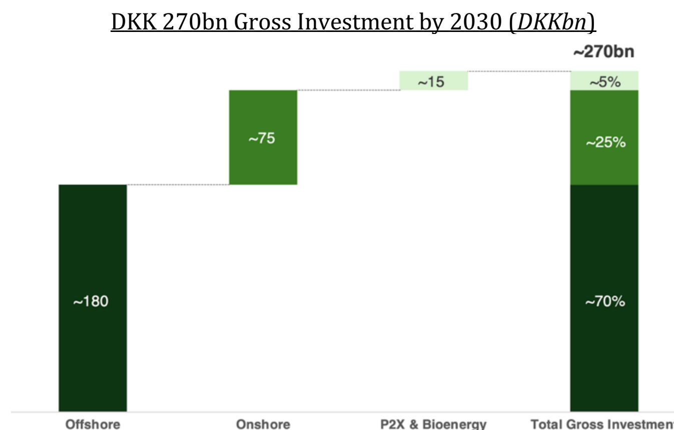
Ørsted vs. PIR EBITDA Guidance, 2024E-2030E



Orsted lowered its renewable capacity guidance from a previous 50GW to 30-38GW (with 20-22GW for offshore, 11-13GW for onshore, 2GW for Bioenergy, and ~1GW for P2x) in order to focus on projects that will more readily and securely generate value for shareholders. This is something that we believe that shareholders are not entirely considering given their trepidation due to recent events. We do not believe that shareholders have taken issue with the fact that Orsted has lowered guidance particularly on capacity, but rather, on the belief projects will continue to be ridden by setbacks and impairments. However, we are confident in management's ability to reach their project targets on time and on budget. We attribute our contrarian views to Orsted's unique ability for in-house engineering, procurement, and construction, as highlighted in the company overview segment of this report.

Through 2030, Orsted plans to make gross investments totaling ~ DKK 27 bn (a cut of 33% like-for-like compared to previous ambitions) with ~ DKK 115bn in proceeds from farmdowns of which ~ DKK 70-80bn will be realized by 2026.

DKK 270bn Gross Investment by 2030 (*DKKbn*)



Out of the DKK 270 bn to be used for investments by 2030, Orsted expects ~ DKK 130bn of this to be used by 2026.

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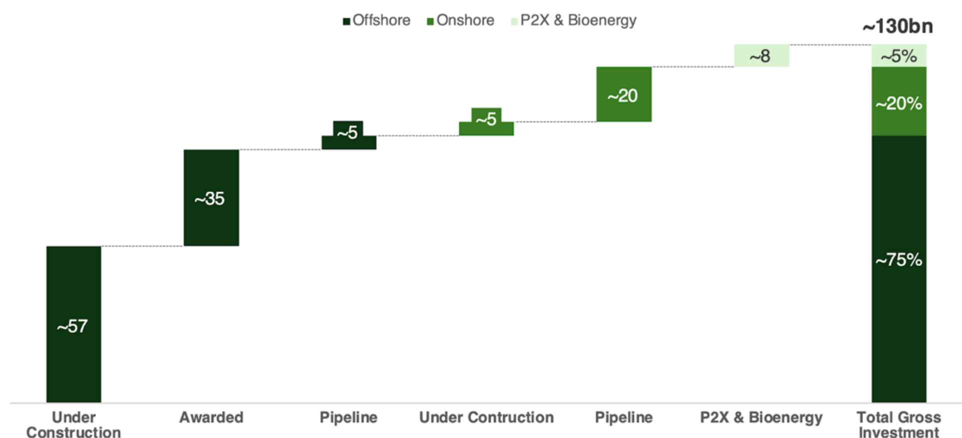
<u>DKK 130bn Gross Investment Through 2026 (*DKKbn*)</u>



This contributes to the idea that short to medium term growth is highly visible. At this point, two developments are as good as finished as they are planned to be connected by the end of Q1 2024 — Changhua 1 & 2a and Southfork are nearly completed with 10 out of 12 turbines installed at Southfork by the beginning of February. All 12 are likely to be installed any day now. Furthermore, three programs will be completed in 2024/2025: the German projects (Gode wind 3 (which reached 50% farm down) and Borkum Riffgund 3), the Revolution Wind project, and Changhua 2b & 4. The German programme is on plan, but with compressed schedules and Orsted is tightly monitoring its supply chain. Changhua 2b and 4 is on a tight schedule but expected to be completed by the end of 2025. A backup vessel for Revolution wind has been secured and Orsted has a strong focus on timely monopile (the large cylindrical base) deliveries. Additionally, Orsted recently took FID with Hornsea 3 (Orsted's largest and most important project with capacity of ~2.9 GW). Completion is expected in 2027 and Orsted estimates a 150bps spread over WACC for this project, in line with its strategic objective. Orsted has only been awarded ~920 MW for Sunrise wind (expected completion in 2026), ~1.5GW for Baltica 2 (expected completion in 2027) and ~1.3 GW for Baltica 3 (expected completion in 2029). All of these projects go to show that Orsted will undoubtedly be able to grow in the short to medium term, countering investors' fears of a stagnant industry in the face of systemic headwinds. We believe value for long-term growth is warranted as Orsted is an effective developer with best-in class assets in a recovering market in addition to its pipeline carrying enough opportunities for near-term growth.

Furthermore, Ørsted's strategic divestiture of shares in four US onshore wind farms to Stonepeak, a transaction valued at approximately $300 million (along with raising $700 million of tax equity proceeds for the portfolio) with total proceeds raised to about $1 billion, represents a pivotal move in the company's ongoing transformation and growth in the renewable energy sector. This deal is not just about the immediate injection of liquidity but demonstrates a nuanced approach to capital management that prioritizes reinvestment into value-creating projects. A negative P/E Ratio TTM of -7.67 suggests Ørsted has been operating at a loss, which could be indicative of the company's strategic investments in growth areas like bioenergy and carbon capture which may not have realized returns yet. The divestiture of assets, such as the sale of shares in onshore wind farms, can provide Ørsted with critical liquidity to weather this period of investment and transition towards these new technologies. Their innovative approach to capital recycling allows Ørsted to redeploy capital efficiently towards high-potential projects, underpinning its growth trajectory and reinforcing its position as a leader in the renewable energy sector. The transaction, wherein Stonepeak will receive 80% of the cash distributions from the projects, while Ørsted continues to operate the portfolio, exemplifies a model that maximizes capital redeployment without relinquishing operational control, thereby maintaining long-term optionality around the portfolio.

Additionally, Ørsted's foray into bioenergy and its commitment to carbon capture and storage (CCS) technologies further illustrate the company's strategic pivot towards sustainable and innovative energy solutions. The collaboration with Microsoft and Aker Carbon Capture to develop BECCS (Bio-Energy with Carbon Capture and Storage) at biomass-fired heat and power plants in Denmark signals Ørsted's dedication to not just achieving carbon neutrality but also actively removing carbon from the atmosphere. This initiative is aligned with Denmark's ambitious climate targets and the global imperative to limit temperature increases in line with the Paris Agreement. Ørsted's management of six biomass-fired units providing a quarter of Denmark's district heating, showcases the company's pivotal role in Denmark's green transition. Ørsted's strategy emphasizes the sustainable sourcing of biomass, with a focus on using wood residues from sustainably managed forests, ensuring a closed carbon cycle that aligns with ecological and sustainability standards.

By the same token, we also expect farmdowns will be the key point of focus as Orsted scales back CapEx, puts the dividend on holiday, and commits to accelerating its farmdown strategy in the near term to aid its balance sheet. The divestment target of DKK 70-80bn in 2024-2026 looks like the key variable going forward, with our expectation that Hornsea 3 and Greater Changhua 4 will make up a large portion of this balance. Given management's expectation of a Hornsea 3 farm down in 2025, investors will have to wait to see exactly what impact these farmdowns will have on Orsted's balance sheet. In our view, Divestments will be a key point of interest given Orsted's commitment to achieving and sustaining a >30% FFO/ND target, although the most significant of these farmdowns is not expected until 2025.

One key question for investors at this point is whether Orsted's farmdown strategy will actually reach the ~ DKK 70-80bn target. We believe so, as there is higher demand for offshore wind assets, especially in the US (refer to Investment Thesis 2). Many state governments on the east coast are still aiming to produce their energy via offshore, however, many project cancellations (such as Ocean Wind 1 and Empire Wind

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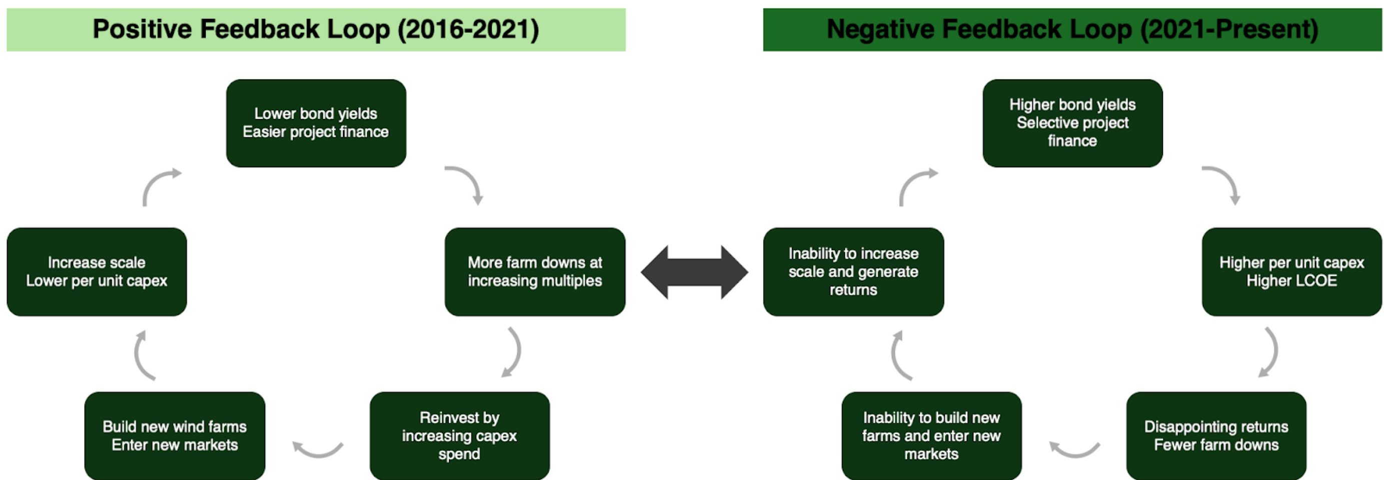
2) have acted against the governments' favor. Another thing to note regarding the DKK 70-80bn figure is that this figure does not include CapEx refunds, which will likely push this figure higher. Furthermore, many core offshore wind markets in Europe and the UK are still in need of more scalable, fixed-price, and low-carbon energy production. Offshore wind is the cheapest scalable source of renewable energy production, except solar (which is not a viable option for many of these European nations). With this, we see the rate-induced down-cycle in offshore wind turning.

Utilities Cycles: Signs of Being Broken



Given success with Ørsted's farmdown strategy, we believe that the >30% FFO/ND target is attainable. This, we believe, will be a large confidence booster for Ørsted's credit holders. Ørsted's credit fundamentals should improve over the coming years as Ørsted executes its updated business strategy, the aforementioned reduced capex plans, and renewable expansion ambitions, together with its farmdown strategy, should plug the balance sheet hole created by the impairments and cancellation costs for the US offshore projects. As we believe that credit agencies will wait to see the outcome of the new strategy before considering increasing Ørsted's credit rating back to BBB+ from BBB, if Ørsted is able to reach its FFO/ND target, this should act as a catalyst for a credit rating upgrade.

We see that, despite recent events and short-term headwinds, Orsted will be well positioned to uniquely capitalize on the growing tailwinds in the offshore wind farm industry. With an attractive new business plan from management and improving financial results as Orsted focuses on value accretive projects rather than empire building, Orsted should be one of the firms in the renewables space that is attractive to investors.

Thesis 2. Although current offshore wind operations in the US are limited and are currently struggling to fully complete projects due to challenges, this should be looked at as only a temporary setback, as the long-term potential for offshore wind in the US remains promising, and in the meantime the US will attempt to continue expanding offshore wind farm operations along the east coast.

Ørsted faced a 35% plummet in stock price between August 23-24 (2023), when they announced setbacks being faced within their American operations, and a further 26% decline on November 1st, when they fully canceled their wind projects in New Jersey. Ever since these two major declines, the stock price has failed to return to its once original value at around 195 DKK. Investors continue to worry that investments into American offshore wind farm operations will continue to grow at an extremely slow rate because of macroeconomic conditions, and the unreliability (and perhaps the unnecessity) within the US market. As such, they have been cautious towards allocating capital towards such projects. However, as a part of this prediction, they fail to account for multiple factors.

Factor 1: Despite temporary setbacks, the Biden administration continues to invest heavily in offshore wind, hoping to reach their goal of 30 GW of offshore wind by the end of 2030.

As mentioned earlier, the Biden administration made bold claims to produce 30 GW of offshore wind by 2030. Despite this possibly being out of reach, the US government remains committed to investing in projects over the next six years to advance towards this goal as closely as possible. Currently over $17b have either been announced or directly invested towards US offshore wind energy, and it is projected that by 2050, upwards of $810b could be invested. Shown below is a graph containing all of the projected projects for offshore wind farms on the east coast. Of the 41 total projects noted on the east coast (#33 is not shown as it an offshore wind project in Ohio, and the ones in red are call zones rather than leased areas), 35 are currently still underway, and 4 others (Empire Wind 1 + 2, Sunrise Wind, and New England Wind) temporarily shut down, but now have had their PPA's successfully restructured and are back in constructions.

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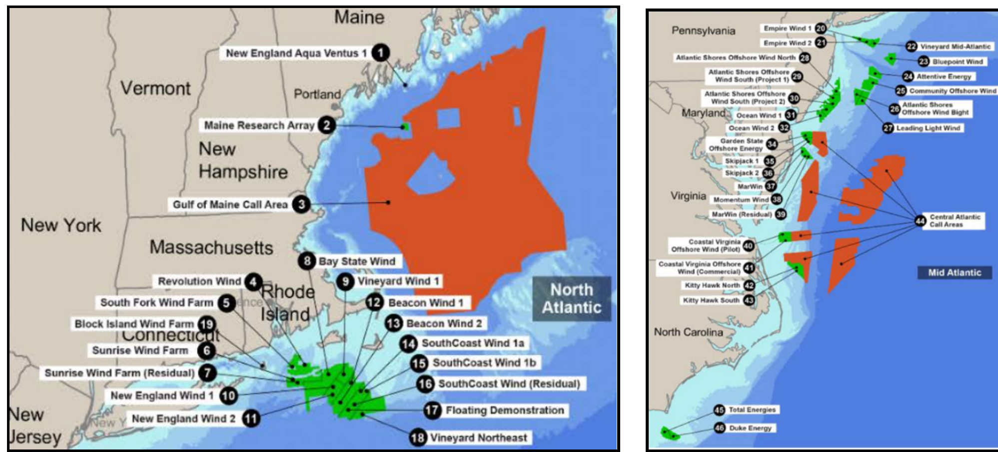

Figure 1: U.S. East Coast Offshore Wind Project Status (Offshore Wind Market Report: 2023 Edition) *Note: Green = Leased Areas, Red = Call Areas

The United States shows no sign of slowing down their investments within this industry, and with the impending 2030 deadline, might even attempt to expand their operations to other coasts. The offshore wind industry within the US isn't looking to leave anytime soon.

Factor 2: Inflation + supply chain issues are temporary.

One of the main problems which caused both the shutting down of the Ørsted projects as well as the attempt to restructure PPA contracts for other projects was high inflation and bottlenecks in the supply chain. As a buffer to make future offtake agreements more durable, some states have now introduced inflation indexing as part of their forthcoming offshore wind procurements. The IRA may soften the adverse impact of rising inflation, supply chain constraints, and interest rates on offshore wind project costs for early-stage offshore wind projects.

Factor 3: New technological advancements in offshore wind turbine structure will ease the ability to produce offshore wind farms amidst strict state environmental regulations.

Although Ørsted blamed its eventual backing out of the Ocean Wind 1 and 2 projects on "inflation, supply chain issues, and rising interest rates", one of the major factors that played a role in their ultimate decisions was complaints raised in regards to environmental concerns. More specifically, environmentalists felt that these large turbines would "destroy marine habitat, compress the seafloor, severely damage marine communities, compromise migration corridors for endangered marine mammals, cause commercial fishing stocks to decline, and injure the beach economy," In addition, the people living close to where these operations were supposed to occur didn't appreciate the idea of having their beautiful view of the ocean be smeared by an ugly wind turbine. From the first figure shown above, it can be seen how the average distance of these wind farm projects lie not too far off the coast (cyan = less than 30 meters off the coast). The primary factor limiting the further expansion of wind farms offshore is inherent to the turbines' design and capabilities. Nearly all these projects solely use fixed-support turbines, which are directly cemented to the ground. However, the more recent implementation of floating turbines would allow for these offshore wind farms to be placed deeper into the sea, subsequently mitigating the problems being raised by environmentalists.

Factor 4: Strategic partnerships have been formed between large renewable energy companies to maintain/continue investments in US offshore wind.

Despite the setbacks, major players in the renewable energy sector (including Ørsted, Eversource, Equinor, and GE Vernova) remain committed to investing in US offshore wind projects. These companies are forming strategic partnerships and engaging in joint venture projects to develop new offshore wind farms along the US east coast. This strategy is extremely beneficial in helping companies share the load of high initial costs and supply chain issues (with the companies being able to combine their suppliers thus pushing project development forward more efficiently and effectively). Ørsted in particular has leveraged this strategy for many of their future investment plans within US offshore wind, with projects such as Revolution Wind (CT), Sunrise Wind (NY) and Ocean Wind 1+2 (NJ) being join ventures/in partnership with other energy companies.

Risks & Mitigants

Risk 1. Due to its major impairments within the US alongside the high amounts of debt being taken, the S&P recently downgraded the long-term issuer credit rating on Ørsted from BBB+ to BBB. Investors worry that Ørsted's business risk profile has weakened, while the offshore wind industry simultaneously seen little success (especially within the United States).

Mitigant 1. Ørsted has already taken strides to fix these problems of debt and risk management, announcing a new business strategy involving less ambitious capex, temporary pauses on dividends, and divesting assets. They also hope to have "greater flexibility on project timelines and commissioning dates", which would help mitigate the problems caused by previous PPA contracts being renegotiated/canceled due to time crunches/miscommunications. In addition, they also recently hired an extremely seasoned new CFO (Trond Westlie) who has past

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CFO experience at multiple global, listed companies (AP Moller-Maersk, VEON and Telenor). The S&P Global Ratings believe that Ørsted's strategy will enable its FFO/ND ratio to reach upwards of 30% by 2025. Finally, this new strategy in being more risk-averse does not mean Ørsted plans to stop its expansions into the US. It will continue working towards hitting this untapped market with even larger offshore wind farms planning to be built off the east coast in the upcoming years (ex: Revolution Wind, Starboard Wind).

Risk 2. Ørsted continues to face the risk of supply chain disruptions/issues, which was seen to be one of the major factors playing into the failure of the offshore wind farm projects in the US. The lack of information regarding Ørsted suppliers, combined with the absence of news regarding the measures being taken to address these issues might raise concern for investors.

Mitigant 2. Specifically, regarding the problems being raised for the US, Ørsted has already invested $2 billion in US suppliers, working with 13 different states to get the different parts necessary for offshore wind farm construction. They have an extremely long and thorough process in choosing their suppliers (including applications, registration to multiple pre-qualification systems, final-round price negotiations, and a condition requiring the supplier to transition to 100% renewable electricity by 2025 latest) to ensure that the quality of supplies they receive is of top quality. In addition to this, Ørsted's unique farm-down approach + multiple partnerships for future projects have the added benefit of reducing the supply-chain management burden, with the other company often having suppliers of their own. Finally, as mentioned before, many US policies such as the IRA work to soften the adverse impact of supply chain constraints for early-stage offshore wind projects.

Price Target

Using a DCF with WACC ~6.00% yields an implied fair share price of 452.49 DKK/share. We set our **price target at 455.00 DKK/share** on the probability of a slightly stronger WACC-IRR spread on American offshore wind projects given recent strong macroeconomic printings. Consensus is at 440.00 DKK/share. We thus represent a 3.40% premium to consensus.

Discounted Free Cashflow Valuation

							Projected						
Year	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Free Cash Flow (millions, USD)													
Revenue	75,520	70,398	50,151	77,673	132,277	79,255	98,447	99,954	107,408	114,008	117,835	122,890	125,944
% growth		*-6.78%*	*-28.76%*	*54.88%*	*70.30%*	*-40.08%*	*24.22%*	*1.53%*	*7.46%*	*6.14%*	*3.36%*	*4.29%*	*2.49%*
Earnings Before Interest and Taxes (EBIT)	24,654	10,052	10,536	16,195	19,774	(17,853)	20,061	19,329	24,808	29,097	30,665	33,936	35,720
% revenue	*32.6%*	*14.3%*	*21.0%*	*20.9%*	*14.9%*	*-22.5%*	*20.4%*	*19.3%*	*23.1%*	*25.5%*	*26.0%*	*27.6%*	*28.4%*
Net Operating Profit After Tax (NOPAT)	19,230	7,841	8,218	12,632	15,424	(13,925)	15,648	15,077	19,350	22,696	23,919	26,470	27,861
% revenue	*25.5%*	*11.1%*	*16.4%*	*16.3%*	*11.7%*	*-17.6%*	*15.9%*	*15.1%*	*18.0%*	*19.9%*	*20.3%*	*21.5%*	*22.1%*
Depreciation & Amortization (D&A)	5,978	6,864	7,588	7,972	9,754	9,795	10,786	12,378	13,811	15,300	16,813	18,281	18,775
Capital Expenditure (CapEx)	(14,655)	(22,445)	(26,957)	(34,569)	(33,004)	(38,203)	(32,487)	(29,686)	(30,305)	(30,559)	(30,006)	(29,728)	(28,944)
Change in Net Working Capital (ΔNWC)		1,570	2,498	90	3,478	3,878	2,767	169	834	738	428	565	342
Free Cash Flow to the Firm (FCFF)		(9,310)	(13,649)	(14,055)	(11,304)	(46,211)	(8,821)	(2,401)	11,243	6,698	10,298	14,457	17,351
Adjustments to FCFF		-	-	-	-	-	-	-	9,221	-	-	-	-
PV Free Cash Flow to the Firm (FCFF)							**(8,331)**	**(2,141)**	**9,470**	**5,329**	**7,737**	**10,258**	**11,627**

WACC Calculation

Risk-free Rate	4.669%
Unlevered Beta	0.35
Levered Beta	0.50
Equity Market Risk Premium	6.00%
Effective Tax Rate	22.00%
Total Debt	88,046
Net Debt	48,386
Current Share Price ($)	388.90
FDSO	420.20
Market Capitalization	163,416
Cost of Debt	3.34%
Cost of Equity *(CAPM)*	7.65%
Percent Debt	35.01%
Percent Equity	64.99%
WACC	**5.89%**

		WACC						
		5.14%	5.39%	5.64%	5.89%	6.14%	6.39%	6.64%
TGR	1.55%	549.64	492.80	443.36	400.03	361.78	327.83	297.52
	1.70%	575.87	514.96	462.25	416.26	375.83	340.06	308.22
	1.85%	604.50	539.00	482.64	433.70	390.86	353.10	319.60
	2.00%	635.86	565.18	504.72	452.49	406.98	367.03	331.72
	2.15%	670.38	593.78	528.69	472.78	424.31	381.94	344.64
	2.30%	708.55	625.16	554.82	494.78	443.00	397.96	358.46
	2.55%	782.02	684.85	604.02	535.83	477.63	427.43	383.75

Gordon-Growth Model

Terminal Growth Rate	2.00%
Last Forecast FCFF	11,627
Terminal Value	305,271
PV Terminal Value	204,571
Sum of Near Term PV CFs	33,950
Proportion that is TV	85.8%
Implied Enterprise Value	238,521
Implied Equity Value	190,135
Implied Fair Share Price	**452.49**
Upside (Downside)	16.35%

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Financials

* All amounts in millions of DKK except per share values	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
							Projected						
Income Statement													
Revenue	**75,520**	**70,398**	**50,151**	**77,673**	**132,277**	**79,255**	**98,447**	**99,954**	**107,408**	**114,008**	**117,835**	**122,890**	**125,944**
Cost of sales	(59,792)	(47,480)	(30,872)	(59,560)	(101,203)	(46,926)	(61,850)	(62,900)	(63,982)	(65,095)	(66,243)	(67,425)	(68,642)
Employee costs and other external expenses	(9,023)	(10,294)	(10,095)	(10,281)	(12,611)	(14,902)	(16,505)	(16,286)	(16,356)	(17,040)	(17,275)	(16,857)	(16,963)
Gain (loss) on disposal of assets	14,995	(96)	805	7,920	10,885	5,745	10,755	10,939	11,547	12,524	13,161	13,609	14,155
Additional other operating income and expenses	990	1,630	1,422	1,879	(1,731)	(5,829)	-	-	-	-	-	-	-
Share of profit (loss) in associates and joint ventures	(6)	(20)	71	(17)	114	(55)	-	-	-	-	-	-	-
EBITDA	**30,029**	**17,484**	**18,124**	**24,296**	**32,057**	**18,717**	**30,847**	**31,707**	**38,619**	**44,397**	**47,478**	**52,217**	**54,494**
Amortisation, depreciation, and impariment losses on	(5,375)	(7,432)	(7,588)	(8,101)	(12,283)	(36,570)	(10,786)	(12,378)	(13,811)	(15,300)	(16,813)	(18,281)	(18,775)
Operating profit (EBIT)	**24,654**	**10,052**	**10,536**	**16,195**	**19,774**	**(17,853)**	**20,061**	**19,329**	**24,808**	**29,097**	**30,665**	**33,936**	**35,720**
Gain (loss) on divestment of enterprises	127	(63)	10,831	(742)	331	234			9,221				
Share of profit (loss) in associates and joint ventures	1	2	7	(10)	40	36							
Financial income	3,179	7,718	5,779	4,380	15,514	12,379	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Financial expenses	(4,457)	(8,853)	(8,303)	(6,546)	(18,050)	(13,822)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)	(10,000)
Interest expense							(2,457)	(2,457)	(2,260)	(2,190)	(2,062)	(1,978)	(1,806)
Profit (loss) before tax	**23,504**	**8,856**	**18,850**	**13,277**	**17,609**	**(19,026)**	**17,604**	**16,872**	**31,769**	**26,908**	**28,603**	**31,958**	**33,914**
Tax on profit (loss) for the period	(3,700)	(3,101)	(1,776)	(2,390)	(2,613)	(1,156)	(3,873)	(3,712)	(6,989)	(5,920)	(6,293)	(7,031)	(7,461)
Profit (loss) for the period	19,804	5,755	17,074	10,887	14,996	(20,182)	13,731	13,160	24,780	20,988	22,311	24,927	26,453

* All amounts in millions of DKK except per share values	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
							Projected						
Cash Flow Statement													
EBITDA	30,029	17,484	18,124	24,296	32,057	18,717	30,847	31,707	38,619	44,397	47,478	52,217	54,494
Reversal of gain (loss) on divestment of assets	(14,995)	101	(805)	(7,920)	(10,885)	(5,745)							
Change in derivatives, buisness performance adjustments	1,538	(1,536)	1,526	-	-	-							
Change in derivatives, other adjustments	369	(1,040)	411	(2,051)	(8,687)	4,274							
Change in provisions	(278)	727	(772)	(158)	(1,935)	8,454							
Other items	203	86	(42)	(262)	(278)	287							
Interest received and similar items	6,648	4,094	3,032	3,518	7,985	8,278							
Interest paid and similar items	(7,348)	(5,143)	(4,862)	(3,985)	(8,548)	(6,894)	(2,457)	(2,457)	(2,260)	(2,190)	(2,062)	(1,978)	(1,806)
Income tax paid	(3,367)	(4,800)	(1,118)	(1,380)	(1,263)	(2,717)	(3,873)	(3,712)	(6,989)	(5,920)	(6,293)	(7,031)	(7,461)
Cash flows from operating activities beforechange in net working capital	**11,261**	**11,509**	**13,968**	**12,058**	**8,446**	**24,654**	**24,518**	**25,538**	**29,370**	**36,288**	**39,123**	**43,208**	**45,227**
Change in net working capital	(918)	1,570	2,498	90	3,478	3,878	2,767	169	834	738	428	565	342
Cash flows from operating activities	**10,343**	**13,079**	**16,466**	**12,148**	**11,924**	**28,532**	**21,750**	**25,369**	**28,536**	**35,549**	**38,695**	**42,642**	**44,886**
Purchase of intangible assets and property, plantand equipment	(14,655)	(22,445)	(26,957)	(34,569)	(33,004)	(38,203)	(32,487)	(29,686)	(30,305)	(30,559)	(30,006)	(29,728)	(28,944)
Sale of intangible assets and property, plant and equipment	19,639	3,424	123	20,946	24,052	(38,203)	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Acquisition of enterprises	(5,602)	(764)	-	(2,431)	(3,406)	8,189							
Divestment of enterprises	363	(89)	18,914	(147)	99	-	-	-	9,221	-	-	-	-
Purchase of associates and joint ventures	-	-	-	-	-	(3)							
Purchase of other equity investments	(78)	-	-	(9)	16	(124)							
Divestment of other equity investments	-	(5)	(6)	-	-	-							
Purchase of securities	(40,444)	(20,503)	(19,862)	(8,098)	(9,414)	-							
Sale/maturation of securities	39,849	29,452	11,212	11,656	3,780	(18,285)							
Change in other non-current assets	(1)	-	15	53	(4)	13,935							
Transactions with associates and joint ventures	(122)	(88)	(19)	(21)	(54)	(13)							
Dividends received and capital reduction	25	21	18	29	23	(247)							
Cash flows from investing activities	**(1,026)**	**(10,997)**	**(16,562)**	**(12,591)**	**(17,912)**	**(72,954)**	**(27,487)**	**(24,686)**	**(16,084)**	**(25,559)**	**(25,006)**	**(24,728)**	**(23,944)**
Proceeds from capital injection	-	10,174	-	-	-	-							
Proceeds from raising of loans	-	-	3,406	14,582	37,090	17,584	2,500	-	-	-	-	-	-
Repayment of debt	-	-	-	-	-	-	-	-	(6,078)	(3,901)	(5,221)	(5,594)	(5,118)
Instalments on loans	(6,429)	(2,043)	(2,398)	(4,435)	(22,595)	(1,580)							
Instalments on leases	-	(664)	(541)	(520)	(582)	(712)							
Coupon payments on hybrid capital	(545)	(556)	(488)	(430)	(529)	(546)							
Repurchase of hybrid capital	-	(4,005)	-	(2,971)	(1,945)	(699)							
Proceeds from issuance of hybrid capital	-	4,416	-	7,327	3,693	-							
Paid dividends to shareholders of Ørsted A/S	(3,781)	(4,096)	(4,410)	(4,830)	(5,252)	(5,673)							
Purchase of own shares	(48)	(99)	(58)	-	-	-							
Transactions with non-controlling interests	(391)	(462)	(428)	332	1,170	(7,061)							
Net proceeds from tax equity partners	78	1	101	289	(523)	(182)							
Collateral posted in relation to trading of derivatives	-	-	-	(23,034)	(48,885)	(21,829)							
Collateral released in relation to trading of derivatives	-	-	-	17,082	52,143	19,515							
Restricted cash and other changes	-	-	-	-	-	1,448							
Change in collateral related to derivatives	422	(1,332)	2,691	-	-	-							
Cash flows from financing activities	**(10,694)**	**1,334**	**(2,125)**	**3,392**	**13,785**	**265**	**2,500**	**-**	**(6,078)**	**(3,901)**	**(5,221)**	**(5,594)**	**(5,118)**
Cash flows from discontinued operations	**209**	**174**	**966**	**-**	**-**	**-**							
Total net change in cash and cash equivalents	**(1,168)**	**3,590**	**(1,255)**	**2,949**	**7,797**	**(5,935)**	**(3,237)**	**683**	**6,374**	**6,089**	**8,469**	**12,321**	**15,824**
Cash and cash equivalents at the beginning of the period	3,891	2,663	6,459	5,210	8,614	16,175	10,144	6,907	7,590	13,963	20,053	28,522	40,842
Cash flows for the period from assets classified asheld for sale	(27)	-	-	-	-	-							
Other change in cash and cash equivalents	5	(17)	-	-	-	-							
Exchange rate adjustments of cash and cash equivalents	(38)	223	6	455	(236)	(96)							
Cash and cash equivalents at the end of period	**2,663**	**6,459**	**5,210**	**8,614**	**16,175**	**10,144**	**6,907**	**7,590**	**13,963**	**20,053**	**28,522**	**40,842**	**56,667**

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* All amounts in millions of DKK except per share values	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
							Projected						
Balance Sheet													
Assets													
Intangible assets	**777**	**672**	**639**	**1,543**	**4,029**	**3,426**	**3,426**	**3,426**	**3,426**	**3,426**	**3,426**	**3,426**	**3,426**
Land and buildings	969	5,177	5,574	8,066	7,980	7,777							
Production assets	66,310	76,682	86,184	95,618	119,211	121,643							
Exploration assets	-	-	-	-	-	-							
Fixtures and fittings, tools, and equipment	342	652	507	604	1,543	2,042							
Property, plant, and equipment under construction	16,434	23,502	29,345	57,108	48,931	28,307							
Property, plant, and equipment	**84,055**	**106,013**	**121,610**	**161,396**	**177,665**	**179,769**	**196,470**	**208,779**	**220,274**	**230,533**	**238,726**	**245,173**	**250,342**
Investments in associates and joint ventures	457	497	555	572	772	960							
Receivables from associates and joint ventures	60	-	-	-	-	77							
Other securities and equity investments	211	217	209	221	182	167							
Derivatives	-	-	3,023	2,716	1,804	1,356							
Deferred tax	4,588	6,847	6,784	13,281	13,719	8,192							
Other receivables	2,670	1,713	1,925	2,492	3,243	3,134							
Other non-current assets	**7,986**	**9,274**	**12,496**	**19,282**	**19,720**	**13,886**	**5,694**	**5,694**	**5,694**	**5,694**	**5,694**	**5,694**	**5,694**
Non-current assets	**92,818**	**115,959**	**134,745**	**182,221**	**201,414**	**197,081**	**205,590**	**217,899**	**229,394**	**239,653**	**247,846**	**254,293**	**259,462**
Inventories	13,943	14,031	14,739	15,998	14,103	10,539	11,552	11,729	12,604	13,378	13,828	14,421	14,779
Derivatives	5,468	7,740	3,086	14,078	23,433	10,473	10,473	10,473	10,473	10,473	10,473	10,473	10,473
Contract assets	1,451	739	30	2	408	802	639	649	697	740	765	798	818
Trade receivables	10,741	8,140	6,732	9,565	12,701	11,107	11,395	11,569	12,432	13,196	13,639	14,224	14,577
Other receivables	4,390	5,253	3,720	14,815	20,289	10,530	13,780	13,991	15,034	15,958	16,493	17,201	17,628
Receivables from associates and joint ventures	-	-	-	-	-	74							
Income tax	1,525	346	852	1,200	419	483	483	483	483	483	483	483	483
Securities	25,501	16,552	25,173	21,228	25,197	29,902	29,902	29,902	29,902	29,902	29,902	29,902	29,902
Cash	3,515	7,148	6,178	9,943	16,178	10,145	6,907	7,590	13,963	20,053	28,522	40,842	56,667
Current assets	**55,534**	**59,949**	**60,510**	**86,829**	**112,728**	**84,055**	**84,945**	**86,200**	**95,403**	**103,997**	**113,918**	**128,157**	**145,141**
Assets classified as held for sale	15,223	16,952	1,464	1,335	-	-							
Assets	**174,575**	**192,860**	**196,719**	**270,385**	**314,142**	**281,136**	**290,535**	**304,099**	**324,796**	**343,650**	**361,764**	**382,450**	**404,603**
Equity and Liabilities													
Share capital	4,204	4,204	4,204	4,204	4,204	4,204	4,204	4,204	4,204	4,204	4,204	4,204	4,204
Reserves	(1,827)	413	(1,956)	(24,778)	(26,467)	(10,251)	(10,251)	(10,251)	(10,251)	(10,251)	(10,251)	(10,251)	(10,251)
Retained earnings	62,012	68,465	74,294	79,391	88,331	62,829	76,560	89,721	114,501	135,489	157,799	182,726	209,179
Proposed dividends	4,099	-	4,834	5,255	5,675	-							
Equity attributable to shareholders in Orsted A/S	**68,488**	**73,082**	**81,376**	**64,072**	**71,743**	**56,782**	**70,513**	**83,674**	**108,454**	**129,442**	**151,752**	**176,679**	**203,132**
Hybrid capital	13,239	13,232	13,232	17,984	19,793	19,103	19,103	19,103	19,103	19,103	19,103	19,103	19,103
Non-controlling interests	3,388	3,248	2,721	3,081	3,996	1,906	1,906	1,906	1,906	1,906	1,906	1,906	1,906
Equity	**85,115**	**89,562**	**97,329**	**85,137**	**95,532**	**77,791**	**91,522**	**104,683**	**129,463**	**150,451**	**172,761**	**197,688**	**224,141**
Deferred tax	4,025	3,371	2,187	5,616	7,414	3,439	3,439	3,439	3,439	3,439	3,439	3,439	3,439
Pensions	9	10	9	8	8	9	9	9	9	9	9	9	9
Provisions	12,765	12,053	12,466	15,116	19,113	16,899	16,899	16,899	16,899	16,899	16,899	16,899	16,899
Lease liabilities	-	4,728	4,455	6,812	7,697	7,618	7,618	7,618	7,618	7,618	7,618	7,618	7,618
Issued bonds	21,623	32,804	32,796	30,830	54,368	70,589	73,283	73,283	67,206	63,305	58,084	52,490	47,373
Bank loans	3,472	3,235	1,578	672	6,083	8,647							
Derivatives			1,456	17,464	24,121	13,763	13,763	13,763	13,763	13,763	13,763	13,763	13,763
Contract liabilities	3,642	3,762	3,650	3,230	3,085	3,297	3,297	3,297	3,297	3,297	3,297	3,297	3,297
Tax equity liabilities	3,728	4,563	6,780	13,358	14,490	13,610	13,610	13,610	13,610	13,610	13,610	13,610	13,610
Other payables	409	469	374	4,682	7,363	6,273	6,273	6,273	6,273	6,273	6,273	6,273	6,273
Non-current liabilities	**496,673**	**64,995**	**65,751**	**97,788**	**143,742**	**144,144**	**138,191**	**138,191**	**132,114**	**128,213**	**122,992**	**117,398**	**112,281**
Provisions	680	538	1,388	764	585	15,955	15,955	15,955	15,955	15,955	15,955	15,955	15,955
Lease liabilities	-	604	599	720	569	808	701	712	765	812	839	875	897
Issued bonds	2,091	570	2,027	3,847	-	-							
Bank loans	110	231	365	15,646	2,830	384	384	384	384	384	384	384	384
Derivatives	8,094	6,958	4,862	32,325	33,438	8,449	8,449	8,449	8,449	8,449	8,449	8,449	8,449
Contract liabilities	924	784	480	2,440	2,269	2,785	2,527	2,565	2,757	2,926	3,024	3,154	3,232
Trade payables	13,082	10,832	9,742	20,231	20,641	14,915	16,595	16,850	18,106	19,219	19,864	20,716	21,231
Tax equity liabilities	445	632	1,187	1,206	1,903	3,397	3,397	3,397	3,397	3,397	3,397	3,397	3,397
Other payables	4,793	4,247	6,082	4,768	7,518	6,225	6,530	6,630	7,125	7,563	7,817	8,152	8,355
Income tax	4,717	4,075	6,220	5,021	5,115	6,283	6,283	6,283	6,283	6,283	6,283	6,283	6,283
Current liabilities	**34,936**	**29,471**	**32,952**	**86,968**	**74,868**	**59,201**	**60,821**	**61,225**	**63,220**	**64,987**	**66,011**	**67,364**	**68,182**
Liabilities	**84,609**	**94,466**	**98,703**	**184,756**	**218,610**	**203,345**	**199,013**	**199,416**	**195,334**	**193,200**	**189,003**	**184,763**	**180,463**
Liabilities relating to assets classified as held for sale	4,851	8,832	687	492	-	-							
Equity and liabilities	**174,575**	**192,860**	**196,719**	**270,385**	**314,142**	**281,136**	**290,535**	**304,099**	**324,797**	**343,650**	**361,765**	**382,451**	**404,604**
Balance Check	*OK*	*OK*	*OK*	*OK*	*OK*	*OK*	*OK*	*OK*	*OK*	*OK*	*OK*	*OK*	*OK*

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
							Projected						
Onshore Segment Revenue & EBITDA													
Onshore Revenue, DKK mm	**80**	**670**	**733**	**995**	**3,014**	**2,620**	**3,063**	**3,280**	**3,513**	**3,762**	**4,030**	**4,316**	**4,622**
Onshore Revenue per MWh, DKK th./MWh	146	192	128	119	229	196	225	236	248	260	273	287	302
Onshore cost of Sales	-	(6)	-	(26)	(57)	(129)	(150)	(150)	(150)	(150)	(150)	(150)	(150)
Onshore employee costs and other external expenses	(121)	(528)	(640)	(1,071)	(1,831)	(2,460)	(2,450)	(2,460)	(2,529)	(2,709)	(2,901)	(3,021)	(3,235)
% revenue	*151.25%*	*78.81%*	*87.31%*	*107.64%*	*60.75%*	*93.89%*	*80.00%*	*75.00%*	*72.00%*	*72.00%*	*72.00%*	*70.00%*	*70.00%*
Onshore gain (loss) on disposal of non-current assets	-	21	34	-	43	-	2,603	2,624	2,459	2,634	2,821	2,805	3,004
% revenue	*0.00%*	*3.13%*	*4.64%*	*0.00%*	*1.43%*	*0.00%*	*85.00%*	*80.00%*	*70.00%*	*70.00%*	*70.00%*	*65.00%*	*65.00%*
Onshore additional other operating incomes and expenses	85	629	1,004	1,448	2,472	2,948	-	-	-	-	-	-	-
Onshore share of profit (loss) in associates and joint ventures	-	-	-	3	3	(9)	-	-	-	-	-	-	-
Onshore EBITDA	**44**	**786**	**1,131**	**1,349**	**3,644**	**2,970**	**3,066**	**3,294**	**3,293**	**3,537**	**3,799**	**3,950**	**4,241**
Onhsore EBITDA per MWh, DKK th./MWh	80	225	197	162	277	223	225	237	233	245	258	263	277

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
							Projected						
Offshore Segment Revenue & EBITDA													
Offshore Revenue, DKK mm	**43,110**	**40,216**	**34,533**	**50,791**	**87,121**	**58,427**	**64,517**	**65,807**	**71,926**	**78,276**	**81,836**	**85,502**	**88,250**
Offshore Revenue per MWh, DKK th./MWh	**3,774**	**3,300**	**2,242**	**3,658**	**5,240**	**3,233**	3,500	3,500	3,750	4,000	4,100	4,200	4,250
Offshore Cost of Sales	(25,551)	(18,981)	(14,377)	(33,922)	(66,398)	(31,773)	(35,000)	(36,050)	(37,132)	(38,245)	(39,393)	(40,575)	(41,792)
Offshore employee costs and other external expenses	(5,435)	(6,440)	(6,624)	(7,171)	(8,410)	(9,712)	(10,968)	(10,740)	(11,269)	(11,773)	(11,816)	(11,852)	(11,743)
% revenue	*12.61%*	*16.01%*	*19.18%*	*14.12%*	*9.65%*	*16.62%*	*17.00%*	*16.32%*	*15.67%*	*15.04%*	*14.44%*	*13.86%*	*13.31%*
Offshore gain (loss) on disposal of non-current assets	15,076	(106)	735	7,920	10,864	5,751	8,152	8,315	9,088	9,891	10,340	10,804	11,151
% revenue	*34.97%*	*-0.26%*	*2.13%*	*15.59%*	*12.47%*	*9.84%*	*12.64%*	*12.64%*	*12.64%*	*12.64%*	*12.64%*	*12.64%*	*12.64%*
Offshore additional other operating incomes and expenses	851	490	412	424	(3,716)	(8,829)	-	-	-	-	-	-	-
Offshore share of profit (loss) in associates and joint ventures	(5)	(18)	71	(21)	108	(47)	-	-	-	-	-	-	-
Offshore EBITDA	**28,046**	**15,161**	**14,750**	**18,021**	**19,569**	**13,817**	**26,701**	**27,332**	**32,614**	**38,148**	**40,967**	**43,879**	**45,866**
Offshore EBITDA per MWh, DKK th./MWh	2,455	1,244	958	1,298	1,177	765	1,449	1,454	1,700	1,949	2,052	2,155	2,209

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	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
										Projected			
Bioenergy Segment Revenue & EBITDA													
Bioenergy Revenue, DKK mm	**39,836**	**32,816**	**21,420**	**32,390**	**46,243**	**19,230**	**30,867**	**30,867**	**31,970**	**31,970**	**31,970**	**33,072**	**33,072**
Bioenergy Revenue per MWh, DKK th./MWh	2,583	2,534	1,928	2,189	3,735	1,744	2,800	2,800	2,900	2,900	2,900	3,000	3,000
Bioenergy cost of Sales	(34,241)	(28,493)	(16,495)	(25,612)	(34,748)	(15,024)	(26,700)	(26,700)	(26,700)	(26,700)	(26,700)	(26,700)	(26,700)
Bioenergy employee costs and other external expenses	(3,467)	(3,326)	(2,831)	(2,039)	(2,370)	(2,730)	(3,087)	(3,087)	(2,558)	(2,558)	(2,558)	(1,984)	(1,984)
% revenue	*8.70%*	*10.14%*	*13.22%*	*6.30%*	*5.13%*	*14.20%*	*10.00%*	*10.00%*	*8.00%*	*8.00%*	*8.00%*	*6.00%*	*6.00%*
Bioenergy gain (loss) on disposal of non-current assets	(81)	(11)	36	-	(22)	(6)	-	-	-	-	-	-	-
% revenue	*-0.20%*	*-0.03%*	*0.17%*	*0.00%*	*-0.05%*	*-0.03%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*	*0.00%*
Bioenergy additional other operating incomes and expenses	54	511	6	7	(487)	52	-	-	-	-	-	-	-
Bioenergy share of profit (loss) in associates and joint ventures	(1)	(2)	-	1	3	1	-	-	-	-	-	-	-
Bioenergy EBITDA	**2,100**	**1,495**	**2,136**	**4,747**	**8,619**	**1,523**	**1,080**	**1,080**	**2,712**	**2,712**	**2,712**	**4,388**	**4,388**
Bioenergy EBITDA per MWh, DKK th./MWh	136	115	192	321	696	138	98	98	246	246	246	398	398

Projected Sale	
Projected Year of Sale	**2026**
Projected EBITDA at Year of Sale	2,712
EBITDA Sale Multiple	3.40x
Proceeds	**9,221**

* All amounts in millions of DKK except per share values	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
										Projected			
Assumptions													
Deprecation & Amortization and Capital Expenditures													
Depreciation & Amortization	5,978	6,864	7,588	7,972	9,754	9,795	10,786	12,378	13,811	15,300	16,813	18,281	18,775
%PPE	*7.11%*	*6.47%*	*6.24%*	*4.94%*	*5.49%*	*5.45%*	*6.00%*	*6.30%*	*6.62%*	*6.95%*	*7.29%*	*7.66%*	*7.66%*
Capital Expenditures	14,655	22,445	26,957	34,569	33,004	38,203	32,487	29,686	30,305	30,559	30,006	29,728	28,944
%revenue	*19.41%*	*31.88%*	*53.75%*	*44.51%*	*24.95%*	*48.20%*	*33.00%*	*29.70%*	*28.22%*	*26.80%*	*25.46%*	*24.19%*	*22.98%*
Taxes													
Tax expense	(3,700)	(3,101)	(1,776)	(2,390)	(2,613)	(1,156)	(3,873)	(3,712)	(6,989)	(5,920)	(6,293)	(7,031)	(7,461)
Effective tax rate	15.74%	35.02%	9.42%	18.00%	14.84%	-6.08%	22.00%	22.00%	22.00%	22.00%	22.00%	22.00%	22.00%
Net Working Capital													
Inventories turnover	61.3	69.5	94.9	69.4	37.7	47.9	42.8	42.8	42.8	42.8	42.8	42.8	42.8
Contract assets turnover	6.38	3.66	0.19	0.01	1.09	3.65	2.37	2.37	2.37	2.37	2.37	2.37	2.37
Trade receivables turnover	47.2	40.3	43.3	41.5	34.0	50.5	42.2	42.2	42.2	42.2	42.2	42.2	42.2
Other receivables turnover	19.3	26.0	24.0	64.2	54.3	47.9	51.1	51.1	51.1	51.1	51.1	51.1	51.1
Lease liabilities turnover		2.99	3.86	3.12	1.52	3.67	2.60	2.60	2.60	2.60	2.60	2.60	2.60
Contract liabilities turnover	4.06	3.88	3.09	10.58	6.07	12.66	9.37	9.37	9.37	9.37	9.37	9.37	9.37
Trade payables turnover	57.5	53.6	62.7	87.7	55.2	67.8	61.5	61.5	61.5	61.5	61.5	61.5	61.5
Other payables turnover	21.1	21.0	39.2	20.7	20.1	28.3	24.2	24.2	24.2	24.2	24.2	24.2	24.2
Net working capital assets	30,525	28,163	25,221	40,380	47,501	32,978	37,366	37,938	40,767	43,272	44,725	46,643	47,803
Net working capital liabilities	18,799	16,467	16,903	28,159	30,997	24,733	26,353	26,757	28,752	30,519	31,543	32,896	33,714
Net working capital	11,726	11,696	8,318	12,221	16,504	8,245	11,012	11,181	12,015	12,753	13,181	13,747	14,088
Change in net working capital excluding adjustments		(30)	(3,378)	3,903	4,283	(8,259)	2,767	169	834	738	428	565	342
Adjustments to change in net working capital		1,600	5,876	(3,813)	(805)	12,137	-	-	-	-	-	-	-
Change in net working capital		**1,570**	**2,498**	**90**	**3,478**	**3,878**	**2,767**	**169**	**834**	**738**	**428**	**565**	**342**
Revenue - Segmented Results													
Onshore revenue	80	670	733	995	3,014	2,620	3,063	3,280	3,513	3,762	4,030	4,316	4,622
Offshore revenue	43,110	40,216	34,533	50,791	87,121	58,427	64,517	65,807	71,926	78,276	81,836	85,502	88,250
Bioenergy revenue	39,836	32,816	21,420	32,390	46,243	19,230	30,867	30,867	31,970	31,970	31,970	33,072	33,072
Revenue from reportable segments	**83,026**	**73,702**	**56,686**	**84,176**	**136,378**	**80,277**	**98,447**	**99,954**	**107,408**	**114,008**	**117,835**	**122,890**	**125,944**
Other activities & eliminations	(6,080)	(5,860)	(4,085)	(6,503)	(4,101)	(1,022)							
Revenue from business performance	**76,946**	**67,842**	**52,601**	**77,673**	**132,277**	**79,255**	**98,447**	**99,954**	**107,408**	**114,008**	**117,835**	**122,890**	**125,944**
Adjustments	(1,426)	2,556	(2,450)										
Total revenue	**75,520**	**70,398**	**50,151**	**77,673**	**132,277**	**79,255**	**98,447**	**99,954**	**107,408**	**114,008**	**117,835**	**122,890**	**125,944**
Onshore revenue as a percent of revenue from reportable segments	0.10%	0.91%	1.29%	1.18%	2.21%	3.26%	3.11%	3.28%	3.27%	3.30%	3.42%	3.51%	3.67%
Offshore revenue as a percent of revenue from reportable segments	51.92%	54.57%	60.92%	60.34%	63.88%	72.78%	65.53%	65.84%	66.96%	68.66%	69.45%	69.58%	70.07%
Bioenergy revenue as a percent of revenue from reportable segments	47.98%	44.53%	37.79%	38.48%	33.91%	23.95%	31.35%	30.88%	29.76%	28.04%	27.13%	26.91%	26.26%
EBITDA - Segmented Results													
Onshore EBITDA	44	786	1,131	1,349	3,644	2,970	3,066	3,294	3,293	3,537	3,799	3,950	4,241
Offshore EBITDA	28,046	15,161	14,750	18,021	19,569	13,817	26,701	27,332	32,614	38,148	40,967	43,879	45,866
Bioenergy EBITDA	2,100	1,495	2,136	4,747	8,619	1,523	1,080	1,080	2,712	2,712	2,712	4,388	4,388
EBITDA from reportable segments	**30,190**	**17,442**	**18,017**	**24,117**	**31,832**	**18,310**	**30,847**	**31,707**	**38,619**	**44,397**	**47,478**	**52,217**	**54,494**
Other activities & eliminations	(161)	42	107	179	225	407							
EBITDA from business performance	**30,029**	**17,484**	**18,124**	**24,296**	**32,057**	**18,717**	**30,847**	**31,707**	**38,619**	**44,397**	**47,478**	**52,217**	**54,494**
Onshore EBITDA margin	55.00%	117.31%	154.30%	135.58%	120.90%	113.36%	100.10%	100.43%	93.73%	94.01%	94.28%	91.52%	91.75%
Offshore EBITDA margin	65.06%	37.70%	42.71%	35.48%	22.46%	23.65%	41.39%	41.53%	45.34%	48.74%	50.06%	51.32%	51.97%
Bioenergy EBITDA margin	5.27%	4.56%	9.97%	14.66%	18.64%	7.92%	3.50%	3.50%	8.48%	8.48%	8.48%	13.27%	13.27%
EBIT - Results													
EBITDA from business performance	30,029	17,484	18,124	24,296	32,057	18,717	30,847	31,707	38,619	44,397	47,478	52,217	54,494
Depreciation & amortization	(5,978)	(6,864)	(7,588)	(7,972)	(9,754)	(9,795)	(10,786)	(12,378)	(13,811)	(15,300)	(16,813)	(18,281)	(18,775)
Impairment losses	-	(568)	-	(129)	(2,529)	(26,775)							
Impairment losses, reversed	603												
EBIT	**24,654**	**10,052**	**10,536**	**16,195**	**19,774**	**(17,853)**	**20,061**	**19,329**	**24,808**	**29,097**	**30,665**	**33,936**	**35,720**

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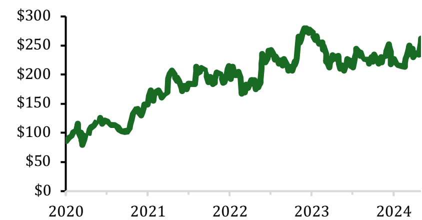
United Therapeutics

Rating	HOLD
Price (04/05/23)	$262.4
Price Target	$246.47
52W Range	$262.51 - $204.44
Market Cap	$11.63B
EPS (FY 2023)	$6.17
Consensus	$300.00
Ticker	UTHR (NASDAQ)

	2022A	2023E	2024E
Revenue (M)	$3,188	$3,353	$3,648
% Growth	6.89%	5.15%	8.80%
EBIT (M)	$515	$774	$860
% Change	16.15%	23.10%	23.6%
Metric	$694	$889	$688

Price Performance Chart



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Investment Overview

We assign a HOLD rating to United Therapeutics (NASDAQ: UTHR). While UTHR holds first-mover advantage in many of its treatments of cardiovascular and respiratory disease, emerging generics impact UTHR's standing in the industry as well as future revenue growth. With looming patent expiration in the next few years, UTHR's focus on new drugs and industries may allow for future growth. This prospect, however, relies on how UTHR performs with these new products. Similarly, the future of the company's initiatives within the organ transplant industry are yet to be determined, as clinical trials are still underway.

Company Overview

Background

United Therapeutics was founded in 1996 in Silver Springs, Maryland to cure cardiovascular and pulmonary disease, namely pulmonary arterial hypertension (PAH), idiopathic pulmonary fibrosis (IPF) and progressive pulmonary fibrosis (PPF). The company transitioned into a public benefit corporation with key objectives to enhance the availability of transplantable organs. United Therapeutics develops five main drugs: Tyvaso, Orenitram, Remodulin, and Unituxin, and Adcirca. To compensate for these treatments' looming patent expiry, UTHR has expanded its business to drugs to like ralinepag to cure IPF and PPF, while also working to expand its organ manufacturing programs through strategic mergers and acquisitions.

Business Model

United Therapeutics operates through five commercial platforms: Tyvaso, Orenitram, Remodulin, Unituxin, and Adcirca. While the company is also developing a new drug, Ralinepag, the drug is currently undergoing stage III trials and will likely not produce revenue until 2027. Likewise, despite significant advancements in the organ transplant industry, revenues within this market will not be realized until 2032.

Tyvaso
Tyvaso is available in both dry powder inhaler (DPI) and nebulized forms and addresses PAH and PH-ILD, with robust sales figures reflecting its efficacy. Tyvaso represents 53% of UTHR's total revenue while also being the only FDA-approved inhaled prostacyclin analogues available in the US. Watson Laboratories can launch a generic version of nebulized Tyvaso in the US beginning in January of 2026. Tyvaso DPI is driving UTHR's growth, with sales having increased by 132% in Q1 of 2024. DPI growth far surpasses the revenue growth of nebulized Tyvaso. Tyvaso sales increasing by 45% YoY is mainly due to the increase in market share with PH-ILD.

In addition to Tyvaso DPI and nebulized Tyvaso, UTHR is also furthering research in IPF and PPF through their TETON studies. The TETON program is a Phase III program that aims to expand nebulized Tyvaso to treat IPF and PPF in addition to PAH.

Remodulin

Remodulin is available in continuous subcutaneous and intravenous forms and provides a vital lifeline for PAH patients globally. Remodulin represents 21% of UTHR's total revenue. UTHR works with third parties to manufacture external pumps, the Remunity pump, to infuse Remodulin to patients. The Remunity Pump launched in February 2021 with limited commercial sales in the US for subcutaneous delivery of Remodulin. Most patients in the US who use subcutaneous Remodulin use the Remunity Pump. While Remodulin faces competition from non-treprostinil based treatments and generic versions of Remodulin. UTHR's Remodulin is stable at room temperature and does not require cooling during infusion, so patients don't need cooling packs or refrigeration. Treprostinil, the main ingredient in Remodulin, is high soluble, so Remodulin can be manufactured in concentrated solutions and can be infused at lower rates.

Orenitram

Orenitram is an oral therapy for PAH and is the only FDA approved orally administered prostacyclin analogue and only FDA-approved oral PAH prostacyclin class therapy in the US that is titratable without a dose ceiling to a maximum tolerated dose. Orenitram represents 15% of UTHR's total revenue. Actavis can launch a generic version of Orenitram in the US in June 2027, while ANI Pharmaceuticals can launch a generic version in December 2027.

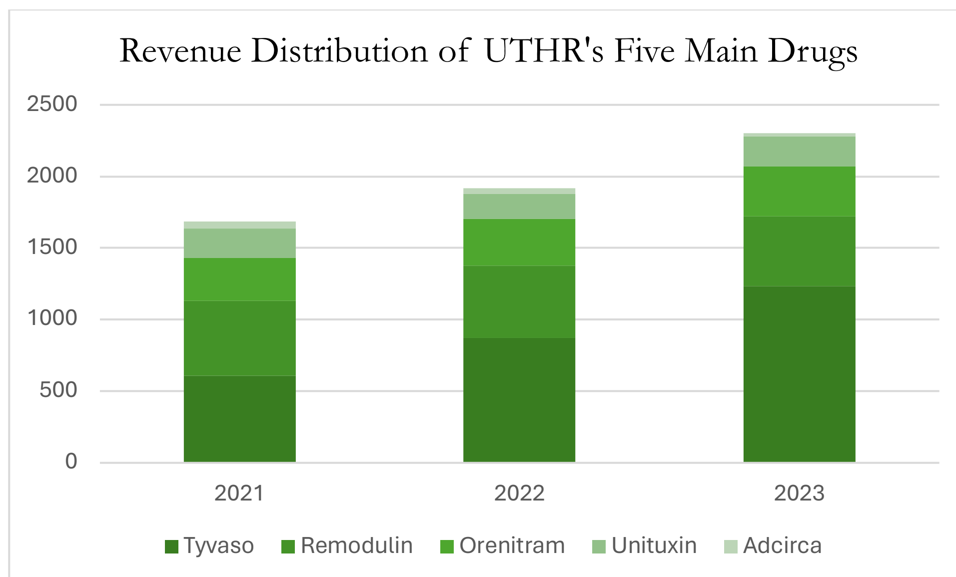
Unituxin

Unituxin is an intravenous therapy for high-risk neuroblastoma. The drug was approved in 2015 and represents 9% of UTHR's total revenue. Its patent expires in March 2027, allowing for competitors to launch generic versions of the drug to the current market.

Adcirca

Adcirca is an oral PAH therapy and only represents 1% of UTHR's total revenue. United Therapeutics acquired commercial rights to Adcirca in 2008 in the US from Eli Lilly and Company and sells the therapies at the price established by Lilly. There are additional companies that have also launched generic versions of Adcirva in 2019. UTHR's license agreement to sell Adcirca expires on December 31, 2026.

The chart below shows the revenue distribution of the five main drugs between the years 2021 and 2023. The y-axis represents UTHR's total revenue of each year in millions.



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United Therapeutics' revenue is driven primarily by Tyvaso, Remodulin, and Orenitram, with each product contributing significantly to the company's financial performance. The company invests substantially in research and development, particularly in exploring new indications and delivery devices for existing products, and organ transplantation-related technologies.

Ralinepag
Ralinepag is a novel drug candidate treating Pulmonary Arterial Hypertension (PAH) delivered orally. Currently in stage III trials, the drug acts as a prostacyclin receptor agonist with the goal of alleviating symptoms for PAH. Promising properties include its once-a-day oral administration and improved therapeutic results.

Organ Manufacturing/Transplantation
UTHR has launched the pre-clinical programs to manufacture and transplant organs and engaged in research in regenerative medicine. The current transplantation program focuses on "xenografts," which are manufactured to transplant organs from genetically modified pigs to humans. UTHR completed the first successful xenotransplants of porcine hearts with surgeons from the University of Maryland School of Medicine. Each patient survived six weeks with UTHR's UHeart. UTHR has continued research in pre-clinical human models of kidneys and hearts, while continuing development of pre-clinical programs supporting lung transplants.

Recent M&A and News

United Therapeutics has been actively pursuing acquisitions and partnerships, particularly in the realm of transplantable organs, attempting to recognize the immense potential of this market before its competitors. The acquisition of Miromatrix, a biotech company specializing in fully implantable bioartificial organs, is one of the first of United Therapeutics' moves to expanding its capabilities in organ manufacturing. Additionally, the acquisition of IVIVA Medical increases United Therapeutics' market share in the development of bioartificial organs. Despite these strategic initiatives, United Therapeutics' success in organ transplantation is hard to predict and will be seen well into the future. With profitability projected to begin in the 2030s, the organ transplantation industry is filled with many other companies that hold a significant market share, making it difficult for United Therapeutics to obtain a large market share for itself.

Industry Overview

UTHR Specializations

United Therapeutics (UTHR) is a leading biopharmaceutical company with a specialized commercial portfolio and late-stage pipeline focusing on treating different types of pulmonary hypertension (PH), while also pioneering the development of novel transplantable organ technology. UTHR's covered industries' respective CAGRs are 5.9% (pharmaceutical industry), 5.30% (pulmonary hypertension industry), and 9.5% (organ manufacturing), representing strong future growth potential. However, all of these industries cover diseases that are considered rare – with only 1% of population diagnosed with pulmonary hypertension – and that predicates a level of competitive intensity. Ultimately, the opportunities for UTHR in both these spaces are significant, but the competition and general industry characteristics sour our valuation.

Pharmaceutical Industry

The pharmaceutical industry is characterized by both scientific exploration and innovation. With substantial investments in research and development, companies strive to discover and manufacture novel drugs that address unmet medical needs. The development process for a drug is famously, meticulously structured. It begins with preclinical research which then leads to subsequent phases of various drawn-out clinical trials; companies move from small-

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scale evaluations on healthy volunteers to large-scale trials on patients in the aim of scrutinizing efficacy, safety, and dosing. Agencies like the FDA and EMA provide regulatory oversight throughout the process, ensuring thorough review and proper conduct. Once approved, these novel therapies enter the market protected predominantly through patents, allowing companies to safeguard their innovations for a specified period.

The consumer base within the pharmaceutical space is definitionally sticky. Often, the drugs these patients receive are imperative to health, survival, or quality of life. Inherently, it's very difficult to come off these drugs, and, as such, demand very rarely wanes. In diseases like PH or for conditions that demand organ transplants, treatments are permanent, lifelong constants. The only consideration that pharmaceutical companies within the industry must analyze and weigh is the potential for other companies to create majorly disruptive products.

Regarding competition, it's evidently very high in the pharmaceutical space. Revenues attributed to these medications and treatments are incredibly lucrative and the consumer base is often small. Thus, major companies fight over these patients in long, storied conflicts. Relatedly, as the barriers to entry within any given sub-sector of industry are large and hard to navigate without significant capital investment, first movers often have the advantage in these battles.

Deep Dive: Pulmonary Hypertension (PH)

Disease Overview
Pulmonary hypertension is a multi-dimensional rare lung disease characterized by high blood pressure in the pulmonary arteries, causing the enlargement and weakening of the heart. Pulmonary hypertension is classified into five groups. Pulmonary arterial hypertension (PAH) is designated as group PH 1, which includes various etiologies such as heredity and unknown causes. Pulmonary hypertension associated with lung disease, PH-ILD, is classified as group PH 3. Within these groups, patients are placed into classes based on symptomatic severity, ranging from class I (no symptoms) to class IV (severe symptoms).

Pulmonary arterial hypertension (PAH) affects the blood vessels in the lungs and is characterized by increased pressure in the pulmonary arteries. PAH is believed to affect about 500,000 individuals in the world with increasing diagnoses. However, due to the rarity and complexity of the disease, only a small fraction of PAH patients are actively being treated.

Current FDA approved therapies focus on three molecular pathways: the prostacyclin pathway, the nitric oxide pathway, and the endothelin pathway. UTHR markets drugs in two of these classes: Tyvaso DPI, nebulized Tyvaso, Remodulin, and Orenitram are all drugs in the prostacyclin pathway, and AdCirca is in the nitric oxide pathway.

Overview of Notable Competition
WINREVAIR is an activin signaling inhibitor being developed by Merck & Co. (Merck) with a Prescription Drug User Fee Act (PDUFA) target action date of March 26, 2024. In comparison to UTHR's therapies, WINREVAIR can potentially ease treatment burden for patients in the form of an injection every three weeks.

Another notable competitor is Liquida's YUTREPIA. YUTREPIA is a drug that treats PAH with inhaled therapies and has been in a litigation battle with UTHR for several years. In 2023, Liquidia was awarded an affirmative decision in court. However, it is very likely that this litigation will continue for the foreseeable future through petitions and adjacent lawsuits. In essence, conflict is ever evolving, and the result will likely be formative to UTHR's attributable revenues.

Forward Looking: Organ Technology/Manufacturing

There is an imminent need to address organ shortages and improve transplantation. Currently, there are approximately 110,000 Americans waiting for an organ transplant, and over 6,000 individuals die each year because they did

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not receive one. Given the shortage of organs, companies are attempting to create bioengineered organs that can subsequently be implanted within humans. While there is a rapid effort to create such organs, the need for more clinical studies and successful transplantations will delay companies' ability to recognize revenue within this field.

Investment Theses

Thesis 1: Liquidia's Yeutrepia, Merck's Winrevair, and emerging generics, will all have relatively small future impacts on UTHR's Tyvaso revenue.

Tyvaso Development
Tyvaso was initially approved as a nebulized product by the FDA to treat PAH and was launched commercially in the United States in 2009. Following the successful INCREASE study of nebulized Tyvaso in patients with PH-ILD, including patients with underlying idiopathic pulmonary fibrosis (IPF), the FDA approved our efficacy supplement to the nebulized Tyvaso NDA in March 2021. As a result, nebulized Tyvaso's label was updated to include the PH-ILD indication. In May 2022, the FDA approved the dry powder formulation of inhaled Treprostinil called Tyvaso DPI, for the treatment of both PAH and PH-ILD. UTHR developed this product under an in-license from MannKind Corporation (MannKind) and launched this product commercially in the United States in June 2022.

Positioning
UTHR's Tyvaso sales comprises around 51% of its total revenues. For the last few years, the drug has been the cornerstone of UTHR's business model and central to their industry positioning: Tyvaso DPI has been the only approved therapy to treat both PAH and PH-ILD. However, several companies are attempting to infringe on Tyvaso's lucrative monopoly. With brand name therapies soon to be approved and Tyvaso's patent due to expire in 2026, UTHR's main revenue driver is seemingly under significant threat. And yet, despite these risks, Tyvaso's future position looks to be quite healthy.

Liquidia
In 2021, Liquidia announced the development of the drug Yeutrepia to treat both PAH and PH-ILD. Yeutrepia was very similar to Tyvaso: treating the same patient groups and relying on a dry-powder inhalation system. Understandably, UTHR saw Yeutrepia as a legitimate to their hegemony, and further, because of the dry-powder inhalation system, saw the therapy as a case of patent infringement. UTHR quickly filed a suit, and the two companies began a lengthy legal battle. After back and forth between district and circuit courts, Liquidia was awarded an affirmative decision, allowing the company to continue to research and develop Yeutrepia. However, UTHR filed another suit alleging that certain pieces of the FDA's NDA process had been skirted. This suit like UTHR's previous is unlikely to find merit, and, even if it does, the therapy's launch will only be delayed until 2026. It seems inevitable that Yeutrepia will steal away some of Tyvaso's market share.

Merck + Generics
Merck's WINREVAIR exists in a similar position to Yeutrepia. However, the company's history with Tyvaso isn't as storied. As of March 26th, the therapy passed all phases of clinical trials and can be used to treat PAH Group 1. WINREVAIR is not at all like Tyvaso, so UTHR has no basis for suit or really any way to stop the therapy's erosion of their revenues. The same can be echoed for generics. As once the patent expires, generic medications will have little to no barriers of entry to the market.

Mitigation
Despite these threats, Tyvaso will retain its dominant position given the preference of prescribing a combination of therapies and its licensed generic. Firstly, Tyvaso has been used primarily in combination with its differentiated competition. PAH is a complex disease with no available cure. There is no individual or "correct" way to treat the disease. Thus, physicians often don't rely on one single drug. Specifically, most of the available drugs for PAH target different mechanistic pathways and thus, to maximize treatment efficacy, a cocktail of medications is often used.

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Therefore, the ability of these novel therapies to erode Tyvaso's revenues, at least under current treatment plans, is somewhat minimal.

In the case of generics and other similar therapies, UTHR's licensed generic is likely to smooth the potential revenue impacts. When a company licenses a generic, it effectively expedites the generic's entry to the market. The drug can skirt nearly all phases of clinical trial and begin being prescribed soon after its development. This hasty approval is facilitated by the fact that the drug is based completely off the initial patent company's research. Licensed generics can be a great way for the company who initially filed the patent to retain revenues and the generic firm to get quick access to the market.

In the case of UTHR, the company's partnership with Watson, to release a licensed Tyvaso generic, helps to insulate the firm from Yeutrepia's/generics impacts to Tyvaso. Therefore, if the firm can delay Yeutrepia's entry to the space until 2026, which seems likely under the new lawsuit, Watson's generic will squash potential competition. Ultimately, Tyvaso will see some hit to its revenues, but the drug will still retain a sizable market share.

Thesis 2: While United Therapeutics shows a promising advancement in the organ transplant market, a rapidly growing industry, it will be years before revenues are realized.

One of the primary initiatives of United Therapeutics is to create an unlimited supply of transplantable organs before the end of the decade. The organ transplant market shows promising growth, with the industry expected to reach $30B in 2032 and grow at a rate of 9.2% per year. However, prior to 2032, the market will show little to no visible growth, as clinical trials are underway. Thus, while UTHR demonstrates a promising advancement into this industry, it will still be years before any revenue is realized.

UTHR is rapidly developing their capabilities within the organ transplant market, as evidenced by their recent M&A activity. In October 2023, the company bought IVIVA Medical, a bioengineering company, for $50M. The transaction will enable UTHR to develop fully implantable bioartificial organs. Similarly, in December 2023, UTHR completed the acquisition of Miromatrix, a bioengineering company which creates fully transplantable human organs, for $91M. Miromatrix is currently developing a fully-implantable manufactured kidney, mirokidney, which will be released in 2025. Miromatrix has also seen approval from the FDA for an external liver assist combination product, miroliverELAP; this also marks the first human clinical trial of a manufactured organ. Furthermore, in 2024, the company also developed the world's first clinical-scale designated pathogen-free facility which will be able to hold up to 125 organs. The facility will be significant in advancing UTHR's xenotransplantation abilities. In 2023, UTHR also announced their intentions to develop an organ production facility. Other recent successes include the transplant of two xeno organs, specifically UHearts, in 2022 and 2023, respectively. Most recently, UTHR transplanted a UThymoKidney into a living individual in April 2024.

Ultimately, while UTHR shows both notable and successful advancement in the organ transplant industry, given the scarcity of completed transplants and the need for future studies, assessments about the profitability of this market cannot be made just yet.

Thesis 3: Phase III programs Ralinepag and TETON studies expand UTHR's market share in the PAH industry and gaining new market share in treatments for IPF and PPF, but potential growth is hindered by unpredictability and slow progress.

While representing an advance in scientific research and therapeutic potential, long-term revenue growth may fail to materialize from a ralinepag introduction. Ralinepag was developed by Arena Therapeutics, a San Diego-based biotech that has since been acquired by Pfizer. The medication aims to resolve symptoms of pulmonary arterial hypertension by targeting the receptors of prostacyclin, a compound that serves as a vasodilator and anticoagulant. Patients with PAH fail to produce sufficient prostacyclin to maintain healthy lung function; consequently, drastic

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reductions in life expectancy and quality are observed. United Therapeutics acquired the license for ralinepag from Arena Therapeutics in 2019 for $800 million, with the drug remaining in Phase III trials. In Phase II trials, ralinepag was assessed to significantly decrease pulmonary vascular resistance, with a 19% decrease in serious adverse events. Ralinepag's competitive advantage is further improved by its once-daily oral administration; current therapeutics require inhalation through specialized equipment. A potential ralinepag approval may result in broad expansion of market share in the PAH market with long-term revenues. However, ralinepag has made slow progress in Phase III trials and remains in development, therefore, any potential revenue from ralinepag is still several years out.

On the other hand, the prevalence of idiopathic pulmonary fibrosis (IPF) is steadily on the rise globally, necessitating effective treatments to address this escalating health concern. Recent developments of the TETON 1 and TETON 2 Phase 3 trials evaluating Tyvaso in IPF have offered promising prospects, potentially catering to an additional 100,000 customers and generating approximately $1.3 billion in sales. Similarly, the TETON PPF trial focusing on Tyvaso in progressive pulmonary fibrosis (PPF) presents an opportunity to serve an additional 60,000 patients, with an estimated revenue of $500 million. While the two existing Tyvaso drugs slow disease progression, they are marred by significant safety concerns. The Phase 3 INCREASE study has shown Tyvaso's potential in reducing lung disease exacerbations and inhibiting fibroblast proliferation in pulmonary fibrosis patients, offering hope for a safer and more effective treatment option. With TETON enrollment slated for completion in 2024 and data expected in 2025, the anticipated launches of Tyvaso for IPF in 2027 and PPF in 2028 could revolutionize the landscape of fibrotic lung diseases. Despite a 50% probability-of-success, projections foresee Tyvaso IPF peaking at $1.3 billion in revenue by 2033 and Tyvaso PPF reaching $500 million by 2034. Patents for Tyvaso IPF and PPF, however, expire in 2033 and 2034, respectively. Patent expiration will greatly diminish growth for UTHR.

Thesis 4: UTHR's main drugs in its revenue streams face patent expiration in the next 2 to 4 years, which will greatly decrease UTHR's market share and, subsequently, revenue growth.

United Therapeutics faces a looming threat to its revenue streams as several of its key patents are set to expire in the coming years. The expiration of patents for flagship drugs like Tyvaso, Remodulin, Orenitram, Adcirca, and Unituxin will open the floodgates for generic competitors to enter the market, eroding United Therapeutics' market share and significantly reducing its revenue. The expiration dates for these patents are close, with Tyvaso's nebulized version set to expire in January 2026, followed by Remodulin in 2028, Orenitram in 2027, and Unituxin in 2027. UTHR's license agreement to sell Adcirca also ends in 2026. Moreover, the company's future prospects for revenue growth are further dampened by the delayed availability of new products such as ralinepag and new versions of Tyvaso from the TETON studies, which are not anticipated to enter the market until around 2028 and 2029. As other pharmaceutical companies have already secured agreements to produce generic versions of United Therapeutics' drugs post-patent expiration, the company is poised to face intense competition in the market. Compounding this issue, United Therapeutics will also experience escalating operating expenses, particularly in research and development (R&D) for pre-clinical and clinical trials in the pipeline, and the expansion of facilities for organ manufacturing. Thus, the convergence of patent expirations, delayed product launches, and increased operational costs hinders United Therapeutics' future revenue prospects.

Investment Risks

Risk 1: *Tyvaso loses its market positioning*

Given the drug's patent expiration and the presence of emerging therapies, Tyvaso could very well lose its dominant position. Tyvaso's current placement in the market gives reason for a degree of optimism. However, that optimism does not discount the fact that the drug's future is contingent on a plethora of unknowns.

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If Yeutrepia or some other generic begins to substantially compete with Tyvaso, it is likely that UTHR would suffer dramatic consequences. Specifically, if Tyvaso fell from grace, UTHR would forfeit a significant portion of its revenues year over year. This significant forfeiture would have significant impacts. With Tyvaso currently comprising over 40% of UTHR's current revenues, the company would be shattered and unlikely to support its lofty future aspirations or even its current pipeline. Ultimately, Tyvaso is more than simply critical to UTHR's position and the company's reliance on the drug, in conjunction with new entrants, is grounds for nervousness about the company's future performance.

Mitigant 1: *Tyvaso's revenue creation is diverse and differentiated*

Tyvaso does not treat one single ailment. The drug has a myriad of applications across various pulmonary and cardiovascular disorders. As such, the drug is somewhat shielded from the impacts of emerging therapies; even if Tyvaso loses its hegemony across certain PAH groups, the drug still will be used to treat ILD, IPF, and PPF. Moreover, the incoming therapies that could threaten Tyvaso are simply less attractive. Whether from a mechanistic or efficacy standpoint, no drug currently can match Tyvaso, and thus UTHR is unlikely to suffer substantial revenue impacts.

Risk 2: *Future research and development (R&D) fail to produce promising results*

UTHR maintains broad exposure to potential failures in both clinical trials and drug approval, jeopardizing future revenue. UTHR's most promising candidate to treat PAH, Ralinepag, remains grounded in phase III trials, while xenotransplantation is still a novel treatment. Ralinepag's potential inability to exit clinical trials limits UTHR's ability to compete in the PAH market, with competitors rapidly advancing oral therapeutics. Additionally, potential approval is not without its headwinds as patients rarely switch between PAH treatments due to medical downsides.

Xenotransplantation additionally is limited to the pre-clinical stage, with an extended timeline to market entry. While current results are promising, and the demand for organs is substantial, artificial organ transplant remains a highly speculative technology that may fail to generate meaningful therapeutic results.

Mitigant 2: *Strong demand improves United Therapeutics' exit options*

Given the demand for improved PAH medications, Ralinepag's promising usage of the prostacyclin pathway and oral method of drug delivery increases its potential market share. United Therapeutics may successfully limit exposure to potential downside by exiting during the clinical stage. Additionally, demand for transplanted organs remains strong, while alternative synthetic organ candidates remain theoretical. Consequently, options are present for UTHR to minimize losses.

Valuations

DCF Assumptions

1. The total revenue were calculated using a sum of the revenues from the following platforms: Remodulin, Unituxin, Orenitram, Adcirca, Ralienpag, Organ transplants.
2. We assumed that organ transplant revenues would not begin until 2032 and that Adcirca revenues would end in 2027.
3. Historical disease incidence and growth trends were used to approximate patient numbers

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1. **Revenue Build**

$ in millions	2018	2019	2020	2021	2022	2023	2024P	2025P	2026P	2027P	2028P	2029P	2030P
Remodulin													
Class 2 Addressable		5250	5303	5356	5409	5463	5518	5573	5629	5685	5742	5799	5857
Class 3 Addressable		6738	6805	6873	6942	7011	7081	7152	7224	7296	7369	7442	7517
Class 4 Addressable		3325	3358	3392	3426	3460	3495	3530	3565	3600	3637	3673	3710
Total Addressable PAH Patients		15313	15466	15621	15777	15934	16094	16255	16418	16581	16748	16914	17084
Remodulin Share of Addressable PAH Patients		4500.662719	3883.977063	3785.71215	3613.945	3486.241635	3363.050832	3244.213133	3129.574716	3018.987194	2912.307424	2809.397319	2710.123675
% Change in Share of Patients		-	-13.70%	-2.53%	-4.54%	-3.53%	-3.53%	-3.53%	-3.53%	-3.53%	-3.53%	-3.53%	-3.53%
Average Monthly Cost		10,869	11,086	11,308	11,534	11,765	12,000	12240	12484.8	12734.496	12989.18592	13248.96964	13513.94903
Cost per Year		130425.2366	133033.7413	135694.4162	138408.3045	141176.4706	144000	146880	149817.6	152813.952	155870.231	158987.6357	162167.3884
Revenue		587,000,000	516,700,000	513,700,000	500,200,000	492,175,290	484,279,320	476,510,025	468,865,373	461,343,364	453,942,031	446,659,437	439,493,678
Adjusted Revenue		587	517	514	500	492	484	477	469	461	454	447	439
Growth*		-2.00%	-11.98%	-0.58%	-2.63%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%	-1.60%

$ in millions	2024P	2025P	2026P	2027P	2028P	2029P	2030P
US revenues							
Tyvaso							
Population	336,488,664	338,507,596	340,538,641	342,581,873	344,637,364	346,705,188	348,785,420
% growth	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%
PAH POP	45,767	46,538	47,314	48,095	48,880	49,670	50,465
PAH Incidence	0.0002%	0.0002%	0.0002%	0.0002%	0.0002%	0.0002%	0.0002%
New cases of PAH	771	776	781	785	790	795	800
Adressable Class I	29,673	30,283	30,896	31,514	32,132	32,756	33,381
Adressable Class II	5,518	5,573	5,629	5,685	5,742	5,799	5,857
Adressable Class III	7,081	7,152	7,224	7,296	7,369	7,442	7,517
Adressable Class IV	3,495	3,530	3,565	3,600	3,637	3,673	3,710
(Tyvaso) Total Adressable PAH patients	16,094	16,255	16,418	16,581	16,748	16,914	17,084
% of PAH I patients that die	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
% of PAH II patients that die	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
% of PAH III patients that die	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%	16.00%
% of PAH IV patients that die	23.00%	23.00%	23.00%	23.00%	23.00%	23.00%	23.00%
(Tyvaso) Deaths	2598.97	2624.98	2651.27	2677.56	2704.59	2731.39	2758.86
Total Deaths	4,676	4,745	4,814	4,884	4,954	5,024	5,096
(Tyvaso) PAH prevalence, end of year	13,495	13,630	13,767	13,903	14,043	14,183	14,325
% treated with Tyvaso	19.00%	18.00%	15.00%	13.00%	12.00%	12.00%	12.00%
PAH patients treated with Tyvaso							
PH-ILD prevalence, beginning of year	31,585	31,760	31,941	32,127	32,315	32,506	32,699
New cases of PH-ILD	10,431	10,494	10,557	10,620	10,684	10,748	10,812
% of PH-ILD patients that die	32.50%	32.50%	32.50%	32.50%	32.50%	32.50%	32.50%
Deaths	10,256	10,313	10,371	10,432	10,493	10,555	10,617
PH-ILD prevalence, end of year	31,760	31,941	32,127	32,315	32,506	32,699	32,894
% Adressable	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%
Adressable Patients	15880.1	15970.7	16063.36	16157.61	16253.11	16349.66	16447.1
% treated with Tyvaso	33.00%	40.00%	47.00%	52.00%	57.00%	62.00%	65.00%
PH-ILD patients treated with Tyvaso	5,240	6,388	7,550	8,402	9,264	10,137	10,691
PAH patients treated with Tyvaso	2,564	2,453	2,478	2,364	2,387	2,411	2,435
PH-ILD patients treated with Tyvaso	5,240	6,388	7,550	8,402	9,264	10,137	10,691
Total patients treated with Tyvaso	**7,804**	**8,842**	**10,028**	**10,766**	**11,652**	**12,548**	**13,126**
Price / patient	$0.26	$0.27	$0.28	$0.28	$0.29	$0.29	$0.30
% growth	4.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Gross to net discount	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Summary income statement							
Revenue (probability adjusted)	$1,726.10	$2,033.70	$2,352.70	$2,576.30	$2,844.10	$3,124.10	$3,333.40
% growth	19.40%	17.80%	15.70%	9.50%	10.40%	9.80%	6.70%

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$ in millions	2018	2019	2020	2021	2022	2023	2024P	2025P	2026P	2027P	2028P	2029P	2030P	2031P	2032P	2033P	2034P	2035P	2036P	2037P	2038P	2039P	2040P
Unituxin																							
Gross number of patients in the US	761.1	761.1	691.1909704	794.47	841.46	1,077.92	1,093.96	1,104.53	1,112.39	1,118.92	1,124.81	1131.07196	1137.19735	1143.44209	1149.6778	1155.9693	1162.28427	1168.63925	1175.02621	1181.44946	1187.90713	1194.40045	1200.92909
% change in gross number of patients		0.00%	-9.19%	14.94%	5.91%	28.10%	1.49%	0.97%	0.71%	0.59%	0.53%	0.56%	0.54%	0.55%	0.55%	0.55%	0.55%	0.55%	0.55%	0.55%	0.55%	0.55%	0.55%
Unituxin share of patients in the US	70.00%	70.00%	77.08%	90.47%	83.00%	82.75%	86.70%	86.70%	84.70%	75.70%	50.70%	45.63%	43.35%	41.61%	40.37%	39.56%	39.16%	38.97%	38.77%	38.58%	38.39%	38.19%	38.00%
% change in share of patients		0.00%	10.11%	17.37%	-8.26%	-0.30%	4.77%	0.00%	-2.31%	-10.63%	-33.03%	-10.00%	-5.00%	-4.00%	-3.00%	-2.00%	-1.00%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%
Gross number of patients in the Rest of the World (ROW)	968.66	968.66	967.78	1,023.34	1,111.67	1,155.83	1,177.92	1,188.96	1,194.48	1,197.24	1,198.62	1207.39156	1213.37938	1218.32592	1223.15471	1228.40697	1234.45356	1239.93842	1245.31965	1250.78981	1256.39134	1262.06428	1267.6601
% change in gross number of patients		0.00%	-0.09%	5.74%	8.63%	3.97%	1.91%	0.94%	0.46%	0.23%	0.12%	0.73%	0.50%	0.41%	0.40%	0.43%	0.49%	0.44%	0.43%	0.44%	0.45%	0.45%	0.44%
Unituxin share of patients in the Rest of the World	44.00%	44.00%	44.04%	65.25%	66.54%	59.00%	69.21%	69.90%	70.60%	71.30%	72.73%	74.18%	75.66%	77.18%	78.72%	80.30%	81.90%	83.54%	85.21%	86.91%	88.65%	90.43%	92.23%
% change in share of patients		0.00%	0.09%	48.16%	1.98%	-11.33%	17.31%	15.00%	12.00%	10.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Total gross number of patients	1,729.76	1,729.76	1,658.97	1,817.81	1,953.13	2,233.75	2,271.88	2,293.49	2,306.87	2,316.16	2,323.43	2,338.46	2,350.58	2,361.77	2,372.83	2,384.38	2,396.74	2,408.58	2,420.35	2,432.24	2,444.30	2,456.46	2,468.59
% change in gross number of patients		0.00%	-4.09%	9.57%	7.44%	14.37%	1.71%	0.95%	0.58%	0.40%	0.31%	0.65%	0.52%	0.48%	0.47%	0.49%	0.52%	0.49%	0.49%	0.49%	0.50%	0.50%	0.49%
Total share of patients	60.00%	60.00%	60.56%	77.86%	74.77%	70.88%	77.96%	78.30%	77.65%	73.50%	61.71%	59.91%	59.51%	59.40%	59.54%	59.93%	60.53%	61.25%	61.99%	62.75%	63.52%	64.31%	65.12%
% change in share of patients		0.00%	0.93%	28.57%	-3.97%	-5.21%	9.99%	0.44%	-0.83%	-5.34%	-16.04%	-2.93%	-0.67%	-0.19%	0.25%	0.64%	1.01%	1.19%	1.20%	1.22%	1.23%	1.24%	1.26%
Unituxin total share of patients	1,037.86	1,037.86	1,004.67	1,415.35	1,460.36	1,583.17	1,771.04	1,795.80	1,791.28	1,702.38	1,433.86	1,400.86	1,398.74	1,402.80	1,412.87	1,428.89	1,450.80	1,475.33	1,500.40	1,526.15	1,552.60	1,579.75	1,607.51
% change in total share of patients		0.00%	-3.20%	40.88%	3.18%	8.41%	11.87%	1.40%	-0.25%	-4.96%	-15.77%	-2.30%	-0.15%	0.29%	0.72%	1.13%	1.53%	1.69%	1.70%	1.72%	1.73%	1.75%	1.76%
Revenue per patient	0.08	0.10	0.07	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
% change in revenue per patient		26.42%	-35.15%	113.37%	-12.38%	0.31%	0.31%	0.31%	0.31%	0.31%	-10.00%	-5.00%	-2.00%	-1.00%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%	-0.50%
Total revenue - Unituxin-WW	84.8	107.2	67.3	202.3	182.9	198.9	223.2	227.0	227.1	216.5	164.1	152.4	149.1	148.0	148.3	149.3	150.8	152.6	154.4	156.3	158.2	160.1	162.1
Revenue growth		26.42%	-37.22%	200.59%	-9.59%	8.75%	12.21%	1.71%	0.06%	-4.67%	-24.20%	-7.19%	-2.15%	-0.71%	0.21%	0.63%	1.03%	1.18%	1.19%	1.21%	1.22%	1.24%	1.25%

$ in millions	2018	2019	2020	2021	2022	2023	2024P	2025P	2026P	2027P	2028P	2029P	2030P
Orenitram													
Adressable Class I	26,052	26,649	27,250	27,855	28,460	29,066	29,673	30,283	30,896	31,514	32,132	32,756	33,381
% of PAH patients that die	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%	7.00%
Deaths Associated with Class I	1823.62	1865.41	1907.53	1949.87	1992.19	2034.62	2077.09	2119.82	2162.73	2205.96	2249.25	2292.93	2336.67
End of year prevalence Class I	24228.09	24783.3	25342.92	25905.4	26467.72	27031.38	27595.67	28163.31	28733.4	29307.81	29882.87	30463.23	31044.28
% treated with Orenitram	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	11.75%	11.75%	7.00%	5.50%	4.50%	4.00%
PAH patients treated with Orenitram	2907.370363	2973.99541	3041.150563	3108.647842	3176.125808	3243.7656	3311.480687	3309.189318	3376.174326	2051.546962	1643.557575	1370.845279	1241.771213
Price / patient	$0.11	$0.11	$0.12	$0.12	$0.13	$0.14	$0.14	$0.15	$0.15	$0.15	$0.16	$0.16	$0.16
% growth	2.00%	3.00%	5.00%	8.00%	5.00%	4.00%	4.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
Gross to net discount	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%	18.00%

$ in millions	2018	2019	2020	2021	2022	2023	2024P	2025P	2026P	2027P	2028P	2029P	2030P
Adcirca													
Product Sales (millions)	323.70	107.20	67.30	55.90	41.30	28.90	21.86	15.99	11.66	0	0	0	0
Generic Decay Rate		*67%*	*37%*	*17%*	*26%*	*30%*	*24%*	*27%*	*27%*	0	0	0	0
Costs of Sales (-)	139.80	46.20	29.10	23.90	17.80	12.30	9.36	6.85	4.98	0	0	0	0
% of Revenue	*43.2%*	*43.1%*	*43.2%*	*42.8%*	*43.1%*	*42.6%*	*42.8%*	*42.8%*	*42.7%*	0	0	0	0
Revenue Floor	*183*	*61*	*38*	*32*	*23*	*16*	*12*	*9*	*6*	0	0	0	0
Net Product Sales (millions)	183.90	61.00	38.20	32.00	23.50	16.60	12.50	9.15	6.68	0	0	0	0
LILY License Fees (-)													
Milestone Fees (325k per mil)	59.48	19.83	12.35	10.40	7.48	5.20	3.90	2.93	1.95	0	0	0	0
Royalty Fees (10% of NPS)	18.39	6.1	3.82	3.2	2.35	1.66	1.25	0.91	0.67	0	0	0	0
Net Profit	106.04	35.08	22.03	18.40	13.68	9.74	7.35	5.31	4.06	0	0	0	0

$ in millions	2018	2019	2020	2021	2022	2023	2024P	2025P	2026P	2027P	2028P	2029P	2030P
Ralinepag													
Class 2 Addressable		5250	5303	5356	5409	5463	5518	5573	5629	5685	5742	5799	5857
Class 3 Addressable		6738	6805	6873	6942	7011	7081	7152	7224	7296	7369	7442	7517
Class 4 Addressable		3325	3358	3392	3426	3460	3495	3530	3565	3600	3637	3673	3710
Total Addressable PAH Patients		15313	15466	15621	15777	15934	16094	16255	16418	16581	16748	16914	17084
Revenue - Bear		0	0	0	0	0	0	0	0	0	25	30	35
Revenue - Base		0	0	0	0	0	0	0	0	25	50	120	135
Revenue - Bull		0	0	0	0	0	0	25	50	135	175	250	350

$ in millions	2018	2019	2020	2021	2022	2023	2024P	2025P	2026P	2027P	2028P	2029P	2030P	2031P	2032P	2033P	2034P	2035P	2036P	2037P	2038P
Organ Transplant																					
Total Addressable Market	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30000000	32760000	35773920	39065120.6	42659111.7	46583750	50869455
Market Share	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15000	16380	17886.96	19532.5603	21329.5559	23291.875	25434.7275
% Share in Market	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%
Cost Per Organ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	250	245	240.1	235.298	230.59204	225.980199	221.460595
Revenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3750000	4013100	4294659.1	4595972.38	4918425.8	5263502.55	5632789.89

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2. DCF

	Projected								
Year	2024	2025	2026	2027	2028	2029	2030	2031	2032
Revenue	2,444.39	2,538.39	2,513.79	2,663.04	2,819.18	3,052.65	3,454.70	3,738.65	3753.949356
revenue growth	5%	4%	-1%	6%	6%	8%	13%	8%	0%
EBIT	1,502.87	1,560.66	1,545.53	1,637.30	1,733.29	1,876.84	2,124.03	2,298.61	2,308.01
%rev	61%	61%	61%	61%	61%	61%	61%	61%	61%
(+) D&A	73.33	76.15	75.41	79.89	84.58	91.58	103.64	112.16	112.62
%rev	3%	3%	3%	3%	3%	3%	3%	3%	3%
(-) CapEx	-166.26	-172.66	-170.98	-181.14	-191.76	-207.64	-234.98	-254.30	-255.34
%rev	7%	7%	7%	7%	7%	7%	7%	7%	7%
NWC	3,009.67	3,125.40	3,095.11	3,278.87	3,471.12	3,758.58	4,253.61	4,603.23	4,622.06
%rev	*123%*	*123%*	*123%*	*123%*	*123%*	*123%*	*123%*	*123%*	*123%*
Change in NWC	-263.07	-115.74	30.29	-183.77	-192.24	-287.46	-495.03	-349.62	-18.83
FCF	1,146.87	1,348.42	1,480.26	1,352.28	1,433.87	1,473.31	1,497.65	1,806.85	2,146.46
Discounted FCF	972.56	969.69	902.71	699.33	628.82	547.92	472.32	483.23	486.81

2033	2034	2035	2036	2037	2038	2039	2040
4017.234936	4298.86812	4600.346317	4922.889582	5267.873936	5637.215632	6030.218421	6453.227116
7%	7%	7%	7%	7%	7%	7%	7%
2,469.89	2,643.04	2,828.40	3,026.70	3,238.81	3,465.89	3,707.51	3,967.59
61%	61%	61%	61%	61%	61%	61%	61%
120.52	128.97	138.01	147.69	158.04	169.12	180.91	193.60
3%	3%	3%	3%	3%	3%	3%	3%
-273.25	-292.40	-312.91	-334.85	-358.31	-383.44	-410.17	-438.94
7%	7%	7%	7%	7%	7%	7%	7%
4,946.23	5,292.99	5,664.19	6,061.32	6,486.09	6,940.84	7,424.72	7,945.56
123%	*123%*	*123%*	*123%*	*123%*	*123%*	*123%*	*123%*
-324.17	-346.76	-371.20	-397.13	-424.76	-454.75	-483.89	-520.83
1,992.98	2,132.84	2,282.30	2,442.41	2,613.76	2,796.81	2,994.36	3,201.41
383.30	347.86	315.66	286.46	259.97	235.90	214.18	194.18

WACC Calculation	
Risk Free	4.49%
Levered Beta	0.55
Market Risk Premium	5.70%
Effective Tax Rate	23.00%
Cost of Equity	7.63%
Cost of Debt	6.52%
Current Stock Price	260.51
Shares Outstanding	47.06
Market Cap	12,259
Total Debt	700
Net Debt	-2,294.10
Market Cap	12,259.22
Percent Equity	94.29%
Percent Debt	5.71%
WACC	17.92%

Terminal Value: Gordon Growth Method	
Terminal Growth Rate	3.00%
Terminal Value	14,815.75
Present Value of TV	898.65
Sum of Near Term Cash Flows	8,400.92
Implied Enterprise Value	9,299.57
Implied Equity Value	11,593.67
Implied Share Price	246.3669622
Downside	5.74%

3. COMPS

Company Name	Share Price	Market Cap	Beta (Levered)	Enterprise Value	Total Debt	Net Debt	Earnings LTM	EBITDA LTM
(all figures in USD millions, except per share figures)								
Gilead Sciences	65.54	81,794	0.14	99,450	24,980	17,716	8452	10,298
Vertex Pharmaceuticals	402.50	103,845	0.57	92,380	819	-10399	3968	4,013
Johnson & Johnson	148.58	357,662	0.92	366,660	33,630	10,703	26,037	24,581
Bayer	30.22	29,689	0.97	64,350	47,400	35,698	25,411	12,613
Amgen	299.48	160,222	0.59	221,300	61,370	50,929	10,028	11,968
Liquidia Corporation	12.69	823	0.19	893	39	-45	77	71
Merck	127.57	325,835	0.4	351,850	35,050	33,030	3,620	6,826
Regeneron Pharmaceuticals	958.64	103,341	0.14	96,910	2,713	-8131	2,829	4,468
Beam Therapeutics	22.78	1,842	1.77	699	173	-1,016	124	147
Medtronic	81.76	108,716	0.78	125,480	25,180	17,221	7,045	8,128
United Therapeutics	260.51	12,259	0.55	9,300	700	-2,294	299	1,236

Company Name	EV/ EBITDA	Include (Yes/No)
(all figures in USD millions, except per share figures)		
[0- No; 1- Yes]		
Gilead Sciences	7.40x	Yes
Vertex Pharmaceuticals	23.27x	Yes
Johnson & Johnson	12.74x	Yes
Bayer	5.20x	Yes
Amgen	12.20x	Yes
Liquidia Corporation	12.87x	Yes
Merck	39.08x	Yes
Regeneron Pharmaceuticals	18.90x	Yes
Beam Therapeutics	4.76x	Yes
Medtronic	14.07x	Yes

Average Industry Multiples	15.05x
Median Industry Multiples	12.81x
United Therapeutics (NYSE: UTHR)	7.52x
UTHR Total Enterprise Value	15,827
- Debt	700
- Noncontrolling Interest	29
- Pension Plan Net Assets	7,052
+ Cash & Equivalents	2,994
Equity Value	11,040
FDSO (millions)	47
Implied Fair Share Price	**234.60**
Implied Premium (Discount)	(9.94%)

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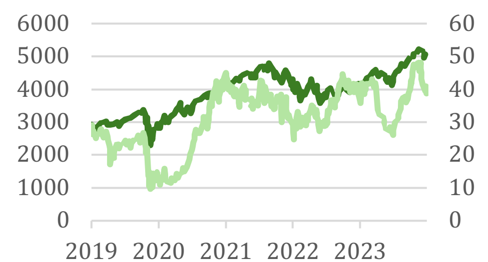
Tapestry Inc. (NYSE: TPR)

Rating	Positive
Price (05/03/24)	**$39.24**
Price Target	**$57.58**
52W Range	**$25.99 - $48.80**
Market Cap	**$9.0B**
EPS (FY 2023)	**$3.96**
Consensus	**$49.71**
Ticker	**TPR (NYSE)**

	2023A	2024E	2025E
Revenue (M)	$6660	$7185	$7653
% Growth	*-0.35%*	*7.87%*	*6.52%*
EBIT (M)	$1172	$1248	$1326
% Margin	17.60%	17.38%	17.33%
FCF	$897	$726	$1046

Price Performance Chart



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Tapestry Inc. is a renowned American luxury fashion conglomerate, formerly known as Coach, Inc. Founded in 1941 and headquartered in New York City, Tapestry manages a collection of iconic accessories and lifestyle brands, including Coach, Kate Spade New York, and Stuart Weitzman. With a strong emphasis on quality, authenticity, and accessibility, Tapestry appeals to a diverse customer base globally, offering leather goods, handbags, accessories, and ready-to-wear fashion for men and women. The company strategically focuses on geographic and demographic trends, with growing momentum in key markets like China and a targeted approach toward younger consumers, particularly Gen Z and millennials. Their innovative circularity and resale programs effectively attract new customers while fostering brand loyalty. Additionally, its decision to lease instead of own real estate provides flexibility and capital for growth in the e-commerce era. We believe that Tapestry presents a compelling investment opportunity, with potential for sustained growth and value creation in the luxury fashion industry. Therefore, we recommend Tapestry as a BUY with a base-case price target of $57.58.

Company Overview

Formerly known as Coach, Inc., and founded in 1941, the name Tapestry, Inc. became the company's new brand in 2018 after its acquisition of Stuart Weitzman Holdings LLC in 2015 and Kate Spade & Company in 2018. Tapestry manages a collection of iconic accessories and lifestyle brands that focus on crafting unique products and differentiated customer experiences.

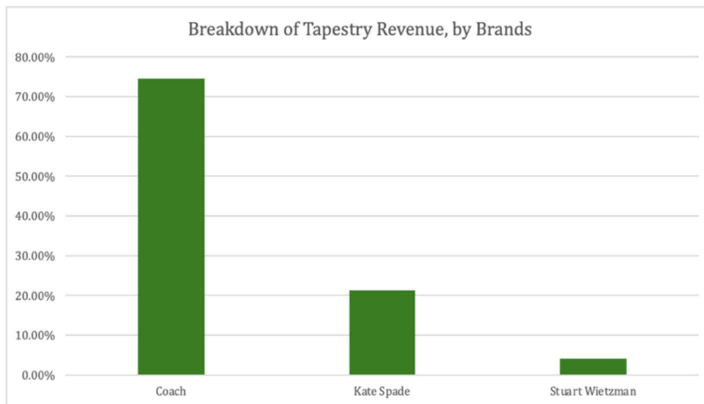
Overall, Tapestry is growing stably in terms of both top-line and bottom-line performance. In the latest fiscal quarter, Tapestry sees a 12% growth in net sales internationally and a 3% increase in gross margin. On an annual basis, Tapestry is progressing smoothly as it sees a 3% revenue growth from last year. As Tapestry expands in multiple geographies including North America, China, Other Asia, and Europe, the growth of revenue is supported by both customer acquisition and brand development. In the latest fiscal quarter, Tapestry acquired 2.5 million new customers in North America and is actively expanding and diversifying its brands and products through various means. As of fiscal 2023, Tapestry's total revenue stands at $6.6B.

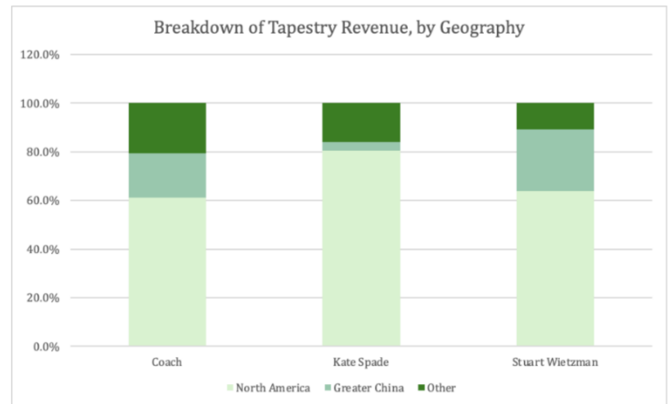
Brand Segmentation

Coach: Founded in 1941, Coach is renowned for its leather goods, handbags, accessories, and ready-to-wear fashion for men and women. It has a strong global presence with a focus on accessible, sustainable, and lasting luxury. As the largest brand in terms of scale and scope among Tapestry's brands, Coach accounts for 74.5% of Tapestry's total sales. In 2023, Coach introduced its youthful and sustainable sub-label "Coachtopia", targeting Gen-Z consumers with vibrant and hopeful designs. Moving forward, Tapestry aims to leverage momentum in Coachtopia to attract more Gen-Z consumers, especially after they saw half of the new customer acquisition (1.25 million) in North America being the young generations including Gen-Z and Millennials. Coach now has 939 stores globally, with 330 of them in North America and 609 located internationally.

Kate Spade New York: Founded in 1993, Kate Spade New York is known for its playful and sophisticated designs, including handbags, clothing, jewelry, shoes, and accessories. With its seasonal collection of products, Kate targets a younger demographic and celebrates "perfectly imperfect lifestyles". Kate Spade currently operates 397 stores worldwide, with 205 in North America and 192 in international locations. Kate Spade accounts for 21.3% of Tapestry's total revenue. Wholesale 11%. Kate Spade also licenses its products to global partners.

Stuart Weitzman: Founded in 1986, Stuart Weitzman is a luxury footwear brand known for its high-quality craftsmanship and innovative designs, offering a range of shoes, boots, and accessories for women. Stuart Weitzman crafts a brand image of women empowerment. Stuart Weitzman has 93 locations globally, with 36 of them in North America and 57 of them internationally. The brand accounts for 4.2% of Tapestry's total revenue.





Recent M&A

Tapestry is in the process of acquiring Capri Holding Inc. for $8.5 billion. Like Tapestry, Capri Holdings specializes in luxury fashion goods and is the parent company of companies like Versace, Jimmy Choo, and Michael Kors. Shareholders of Capri Holdings are to receive $57.00 per share at the date of closing, which is projected to happen during 2024. Once closed, the acquisition could potentially bring Tapestry cost synergies of over $200 million within three years of closing. As of now the acquisition has been approved by market regulators in EU and Japan. The companies are currently waiting on regulatory approval from FTC in the US. While the management team of Tapestry is confident of the successful closing of the deal, the FTC sued to block this merger on April 22nd, 2024. Concerns have led to the stock price lowering downwards by 20% however lawyers for both companies have pushed back on the FTC's allegations, reiterating that the handbag market in the US is competitive. Given that the EU has a much stronger influence on acquisitions within the region, we are confident in the deal's success as past deals such as with LVMH and Tiffany and Co. were also challenged by the FTC yet still completed. We believe with past precedent and a much smaller acquisition relatively, there will be a fair chance for the success of the acquisition.

Said planned acquisition has not yet affected Tapestry's 2024 revenues or projections as the company is waiting to include projections once the deal is finalized. Once finalized, Tapestry Inc. is looking to incorporate its expertise in inventory management with the impressive product line offered by Capri Holdings. The companies are looking to expand their footprint in both China and Japan as growth has surpassed other Asian nations as well as those in North America and Europe.

Industry Overview

Market Catalysts

Rise of E-Commerce:
While the luxury fashion industry has historically been averse to e-commerce, the pandemic has triggered an attitude shift. Lockdowns and restrictions on physical retail drove consumers online, highlighting the importance of having a robust e-commerce presence. Features such as click-and-collect, in-store returns for online purchases, and virtual appointments bridge the gap between digital and physical retail channels, catering to the preferences of modern consumers. To keep their exclusive image while being accessible to all their customers online, brands are increasingly offering exclusive collections and collaborations through their e-commerce platforms, driving traffic and sales online.

Data-Driven Personalization:
Customers expect a seamless online shopping experience that is tailored to their specific needs and tastes. The rise of e-commerce provides valuable data and insights into consumer behavior, preferences, and trends. Luxury fashion brands can leverage this data to personalize marketing efforts, optimize product assortments, and enhance the overall shopping experience, driving engagement and loyalty among online shoppers.

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Globalization and Emerging Markets:
The globalization of luxury markets and the rise of emerging economies have presented new growth opportunities for brands. Emerging markets such as China, India, and Southeast Asia have appeared as key drivers of consumption, fueled by rising disposable incomes, urbanization, and a growing middle class. Recent data shows that China has become the largest market surpassing traditional markets such as the United States and Europe. Chinese consumers account for a significant portion of global luxury spending, with a growing appetite for high-end fashion, accessories, and lifestyle products. Companies have responded by investing in localized marketing strategies, cultural adaptation, and experiential retail concepts to resonate with diverse consumer preferences and capture market share in emerging economies.

Market Challenges

Rising Expectations:
The rise of social media-conscious Gen Z as growth-driving and important customers means that luxury brands must cater to their expectations. Not only does the younger generation want to purchase from brands that have an established personality that aligns with theirs, but they also have higher expectations for the merchandise itself. Brands that cannot deliver to these hyper-specific high standards will have a hard time growing or even keeping their customer base.

Redefining Exclusivity:
As consumer preferences shift towards luxury products emphasizing quality over conspicuous branding, brands reliant on reputation rather than intrinsic product quality face significant challenges in adapting to this trend. Traditionally, many brands in this market have relied heavily on their prestigious reputation, often built upon iconic logos and brand heritage. However, as shoppers increasingly prioritize understated luxury and seek products that offer superior craftsmanship, materials, and functionality, brands solely banking on their reputation may find themselves at a disadvantage.

What Drives Unique Value for Luxury Businesses?

Exclusivity and Prestige:
Luxury fashion brands are known for their exclusivity, offering products that are perceived as rare, prestigious, and inaccessible to the masses. Limited edition collections, high price points, and selective distribution channels contribute to this aura of exclusivity. Brands also leverage celebrity endorsements, collaborations, and influencer partnerships to enhance brand visibility and reach new audiences. Celebrity red-carpet appearances and influencer-driven social media campaigns play a significant role in shaping consumer perceptions and driving demand.

Expansive and Adaptive Distribution Channels:
Companies select department stores and boutiques that align with their brand positioning and target demographic. These curated retail partnerships allow brands to reach a wider audience while maintaining control over the retail environment and customer experience. For instance, Coach products are prominently featured in department stores such as Bloomingdale's, Nordstrom, and Saks Fifth Avenue, as well as boutique retailers specializing in luxury fashion and accessories.

Distinctive Design and Innovation:
One's brand is synonymous with distinctive design aesthetics and creative innovation. Leading designers and creative directors are celebrated for their ability to push boundaries, set trends, and create iconic pieces that resonate with consumers on an emotional level. The industry operates within seasonal fashion cycles, with designers presenting new collections each year during fashion weeks in major cities such as Paris, Milan, and New York. Trends in fashion and design evolve rapidly, influencing consumer preferences and purchasing decisions. Affluent consumers are increasingly seeking out meaningful and enduring experiences, prioritizing products that offer superior design, materials, and brand heritage.

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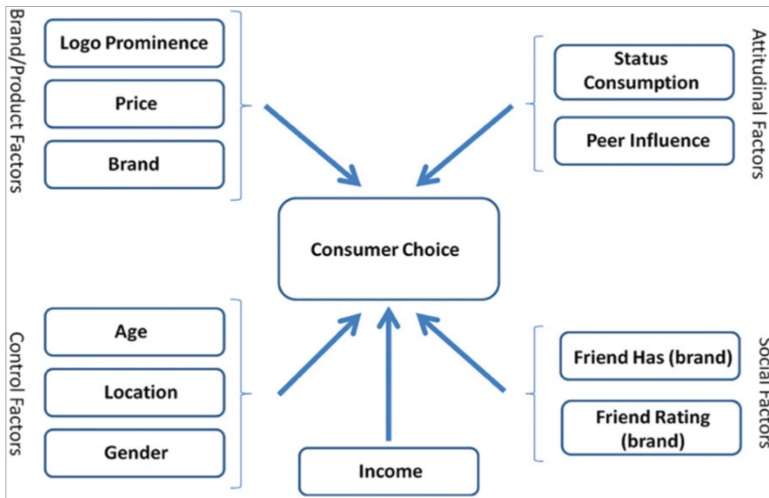


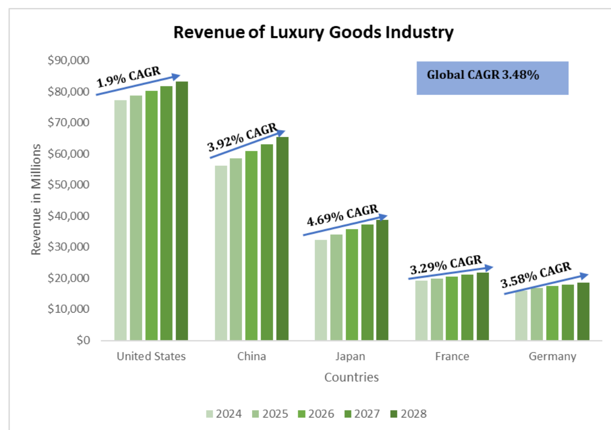
Consumer Behavior and Preferences Heavily Influence the Market:
Consumer behavior and preferences play a central role in shaping the luxury fashion market. Affluent consumers seek products that align with their lifestyle, status, and personal values. According to studies, there is also a collective social effect with peer influence directly affecting the sales of certain brands amongst communities and friend groups. Common perception is powerful in the decision-making behind consumer choice and is something that rewards a careful balance of abundant exposure along with artificial scarcity.

Revenue and Costs

Extremely High Margins for Goods:
Businesses command exceptionally high-profit margins compared to other industries, thanks to the perceived value, exclusivity, and brand prestige associated with their products. According to industry reports, gross profit margins for luxury fashion goods typically range from 60% to 80%, significantly higher than those of mass-market apparel brands. They leverage their pricing power to maintain premium price points, capitalize on brand equity, and sustain profitability even during economic downturns.

Large Costs Mostly Reside in Marketing and Salesperson Salaries:
Marketing and sales expenses represent significant cost components for luxury fashion businesses, reflecting investments in brand building, advertising campaigns, and salesperson salaries. Brands allocate substantial budgets to marketing initiatives aimed at cultivating brand awareness, enhancing brand perception, and engaging with affluent consumers. Fashion companies typically spend between 10% to 15% of their revenues on marketing activities, with a focus on high-impact channels such as print media, digital advertising, and experiential events. Salesperson salaries and commissions constitute another major cost driver, as luxury brands prioritize hiring and retaining knowledgeable, skilled sales professionals to deliver exceptional customer service and drive sales conversions in-store and online.

General Markets



The Unique Success of Luxury Brands in the Current Environment
Despite economic downturns, the luxury fashion industry has demonstrated resilience due to the aspirational nature of its products and the loyalty of its affluent customer base. Luxury spending tends to be more insulated from economic fluctuations compared to other consumer sectors. For instance, during the global financial crisis of 2008-2009, luxury sales experienced only a modest decline, and the sector quickly rebounded once economic conditions improved. Recent data from leading conglomerates of the industry, such as LVMH and Kering, indicate robust financial performance despite the challenges posed by the COVID-19 pandemic. Quarterly earnings reports have consistently shown resilient sales and profitability, underscoring the enduring demand for luxury fashion products.

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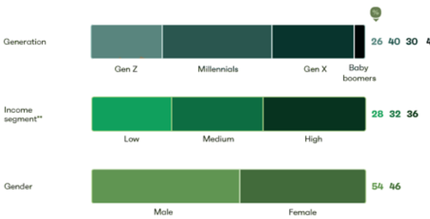
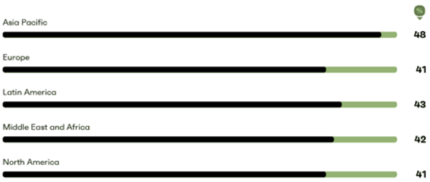
Who are luxury buyers?

% of luxury buyers* who fall into the following segments



% of consumers in the following regions who are luxury buyers*



*Luxury buyers are defined as individuals who have purchased from luxury fashion brands in the last year

**excludes respondents who said don't know/prefer not to say

Assorted questions about demographics and lifestyle

GWI Core Q2 2023 44,396 luxury buyers aged 16-64

Demographics:

Many might also imagine that buyers are wealthy, but that's not necessarily the case – luxury is becoming more accessible than it was in the past. In fact, the majority of these consumers don't sit in the high-income bracket. So, despite having preferences, these shoppers are likely making economies elsewhere. For brands hoping to tap into this audience, the Asia Pacific & Europe region is a key market at play with around half of consumers here being luxury buyers, highlighting immense potential and lucrative opportunities for brands. For brands hoping to engage with this region, it's important to understand cultural nuances, preferences, and the purchasing behaviors of this diverse audience to secure them as a customer base.

Younger consumers and luxury go hand in hand, with the majority of consumers being Gen Z or millennials. Gen Z are the ones to watch though, as they're purchasing luxury goods three to five years earlier than millennials did at their age. There's likely a mix of factors at play here, but a big one could be due to many having a safety net in place – 66% of Gen Z say they live with their parents, potentially giving them more freedom to fund their expensive tastes. Meanwhile, many millennials are progressing in their careers, with their spending potential likely to grow too. Gen Z and millennials also accounted for all the luxury goods market's growth last year, so together they're very influential in this space.

Competition

In a volatile economy, having the know-how of a specific industry is a key lever when diversifying in the same segment. Luxury is a clear example of how brands can take profit from being part of a conglomerate and take advantage of economies of scale, centralization of capabilities (e.g. purchasing power, technology, advertising), access to an exclusive network of suppliers, access to capital, access to professional talent, amongst others. The main competitors for Tapestry include LVMH, PVH, and Kering.

A Deeper Dive into the Subsectors

Sectors	Handbags	Jewelry	Apparel	Luxury Shoes
Market Size (2023)	$40.9 Billion	$27.47 Billion	$1300 Billion	$400 Billion
Margins (Gross)	30-70%	400-800%	30-70%	40-50%
Trends (5)				
Experiential Retail through Digital Platforms	✓	✓	✓	✓
Gen-Z Focus	✓	✓	✓	✓
Elevated Outdoor and Casual Styles	✗	✗	✓	✓
Resurgence of Artisanal and Craft Techniques	✓	✓	✗	✓
Challenges (3)				
Brand Dilution	✓	✗	✗	✓
Changing consumer preferences	✓	✗	✓	✓
Ethical concerns	✓	✓	✗	✓

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Sector 1: Handbags
Handbags are iconic accessories that serve as both fashion statements and functional items. Brands are known for their heritage, craftsmanship, and signature designs. The global luxury handbag market size was valued at USD 30.1 billion in 2022. It is estimated to reach USD 50.9 billion by 2031, growing at a CAGR of 6.01% during the forecast period (2023–2031). Emerging markets such as China and India represent key growth opportunities, with a rising middle class driving demand for luxury goods.

Sector 2: Jewelry
Jewelry, a symbol of opulence, bridges the gap between different socioeconomic classes. The term "luxury" denotes jewelry of superior quality, characterized by factors like the precision of stone cutting, overall quality ratings, and the artistry involved in crafting both the stone and the jewelry piece itself. The global luxury jewelry market size was valued at USD $27.47 billion in 2024. It is estimated to reach USD 89.98 billion by 2031, growing at a CAGR of 7.9% during the forecast period (2023–2031). This market is becoming more than just fashion but also seen as an investment by many who hope to have their purchased gems appreciated in future value or be passed down as an heirloom.

Sector 3: Apparel (Clothing)
Luxury apparel encompasses a wide range of clothing categories, including ready-to-wear collections, haute couture, and luxury sportswear. Fashion brands are known for their innovative designs, superior craftsmanship, and attention to detail. In 2023, the luxury apparel market was valued at 59.87 billion in 2022, with a projected CAGR of 3.03% over the next 4 years. The apparel segment is the largest revenue contributor to the luxury goods market.

Sector 4: Luxury Shoes
Shoes represent a significant sub-sector within the luxury fashion industry, offering both functional and aesthetic value to consumers. Luxury shoe brands often emphasize craftsmanship, premium materials, and innovative designs to differentiate their products. The global luxury footwear market was valued at USD 26.43 Bn in 2023, with expectations to grow at an annual rate of 3.85% over the next 4 years. Millennials and Gen Z consumers represent a significant demographic segment driving demand for luxury sneakers and designer footwear.

Investment Theses

Investment Thesis 1: Tapestry Captures Market Share with Quality and Authenticity

Tapestry Inc. presents a compelling investment opportunity distinguished by its unique market position and strategic initiatives, setting it apart from competitors and offering promising prospects for future growth. With a focus on quality, authenticity, and accessibility, Tapestry stands out in the fashion industry, appealing to a diverse customer base and capturing market share.

Unlike many of its competitors who prioritize exclusivity, Tapestry's emphasis on product authenticity and versatility allows it to penetrate the market with flash sales and discounts, expanding its reach without compromising brand integrity. This strategy not only differentiates Tapestry within the industry but also positions it favorably for sustained growth, as it capitalizes on consumer demand for both quality and affordability. Moreover, Tapestry's recent acquisitions and successful rebranding efforts have propelled it into new markets and demographics, mitigating the risk associated with over-reliance on a single brand. The company's ability to adapt to changing consumer preferences and capitalize on emerging trends, such as the recent popularity of products like the Tabby cat bag, further strengthens its competitive edge and augurs well for future performance.

(Tapestry Tabby bag ref on the left)

Effective Resale Program:
In addition, Tapestry's innovative circularity and resale programs have proven effective in attracting new customers while fostering brand loyalty, particularly among price-conscious consumers. Prices are deliberately lower than those of main Tapestry products and other luxury rivals in order to make products more accessible to younger shoppers. Although a relatively smaller and newer venture, programs such as Coach Re-loved as well as Kate Spade’s Upthread program have garnered major support within Gen Z, who will represent 40 percent of the luxury goods market by 2035.

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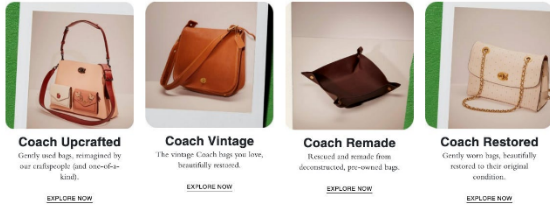

Coach Program Offerings

Kate Spade Offerings

By strategically leveraging these initiatives, Tapestry not only enhances its market penetration but also establishes a sustainable revenue stream. An example is that more than 90% of the people who buy second-hand from Kate Spade are new to the brand. That figure confirms what many in the resale space have been saying for years and one of the resale's main pitches to brands before the current wave of branded resale adopters: Resale is a customer acquisition tool. Within this new market, the brand stands to benefit the most as their main line offerings are relatively much more affordable to their resale options than many other luxury brands that see price differences of over 5x vs Tapestries 2x. The classic it-bag is no longer in touch with the new price-conscious saver weary of an upcoming recession. Coach's price points offer a solution to this issue: with price points around $295-500, their bags aren't unrealistically expensive for the fashionista willing to splurge yet also not too discounted to dilute the market with Coach designs.

Investment Thesis 2: Tapestry's geographic and demographic focuses capture industry trends

Tapestry's Growing Momentum in China:

Tapestry's effort in directing sales toward the Asian market, especially the Chinese market has brought positive impacts on its revenue growth. In Q2 2024, the Greater China market performed the strongest among all regions, reflecting a 19% revenue growth for Tapestry's total sales, compared to flat growth in North America and 11% growth in Europe. China is consistently outpacing the growth in other regional markets. Specifically, China occupies 18% of Coach's sales and 25% of Stuart Weitzman's market. Tapestry's geographic strategic focus coincides with consumers' intent to purchase fashion luxury goods in these regions.

Growth of Chinese Customers in the Fashion Retail Industry:

McKinsey found that despite the challenges faced by the global economy amid geopolitical uncertainty, China is expected to deliver the strongest growth for the fashion luxury market. Overall, China's consumers show a higher intent to purchase fashion goods in 2024 than consumers in the United States and Europe. Much of this intent for luxury goods is distributed to Coach. Coach is ranked 2# among all its competitors according to a brand index collected from Chinese social media calculated based on consumers' preferences. Therefore, not only has China been successfully delivering geographic growth from a quantitative aspect but it shows great potential delivering strong demographic growth from a qualitative aspect. According to the previously mentioned social media ranking for luxury brands, Coach has sufficient soft power and a well-spread brand image among Chinese social media users. Connecting to the fact that Chinese consumers have been a major portion of buyers for Coach globally, we could extrapolate the conclusion that Coach is appealing to China, geographically and demographically. To summarize, Coach's demand-centric design captures its Chinese customers. Moving forward, Tapestry has shown determination in fueling growth in all three brands, especially Coach and Stuart Weitzman, in the Chinese market and for Chinese customers. In particular, they have indicated multiple times in their earnings calls that they value "the long-term opportunities in China" and indicated

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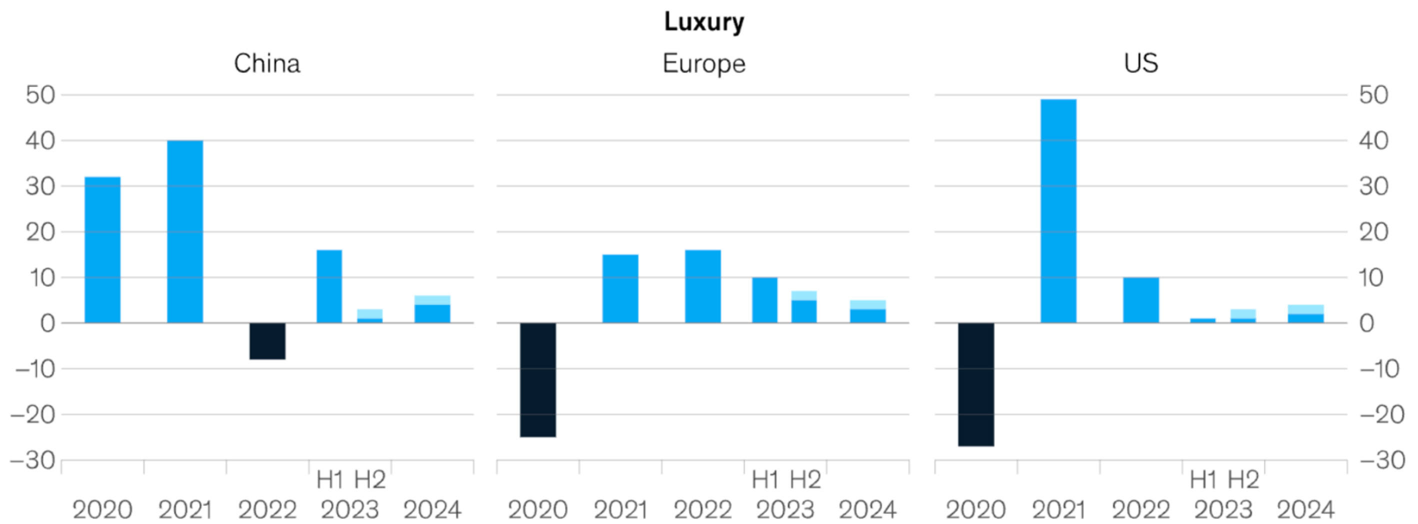
in their earnings presentation that they will hold on to the Chinese market in the foreseeable future.



(Year-over-year growth in fashion retail sales by geography, % above)

Rise of Gen-Z:
Demographically, Tapestry is also actively acquiring new customers, with a main focus on the younger generations, namely Gen Z and millennials. The luxury market has shifted to become a stage for young consumers. Millennials and Gen Z are expected to dominate the market with more than 70% consumption share by 2025. Gen Z, specifically the population aged between 12 and 25, has a combined purchasing power of around $360 billion in the US, and fashion goods are among their favorite consumption categories. This expenditure represents the preference for luxury goods among the younger generation, and the number is only going to increase once the earnings of Gen Z and Millennials go up as they move along their career. It is also surveyed that Gen Z are more willing to consume fashion goods compared to older generations. Tapestry's brandings as "accessible luxury" appeal to Gen Z's preference, as shown in the latest customer acquisition in Q2 2024. Coach's CEO Joanne Crevoiserat mentioned in the latest earning call that "approximately 2.5 million new customers in North America alone, of which roughly half were Gen Z and Millennials, consistent with our strategy to recruit younger consumers to our brands." As its largest brand, Coach has diverted itself from an old-fashioned brand to a brand for "timeless Millennials and Gen Z".

Environmental Appeal to Younger Consumers:
Tapestry also sees momentum in Coachtopia, which is the latest sub-label of Coach, targeting Gen Z consumers with its brand focus in youthful designs and sustainable circularity of fashion. Specifically, it achieves sustainability through promoting bags made from material waste.

Gen Z consumers tend to be price-conscious, as opposed to Gen X's price-centric consumption behaviors. In this respect, Gen Z is more likely to be attracted to brands that not only consider accessible prices but social responsibilities. With Coachtopia's focus on sustainability, it has great potential to attract more young consumers. This trend is backed by Tapestry's confidence. As the management team commented for Coachtopia, although it takes up a small portion of their total sales, they are "excited by the significant consumer attention it's receiving, specifically with younger audiences." Alongside a series of campaigns, including Y2K staple pieces and advertising through social media influencers, Coach has become a Gen-Z favored brand among its competitors.

(Coachtopia bags ref above.)

Investment Thesis 3: Tapestry opts for leasing over ownership which frees capital for growth

Tapestry is uniquely situated in the luxury fashion industry as Tapestry does not own any real estate and instead has signed long-term leases. Many of their leases are triple net leases, which allow Tapestry to modify the property while paying lower rent than a typical lease at the cost of paying for maintenance, insurance, and property taxes. While many of its competitors either own their storefronts or are in the process of buying out their landlord's position, Tapestry continues to lease its properties. We believe that instead of hindering Tapestry's capabilities, this decision allows Tapestry to focus on investing capital in growing its customer base through e-commerce. 33% of Tapestry's sales are derived from online shopping, significantly higher than pre-

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pandemic levels. This number does not appear to decrease in the foreseeable future as consumers look to either maintain or increase their online footprint when shopping. By deciding to lease instead of buying its storefronts, offices, and fulfillment centers, Tapestry allows for supreme flexibility in the market.

Strategically Located Fulfillment Centers:
Tapestry's fulfillment centers are located in transportation hubs around the globe, its largest being in the United States. Tapestry's Jacksonville center is close to one of the nation's largest ports, and the Jacksonville airport allows for inexpensive air and sea freight. Recently, leasing and shipping out of the Jacksonville area mitigates risk due to the addition of expanded freight options. Locations in Asia are smaller in square footage but allow for easy and inexpensive access to the key growth markets in the region. Unlike its Asian and North American counterparts, Tapestry does not lease any key fulfillment centers in Europe. Instead, it utilizes trusted third parties to store and ship products to mitigate costs as the company looks to grow print in the region. As e-commerce grows in the luxury fashion industry, Tapestry will be able to expand faster than its competitors due to extensive supply chain management and growth practices. (*Strategically located fulfillment centers below*)

Investment Risks

Risk #1: Tapestry may struggle to appeal to Chinese consumers due to their preference for brands perceived as more exclusive and expensive.

Tapestry, positioned within the realm of mid-level luxury, finds itself facing a nuanced challenge in the Chinese market. The Chinese market is appealing for luxury brands that seek growth because its consumers show a higher intent to purchase fashion goods than consumers in the United States and Europe. The key factor driving this variance is the heightened status consciousness among Chinese consumers, particularly evident in the realm of fashion goods. As highlighted in a comprehensive study conducted by KPMG, the inclination of young Chinese individuals towards purchasing luxury items stems from a deeply ingrained belief that such acquisitions serve as a vehicle for social elevation and prestige. In this context, the allure of brands perceived as exclusive and exorbitant holds a particularly strong sway over the Chinese consumer psyche. This presents a unique risk for Tapestry, a mid-level luxury brand that might not have the exclusivity and expensiveness Chinese consumers have an appetite for in a brand.

Mitigant #1: **The Chinese Gen-Z consumer's attitudes are shifting towards prioritizing design aesthetics over traditional brand recognition.**

As consumer attitudes in China continue to evolve, particularly among the younger demographic cohorts, there is a notable shift away from traditional brand recognition as the sole determining factor in purchasing decisions. According to Mazar, a noteworthy trend among Generation Z consumers is their growing inclination towards luxury products driven by personal satisfaction rather than societal pressures or status symbols. This shift suggests a maturation of consumer behavior wherein the intrinsic value of a product, particularly in terms of its design appeal and ability to resonate with individual tastes, holds greater significance than the prestige of the brand itself. Given these evolving dynamics, Tapestry stands to benefit from the changing consumer landscape in China. The increasing willingness of Gen-Z to prioritize design aesthetics over brand recognition presents a favorable opportunity for Tapestry. Since Gen-Z consumers are expected to generate luxury sales more than any other demographic, Tapestry establish itself as a compelling choice within the competitive market landscape in China.

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Risk #2: **Tapestry's re-sale programs and outlet stores may decrease its luxury appeal by diluting its exclusivity.** Tapestry faces a dilemma with its re-sale programs and outlet stores for Coach and Kate Spade, as these initiatives raise legitimate concerns regarding the potential erosion of brand prestige. Central to the allure of luxury brands is their esteemed reputation and the inherent value they command in the eyes of consumers. Selling excess inventory at discounted prices through outlet channels can undermine this prestigious image, as it may be perceived as diluting the exclusivity and perceived value of the brand's merchandise. Thus, the availability of discounted items through re-sale programs and outlet stores runs the risk of diminishing the perceived exclusivity and desirability of Tapestry's offerings among discerning consumers.

Mitigant #2: **Tapestry has brands that have distinguished themselves by their high quality, building a reputation with customers that depends on more than superficial notions of luxury.**

Tapestry's steadfast commitment to enduring quality and appeal across a diverse demographic serves to mitigate potential risks, positioning the company for sustained long term value creation. Coach's unique position is particularly noteworthy, as it does not solely rely on an aura of opulence as its primary ethos; instead, its reputation is firmly rooted in its excellence. Thus, despite not aggressively pursuing exclusivity and maintaining relatively accessible price points, Coach has demonstrated resilience and success, characteristics we anticipate will persist, driving continued strong performance.

Risk #3: Tapestry lacks significant real estate holdings and depends on long-term leases for its physical presence.

Tapestry Inc. does not own any of the real estate associated with fulfillment, corporate, and product development and instead is in non-cancellable long-term leases that expire in 2037. Unlike competitors such as LVMH, which boast significant real estate holdings, Tapestry's reliance on long-term leases until 2037 exposes investors to various uncertainties and vulnerabilities: Economic downturns, changes in consumer behavior, or shifts in real estate market dynamics could adversely affect the company's financial performance and valuation, particularly since their physical locations are not assets that could contribute to their finances like their competitors.

Mitigant #3: Long-term leases enhance Tapestry's brand presence and financial stability in the luxury market

Tapestry's exceptionally long-term leases provide a crucial advantage by guaranteeing the company's in-person presence in prime locations until 2037. In the luxury goods industry, maintaining a physical presence in key markets is paramount for brand visibility, customer engagement, and the delivery of personalized experiences. In addition, by locking in favorable terms for an extended period, the company mitigates the risk of sudden rent increases or fluctuations in leasing rates, thereby enhancing financial predictability and cost management.

Furthermore, luxury businesses like Tapestry Inc. typically target affluent demographics that are less susceptible to economic downturns compared to mass-market consumers. During periods of economic uncertainty, affluent consumers often exhibit more stable purchasing power and a greater willingness to invest in luxury products and experiences. This aspect of Tapestry's customer base serves to mitigate the risks of a non-cancellable long-term lease.

Assumptions

Revenue Build: We adopted a top-down approach to project the revenue. First, we gather the historical and projected data of the size of the Global Luxury Goods market. We also refer to the geographical industry data for the US and China as they are the two main revenue-generating geography for Tapestry. Next, we represent the historical revenue data of Tapestry, segmented down to each brand and each geography (US, China, Other) as a percentage of the respective industry size. Using these industry penetration percentages, we assume the changes in penetration of each brand in each geography in the future five years. By multiplying the penetration by the projected geographical industry size, we get the revenue of each segment. Finally, the total revenue is projected by summing all segments.

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Tapestry Inc.

REVENUE PROJECTIONS

US$ & shares in millions	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Coach Revenue	4,270.9	3,525.7	4,253.1	4,921.3	4,960.4	5,241.4	5,567.1	5,736.4	5,923.8	6,067.3
Rev Growth Rate		*-17.45%*	*20.63%*	*15.71%*	*0.79%*	*5.67%*	*6.21%*	*3.04%*	*3.27%*	*2.42%*
US Revenue	2,401.6	2,015.5	2,466.3	3,102.8	3,037.5	3,128.5	3,325.0	3,355.4	3,436.8	3,504.0
China Revenue	779.8	200.8	930.6	892.2	896.7	999.5	1,074.2	1,150.6	1,201.4	1,253.9
Other Revenue	1089.5	1309.4	856.2	926.3	1026.2	1,113.4	1,167.9	1,230.4	1,285.6	1,309.5
Kate Spade Revenue	1,366.8	1,149.5	1,210.0	1,445.5	1,418.9	1,505.1	1,534.8	1,560.8	1,607.6	1,646.8
Rev Growth Rate		*-15.90%*	*5.26%*	*19.46%*	*-1.84%*	*6.07%*	*1.98%*	*1.69%*	*3.00%*	*2.43%*
US Revenue	1067.4	889.4	936.7	1156.7	1142.8	1,224.2	1,239.3	1,251.9	1,281.7	1,307.5
China Revenue	52.9	48.3	55.2	41.7	47.9	52.3	57.8	65.9	73.1	75.8
Other Revenue	246.5	211.8	218.1	247.1	228.2	228.6	237.7	243.0	252.8	263.5
Stuart Weitzman Revenue	389.4	286.2	283.2	317.7	281.6	317.9	368.1	384.1	404.1	420.2
Rev Growth Rate		*-26.50%*	*-1.05%*	*12.18%*	*-11.36%*	*12.90%*	*15.77%*	*4.35%*	*5.21%*	*3.99%*
US Revenue	216.3	146.2	139.4	189.9	180.0	201.1	208.5	218.6	232.5	242.8
China Revenue	80.2	81.2	108.3	92.7	71.2	83.6	128.1	134.8	140.7	146.3
SW Other revenue	92.9	58.8	35.5	35.1	30.4	33.2	31.4	30.7	30.9	31.1
Total Revenue	6,027.1	4,961.4	5,746.3	6,684.5	6,660.9	7,064.4	7,470.0	7,681.3	7,935.5	8,134.3
Rev Growth Rate		*-17.68%*	*15.82%*	*16.33%*	*-0.35%*	*6.06%*	*5.74%*	*2.83%*	*3.31%*	*2.51%*

Assumptions - Coach					
US Penetration					
Base	10.58%	10.63%	10.67%	10.70%	10.72%
Bear	10.05%	10.10%	10.14%	10.17%	10.18%
Bull	11.11%	11.16%	11.20%	11.24%	11.26%
China Penetration					
Base	4.78%	4.83%	4.89%	4.93%	4.96%
Bear	4.54%	4.59%	4.65%	4.68%	4.71%
Bull	5.02%	5.07%	5.13%	5.18%	5.21%
Other Penetration					
Base	0.43%	0.44%	0.45%	0.46%	0.45%
Bear	0.41%	0.42%	0.43%	0.43%	0.43%
Bull	0.46%	0.46%	0.47%	0.48%	0.47%

Assumptions - Kate Spade					
US Penetration					
Base	4.14%	4.16%	4.18%	4.19%	4.20%
Bear	3.93%	3.95%	3.97%	3.98%	3.99%
Bull	4.35%	4.37%	4.39%	4.40%	4.41%
China Penetration					
Base	0.25%	0.26%	0.28%	0.30%	0.30%
Bear	0.24%	0.25%	0.27%	0.29%	0.29%
Bull	0.26%	0.27%	0.29%	0.32%	0.32%
Other Penetration					
Base	0.09%	0.09%	0.09%	0.09%	0.10%
Bear	0.09%	0.09%	0.09%	0.09%	0.09%
Bull	0.10%	0.10%	0.10%	0.10%	0.10%

Assumptions - Stuart Weitzman					
US Penetration					
Base	0.68%	0.70%	0.73%	0.76%	0.78%
Bear	0.65%	0.67%	0.69%	0.72%	0.74%
Bull	0.71%	0.74%	0.77%	0.80%	0.82%
China Penetration					
Base	0.40%	0.43%	0.45%	0.46%	0.47%
Bear	0.38%	0.41%	0.43%	0.44%	0.45%
Bull	0.42%	0.45%	0.47%	0.48%	0.49%
Other Penetration					
Base	0.01%	0.01%	0.01%	0.01%	0.01%
Bear	0.01%	0.01%	0.01%	0.01%	0.01%
Bull	0.01%	0.01%	0.01%	0.01%	0.01%

Effective Tax Rate: We assume that the tax rate will remain stable at 18% during the projection period.

Inventory Projections: We examined the historical quarterly data of inventory and summarized the pattern of inventory for Tapestry. In general, Tapestry's inventory tend to increase in Q1 (July to September) due to start-of-fiscal-year stock-up and New York Fashion Week in early September, decrease in Q2 (October to December) due to London Fashion Week and most importantly, rising consumption during holiday shopping season, increase in Q3 (January to March) as it prepares for New York Fashion Week in early February and London Fashion Week in mid-February, and decrease in Q4 (April to June) as sales increase due to Graduation season and Mother's day approach, as well as the occurrence of Met Gala in early May. The average percentage in inventory quarter by quarter is displayed below.

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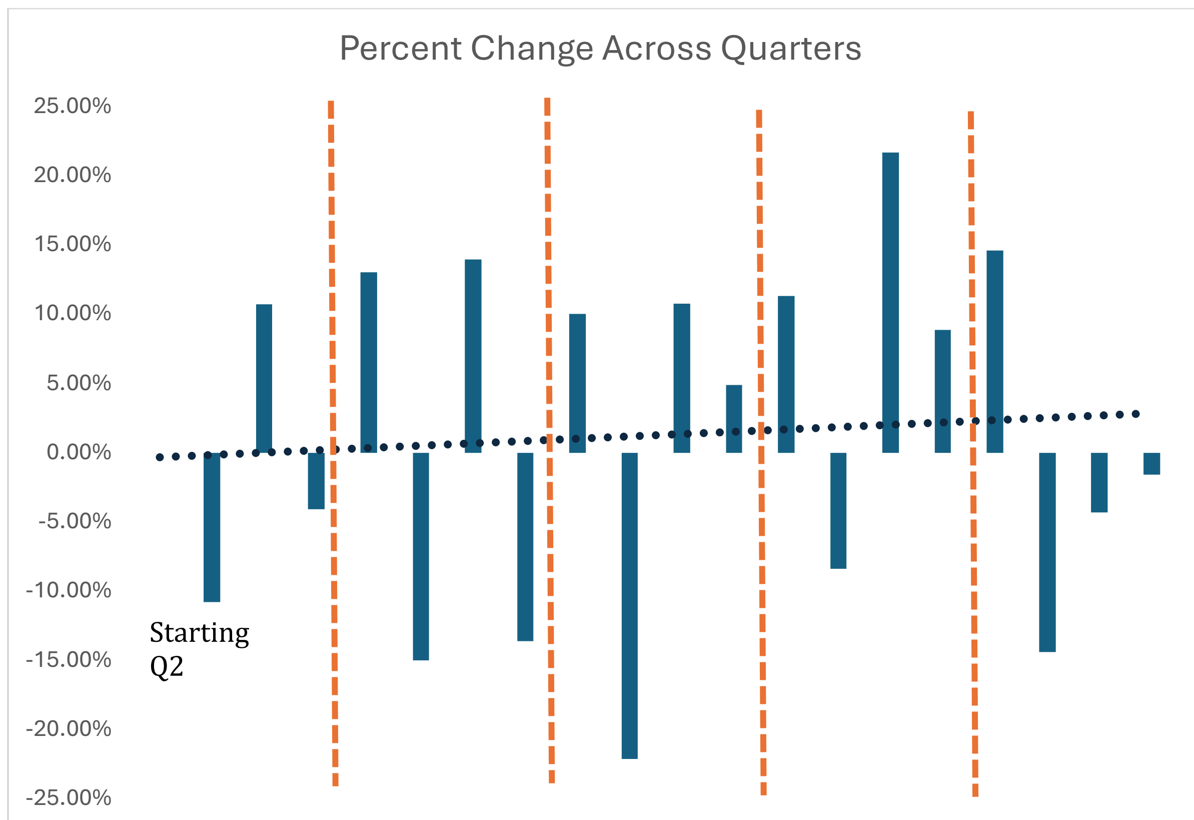
Quarters	**Month Range**	**AVG % change**
Q1	July 1st to October 1st	12.30%
Q2	October 1st to January 1st	-14.12%
Q3	January 1st to April 1st	10.60%
Q4	April 1st to July 1st	-1.08%

We take the average percentage change of inventory in each quarter and project out the inventory amount for each quarter for the next five years. We then represent each line item in the balance sheet (excluding cash and debt) as a percentage of inventory on a quarterly basis.



Three-Statement Projection

Growth Assumptions: We chose to utilize our revenue build to input growth assumption highlighted in yellow and others were taken as historical percentages of Gross Profit Margin, SG&A, and tax rates.

Growth rates & margins								
Revenue growth		16.3%	(0.4%)	6.1%	5.7%	2.8%	3.3%	2.5%
Gross profit margin	71.0%	69.6%	70.8%	70.9%	70.9%	71.0%	71.0%	71.0%
SG&A % of sales	52.6%	51.3%	53.2%	53.5%	53.6%	53.7%	53.7%	53.7%
Tax rate	6.4%	16.2%	18.1%	18.0%	18.0%	18.0%	18.0%	18.0%

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PPE & Other Non-Current Assets: For our PPE and non-current assets, Tapestry does not have heavy involvement in either and so when it comes to these factors we chose to utilize a historical average in our forecasts.

PP&E								
Beginning of period	3661.7	2,175	1,826	1,943	1,956	1,970	1,985	1,999
Plus: Capital expenditures	116	94	184	131	136	151	140	142
Less: Depreciation	-212	-188	-175	-118	-123	-136	-126	-128
End of period	**2,175**	**1,826**	**1,943**	**1,956**	**1,970**	**1,985**	**1,999**	**2,013**
IMPUTING TOTAL DEPRECIATION & AMORTIZATION								
D&A not related to PP&E	7	7	7	7	8	8	8	9
as % of revenue	0.12%	0.10%	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%
Depreciation & Amortization - Total	**-212**	**195**	**182**	**126**	**131**	**144**	**134**	**137**
D&A related to PP&E as a % of capex	182.5%	200.5%	95.1%	90.0%	90.0%	90.0%	90.0%	90.0%

OTHER NON-CURRENT ASSETS								
Beginning of period				2,810	2,980	3,151	3,241	3,348
Less: Amortization of intangible assets				(7)	(8)	(8)	(8)	(9)
Plus: Additions				178	179	97	116	92
End of period			**2,810**	**2,980**	**3,151**	**3,241**	**3,348**	**3,432**

Retained Earnings and Share Repurchases: In these line items, we decided to stick with a historical straight line of dividends and repurchases due to no recent changes in the company's plans for any new actions.

RETAINED EARNINGS								
Beginning of period	(993)	(167)	(1,077)	(1,180)	(1,249)	(1,213)	(1,139)	(1,020)
Plus: Net income	833	986	939	988	1,086	1,124	1,168	1,197
Less: Dividends	-	(264)	(283)	(283)	(283)	(283)	(283)	(283)
Less: Repurchases	(8)	(1,631)	(759)	(759)	(759)	(759)	(759)	(759)
Excise Tax	0	0						
End of period	**(167)**	**(1,077)**	**(1,180)**	**0**	**(1,213)**	**(1,139)**	**(1,020)**	**(873)**

Interest expense/income:

We assumed a general straight line for interest expense and income from cash.

Long term debt								
End of period balance (from B/S)	3,440	3,265	3,294	3,294	3,294	3,294	3,294	3,294
Interest expense		**69**	**73**	**109**	**109**	**116**	**116**	**116**
Interest rate on cash								
Weighted average interest rate on cash		2.10%	2.20%	3.30%	3.30%	3.50%	3.50%	3.50%
Interest Income	2	11	46	0	21	23	25	29

Beta Calculation: In order to calculate beta, we utilized the covariance and variance method in order to find a median unlevered beta in order for us to re-lever it back to our given company TPR.

	Total Equity (Plug	Total Debt	D/E Ratio	Covariance	Variance	Levered Beta	Unlevered Beta	Effective tax Rate
(NYSE:CPRI)	1,407.06	1,953.00	138.80%	0.000221175	0.000149754	1.477	0.678	15.00%
(ENXTPA:RMS)	1,934.83	3,711.00	191.80%	-7.44201E-06	0.000149754	-0.050	-0.021	28.20%
(LSE:BRBY)	17,292.61	19,246.68	111.30%	-1.73791E-05	0.000149754	-0.116	-0.063	24.10%
(NYSE:RL)	4,241.75	2,850.46	67.20%	0.000171136	0.000149754	1.143	0.756	24.00%
(NYSE:PVH)	5,120.81	3,543.60	69.20%	0.000232353	0.000149754	1.552	1.004	21.10%
(NYSE:VFC)	2,570.99	2,756.10	107.20%	0.00017689	0.000149754	1.181	0.622	16.20%
(SEHK:1913)	2,109.14	7,341.90	348.10%	-1.48887E-06	0.000149754	-0.010	-0.003	24.00%
						MEDIAN	0.62	
Tapestry, Inc. (NYSE:TPR)	6,458.99	**9,339.70**	**144.60%**			BETA (Levered)	1.342	20.00%

Valuation

Comps: Comparable choices were based on choosing firms that specialized in selling in the luxury handbags and leather goods industry as well as being internationally sold. Financially, there was a focus on choosing companies that were similarly levered to TPR in order to show the most optimal comparison. In preparation for the Capri acquisition Tapestry has an short term abnormal amount of debt in the current quarter however we do not believe it to be a long-term indicator of their true D/E ratio.

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Ticker	Company	Total Enterprise Value(TEV)	Gross Margin	D/E Ratio	EBIT	EBITDA	EV/EBIT	EV/EBITDA
(NYSE:CPRI)	Burberry Group plc (Converted from British pounds)	6,423.61	70.40%	138.80%	619.00	720	10.38x	8.92x
(ENXTPA:RMS)	Capri Holdings Limited	7,622.10	64.90%	191.80%	438.00	625	17.40x	12.20x
(LSE:BRBY)	Kering SA (Converted from Euros)	59,368.36	76.30%	111.30%	5,125.68	6,049.08	11.58x	9.81x
(NYSE:RL)	Prada S.p.A. (Converted from HKD)	23,860.59	80.40%	67.20%	1,161.63	1,380.42	20.54x	17.29x
(NYSE:PVH)	PVH Corp.	9,367.50	58.20%	69.20%	934.80	1,216.50	10.02x	7.70x
(NYSE:VFC)	Ralph Lauren Corporation	11,491.30	65.70%	107.20%	937.44	1227.492	12.26x	9.36x
(SEHK:1913)	V.F. Corporation	11,255.10	52.30%	348.10%	767.50	1,068.40	14.66x	10.53x
(NYSE:TPR)	**Tapestry, Inc.**	**10,877.70**	**72.30%**	**144.60%**	**1,248.60**	**1,428.00**	**8.71x**	**7.62x**
				NOTE: was 351% this year but that is not indicative of common cap structure				

	EV/EBITDA of Comparable Companies
Median	**9.81x**
Average	10.83x
25th Percentile	9.14x
75th Percentile	11.36x

Conversion Assumptions (as of 5/6/2024)

1 EURO -> 1.08 USD

1 Pound -> 1.26 USD

1 HKD -> 0.13 USD

DCF: All projected line items are taken from the revenue build and/or the three-statement projection. Shown below is the DCF analysis for base case.

	Financials Summary									
	Historical					Projected				
Year	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Total Revenue	6,027.10	4,961.40	5,746.30	6,684.50	6,660.90	7,064.43	7,469.97	7,681.27	7,935.54	8,134.34
revenue growth		*-17.68%*	*15.82%*	*16.33%*	*-0.35%*	*6.06%*	*5.74%*	*2.83%*	*3.31%*	*2.51%*
COGS	1973.40	1609.70	1664.40	2034.10	1946.00	2057.16	2170.77	2229.11	2299.72	2355.70
%rev	*32.74%*	*32.44%*	*28.96%*	*30.43%*	*29.22%*	*29.74%*	*29.80%*	*29.98%*	*30.12%*	*30.21%*
EBIT	819.70	117.90	1,057.60	1,218.60	1,172.40	1,227.80	1,294.55	1,331.16	1,375.23	1,408.87
%rev	*13.60%*	*2.38%*	*18.40%*	*18.23%*	*17.60%*	*17.38%*	*17.33%*	*17.33%*	*17.33%*	*17.32%*
tax rate	16%	-4%	7%	18%	18%	18%	18%	18%	18%	18%
D&A	268.20	248.30	218.70	195.30	182.20	125.65	130.69	143.69	133.90	136.55
%rev	*4.45%*	*5.00%*	*3.81%*	*2.92%*	*2.74%*	*1.78%*	*1.75%*	*1.87%*	*1.69%*	*1.68%*
CapEx	274.20	205.40	116.00	93.90	184.20	131.37	136.49	150.69	139.51	142.23
%rev	*4.55%*	*4.14%*	*2.02%*	*1.40%*	*2.77%*	*1.86%*	*1.83%*	*1.96%*	*1.76%*	*1.75%*
NWC	670.40	96.20	(58.20)	315.29	375.88	672.19	709.70	756.00	803.85	856.24
%rev	*11.12%*	*1.94%*	*-1.01%*	*4.72%*	*5.64%*	*9.52%*	*9.50%*	*9.84%*	*10.13%*	*10.53%*
Change in NWC		(574.20)	(154.40)	373.49	60.60	296.31	37.51	46.31	47.85	52.39
FCF		740.27	1240.33	724.56	897.40	704.78	1018.22	1038.25	1074.23	1097.21
Discounted FCF						651.55	870.25	820.35	784.68	740.95

WACC Calculation	
Risk Free	4.68%
Unlevered Beta	0.62
Levered Beta	1.34
Equity Risk Premium	4.60%
Effective Tax Rate	18.00%
Cost of Equity	10.86%
Cost of Debt	6.15%
Current Stock Price	39.24
Shares Outstanding	229.3
Market Cap	8,998
Total Debt	7,739.40
Net Debt	906.30
Market Cap	8,997.73
Percent Equity	54%
Percent Debt	46.24%
WACC	8.17%

Terminal Value: Gordon Growth Method	
Terminal Growth Rate	2.00%
Terminal Value	18,143.34
Present Value of TV	12,252.23
Sum of Near Term Cash Flows	3,867.79
Implied Enterprise Value	16,120.02
Implied Equity Value	15,213.72
Implied Share Price	66.35
Implied Upside	69.08%

Terminal Value: Exit Multiples Method	
Median EV/EBITDA	9.81x
Terminal Value	15,167.46
Present Value of TV	10,242.62
Implied Enterprise Value	14,110.40
Implied Equity Value	13,204.10
Implied Share Price	57.58
Implied Upside	46.75%

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Sensitivity Analysis: Given the data, we evaluated that with both intrinsic and relative valuation even with worse case conditions such as lowered terminal growth rates as well as multiples for Gordon Growth and Exit Multiple respectively, we see that our estimated stock prices still reside higher than the current stock price of $38.99 as of 5/7/2024. We also collectively reduced and increased WACC in these analyses.

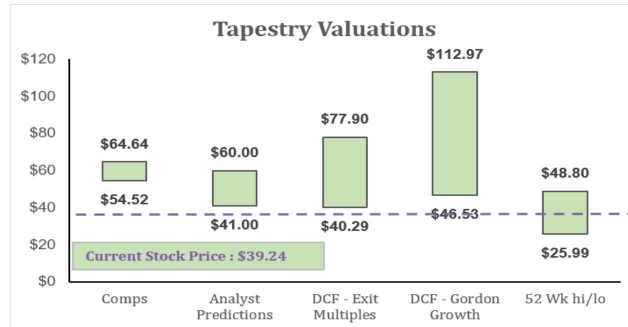
Implied Share Price (GG)

		Terminal Growth Rate				
	66.35	1.50%	1.75%	2.00%	2.25%	2.50%
	7.17%	73.99	76.94	80.17	83.74	87.69
	7.67%	67.55	69.99	72.64	75.54	78.71
WACC	8.17%	62.08	64.12	**66.33**	68.72	71.33
	8.67%	57.38	59.11	60.97	62.97	65.13
	9.17%	53.29	54.77	56.35	58.05	59.87

Implied Share Price (Exit Mult.)

		Multiples				
	57.58	6.81	7.81	9.81	11.81	12.81
	6.17%	47.92	52.92	62.91	72.90	77.90
	7.17%	45.86	50.63	60.16	69.70	74.47
WACC	8.17%	43.91	48.46	**57.56**	66.66	71.21
	9.17%	42.05	46.40	55.09	63.78	68.13
	10.17%	40.29	44.44	52.75	61.05	65.21

Final Football Chart of Several Valuations



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