



Forest2Market[®]



Forest2Market®

Overview

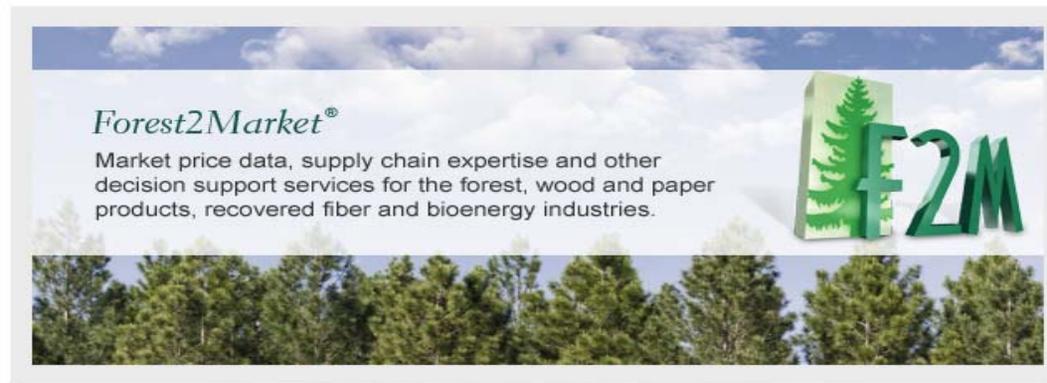
Our Belief

The only way to achieve a true measure and understanding of the market is to collect transactional data.

An Exponentially Better Business Model

Transaction data is the foundation of all our products and services (opened sales orders, purchase orders, scale tickets).

50,000,000
transactions
collected
annually.



A History of Positive Change



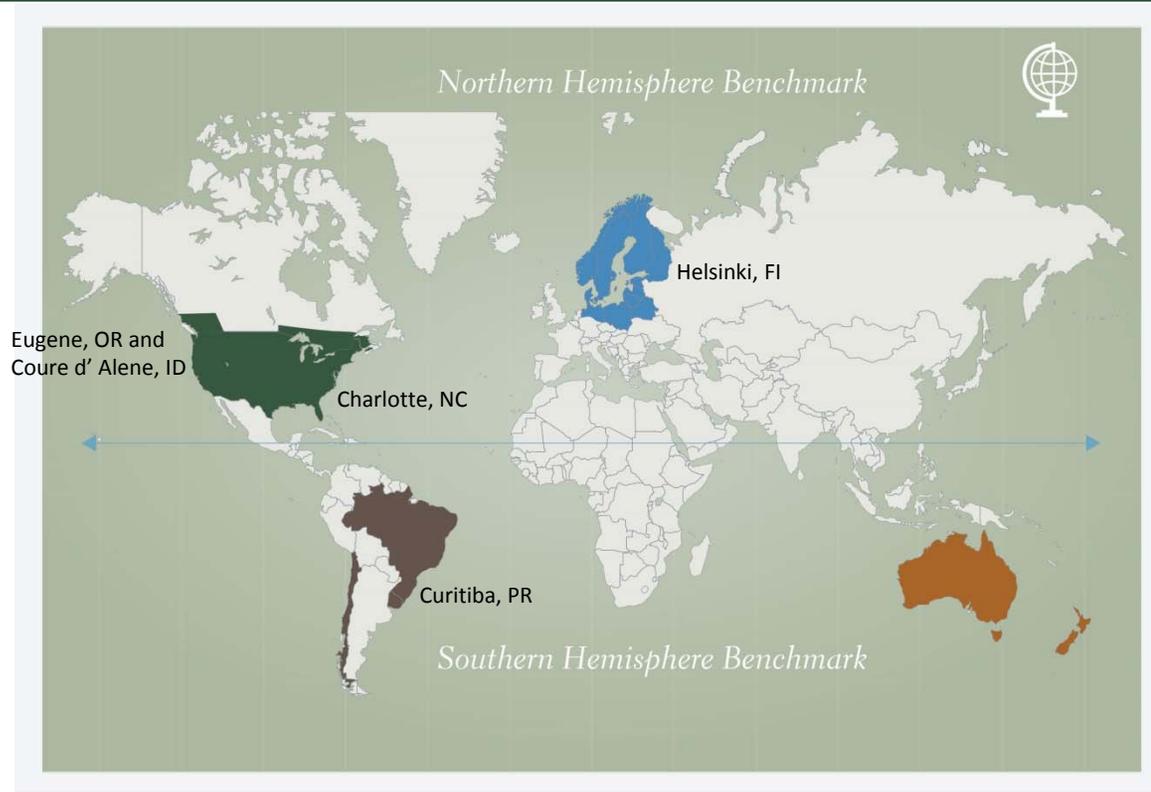
Our customers make better-informed decisions and thrive because they have reliable and consistent measures of their performance compared to the broader market.

Our commitment to deliver the most accurate, credible and quantitative market insight to our customers has never wavered.



Forest2Market®

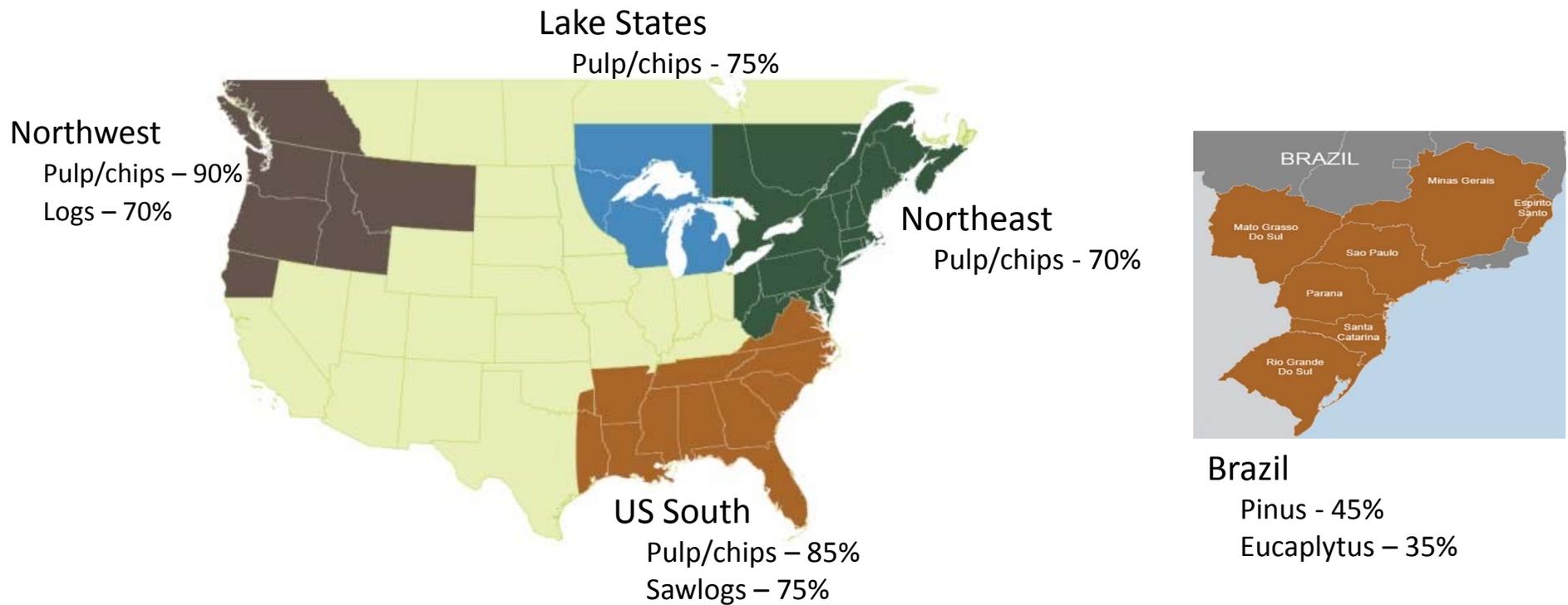
Market Coverage





Forest2Market®

Delivered Raw Material Cost Benchmarks





Forest2Market

Three Fundamental Drivers for North America

- Long fiber (pine/conifer) supply squeeze leads to cost structure changes.
- Population growth occurs outside of North America.
- Millennial behavior dampens housing demand.



North American Softwood Fiber Cost Expansion

Mill costs will unevenly and dramatically change relative pulp mill cost positions.

- Major wood fiber cost increases
 - Robust demand for long fiber products
 - Pulp and OSB*
 - Renewables
 - Pellets and biofuels/biochemicals*
- Similar trends in Latin America



New Pellet Demand - A Significant Increase in Softwood Fiber Demand

Forest2Market Global Pellet Forecast

Region (Type)	Year 2020 Pellet Demand (Million Metric Tons)
Europe (Industrial)	21.9
Europe (Heating)	14.8
Asia (Industrial)	5.6
North America (Heating)	5.3
Other	1.3
Total	48.9

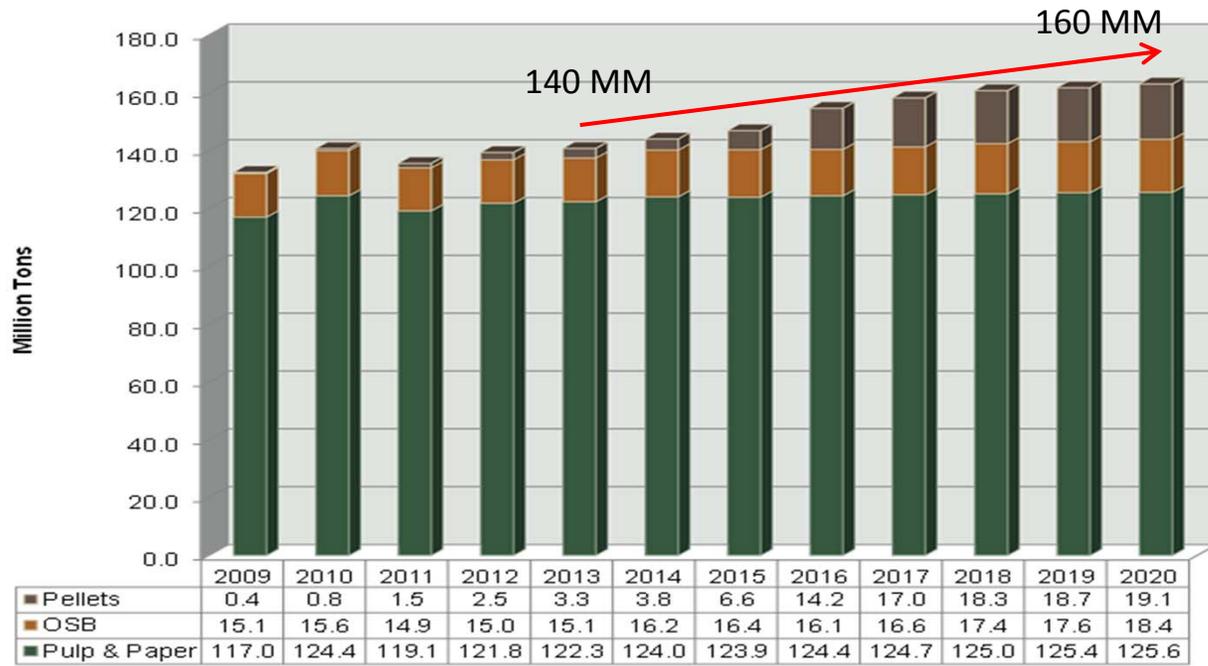
Forest2Market Pellet Production Allocation Model

Demand/Production (Year 2020)	Million Metric Tons
Global Demand	48.9
Less 80% of Asian Demand (Supplied by Asia and Western North America)	(4.5)
Less 50% of North American Heating Demand (Supplied by Northern US/Canada)	(2.6)
Net Global Demand	41.8
Less South Production (Operating + Construction, Year 2015)	(8.8)
Less Other Global Production (Operating, Current)	(17.9)
Remaining Production Capacity Needed to Meet Global Demand	15.1
Less Assumed Incremental US South Production Capacity (30% of Announced Projects)	(3.1)
Less Assumed Other Incremental Global Production Capacity (30% of Current Other Global Capacity)	(6.0)
Potential Incremental Production Capacity from US South	6.0

= 9.1 remaining for US South
= 20 million tons of fiber



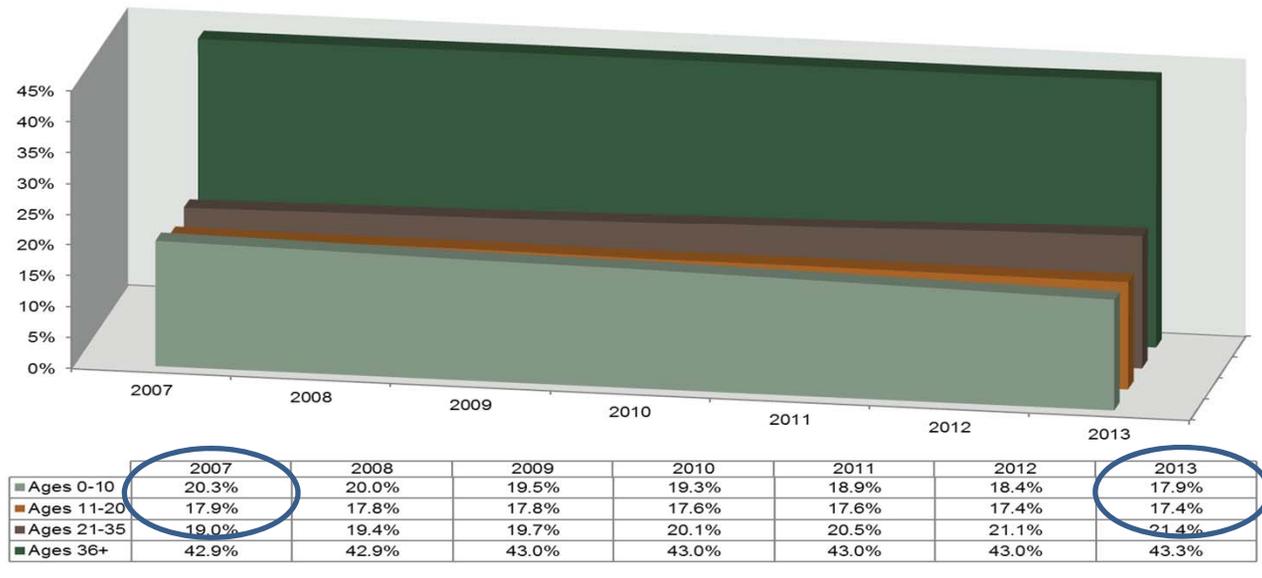
Strong Pulp Demand, OSB Rebound and Age Class Squeeze Drive Fiber Prices Higher



Expect pellet demand to add another 10-15 million tons of pine pulpwood demand by 2020.

Strong Pulp Demand, OSB Rebound and Age Class Squeeze Drive Fiber Prices Higher

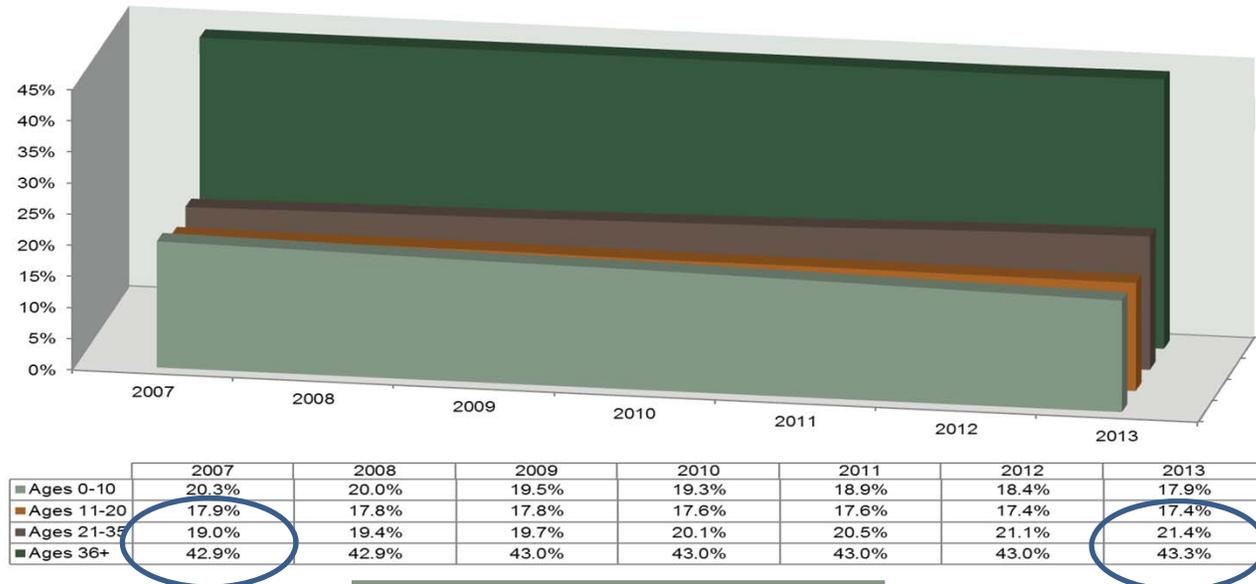
US South Acres by Age Class 2007 - 2013
(US Forest Service - Forest Inventory Analysis)



Young pine acres are diminishing, driving down effective supply.

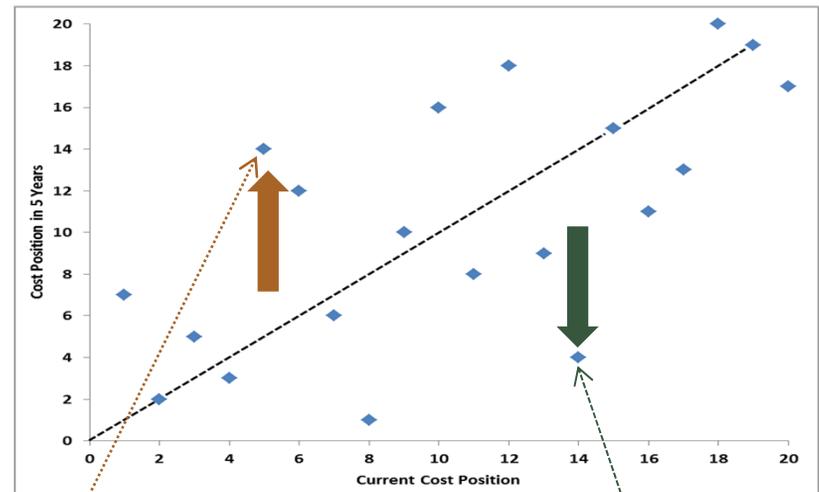
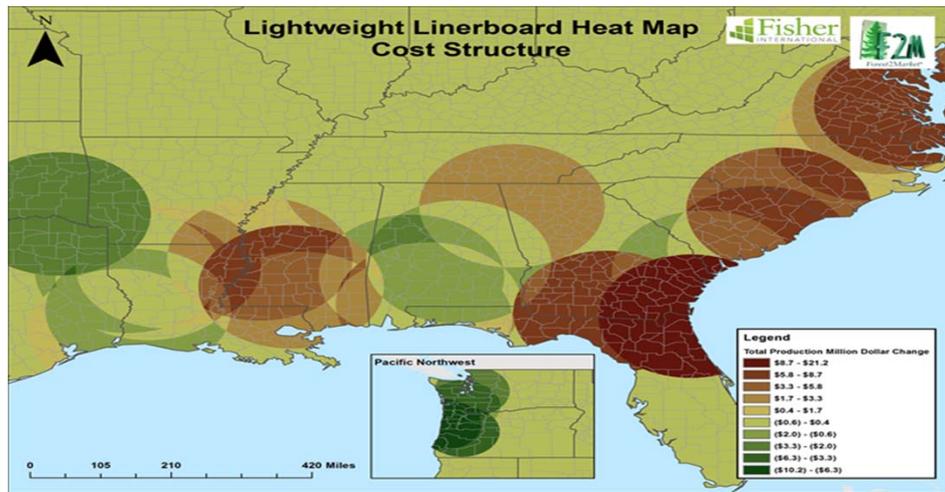
Strong Pulp Demand, OSB Rebound and Age Class Squeeze Drive Fiber Prices Higher

US South Acres by Age Class 2007 - 2013
(US Forest Service - Forest Inventory Analysis)



Young pine acres are diminishing, driving down effective supply.

Significant Cost Structure Changes in Softwood Fiber Market – However, Very Uneven



Early results indicate that this mill's costs will move from 1st to 4th quartile as structural demand and supply changes take hold.

Overall cost structure increases, but this mill gains in relative competitiveness.



Forest2Market

Population Growth Is Far from North America



+1.2 billion; 4-7% GDP

By 2050



+125 million; 2-4% GDP



+400 million; 7% GDP

And



-34 million; 7% GDP

Increasingly urbanized population (1.3 billion) will drive consumption.



Forest2Market®

Canadian Population Growth

By 2050



+8 million; 2-3% GDP



Forest2Market

Modest Population Growth at Home

By 2050



Theoretically should add 350-450,000 new single family starts annually to baseline, but.....

+70 million; 2-3% GDP



Forest2Market®

Millennials – 92 Million Between 15-35

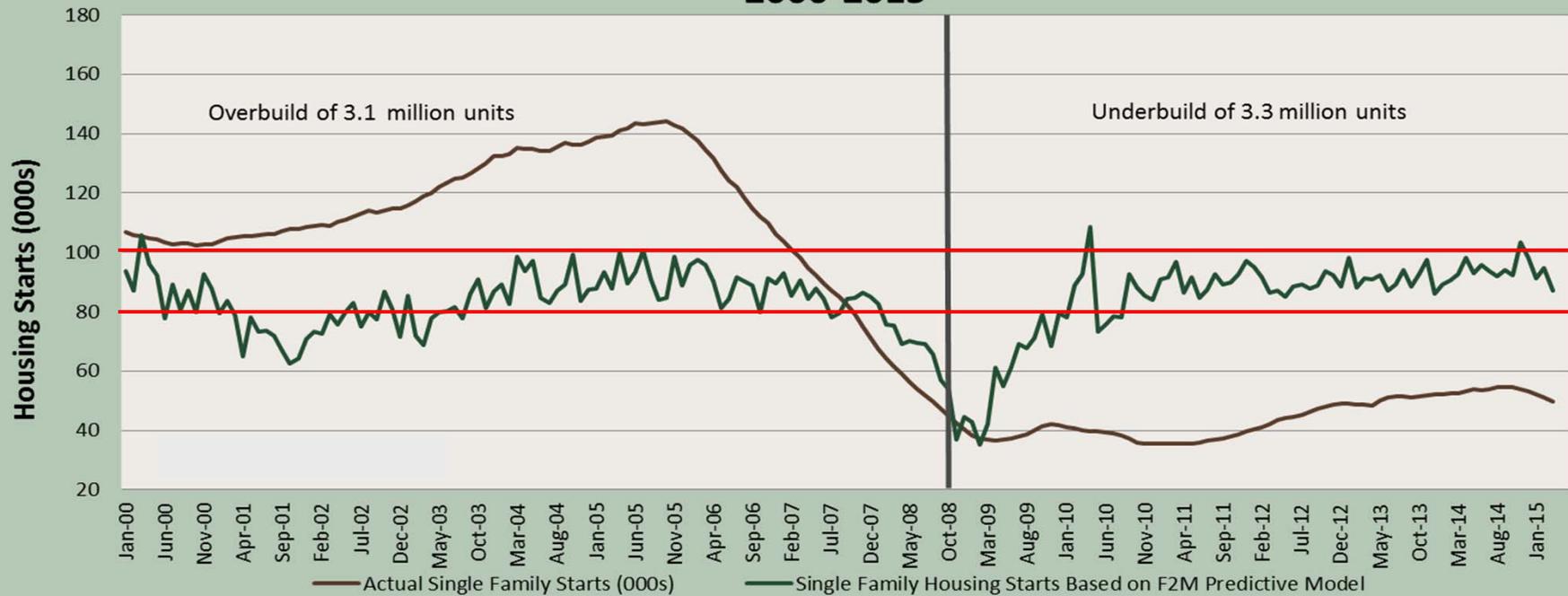
- Peak home buying years – 25-45 years
- Marriage
 - 1970 – 23 years old
 - 2010 – 30 years old
- Married and own a home (18-31 years)
 - 1968 – 56%
 - 1981 – 43%
 - 2012 – 23%
- Urban Centric
- 93% want to own their own homes, but the financials may not make sense:
 - 41% work full-time
 - 50% have less than \$5,000 in savings
 - Average student loan debt \$33,000





Housing Market Has Rebalanced

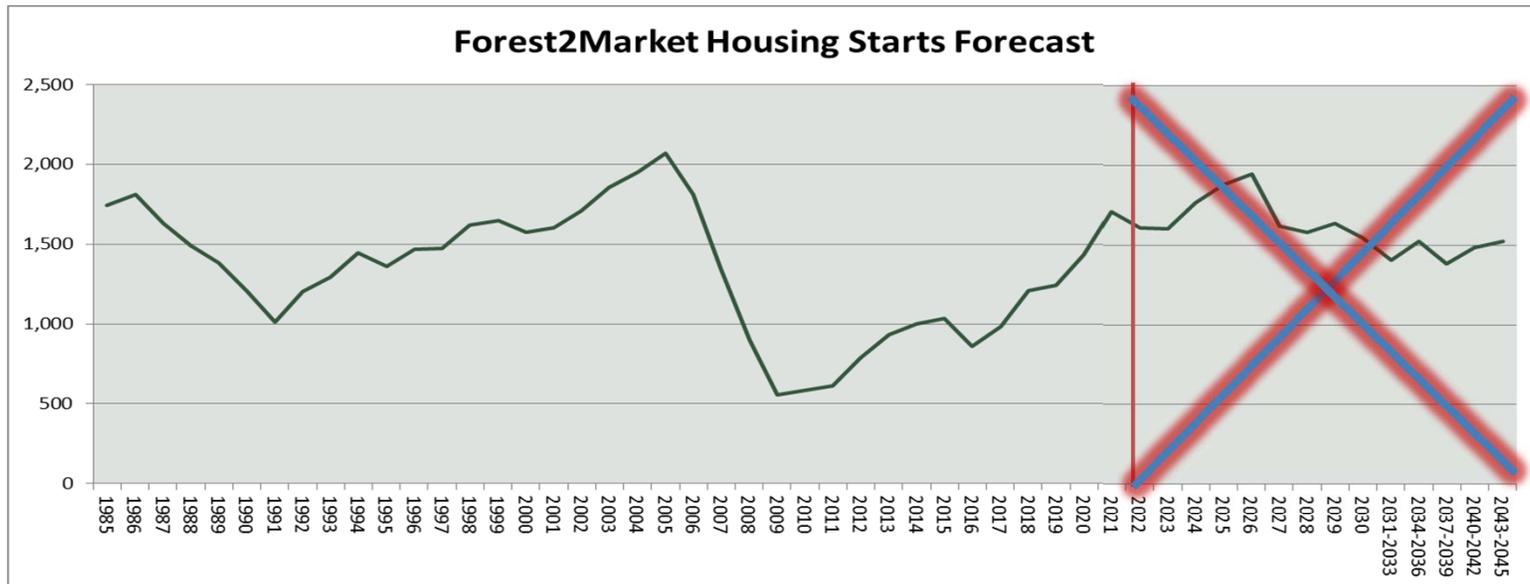
Housing Starts - Actual vs. F2M Predictive Model 2000-2015





Forest2Market®

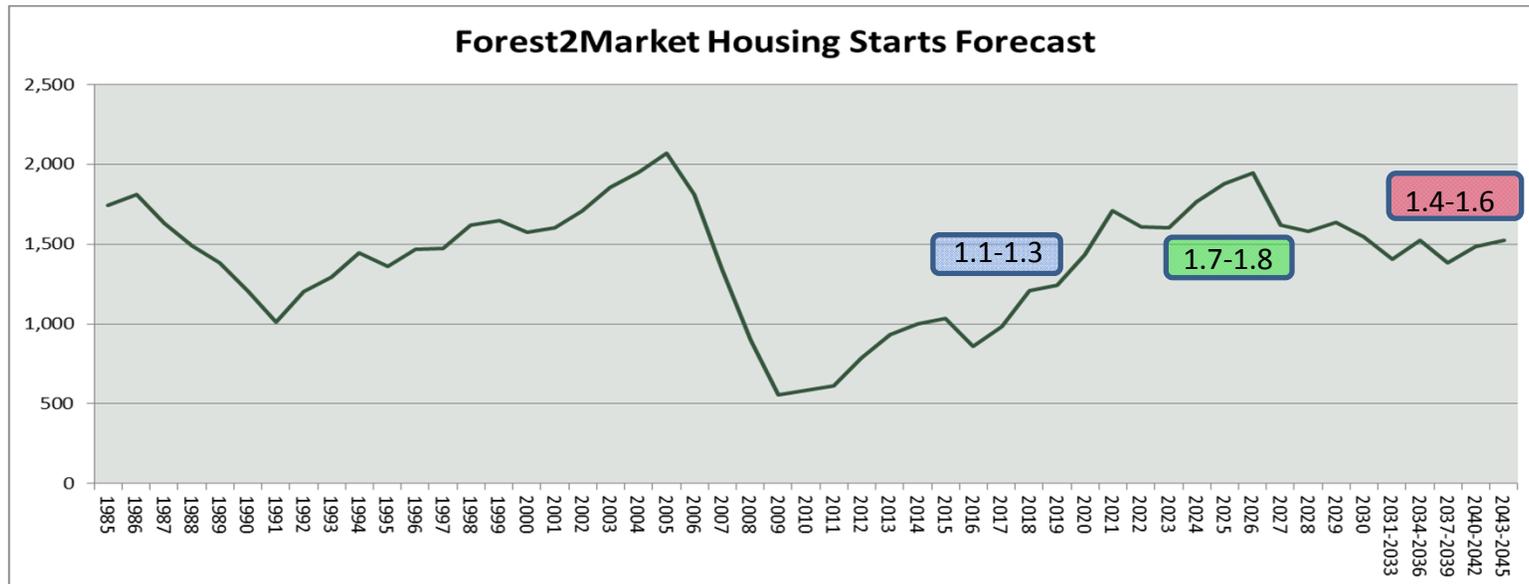
Housing Market Forecast





Forest2Market®

Housing Market Forecast





Forest2Market

Population Growth Is Far from North America



+1.2 billion; 4-7% GDP

By 2050



+125 million; 2-4% GDP



+400 million; 7% GDP

And



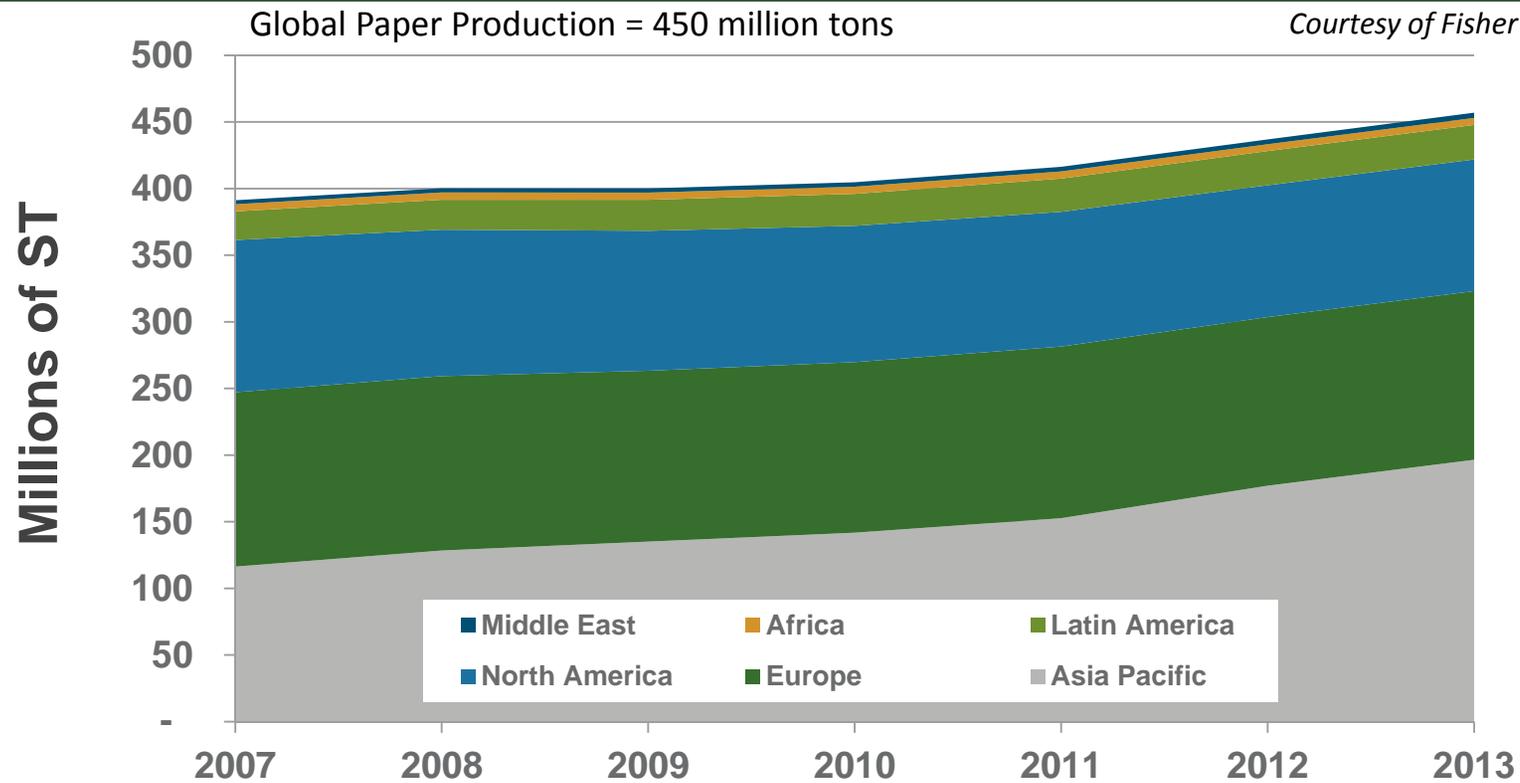
-34 million; 7% GDP

Increasingly urbanized population (1.3 billion) will drive consumption.



Forest2Market

Paper – A Growing Industry





Forest2Market®

Growth in Demand by Grade and Market

	Africa	Asia Pacific	Europe	Latin America	Middle East	North America	Global
Market Pulp	1.00%	4.55%	-0.97%	7.80%		-0.48%	2.38%
Newsprint	-8.25%	1.09%	-2.93%	-2.55%	1.18%	-6.49%	-2.99%
Packaging	3.19%	8.50%	1.22%	3.76%	7.73%	-0.26%	4.02%
Printing and Writing	-0.75%	4.95%	-1.45%	0.00%	2.26%	-4.20%	0.13%
Specialties	3.93%	8.93%	-1.47%	-2.47%		0.13%	1.81%
Tissue and Towel	8.34%	12.01%	2.56%	3.92%	9.86%	0.37%	6.18%

Green arrows point up from Africa, Asia Pacific, Latin America, and Middle East. Red arrows point down from Europe and North America. The Global column is circled in blue.

Courtesy of Fisher International



Forest2Market®

North American Demand

- Tepid housing recovery
 - Lots of sawlogs for a long time
 - No price appreciation in sight
- Pulp/paper
 - Long fiber pine/softwood squeeze
 - Short fiber hardwood abundance



Forest2Market

Conclusions

- New demand outside NA
 - Build exposure to export demand
- Changing pulp cost position
 - Understand your customer's cost position and risk to global trends
- Mitigate over-exposure to sawtimber harvests
- Short hardwood pulpwood



Forest2Market, Inc.
15720 Brixham Hill Ave
Suite 550
Charlotte, NC 28277

Forest2Market[®]

Peter Stewart

President/CEO

Office: 980.233.4010

peter.stewart@forest2market.com