



Forest Economic Advisors, LLC  
**NA Structural Panel Markets**

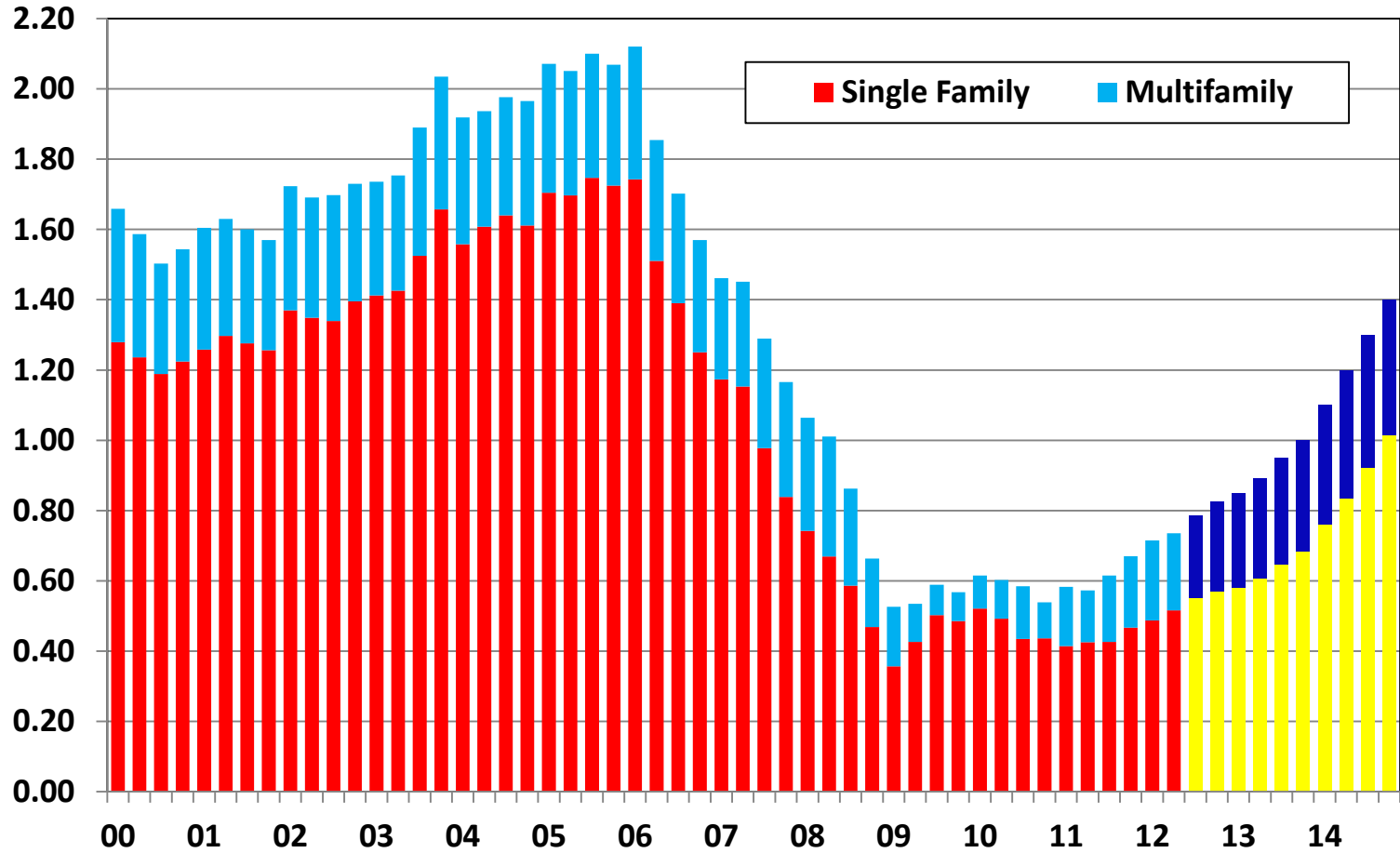
Greg Lewis

Processing Technologies Conference 2012

November 6, 2012

# Near-Term Housing Starts Recovery

Millions of Units, SAAR



# Housing Outlook Is Positive

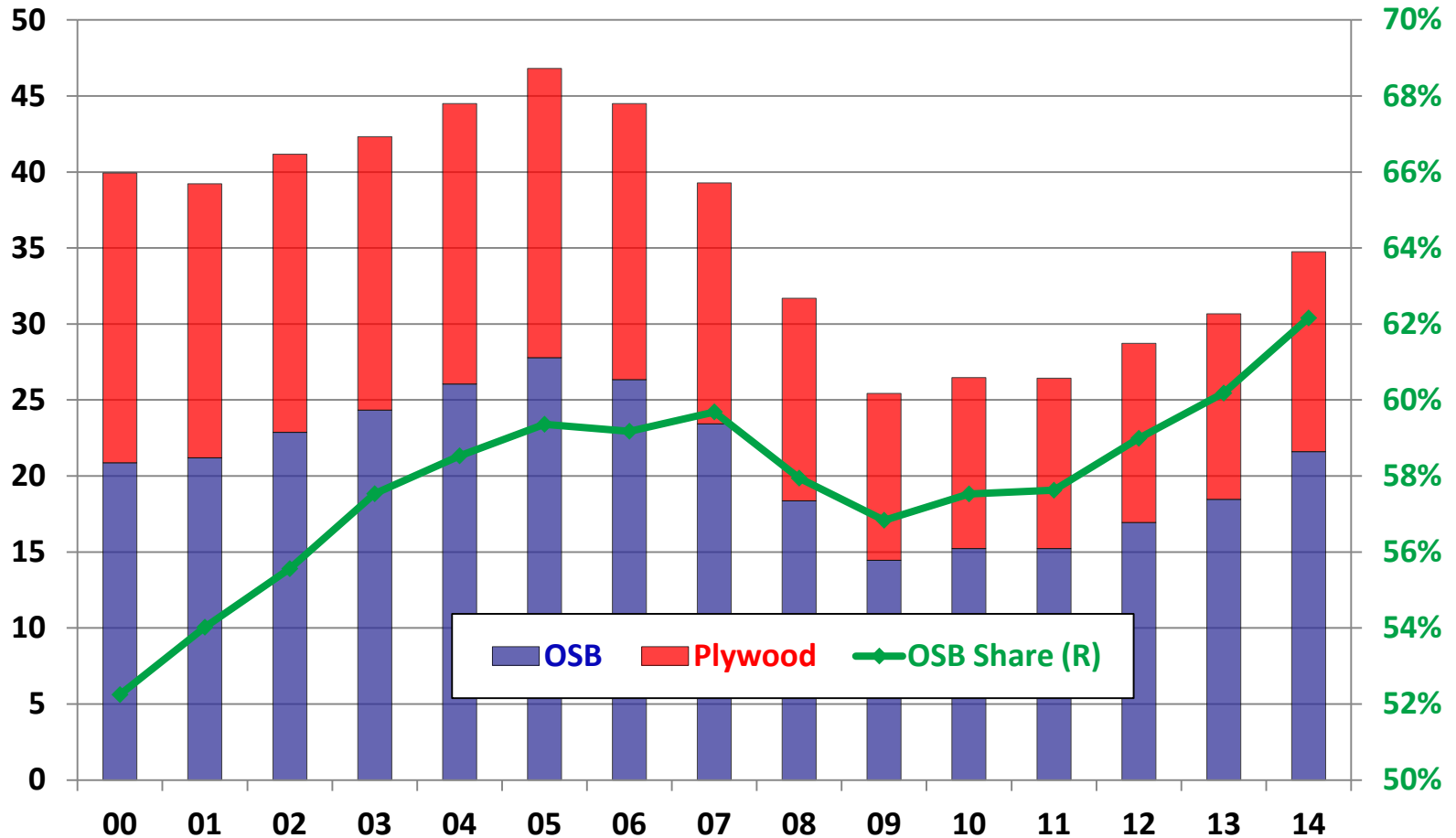
- September new single home sales (389,000) translate into conventional starts of 830,000
- Base forecast assumes 1.5 million unit shadow inventory will be worked off by 2015
- Single-family share will bottom at 68% in 2013, then rebound
- Average single-family home size has rebounded from recession low and will continue to trend higher
- Pent-up demand and strong demographics and will support residential construction over 5- and 15-year time horizons



# NA Structural Panel Demand

## Will Improve as End-Use Markets Strengthen

BSF, 3/8-Inch Basis



# NA OSB Demand

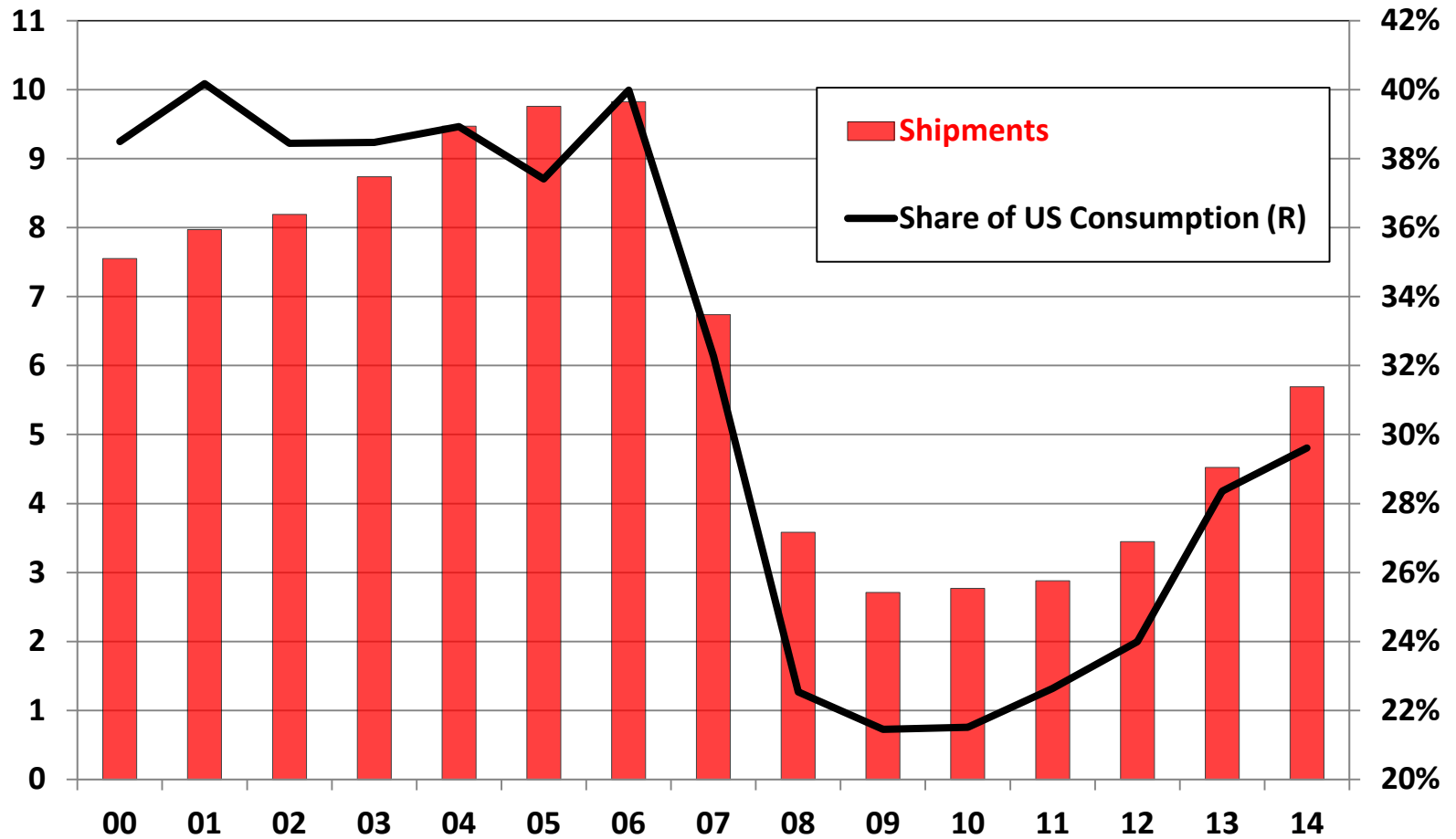
BSF, 3/8-Inch Basis

	2011	2012	2013	2014
US Domestic Consumption	12.72	14.37	15.95	19.23
CA Domestic Consumption	1.72	1.87	1.66	1.60
NA Offshore Exports	0.78	0.71	0.85	0.77
US	0.21	0.19	0.20	0.17
CA	0.57	0.52	0.65	0.60
Total NA Demand	15.23	16.95	18.46	21.6
% Change	0.0%	11.3%	8.9%	17.1%



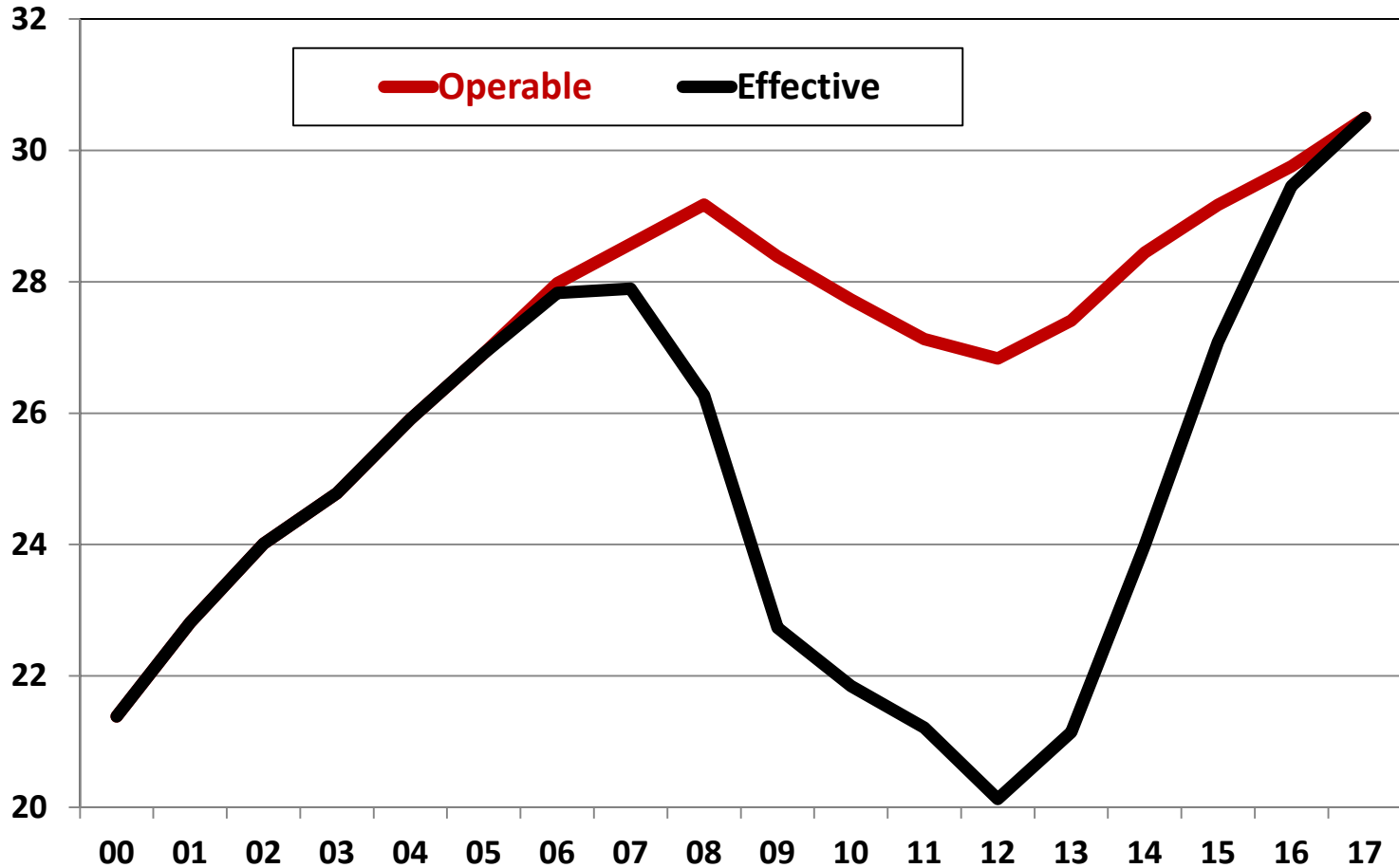
# Canadian OSB Shipments to the US

BSF, 3/8-Inch Basis



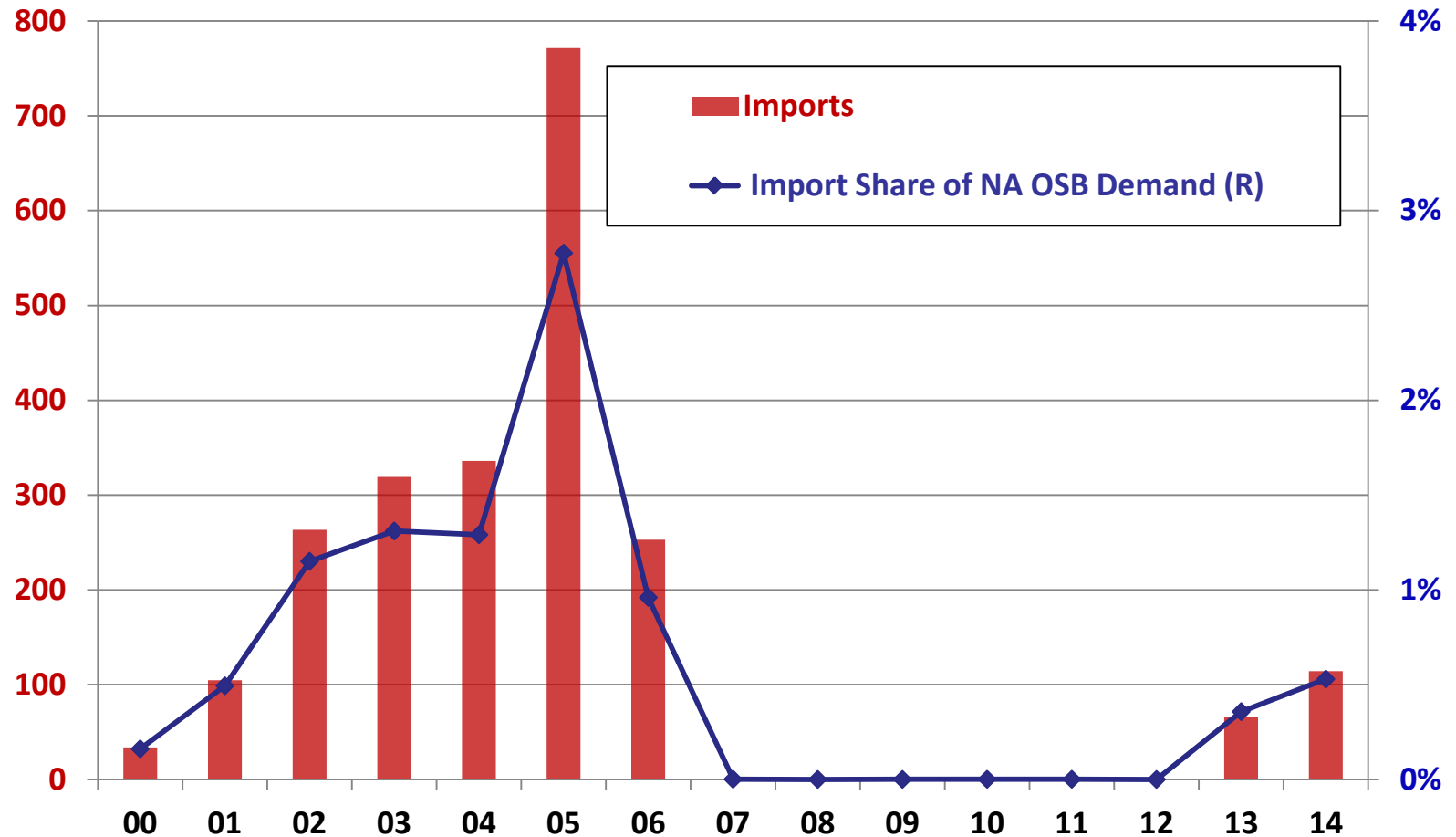
# NA OSB Capacity: Operable vs. Effective

BSF, 3/8-Inch Basis



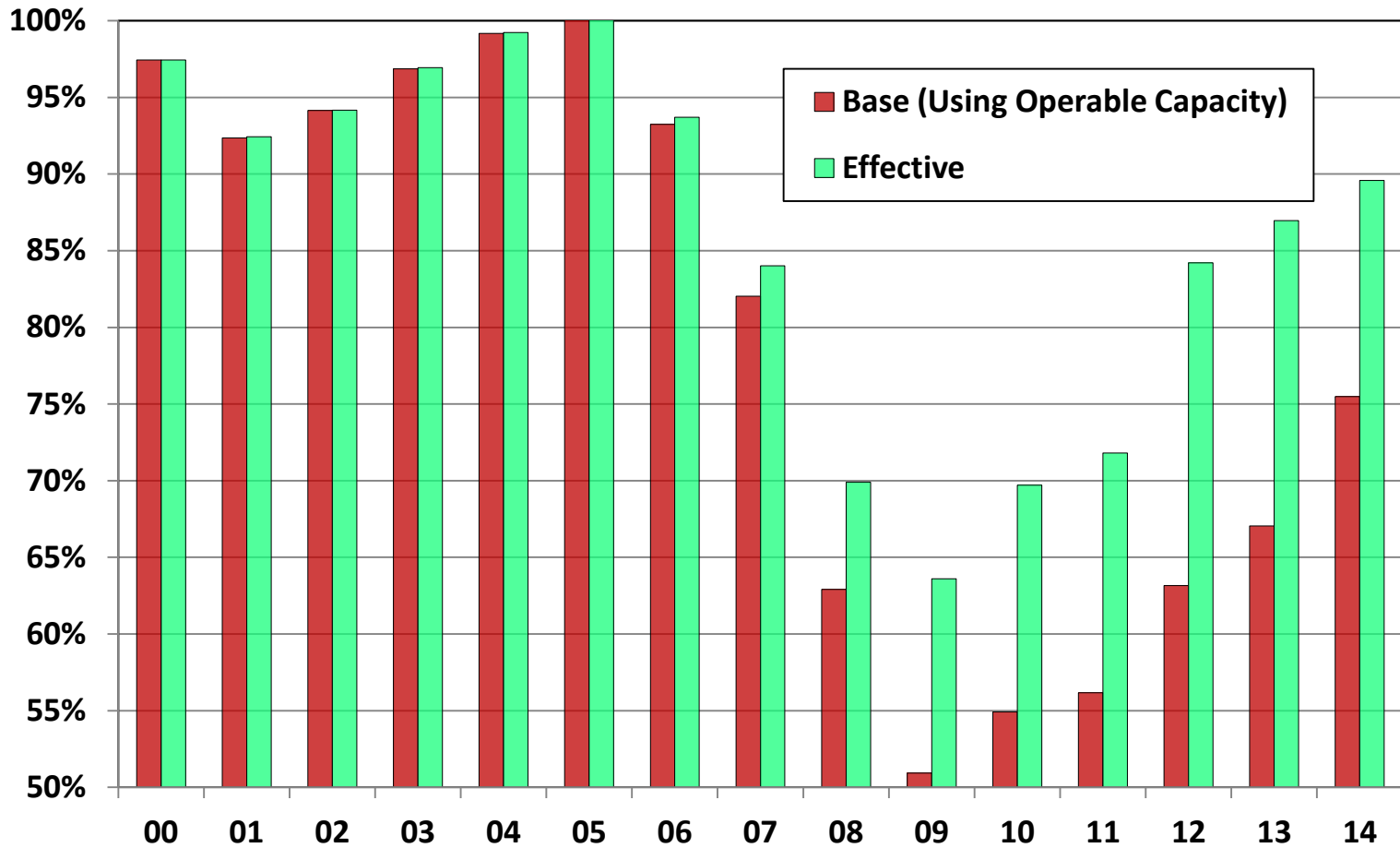
# Offshore OSB Imports Will Remain Nonexistent in the Next Few Years

MMSF, 3/8-Inch Basis





# The North American OSB D/C Ratio: Base vs. Effective



# NA Plywood Demand

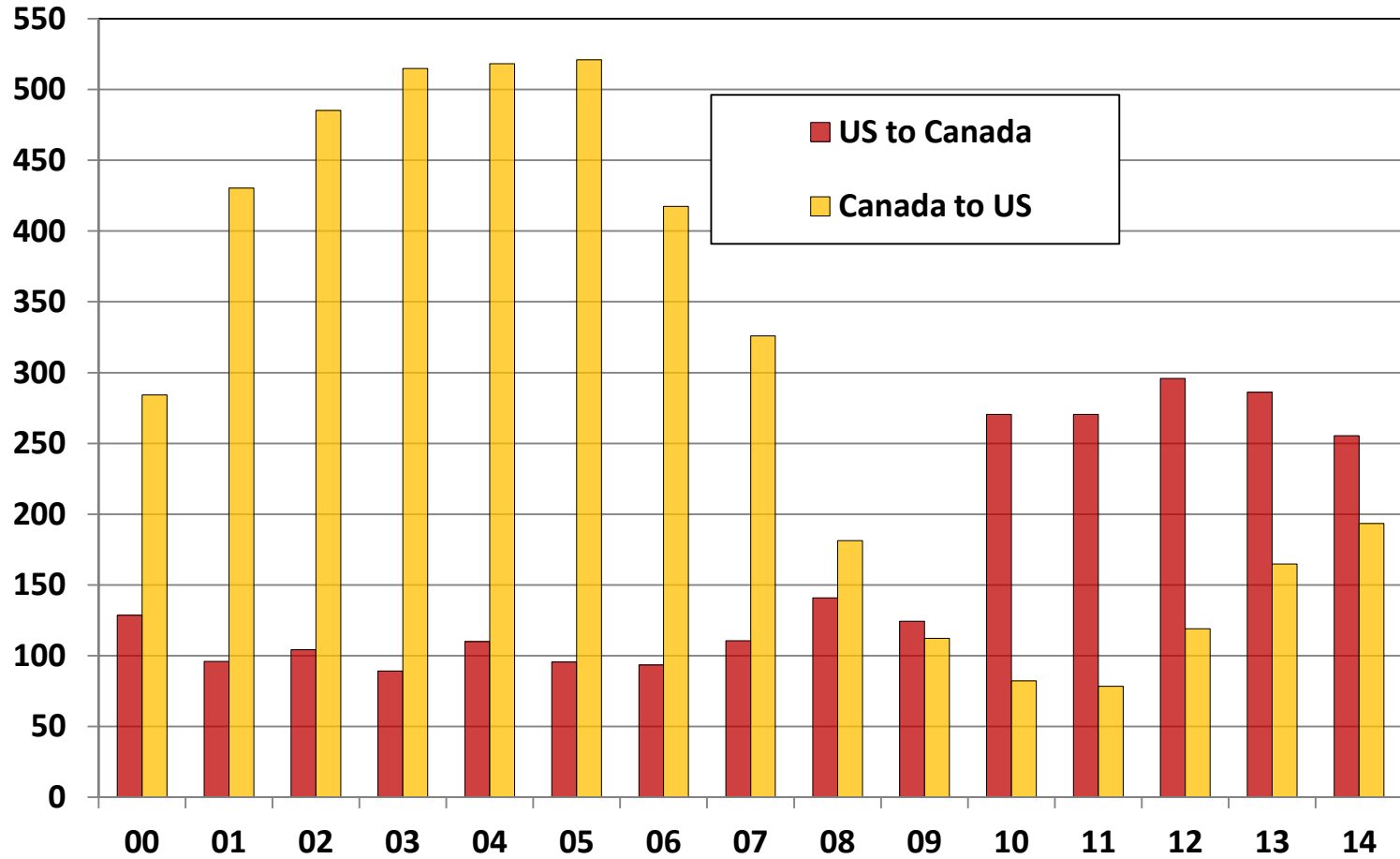
BSF, 3/8-Inch Basis

	2011	2012	2013	2014
US Domestic Consumption	8.99	9.58	10.09	11.03
CA Domestic Consumption	1.96	1.99	1.92	1.92
NA Offshore Exports	0.25	0.21	0.21	0.20
US	0.19	0.20	0.18	0.17
CA	0.05	0.01	0.02	0.03
Total NA Demand	11.2	11.78	12.21	13.15
% Change	-0.4%	5.2%	3.6%	7.7%



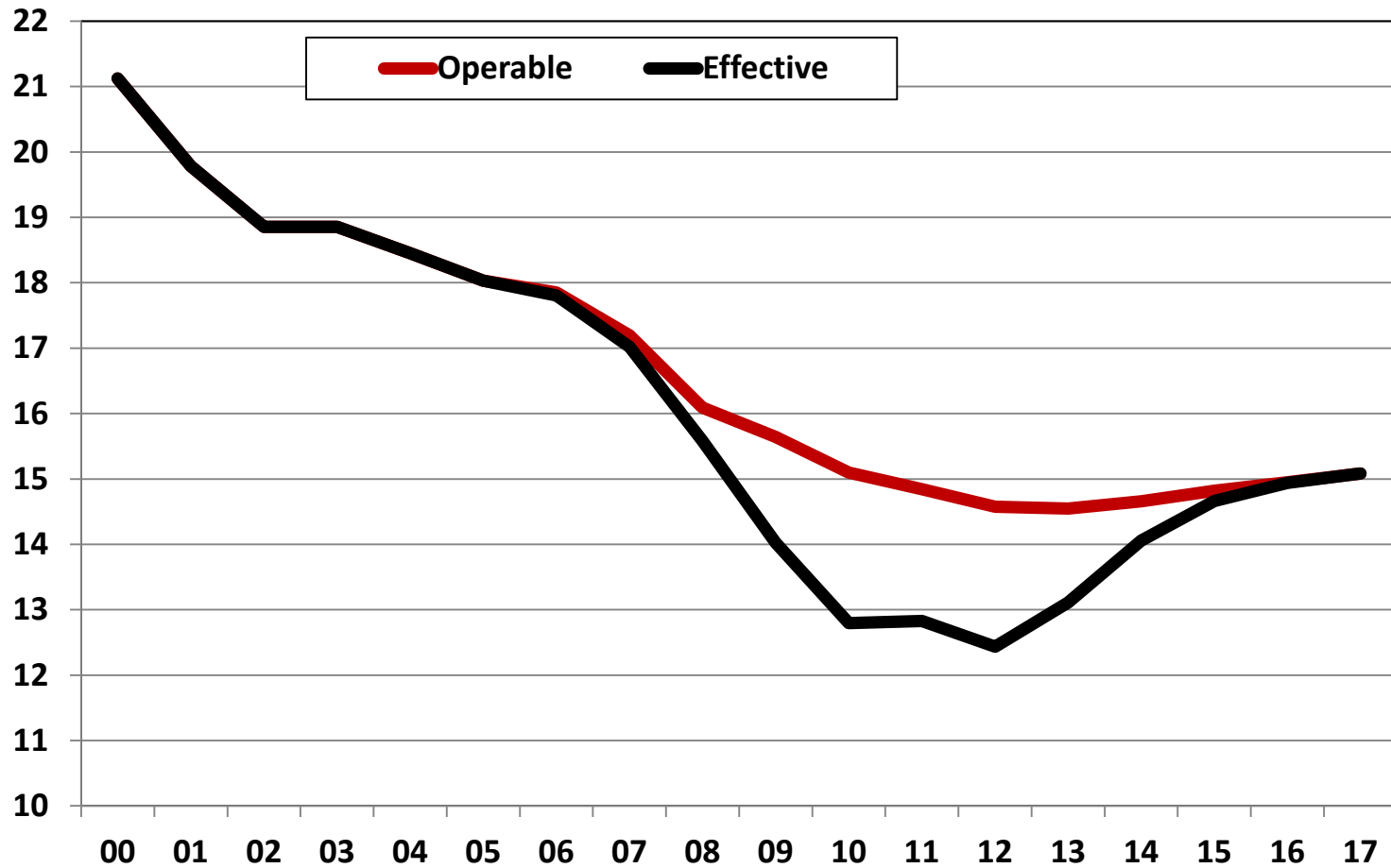
# US/Canada Plywood Trade

MMSF, 3/8-Inch Basis



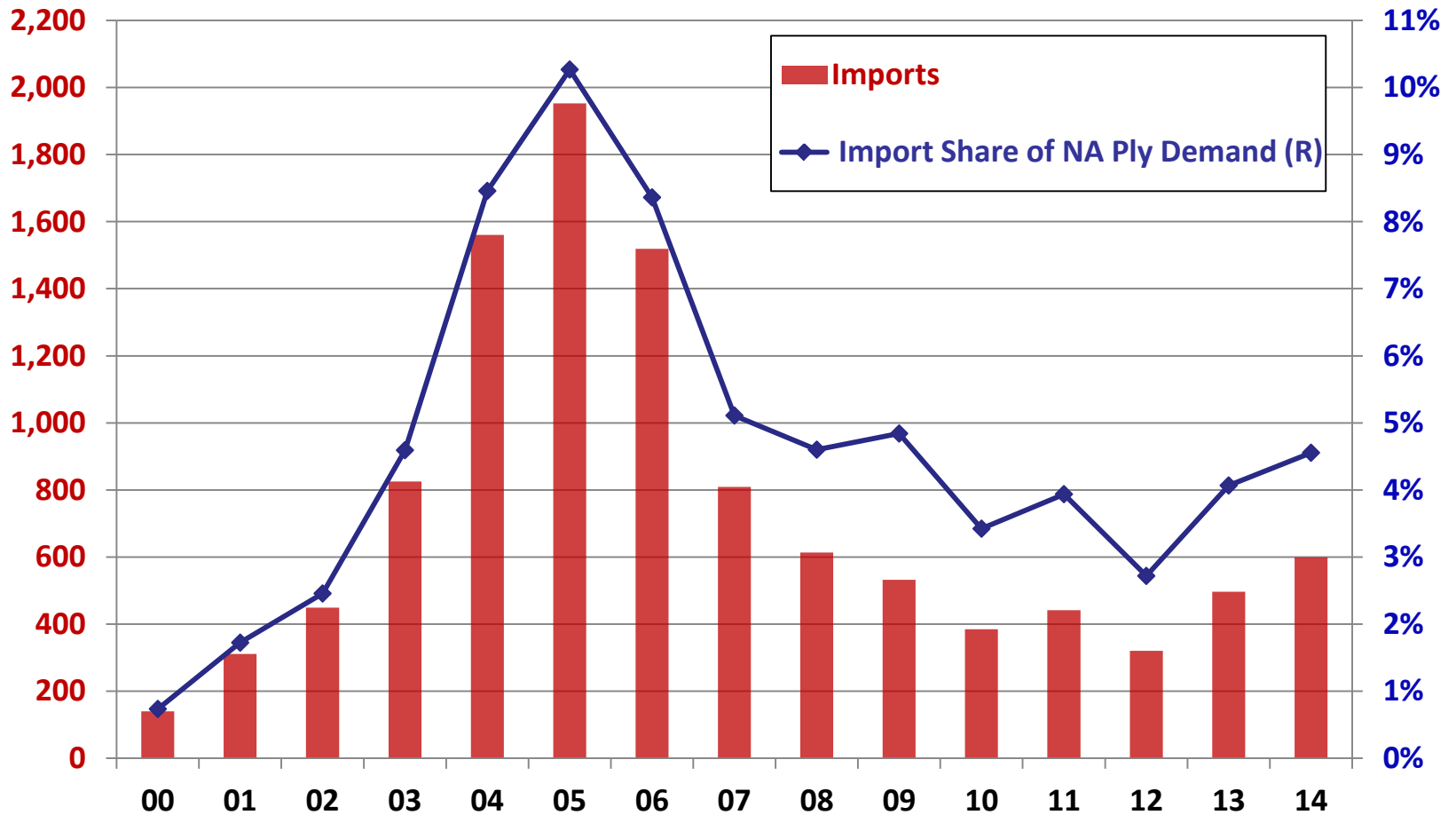
# NA Plywood Capacity: Base vs. Effective

BSF, 3/8-Inch Basis

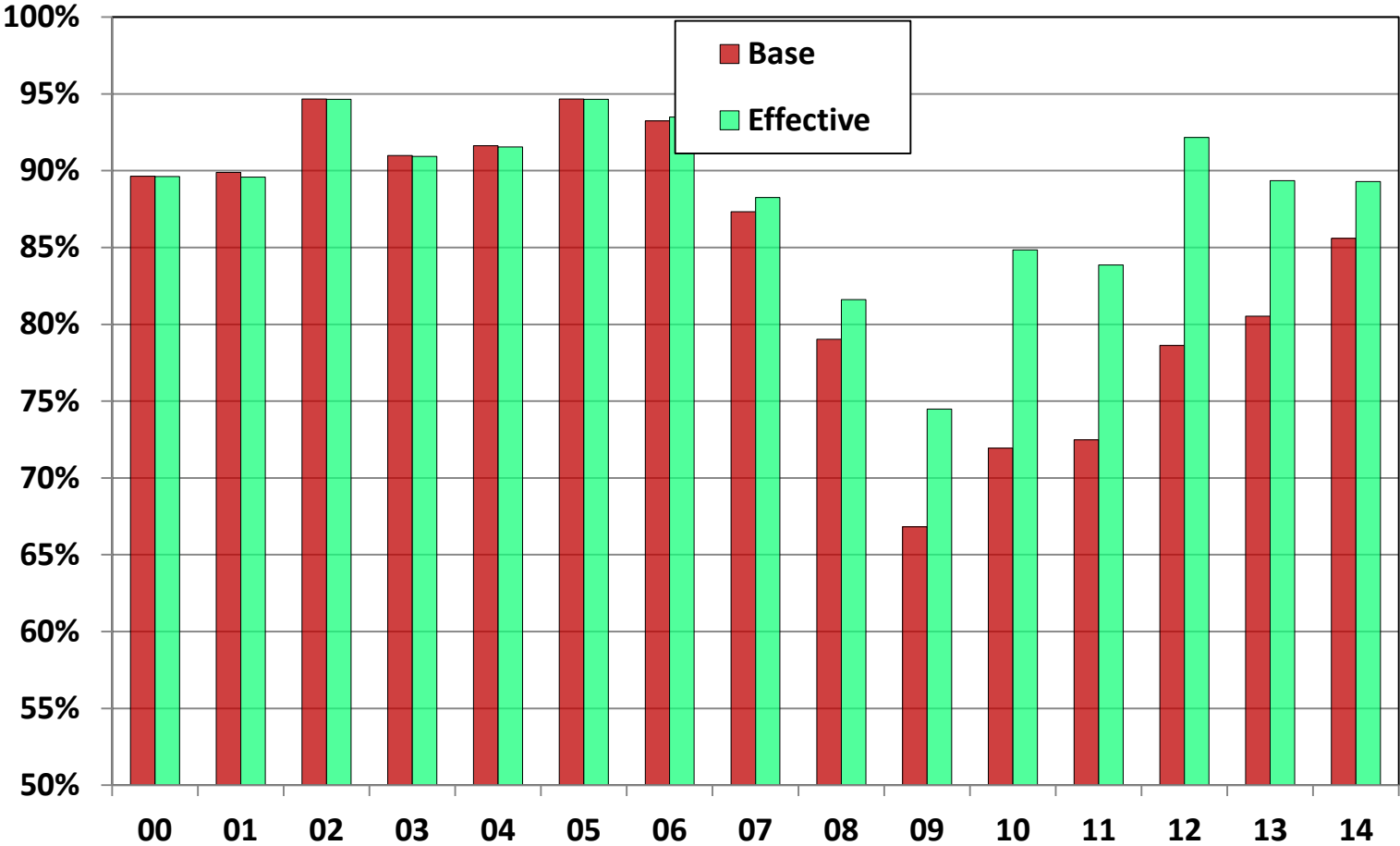


# Offshore Plywood Imports Will Rebound as Demand Improves

MMSF, 3/8-Inch Basis

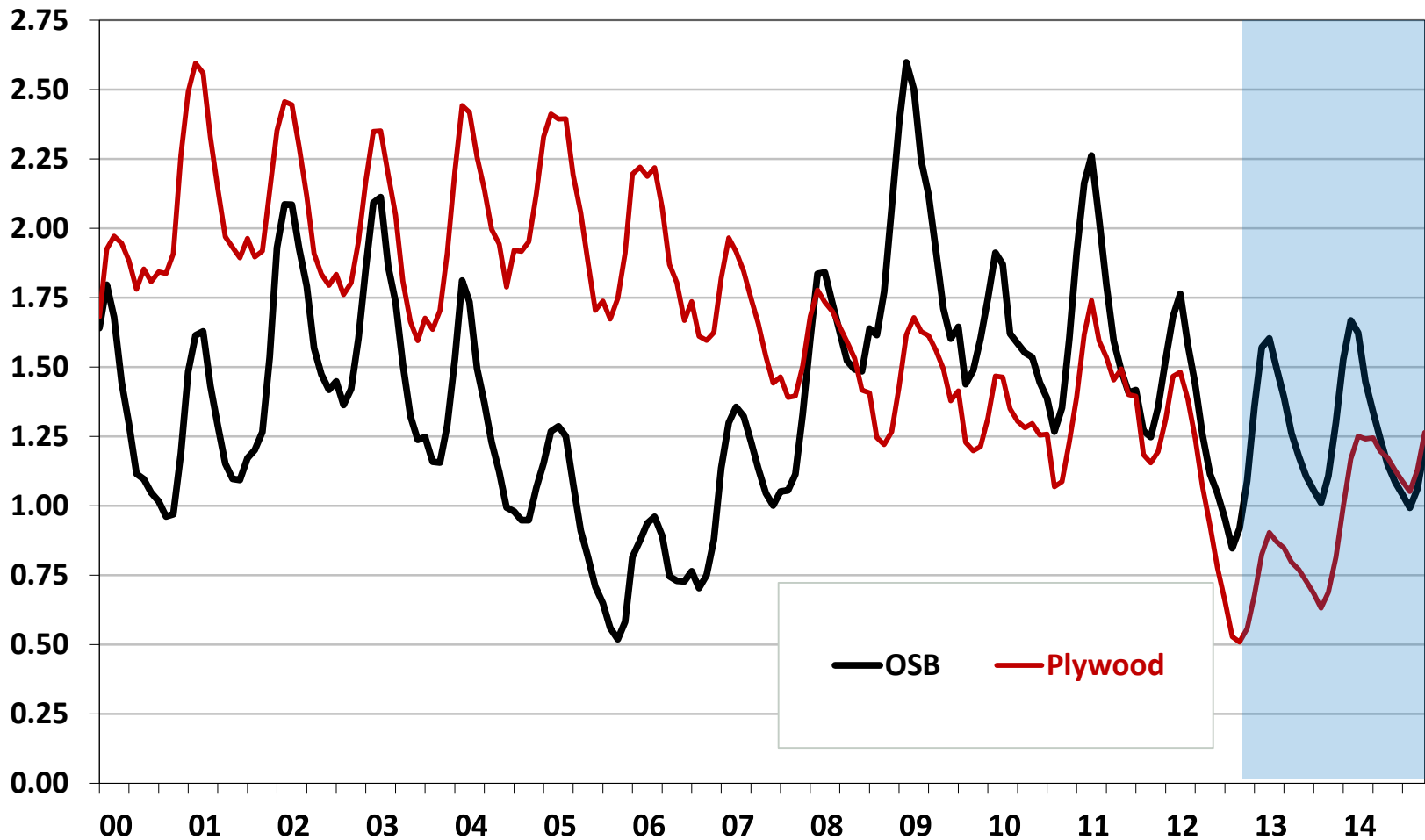


# The North American Plywood D/C Ratio: Base vs. Effective



# Low Inventory Levels Have Spurred Recent Prices Fluctuations

Inventory As a Share of Demand in the US



# Cost and Price Outlook

- Canadian dollar has kept OSB capacity curve flat and Western Canadian plywood costs near to top of the cost curve
- Average prices will improve as D/C ratios rebound
- In the near-term, prices will be volatile as inventory levels remain low.
- As capacity is restarted, production will lag the increase in orders