

Investment Management Group

Fall 2021 Info Session



NORTHWESTERN
UNIVERSITY

Tonight's Agenda

- Club Overview (~20-30 minutes)
- A Sample Pitch (~20 minutes)
- Small Group Q&A (~10-20 minutes)

One Singular Mission

We exist to make investors out of students who are willing to work hard and are eager to learn.

What do we do as a Club?

We spend each quarter understanding businesses with the aim to trade securities

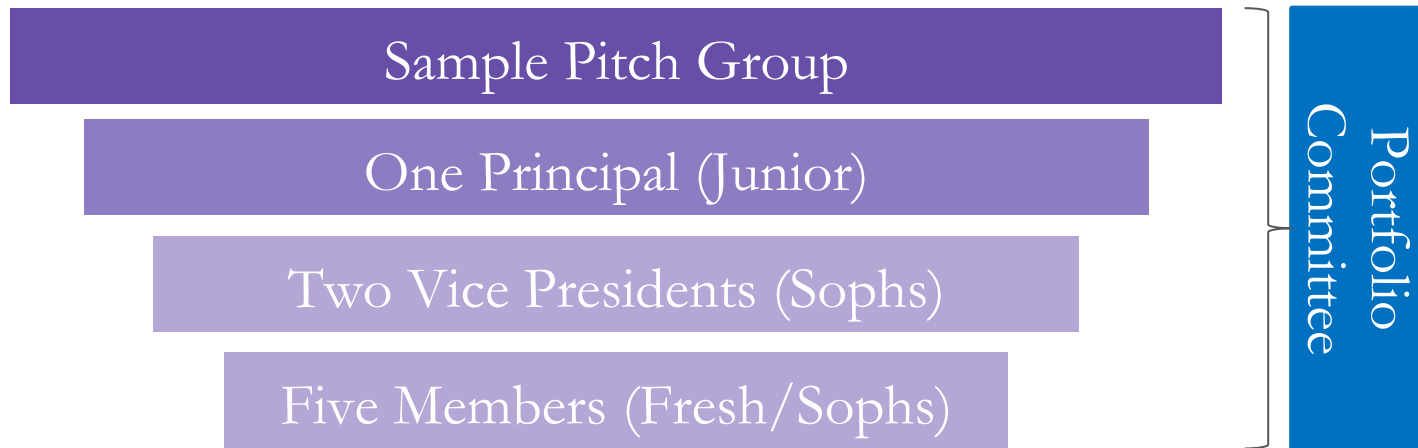
Our core areas of research include the below:

- **Industry Research** (2 weeks): Understand the industry's dynamics and articulate our outlook on the space
- **Company Research** (4 weeks): Understand its competitive advantage, management, and operating profile; articulate our thesis on the business
- **Valuation** (1 week): Build a dynamic model in excel to assess the value of the business under various sets of assumptions
- **Presentations** (1 week): Present conclusions to another pitch group and the Exec Board

The portfolio committee will provide use with a quarterly memo at the end so we can understand their decision-making process to add/leave out certain names

How are we organized?

- We organize our members into six different pitch groups, each tasked with finding, researching, and valuing one company over the quarter
- Each pitch group is run by a Principal who has both mentoring and pitching responsibilities; two Vice Presidents lead the research process by working with members
- Our Club-wide Thursday meetings feature updates from pitch groups



Group structures designed in order to encourage lean teams (resulting in quick learning experiences) as well as opportunities for leadership positions.

Our Training Program

Investing requires two core skillsets:

- (1) Qualitative understanding of the asset / company
- (2) Quantitative ability to forecast future performance

We believe that pitch groups best facilitate the learning of the bucket (1) skillset

We have designed a case-based training program in excel to cover the bucket (2) skillset from our prior experience working at world-class investment banks and private equity firms.

Tim Camp Fires		Case: KCM Base Case											CAGR / Δbps		
Operating Model		Actuals					Estimated					'15A-'20A	'21A-'26E		
(All figures in \$000's unless otherwise noted)		2015A	2016A	2017A	2018A	2019A	2020A	2021B	2022E	2023E	2024E	2025E	2026E		
S'mores Co															
S'mores Sold		1,000	1,100	1,210	1,331	1,398	1,467	1,541	1,618	1,699	1,784	1,873	1,966	8.0%	3.0%
Average S'more Price		2.00	2.04	2.08	2.12	2.25	3.38	3.52	3.66	3.80	3.95	4.11	4.28	11.1%	4.0%
S'More Revenue		2,000	2,244	2,518	2,825	4,542	4,959	5,416	5,914	6,458	7,052	7,701	8,410	19.9%	9.2%
% Growth															
S'mores Sold			10.0%	10.0%	10.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%		
Average S'more Price			2.0%	2.0%	2.0%	53.1%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%		
S'More Revenue			12.2%	12.2%	12.2%	60.8%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%	9.2%		
Crackers		(600)	(667)	(741)	(823)	(873)	(924)	(980)	(1,040)	(1,103)	(1,169)	(1,240)	(1,315)	9.0%	6.1%
Chocolate		(500)	(553)	(678)	(785)	(860)	(954)	(1,041)	(1,126)	(1,206)	(1,292)	(1,384)	(1,482)	13.8%	7.3%
Marshmallow		(750)	(842)	(944)	(1,058)	(1,132)	(1,211)	(1,296)	(1,389)	(1,487)	(1,593)	(1,706)	(1,827)	10.0%	7.1%
Special Sauce		—	—	—	—	(629)	(673)	(721)	(773)	(827)	(886)	(949)	(1,016)	N/A	2.1%
S'More Direct Cost		(1,850)	(2,091)	(2,362)	(2,666)	(3,499)	(3,762)	(4,040)	(4,327)	(4,623)	(4,940)	(5,278)	(5,640)	15.3%	6.9%
Pieces per S'more															
Crackers		2	2	2	2	2	2	2	2	2	2	2	2	—	—
Chocolate		1	1	1	1	1	1	1	1	1	1	1	1	—	—
Marshmallow		1	1	1	1	1	1	1	1	1	1	1	1	—	—
Special Sauce		—	—	—	—	1	1	1	1	1	1	1	1	N/A	—
Total Pieces		4	4	4	4	5	5	5	5	5	5	5	5	4.6%	—
Cost per Piece															
Crackers		(0.30)	(0.30)	(0.31)	(0.31)	(0.32)	(0.32)	(0.32)	(0.32)	(0.32)	(0.33)	(0.33)	(0.33)	1.0%	1.0%
Chocolate		(0.50)	(0.53)	(0.56)	(0.59)	(0.62)	(0.65)	(0.68)	(0.70)	(0.71)	(0.72)	(0.74)	(0.75)	3.4%	2.2%
Marshmallow		(0.75)	(0.77)	(0.78)	(0.80)	(0.81)	(0.83)	(0.84)	(0.86)	(0.88)	(0.89)	(0.91)	(0.93)	1.9%	2.0%
Special Sauce		N/A	N/A	N/A	N/A	(0.45)	(0.46)	(0.47)	(0.48)	(0.49)	(0.50)	(0.51)	(0.52)	N/A	2.0%
Total Pieces		(0.46)	(0.48)	(0.49)	(0.50)	(0.51)	(0.52)	(0.53)	(0.54)	(0.55)	(0.56)	(0.57)	(0.57)	2.1%	1.8%

How are we different?

1 Quarterly Pitch Structure

- Long-term thinking
- Discussion-focused and feedback-oriented
- Better proxies real investing
- Personalized Portfolio Committee coverage

2 The Club Feels Small

- Club Presidents know you
- Checks and balances to ensure everyone is receiving mentorship

3 Case-based, excel driven training

- Learn concepts in the contexts in which they're relevant
- Based on real-world material
- All finalists in annual Northwestern pitch competition have been from IMG

4 Pipeline into Other Pre professional Clubs on Campus

Our Outcomes



J.P.Morgan



strategy&



Morgan Stanley

LAZARD



McKinsey&Company



What We're Looking For

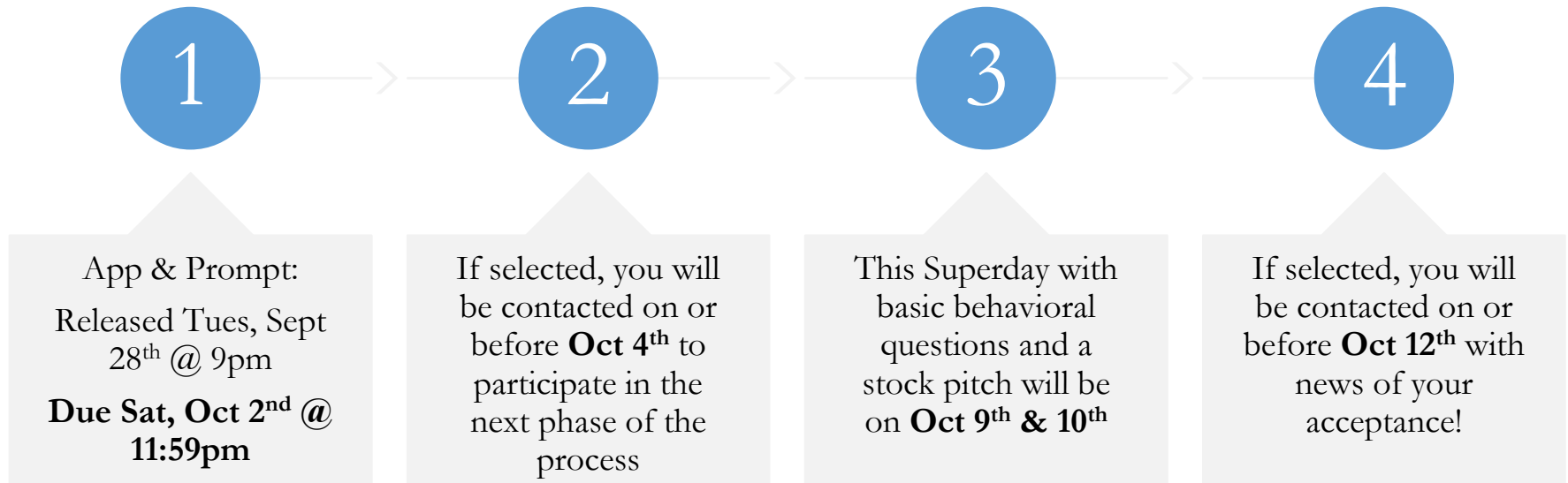
A Candidate's Qualities

- (0) ZERO prior finance or investing experience required
- (1) Smart
- (2) Willing to work hard
- (3) Able to conduct good research

Typical Candidates...

- Are freshmen (fill class first with freshmen)
- Are considering a career in banking, consulting, asset management, private equity, etc.

Recruitment Process



Make sure that you have filled out our “2021-2022 NUIMG Info Session” sign-up form. You need to be on this list to receive our application!

tinyurl.com/nuimginfosession

Questions & Tips

What does the time commitment look like?

- 2 hours weekly training sessions
- 2 hours preparing for weekly deliverables (We've both often put in way more time than this)
- Informal coffee chats/resume checks
- Total **minimum** ~5 hours commitment per week

How do I find what to pitch?

- **Pitch what you know!** – Don't start on the internet e.g. Seeking Alpha/Motley Fool
- Names to avoid: Large Semi Conductor companies, Facebook, Amazon, Apple
- **Helpful Resources:** Look at your company's 10K, Pat Dorsey's video on moats



Don't focus on financial valuation if you don't understand it

Conclusion

- Email northwesternimg@gmail.com if you have any questions
- Look out for our application coming soon!
- Don't forget to **apply by Sat, Oct 2rd** at 11:59PM!



Northwestern Investment Management Group
Example Pitch: PGT Innovations

PGTI
INNOVATIONS

INVENT. BUILD. DELIVER.

NYSE: PGTI

September 28, 2021

INVENT. BUILD. DELIVER.

INNOVATIONS



Rachel Yoon

Sophomore
Major: MMSS and
Economics
Minor: BIP

Artemis Real Estate
Partners



Emily Seo

Sophomore
Major: Human Communication
Sciences and Economics
Minor: BIP

Third Century Investment
Associates



Anirudh Poranki

Sophomore
Major: MMSS
Minor: Data Science

The Interlink Group



Martin Rusanov

Sophomore
Major: International Studies and
Economics
Minor: BIP

Wellington Management

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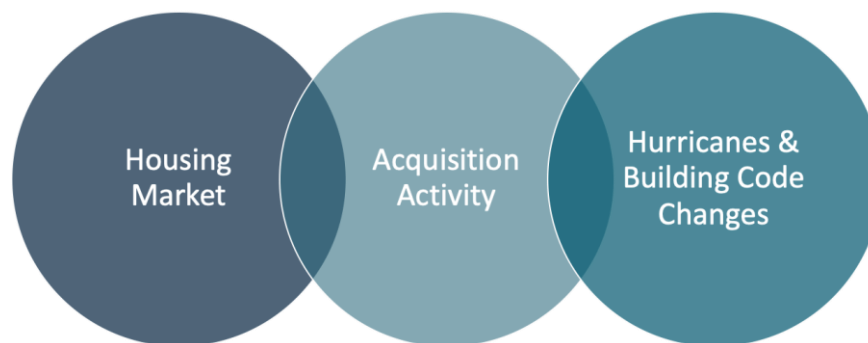
- I. Investment Thesis & Recommendation
- II. Industry Overview
- III. Company Overview & Fundamentals
- IV. Management
- V. Competitive Advantage
- VI. Growth Drivers
- VII. Primary Research
- VIII. Comparable Company Analysis
- IX. Financial Valuation & Assumptions
- X. Questions

Investment Thesis & Recommendation

Investment Thesis

PGTI is the largest impact window & door manufacturer in the country and holds a superior product offering

We believe the company will **continue to capture market share** in Florida and will **grow substantially** in the future due to three trends:



Recommendation

We support a **LONG** position on PGTI and believe our thesis will materialize within the next 5 years. Our unique insights lead us to believe that building code changes are a major catalyst for the impact window industry. The increase in hurricane activity and magnitude will lead to building code reform and bring PGTI to its intrinsic value. We also recommend reevaluation contingent on notable changes to our additional aforementioned trends.

Current Share Price	\$19.74 (EOD 9/28)
Implied Share Price	\$26.56
Potential Upside	34.7%

Window & Door Market Overview

The US window & door market was valued at \$67B in 2020 and is expected to grow at a **6.2% CAGR** over the next 6 years. PGTI operates specifically within impact-resistant windows, whose main alternatives are hurricane shutters & plywood.

Industry trends:

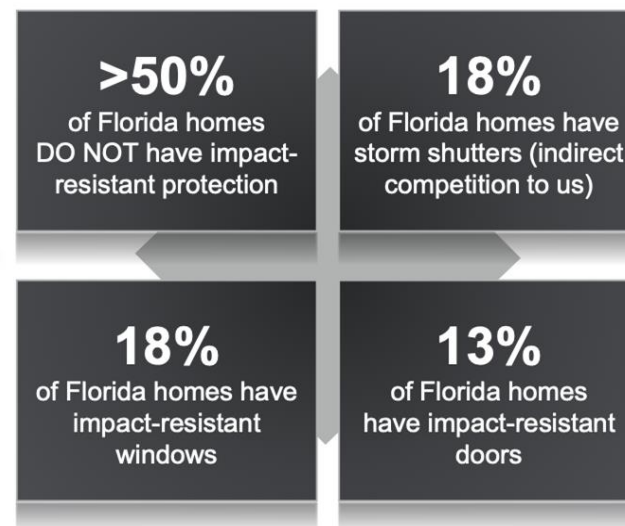
- Rapid market consolidation by PE firms & firms in the industry
- Increased home renovation & building - especially within Florida

Pandemic:

- Shortage of raw materials (aluminum, glass, etc...) due to supply chain issues
- Acceleration of the Florida housing market
 - In May, new housing starts were up 50% Y/Y,
 - Renovations expected to grow 9% and 4% in 2021 and 2022 respectively
 - Increased WFH initiatives accelerated home improvement projects and remodeling

Potential Market & Future Trends:

- Untapped Potential: 64% of the homeowners lack impact-resistant windows
- **Investor View:** PGT controls **60-70%** of Florida market so lack of potential growth
- Product Suite: Overall shift towards customization, vinyl windows & fiberglass entry doors. PGT has seemed to focus on these products through acquisitions & organic growth



Company Overview & Highlights

Company Overview

PGT Innovations is one of the largest manufacturers of **impact-resistant windows and doors**, specifically in the Southeast US markets.

Customer Relationships: PGTI sells their products through a diversified network of 2,000 window distributors, building supply distributors, window replacement dealers and enclosure contractors. The top 10 distributors accounted for 20% of sales in FY 2020.

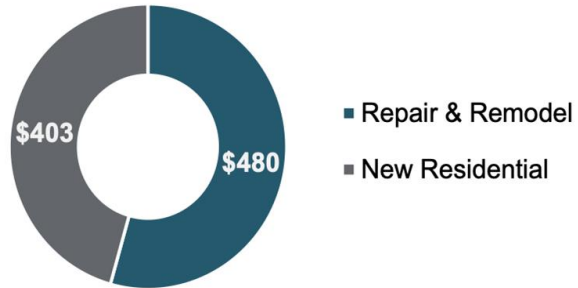
Supplier Relationships: Glass comprises approximately 43% of material costs, aluminium and vinyl compromise 35%, and Polyvinyl butyral and ionoplast make up roughly 5%.

History of Acquisitions: Over the past 8 years, PGTI has strategically acquired 6 companies with the goal of product, geographic, or price point diversification

REVENUE BY SEGMENT (\$M)



REVENUE BY END MARKET (\$M)



Built Strong Foundation	Repositioned	Sustained Growth Ahead
1980 – 2013	2014 – 2017	2018 – 2021 & Beyond
Created leading position in impact-resistant products in Florida through innovation and strong customer focus	Executed acquisitions of two market-leading brands; renamed company PGT Innovations	Established national platform with niche market leadership; leveraging technical expertise, customer focus and operational capabilities
<p>Price: \$110M Date: Sept. 2014</p>	<p>Price: \$103M Date: Feb. 2016</p>	<p>Price: \$1.9M Date: Sept. 2016</p>
		<p>Price: \$355M Date: Aug. 2018</p>
		<p>Price: \$90M Date: Feb. 2020</p>
		<p>Price: \$108M 75% Ownership Stake Date: Feb. 2021</p>

Management



Jeffrey T. Jackson
Chief Executive Officer &
President



Brad West
Interim CFO & Senior VP of
Corporate Development &
Treasurer



Mike Wothe
President of Western
Business Unit



Bob Keller
President of Southeast
Business Unit

	2020 Annual Base Salary	2020 Annual Cash Incentive Plan	2020 Long-Term Incentive Plan
Jeffrey T. Jackson	24%	24%	52%
Robert A. Keller	42%	25%	33%
Mike Wothe	45%	27%	28%
Brent Boydston	45%	27%	28%
Sherri Baker	44%	28%	28%

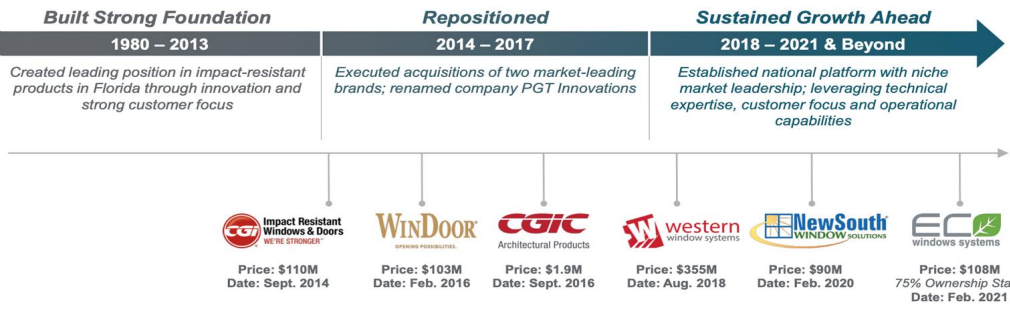
Through primary and secondary research, we've identified three main competitive advantages and one specific barrier to entry

- **Scale of operations**
- **Superior Customer Relationships**
- **Technology**
- **Significant barrier to entry:**
 - Miami-Wade County Certifications are costly to obtain
 - PGTI offers the largest code compliant portfolio and has more notice of acceptance for Miami-Wade County and impact certified products than any other supplier in the nation.

Growth Driver I: Acquisition Strategy

Overview

- PGTI has a proven track record of engaging in strategic acquisitions that drive margin growth, product diversity, and geographic expansion
- The Company is now seeking to expand its reach both regionally and nationally

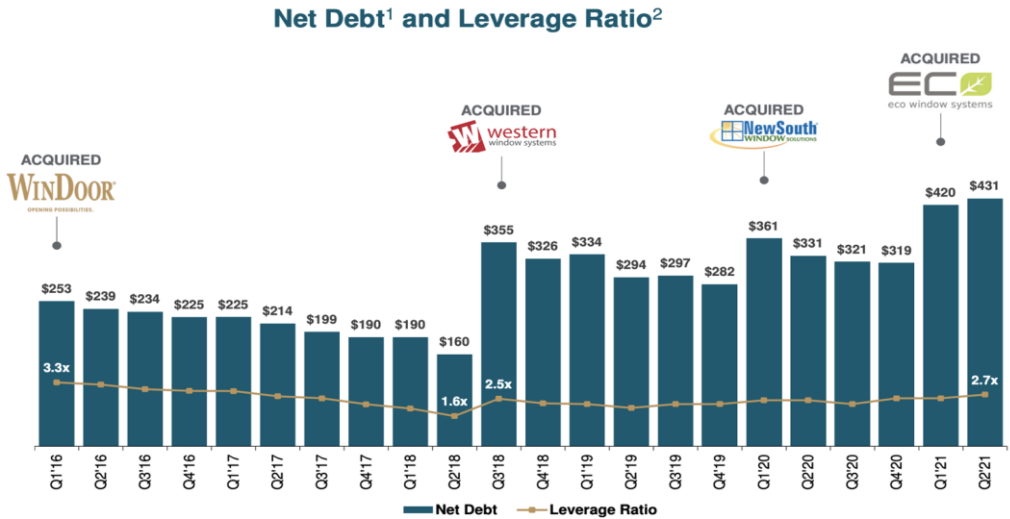


Acquisitions

- Historical:
 - CGI: Consolidated market share & eliminated major competitor in Florida market
 - Western Window: Allowed for geographic expansion to Arizona & California
 - ECO: Mitigated supply chain risk by vertically integrating glass manufacturing
- Future:
 - Focus on geographic expansion & Florida market
 - Potential interest from sponsors & strategics

Risks & Mitigation

- Supply chain issues
- Assumed benefits of acquisitions may not materialize
- Debt accumulation



Growth Driver II: Housing Trends

Overview

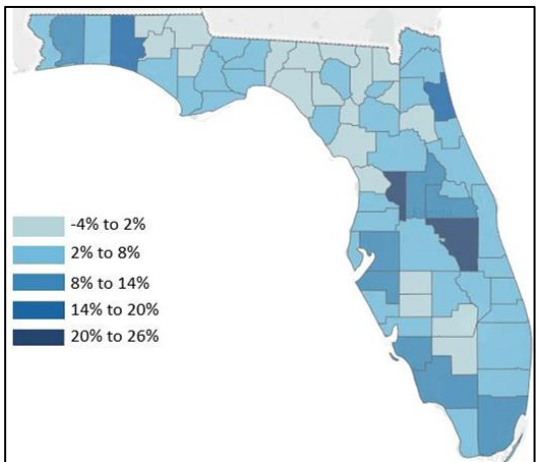
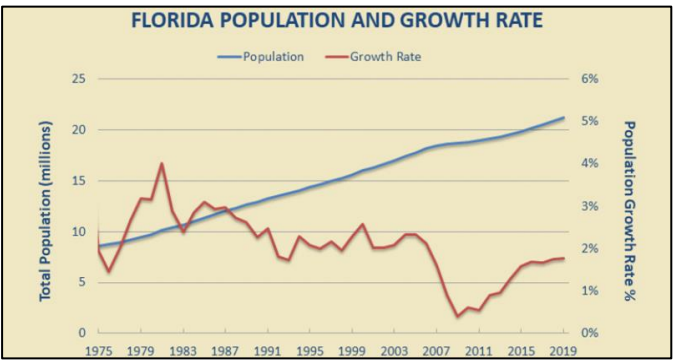
- The housing market, particularly in Florida, has seen strong and consistent growth over the last decade
 - This growth can be attributed to migratory, fiscal, and inflationary trends
- Remodeling demand has also seen historically consistent growth, but recently has grown stronger due to the pandemic

Sustainability of Current Trends

- Demand stems from the need for windows for new homes and for renovations
- New home construction
 - Absence of over-leveraging, high supply, low-credit buyers, and adjustable rates
 - Fed to support MBS until markets stabilize, and historically they don't sell off their holdings afterwards
 - Largest intergenerational wealth transfer in history will occur in the next few years
- Home improvement
 - De-urbanization
 - Increased acceptability and comfort with DIY projects
 - Work-from-home is expected to stay

Risks & Mitigation

- Housing market slow down
- Non-transitory inflation may cause a spike in mortgage rates



Expected Population Change in Next 5 Years

Growth Driver III: Hurricane Intensification & Building Codes

Overview of Category 5 Hurricanes

- Hurricane Andrew (1992): destroyed 63,000 homes, \$27.3 Billion in damage
 - Establishment of Florida Building Codes Study Commission: effective 2002, triennial reevaluation, due 2023
- Hurricane Michael (2018): \$25 Billion in damage

Research

- Northwest Florida has experienced more hurricanes than any other part of Florida since 1851
- Within 5 years, 90% chance we experience the hottest year on record
 - Hotter temps → Greater heat energy → More intense hurricane wind speeds
 - Rainfall rates projected to increase 10-15% per 1°C → Greater intensity/destruction

Differentiated View

- Building codes are constantly updated, but experts (engineers, safety advocates, insurers) believe Hurricane Michael should have forced a review of building codes in panhandle

Risks & Mitigation

- Political Inaction

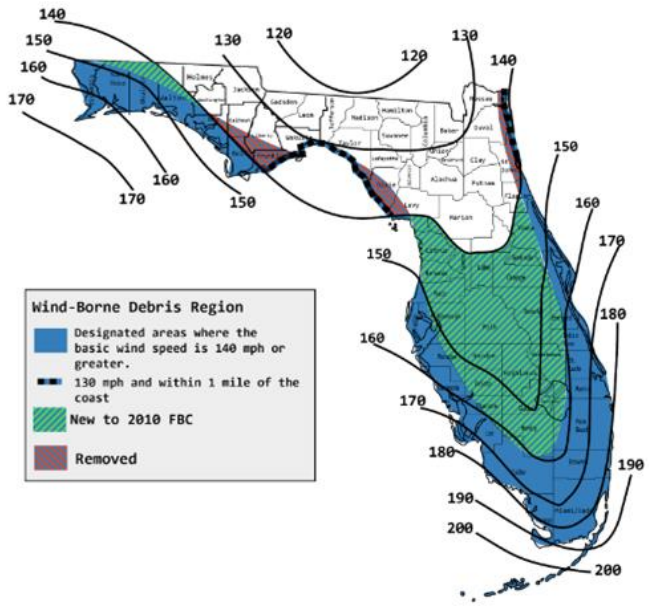


Figure 1609B Risk Category IV Buildings and Structures and Category III healthcare facilities

Primary Research Findings

Primary Research Method

To conduct primary research regarding PGTI's unique product offering and to understand PGTI's strategy of expansion through acquisition we reached out to Stephanie Cz of PGTI. We were fortunate to tour PGTI's main plant and corporate office in North Venice to see the Assembly Plant, Glass Plant, and Innovation Lab and to speak with Stephanie Cz, Ryan Smith (Manufacturing Engineer), and Dean Ruark (Vice President of Product Management and Design). To gain an unbiased perspective into PGTI's competitive advantage and business, we also interviewed local impact-resistant window distributors in the Sarasota area.

Main Questions

How big of a role does hurricane activity play in sales?

What makes distributors choose PGTI over other window companies?

How has PGTI's extended backlog affected distributors?



Comparable Companies Analysis

Company Name	Market Data			Financial Data			Valuation			
	Price	Market Cap	EV	Sales	EBITDA	EBITDA Margins	EV/Sales	EV/EBITDA	EV/EBIT	P/E
	(\$/share)	(\$M)	(\$M)	(\$M)	(\$M)	(%)	x	x	x	x
Jeld-Wen Holding (\$JELD)	28.36	2,841	4,061	4,235	334	8%	0.96x	12.2x	20.4x	30.9x
Cornerstone (\$CNR)	16.7	2,115	5,235	4,617	587	13%	1.1x	8.9x	17.3x	-
Mohawk Industries (\$MHK)	206.64	13,878	15,288	9,552	1,554	16%	1.6x	9.8x	20.0x	26.9x
Masonite (\$DOOR)	116.57	2,924	3,379	2,257	304	13%	1.5x	11.1x	15.9x	42.4x
Armstrong (\$AWI)	112	5,254	5,763	937	254	27%	6.2x	22.7x	33.9x	-
Technoglass (\$TGLS)	20.81	1,173	1,254	378	89	24%	3.3x	14.1x	18.0x	48.5x
Average						17%	2.4x	13.1x	20.9x	37.2x
Median						15%	1.5x	11.6x	19.0x	36.6x
PGT Innovations	22.91	1,382	1,832	883	141	16%	2.1x	13.0x	18.8x	30.6x

In relation to its competitors, PGT is undervalued/in-line on valuation metrics, while also having moats that will lead to growth opportunities

Financial Overview and Assumptions

Projection Assumptions

Revenue:

- Housing trends
- Company strategy
- Company guidance

Expenses:

- Rising labor & raw material costs
- However, recent acquisition of ECO & technological improvement will reduce raw material costs from 2022 to 2025

Income Statement	Historical					Projections				
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Revenue										
New Construction			283.1	368.4	402.5	535.3	669.2	809.7	923.0	1033.8
Repair and Remodel			415.4	376.6	480.1	609.7	737.8	855.8	941.4	1016.7
Total Revenue	458.6	511.1	698.5	745.0	882.6	1145.1	1406.9	1665.5	1864.4	2050.5
COGS incl. D&A	(310.0)	(345.9)	(452.9)	(495.4)	(582.5)	(755.73)	(921.54)	(1,082.57)	(1,193.23)	(1,291.82)
Gross Income	148.6	165.2	245.6	249.6	300.1	389.3	485.4	582.9	671.2	758.7
Margin	32%	32%	35%	34%	34%	34%	35%	35%	36%	37%
Operating Expense										
SG&A	(80.5)	(94.3)	(142.7)	(149.2)	(190.8)	(245.0)	(295.5)	(333.1)	(372.9)	(389.6)
Other Operating Expense	(11.1)	(10.7)	(6.3)	(10.6)	(11.7)	(16.3)	(20.0)	(23.7)	(26.5)	(29.2)
Total Operating Expense	(91.6)	(105.0)	(149.0)	(159.8)	(202.5)	(261.3)	(315.5)	(356.8)	(399.4)	(418.8)
Operating Income (EBIT)	57.1	60.2	96.6	89.8	97.7	128.0	169.9	226.1	271.8	339.9
D&A	15.7	19.5	24.5	34.7	42.8	56.1	63.3	68.3	70.8	71.8
EBITDA	72.7	79.7	121.1	124.5	140.5	184.1	233.2	294.4	342.6	411.7
Margin	15.9%	15.6%	17.3%	16.7%	15.9%	16.1%	16.6%	17.7%	18.4%	20.1%
Non-Operating Income	0.1	0.2	2.7	(4.7)	2.5	3.2	4.0	4.7	5.2	5.8
Interest Expense	(20.3)	(20.5)	(26.9)	(26.8)	(27.8)	(34.4)	(42.2)	(50.0)	(55.9)	(61.5)
Unusual Expense	(1.3)	0.0	(7.2)	(2.2)	(15.3)	3.4	4.2	4.9	5.5	6.1
EBT	35.5	39.9	65.2	56.1	57.0	100.2	135.8	185.8	226.6	290.2
Income Tax	(11.8)	(0.1)	(11.3)	(12.4)	(11.9)	(25.1)	(34.0)	(46.4)	(56.7)	(72.6)
Tax Rate	33%	0%	17%	22%	21%	25%	25%	25%	25%	25%
Income from Continuing Operations	23.7	39.9	53.9	43.7	45.1	75.2	101.9	139.3	170.0	217.7

Cash Flow Projections	Historical					Projections				
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
EBIT	57.1	60.2	96.6	89.8	97.7	128.0	169.9	226.1	271.8	339.9
Tax	(11.8)	(0.1)	(11.3)	(12.4)	(11.9)	(32)	(42)	(57)	(68)	(85)
Effective Tax Rate	33.3%	0.2%	17.3%	22.2%	20.9%	25.0%	25.0%	25.0%	25.0%	25.0%
NOPAT	45.3	60.1	85.3	77.4	85.8	96	127	170	204	255
+D&A	15.7	19.5	24.5	34.7	42.8	56.1	63.3	68.3	70.8	71.8
-CapEx	(17.7)	(17.8)	(29.8)	(31.3)	(24.8)	(34)	(41)	(47)	(50)	(55)
-Change in NWC	-	8.7	5.1	6.1	30.6	36.3	26.6	23.6	4.9	20.2
uFCF	43.2	53.1	74.9	74.8	73.2	81.4	123.3	167.6	219.4	251.1
Discount Period						1	2	3	4	5
DCF						75.5	106.1	133.8	162.5	172.5

See valuation for further assumptions and justifications

Financial Overview and Assumptions Cont.

Implied Share Price (Gordon Growth Method)

PV of FCF		650.5
Terminal Value		2,954.93
	Discount Rate	7.80%
	Terminal Growth Rate	1.85%
PV of Terminal Value		2,030.08
Enterprise Value		2,680.60
	-Total Debt	474.27
	- Lease	703.078
	+Cash and Eqv	100.32
Equity Value		1,603.58
Shares Outstanding		60.32
Implied Share Price		<u>26.58</u>
Current Share Price as of 8/13		20.41
Implied Return on Investment		30.2%

Thank You

— IMG INVESTMENT MANAGEMENT



Thank You!
Questions?

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Anirudh Poranki: AnirudhPoranki2024@u.northwestern.edu Martin Rusanov: MartinRusanov2024@u.northwestern.edu

Work Cited

PGTI Annual Report FY2016-FY2020

PGTI Investor Presentation FY2013-FY2020

Conversations with PGT Executives, PGT distributors, Representatives of local window/door distributors

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