Real Estate and Timberland Handout
PRIM Asset Allocation Discussion
October 15, 2015
(Internal)

Real Estate

Themes

- Employment growth – The key is where...
- Demographics
  - Boomers and Millenials
  - % population growth slowing but 50 million new Americans expected in the next 20 years.
- Construction pipeline – still low but growing. Certain markets have well exceeded averages (San Jose, Austin, Seattle). Office is biggest supply risk.
- Valuations & Cap Rates – All time low cap rates risky but supported by low supply = above inflation rent growth and wide spread to 10YT.
  - Spread tightening and rate normalization baked in
- Lending and Interest Rates – Low rates but moderate construction lending. Driven by psychology and risk management/retention.
- High Yield capital flow to CRE?
- Auctions harder to get through - Cracks in capital demand though?

Cap Rate

- Definition:
  - Net operating income / purchase price
  - Does not include:
    - Capital Investment – Leasing costs and construction, common area and exterior improvements (below the line).
    - Debt service
    - Future rent growth
    - Market Yield compression and expansion
- Cap rates are effective in communicating CRE pricing but can be blunt as a decision making tool.

A framework for thinking about the real estate cycle

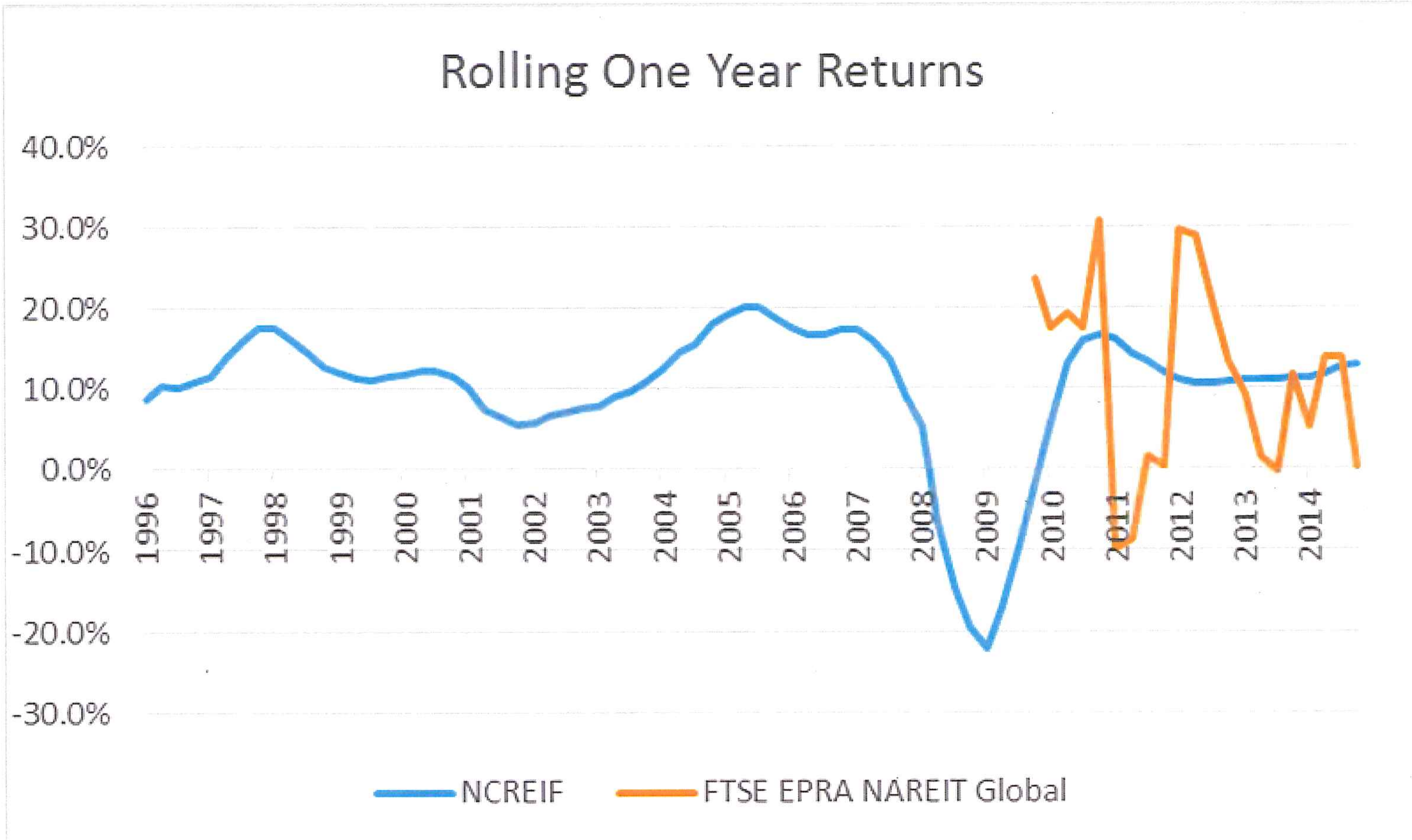
	Business Cycle	Property Fundamentals Cycle			Real Estate Capital Markets Cycle		
	GDP and Employment	Occupancy	Rents	Construction	Transaction Volume	Values	Credit Availability
1. Early Recovery	Begin growing	Below average, but stabilizing	Flat	Almost none	Very low	Stabilized at cyclical low level	Limited
2. Recovery	Accelerate	Begins rising	Small increase	Very low	Increasing	Increase as yields start to compress	Some available
3. Expansion	Expand beyond prior peak	Rises past historic average	Strong growth	Reaches long-term average	Above-average	Reach prior peak	Widely available
4. Late Cycle	Overheat and approach peak	Far above historic average	Slowing growth	Record deliveries	Record high	Hit new highs	Loose terms
5. Falling	Start declining	Declines to average	Stall	Still above average	Falling	Down or flat as yields expand	Tightening
6. Bottoming	Falling and stagnant	Falls below historic average	Sharp decline	Slows	Liquidity dries up	Down as yields expand to cycle highs	Constrained

Source: LIM

Market Cap Rates and Spreads

Source: Real Capital Analytics, PRIM

Real Estate Returns

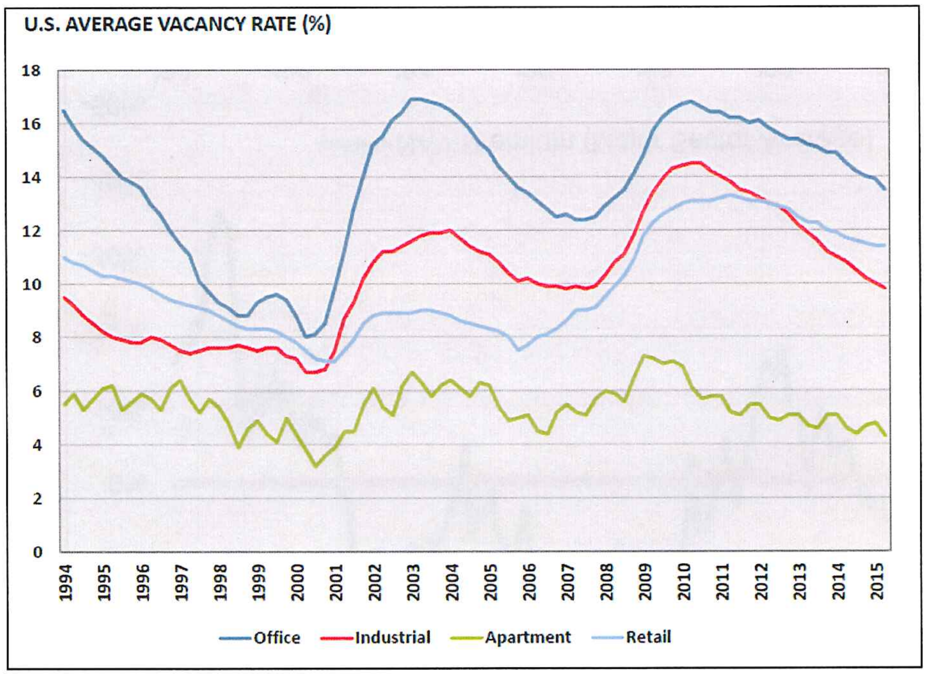


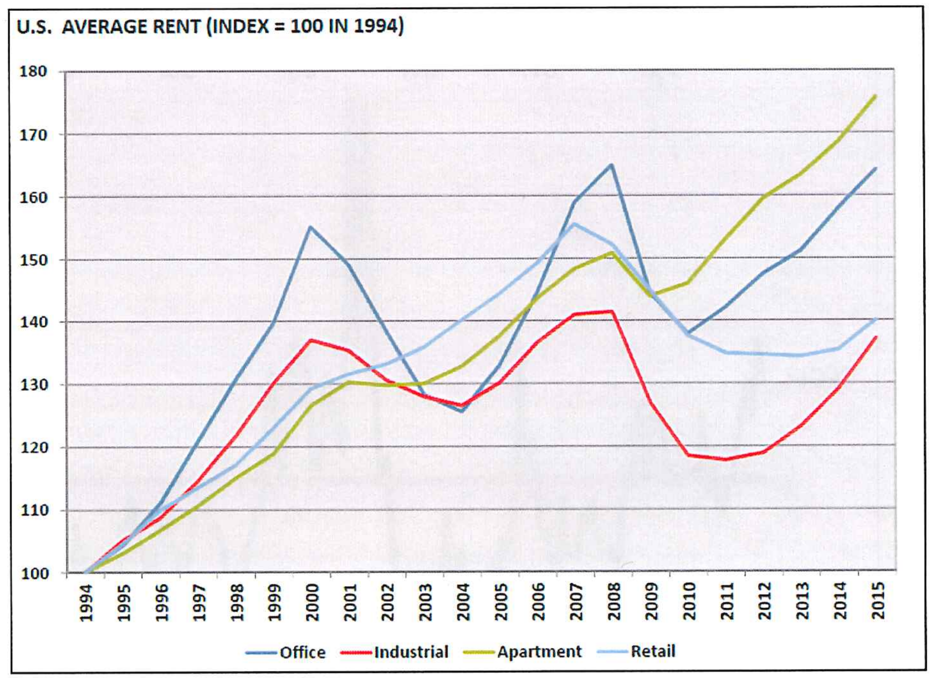
Source: Factset, PRIM
Note – FTSE EPRA NAREIT Global, USD, net, unhedged

U.S. Transaction Volume

Source: Real Capital Analytics, PRIM

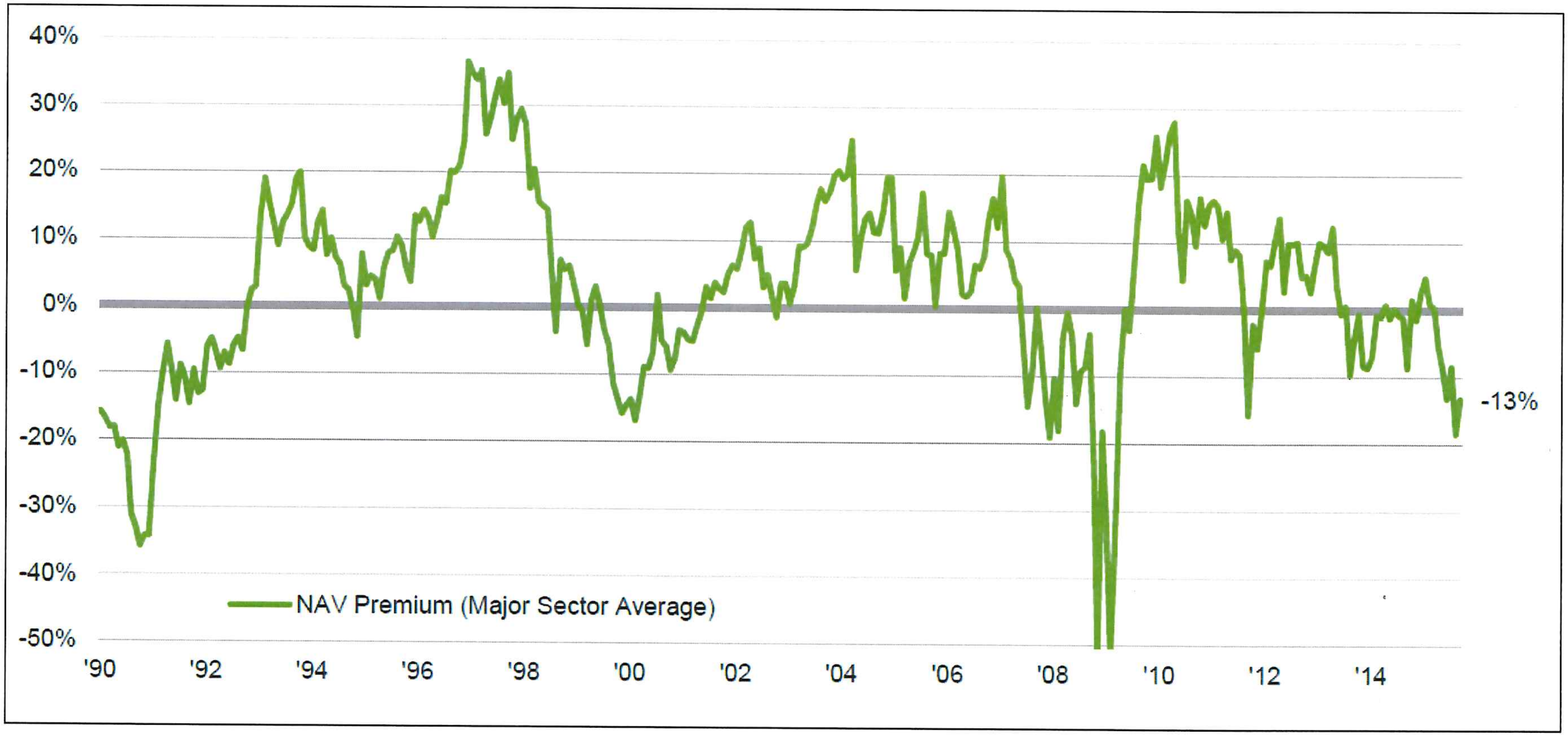
U.S. Fundamentals





Source: CBRE-EA, 2015Q2, AEW

US Public vs. Public Real Estate Values



Source: Green Street Advisors

Interest Rates and REITs

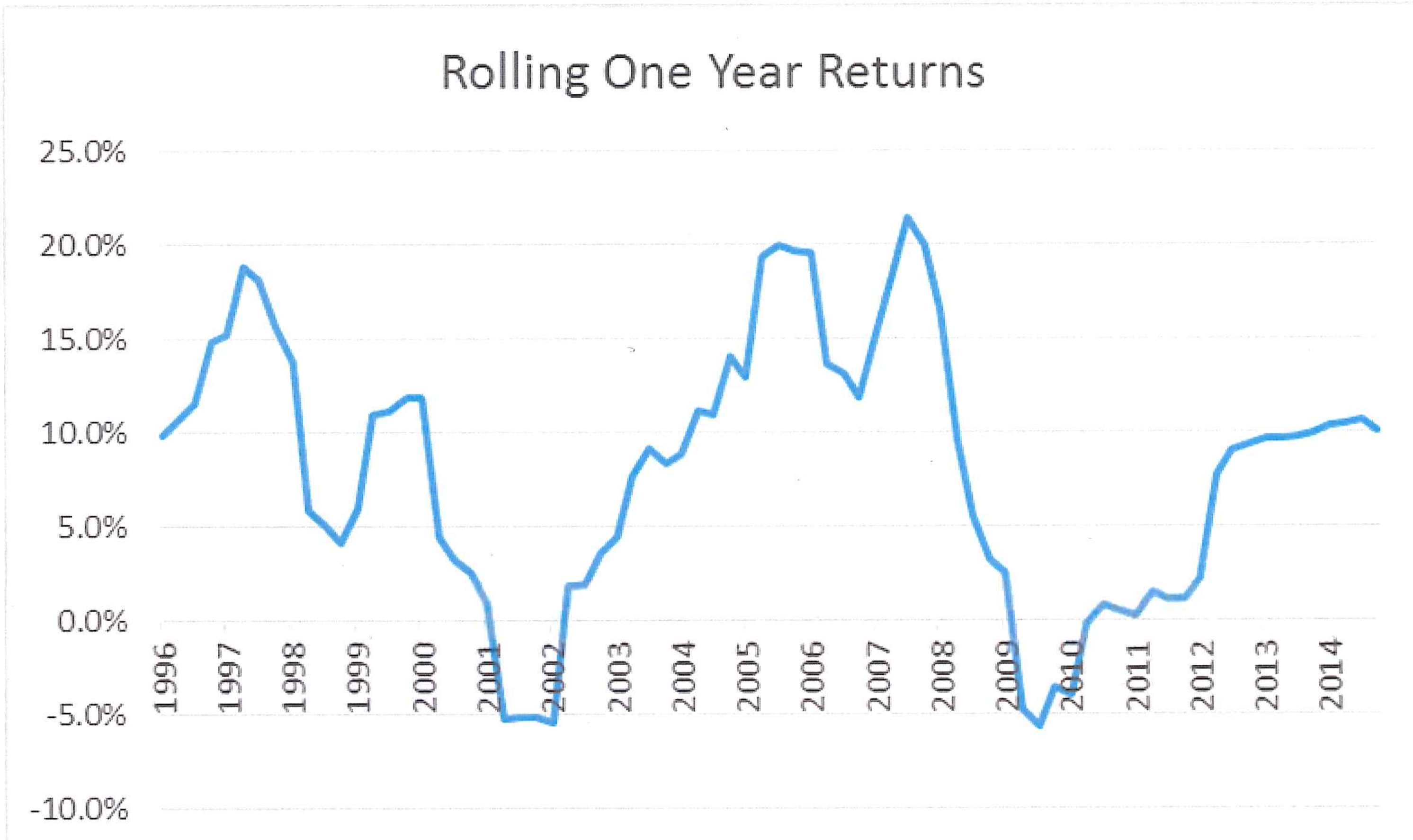
- Volatility in the REIT market has been high, driven by expected interest rate increases.
- History would indicate that after an initial sell off, REIT performance often rebounds.
- Interest rates are rising during times of growth in employment and consumption, driving real estate rents.
- Dispersion often increases due to differences in company leverage and lease duration.

Sell-Off Period		Rate Rise During Sell-Off	Acute Periods of Interest Rate Fears		REITs vs. S&P 500 Index	1 Year	
			REITs Return	S&P 500 Index Return		Subsequent REIT Returns Post Sell-off Period[2]	Subsequent S&P 500 Index Returns Post Sell-Off Period
Aug 90	Sep 90	0.45%	-13.76%	-13.45%	-0.31%	32.84%	31.09%
Oct 93	Dec 93	0.41%	-7.38%	2.32%	-9.70%	3.17%	1.32%
Jun 99	Nov 99	0.57%	-13.19%	7.36%	-20.55%	21.79%	-4.23%
Apr 04	Apr 04	0.67%	-14.58%	-1.57%	-13.01%	34.62%	6.33%
Jan 09	Feb 09	0.80%	-34.53%	-18.14%	-16.39%	95.19%	53.55%
May 13	Jun 13	0.81%	-7.96%	0.97%	-8.92%	-	-
Averages[1]		0.58%	-16.69%	-4.70%	-11.99%	37.52%	17.61%

Source: Invesco Real Estate, 2013. Reference rate is 10YT

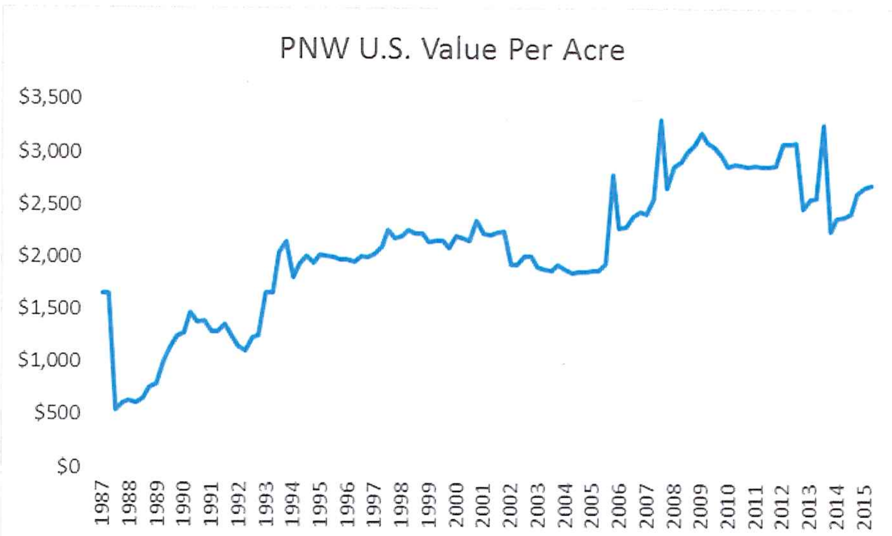
Timberland

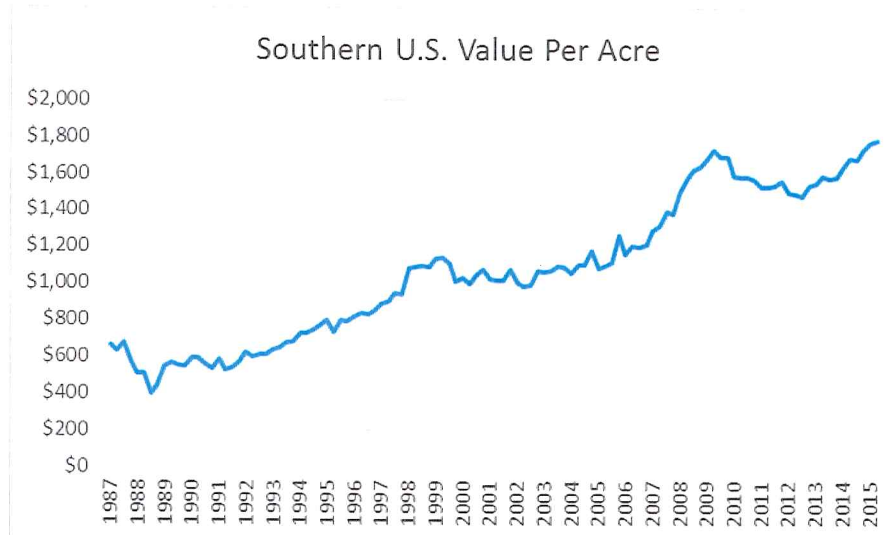
U.S. Timberland Returns



Source: Factset, PRIM

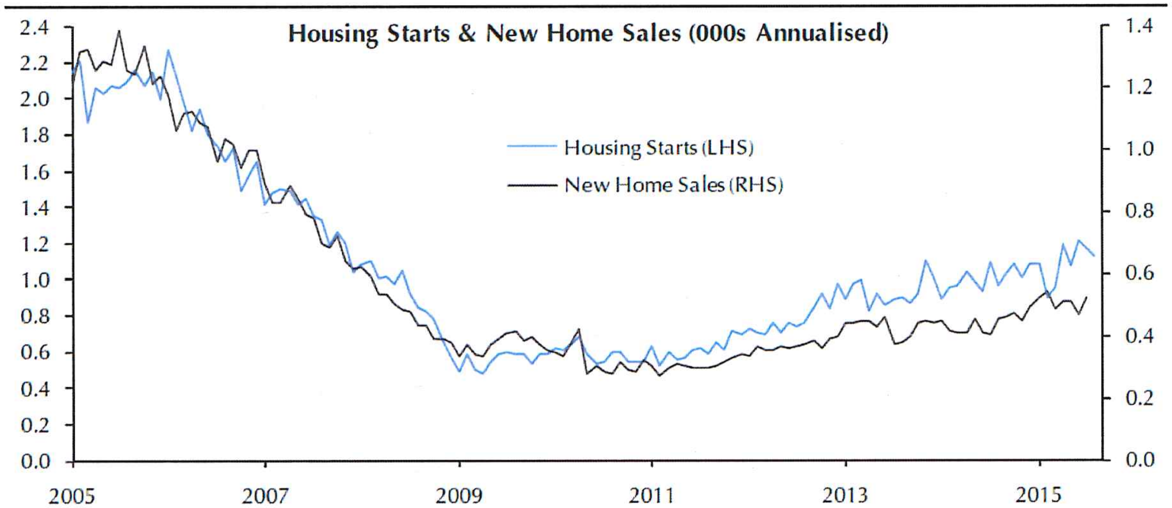
U.S. Timberland Values

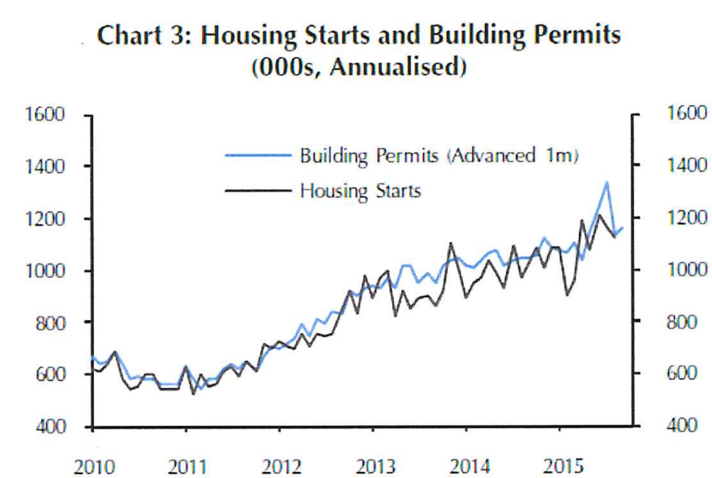




Source: NCREIF, PRIM

U.S. Starts and Sales

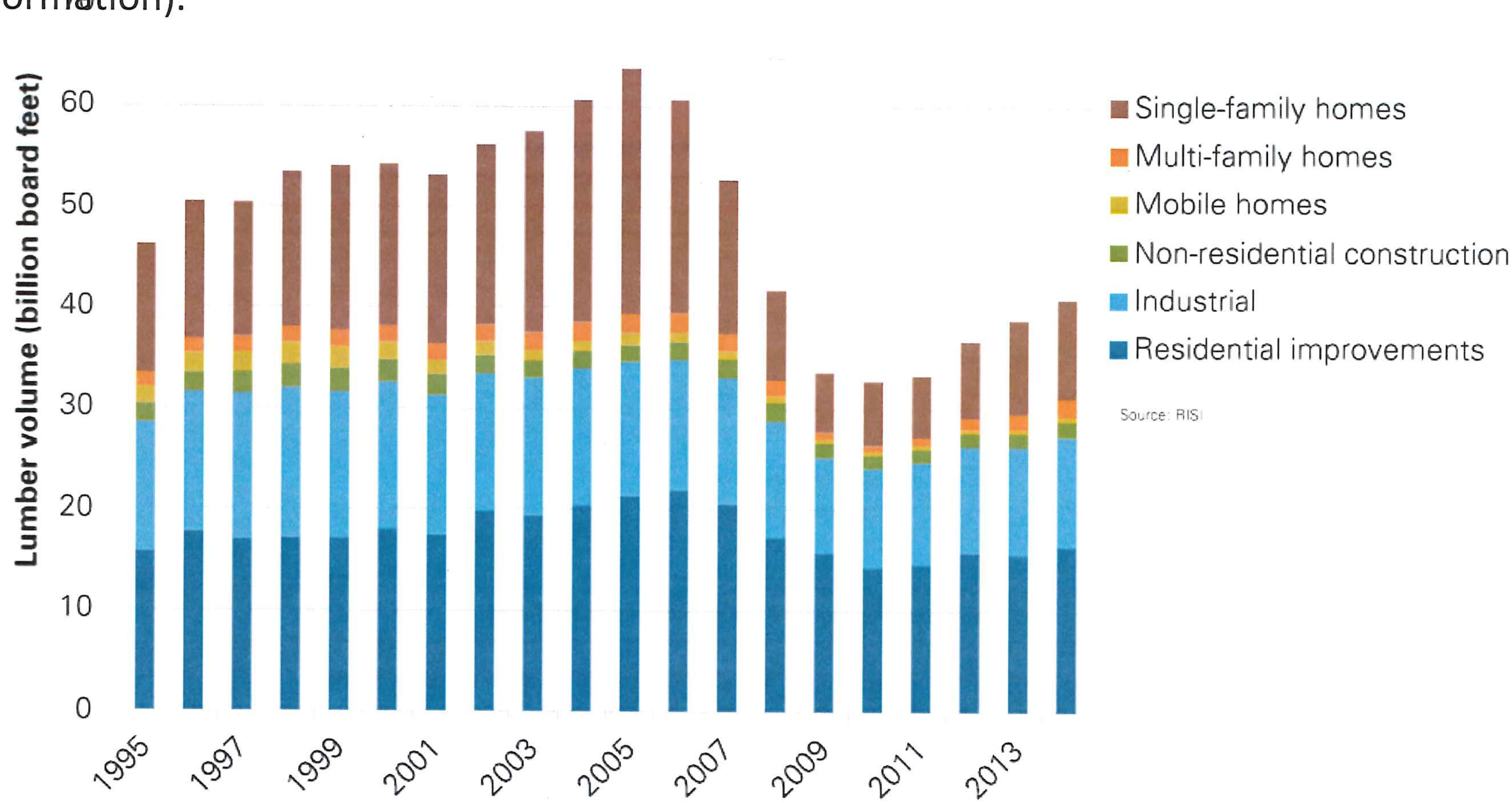




Source: Capital Economics

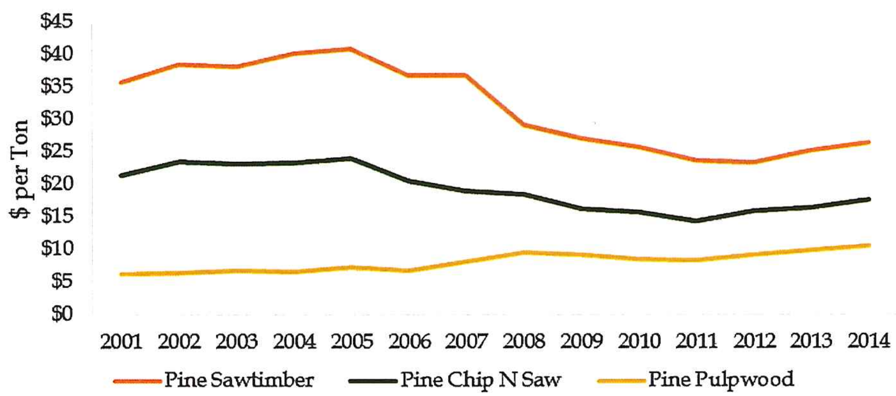
Housing Starts

Starts are low across the board but single family starts have been the most variable. Millenial demand and immigration are important drivers of future growth (housing formation).

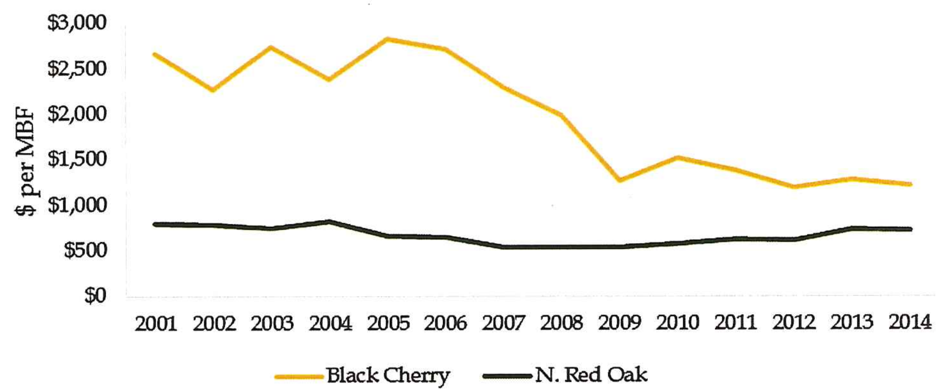


Timber Prices

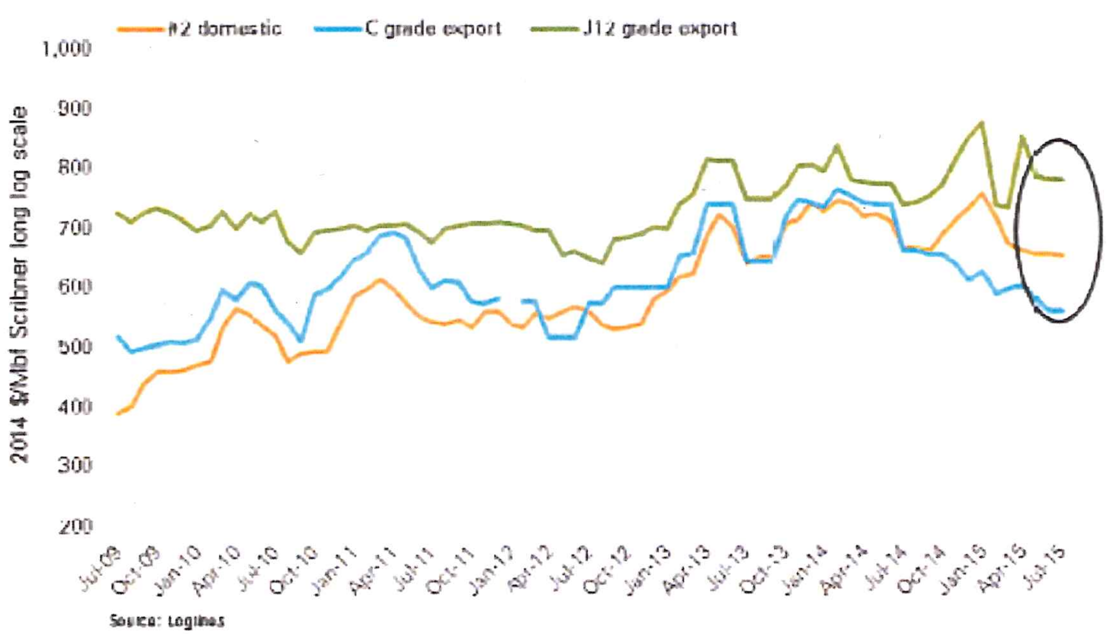
Southern Pine Timber Prices



Northern Hardwood Timber Prices



Pacific Northwest Prices



Source: Forest2Market, Log Lines, FIA, CG

‘Round the World

- U.S./Canada – Housing starts have lagged but are improving. Canada continues to harvest beetle kill and send to China but supply is declining. U.S. supply on the stump is a risk. Currency strength is also a headwind.
- China/Asia – Starts spiked between 2010 – 2014. Demand is slowing but China has a huge supply deficit. Most of their wood has been sourced from Russia and Canada. Japan growth has been slow.
- Russia – Lots of timber but poor infrastructure and high transport costs. Log (not lumber) export taxes have hurt Russian sales. Investment has been slow. Currency may change this.
- Europe – Slow growth environment, low interest rates. Suppliers benefitting from low Euro, Swedish Krona. Europe advantage in developing India market?
- Brazil/S. America – Fast growing timberland, world leading forest technology and deep mill markets. But, most of demand is domestic. Property rights issues exist (change next month?) along with currency issues, growth expectations, corruption scandal.
- India – India is a huge potential opportunity. Huge population and wood deficit. Lots of caution around how to approach market though.
- Australia/NZ – Australia and NZ offer deep timberland markets. Risks exist in both countries due to questions around economic growth (commodities, housing) and the strength of export markets. NZ is particularly exposed to a drop in Asian demand. Opportunities exist in India and longer term in China due to fibre deficits.