

# 2004 Economic Outlook for Inland West Private Forests



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*Developers of TreeCents©*

NIPF Foresters @ Spokane 1/23/2004



# What Are We Doing Here?

- Every year I get great reviews--But why?

Hear jokes about \$\$, charts, & Bush?

Its not enough to listen—  
you must **THINK & DO!**

- Hedge your bets in short run markets!
- Get filthy rich in long run investments!

# Think About: Short Run Decisions

- Harvest timing decision logic

$$P_0 * Q_0 \leq ? \geq \frac{(P_0 + \Delta P_m + \Delta P_g) * (Q_n)}{(1+i)^n}$$

Where:

$P_0$  = Stumpage price (\$/MBF) in year 0

$\Delta P_m$  = Price changes due to market forces

$\Delta P_g$  = Price changes due to size & grade changes

$Q$  = Stand volume in time 0 or n (MBF/acre)

$i$  = Discount (interest) rate

# Think About: Long Run Timber Investments

- Land use/stand establishment
- Optimal silvicultural practices

$$SEV = \frac{-\sum_{t=0}^R C_t(1+i)^{R-t} + \sum_{t=0}^R P_n Q_n B_t(1+i)^{R-t}}{(1+i)^R - 1} + \frac{b-c}{i}$$

Where:

$SEV$	= Soil Expectation Value (\$/acre)
$C$	= Costs incurred in period $t$ (\$/acre)
$B$	= Benefits realized in period $t$ (\$/acre)
$c$	= costs incurred annually (\$/acre/year)
$b$	= benefits realized annually (\$/acre/year)
$R$	= Cycle length or Rotation age (years)
$t$	= Year costs incurred or benefits realized
$i$	= Discount (interest) rate

# How Should I Use Charley's Good Stuff?

Actually quantify & analyze decisions!

- Get out your software
  - Scale & Cruise Programs
  - User-friendly growth & yield simulator
  - *TreeCents* Timber Investment Program

(from *Forest Econ Inc*)

- Define your silvicultural options
- Ask rational financial questions!
- Test for financially optimal choices!



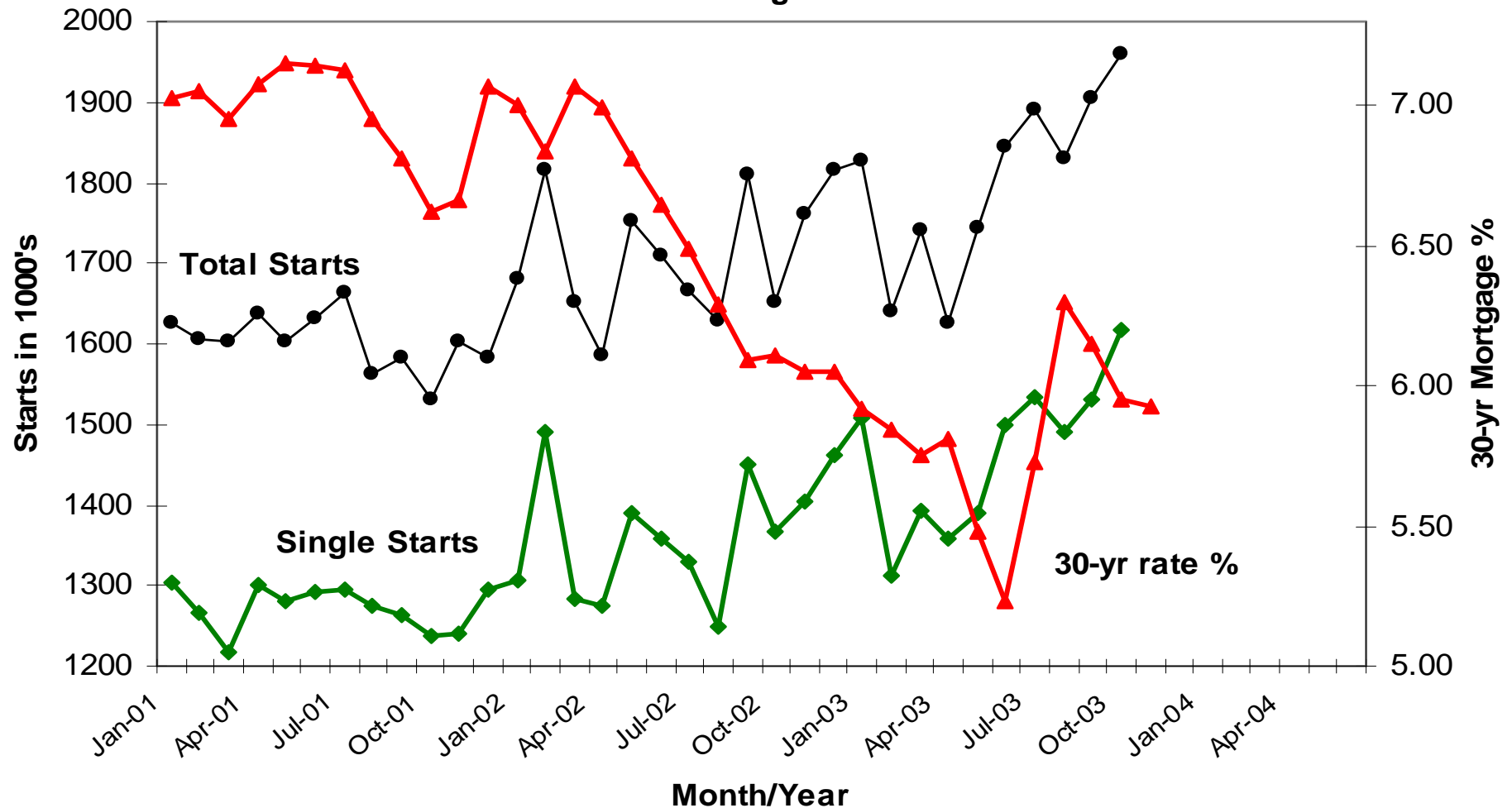
# Short-run Market Overview

- Housing has boomed—
- Lumber & panel prices are great
- With log prices lagging slightly
- Mill closures abated
- Canadian imports slowing
- When FED raises interest...
  - housing will falter...so
  - Log prices drop temporarily
- Plan for late 2004/ 2005 decline

# Unbelievable Housing Markets

## Housing Sector Indicators

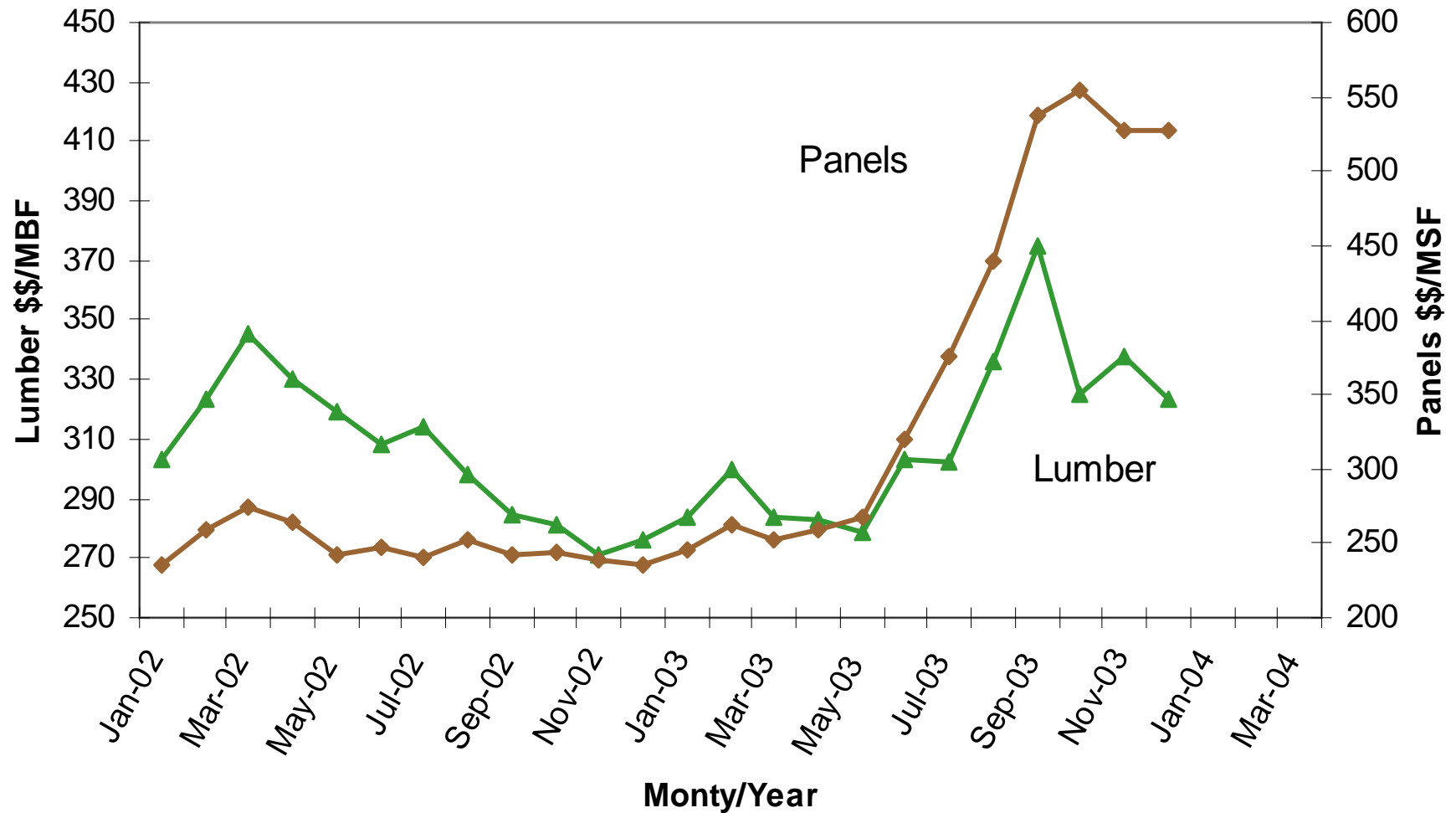
Random Lengths 1/04



# Wow! Wood Products Prices

## Lumber & Panel Price Indices

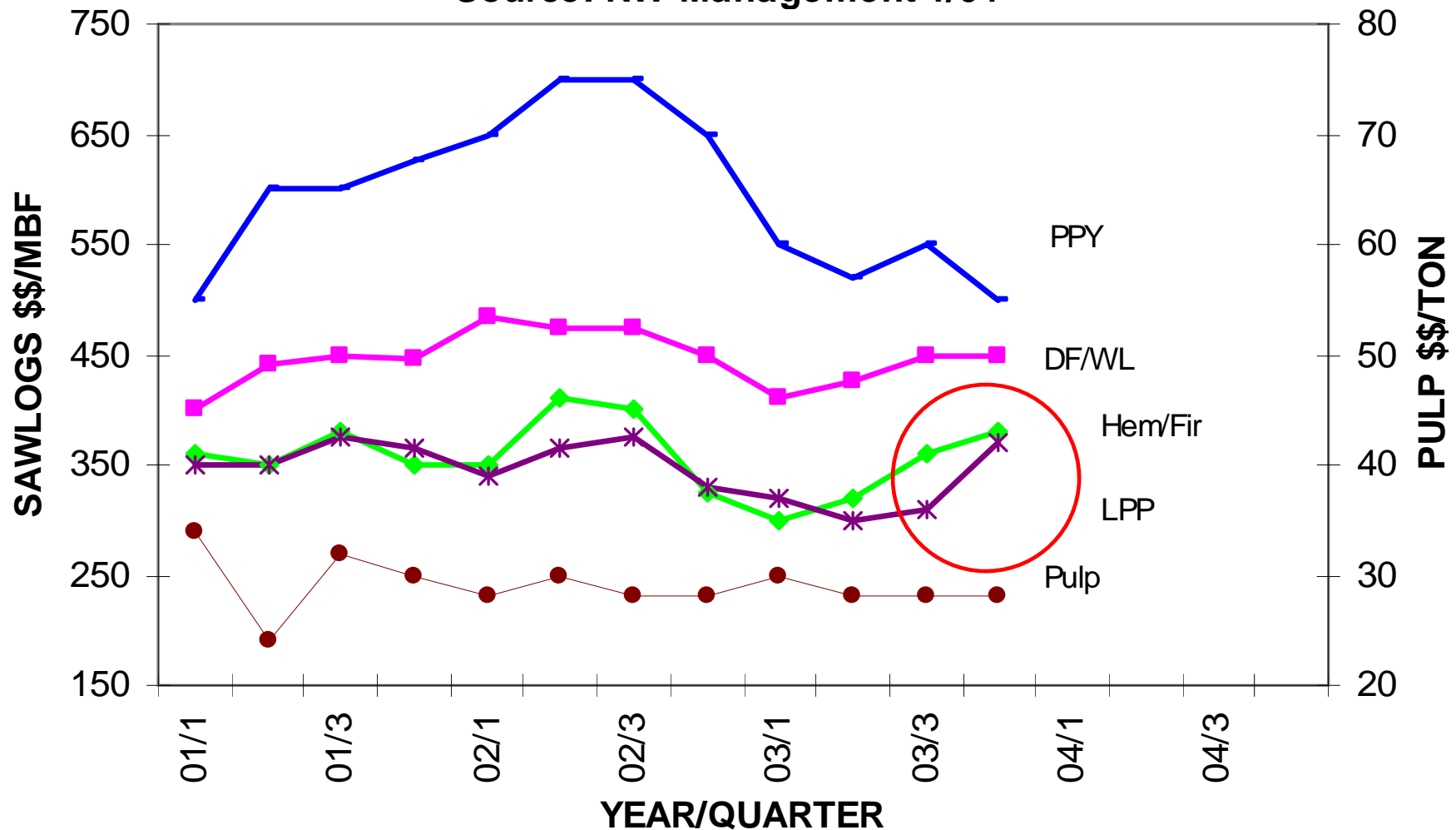
Source: Random Lengths 1/04



# Inland Log Prices Lagging

## NORTH IDAHO QUARTERLY LOG PRICES

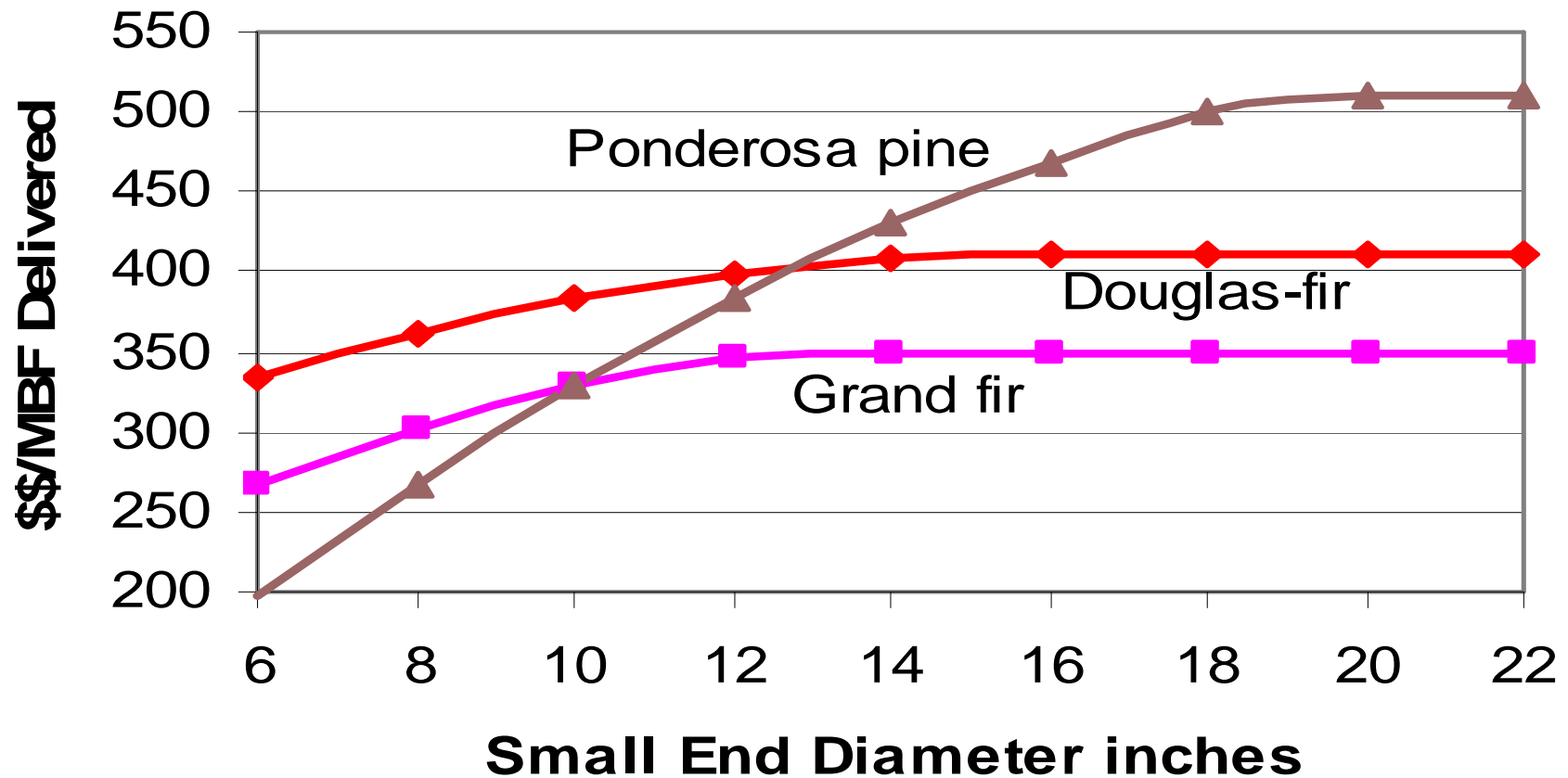
Source: NW Management 1/04



Last year we looked at log size premiums by species

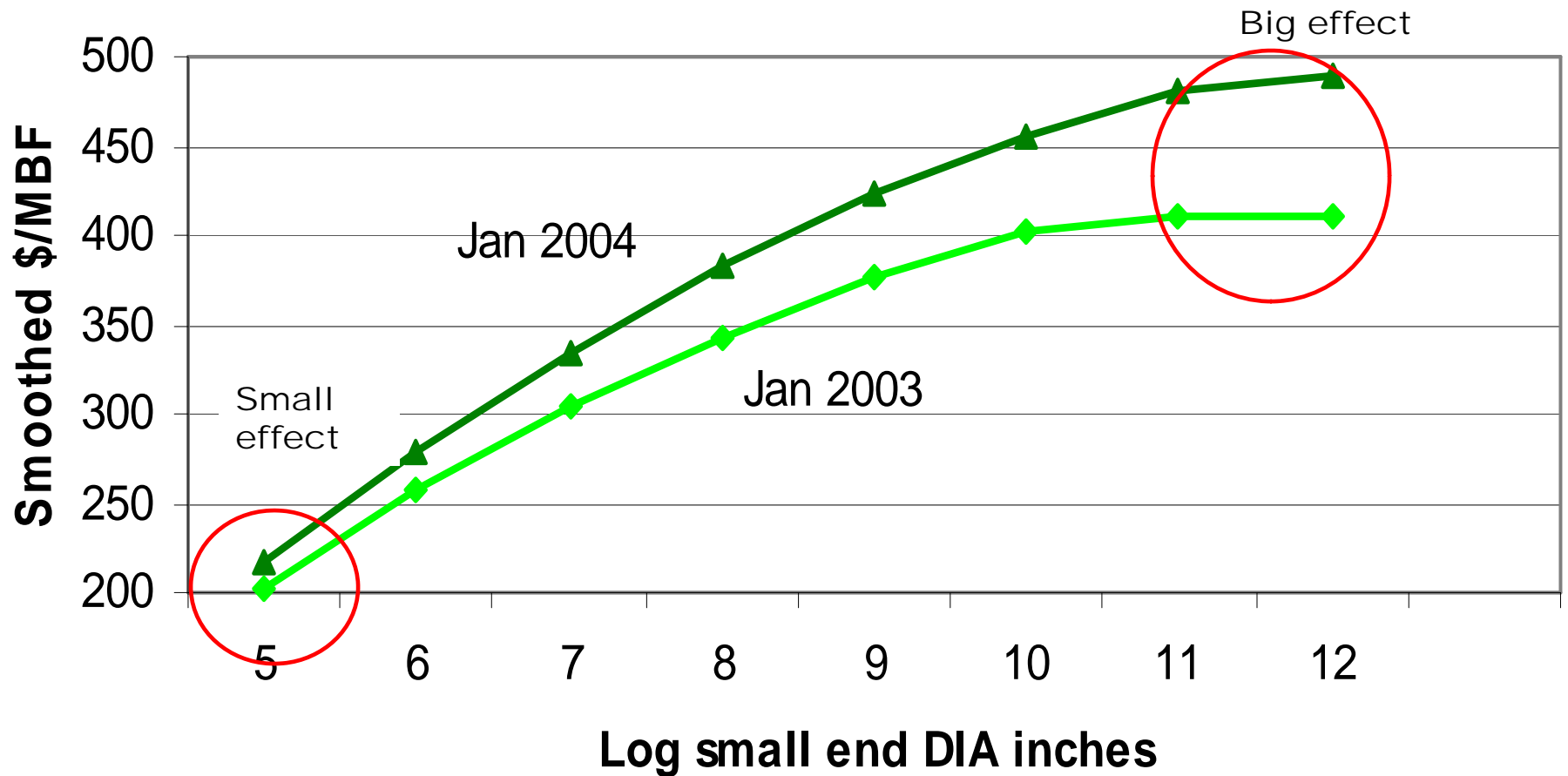
## Log Prices by Size Class

Source: N. Idaho mills 12/2002



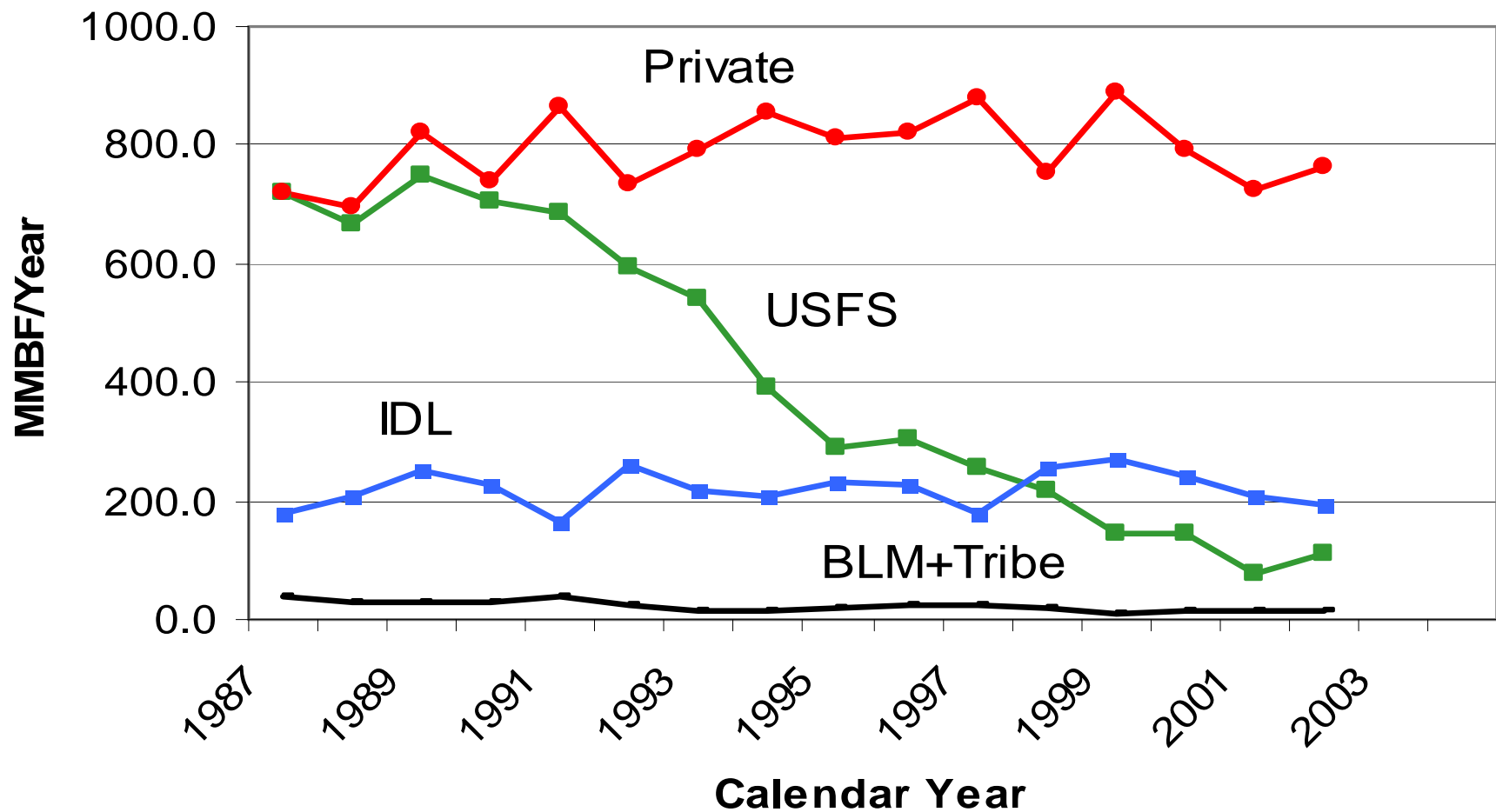
Note price changes affect larger log sizes more

### Douglas-fir Log Size Premium Jan 2003 vs. Jan 2004



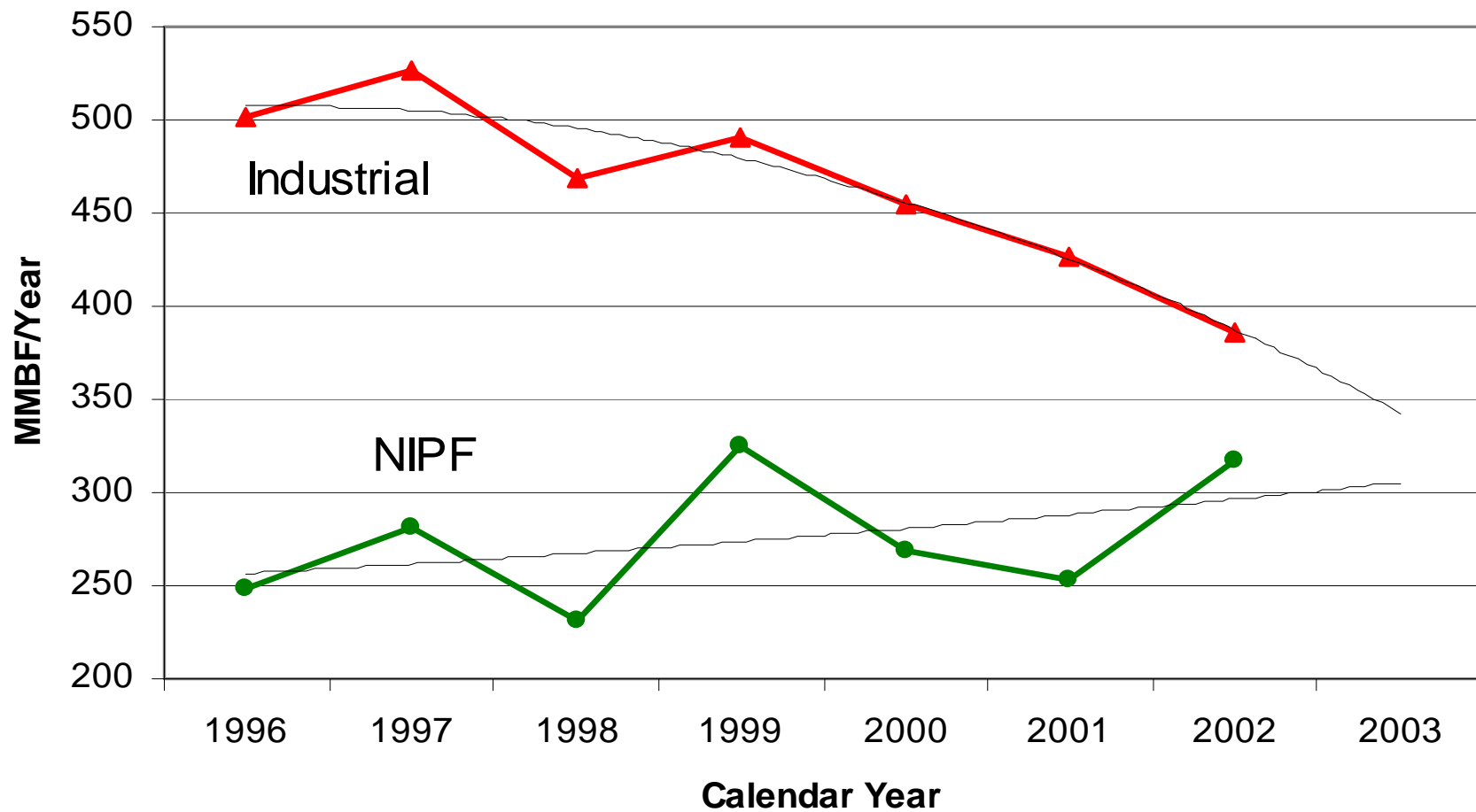
# Private Harvests Dominate

**Idaho Timber Harvest**  
1987-2002 (USFS S&P 2003)



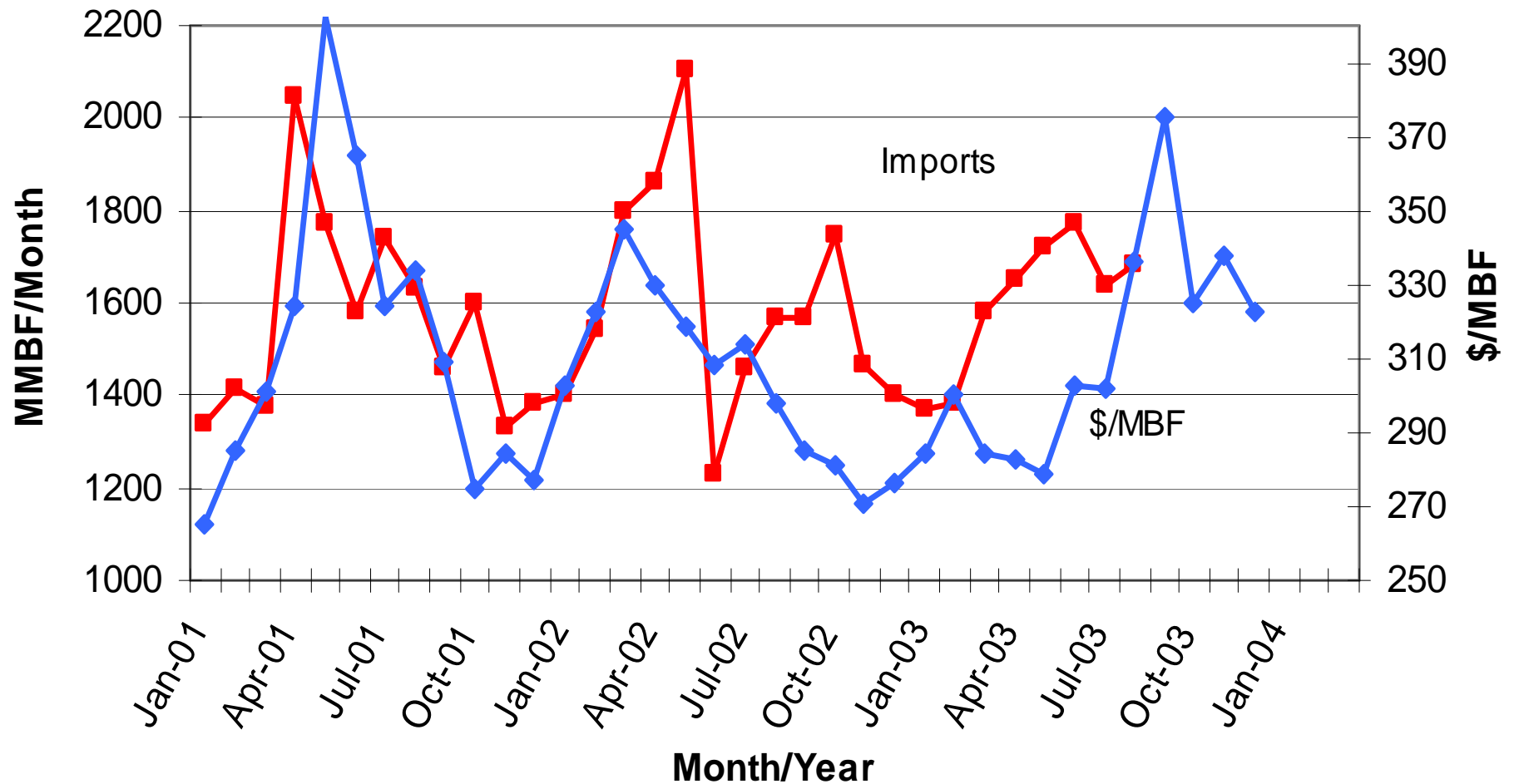
# Industrial Availability Faltering

**N. Idaho Private Timber Harvest  
1996 to 2002 (IDL 2003)**



# Can We Blame the Canuks Yet?

## Canadian Lumber Imports Random Lengths 1/04

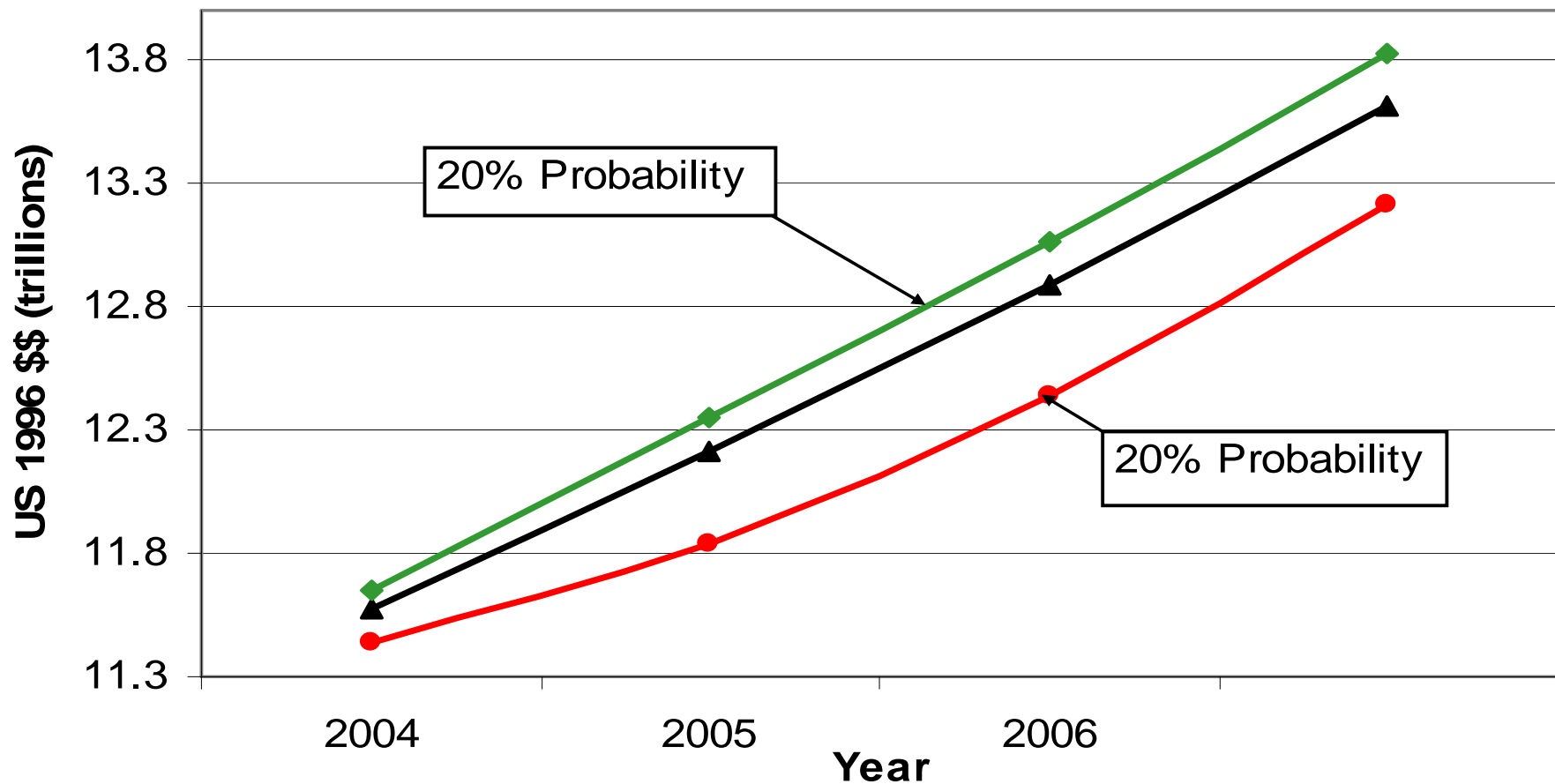
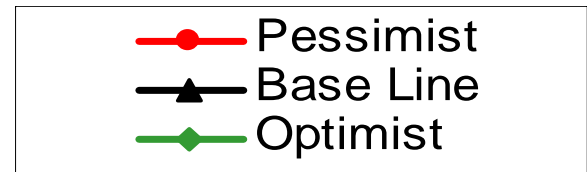


# Rosy Futures Indicators

- Economy will grow 4.4%/year +
- Much stronger Canadian \$\$
- Low 3.7 month existing housing supply
- Dec. building permits generally up  
NE + 10%, SE +9.5%, West - 0.9%
- May lumber futures up 8.7% from Jan
- Only 2 mills closed (LP & Stimpson)  
BUT OOPS!
- Housing controlled by FED policy

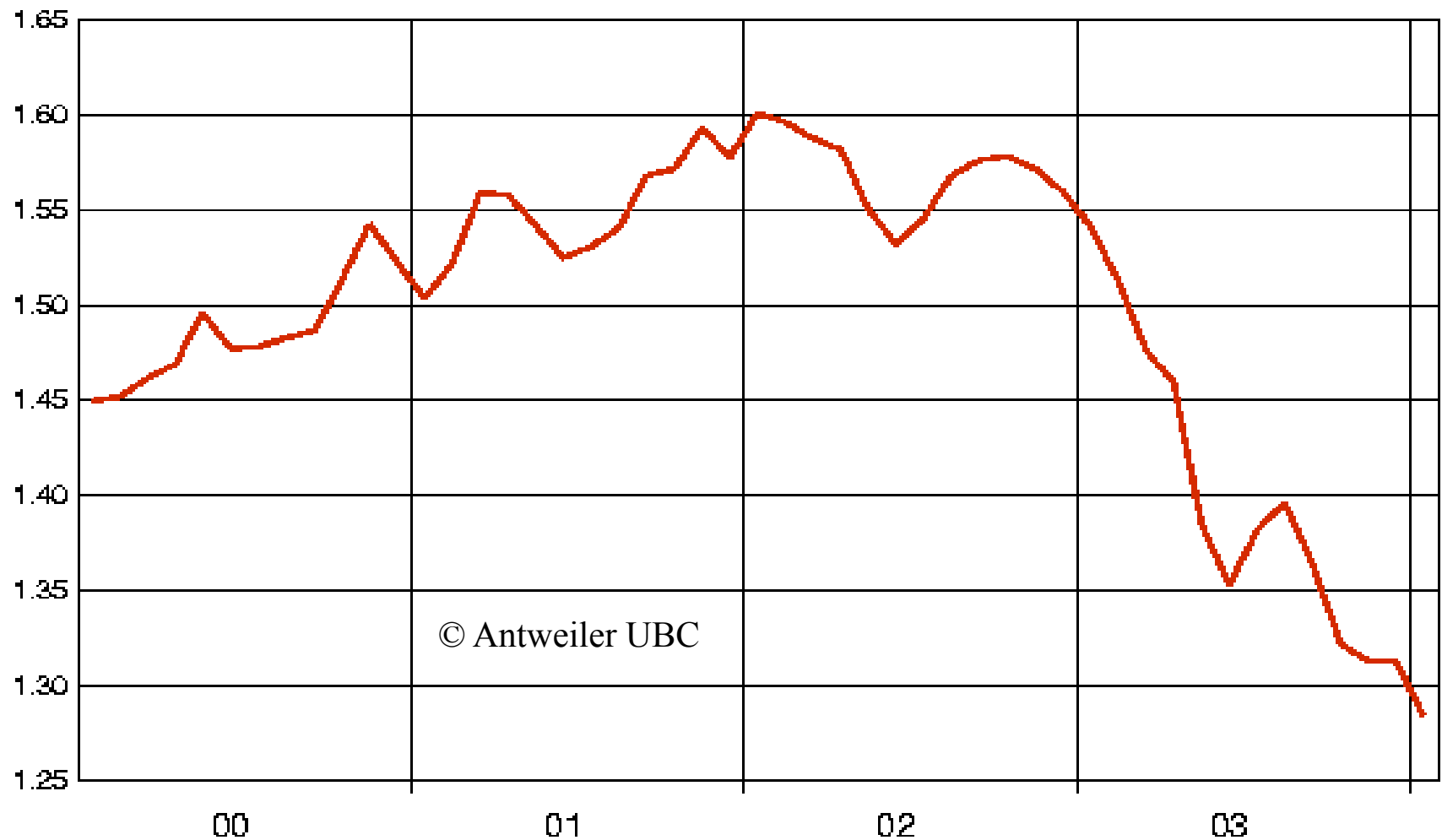
# Economic Recovery--WOW! Even Pessimists say + 4.4%/yr

**US GDP Forecasts**  
Source: Global Insight 10/03



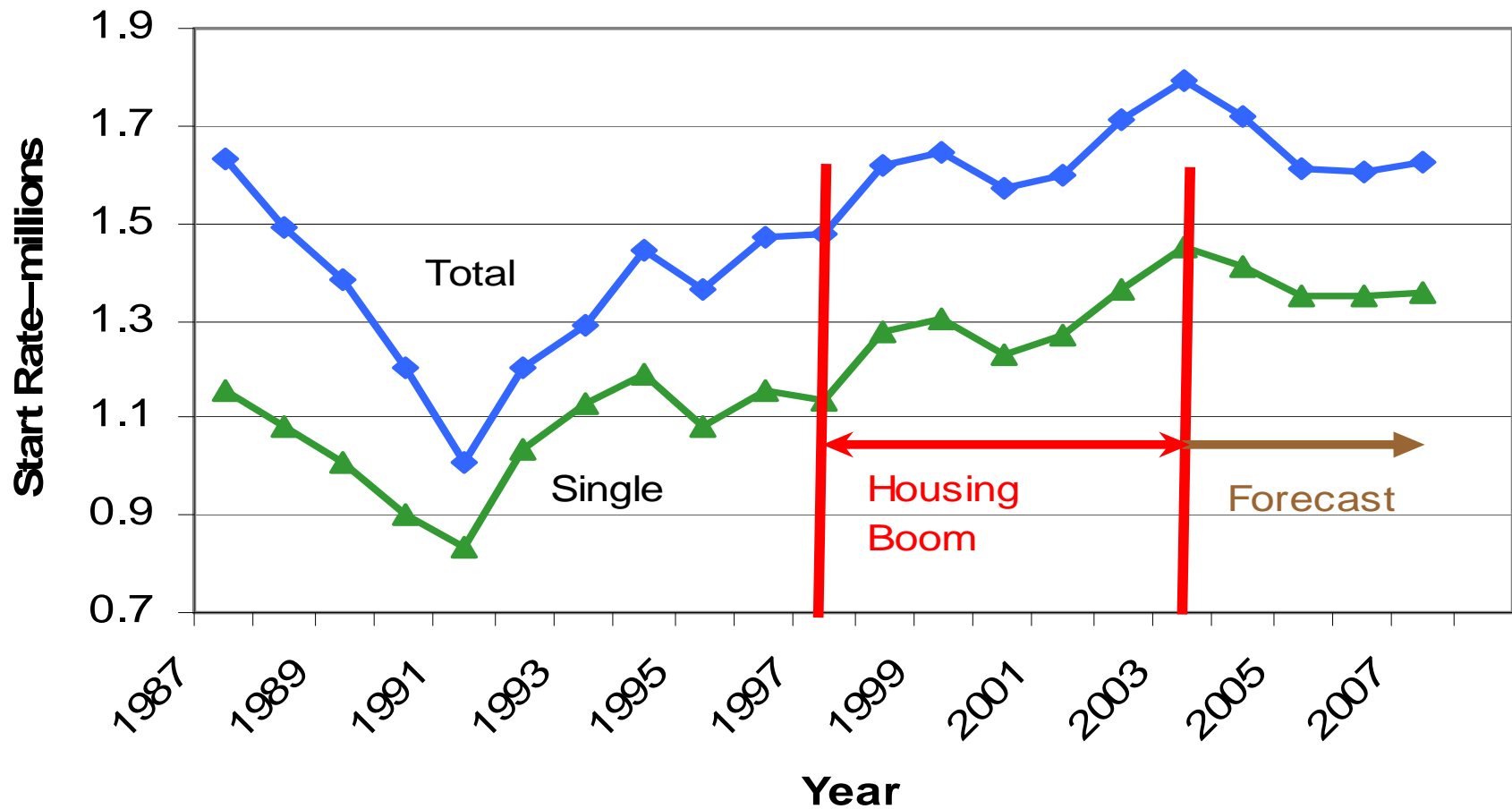
# US \$ is Getting Weaker Fast

Monthly Avg. Exchange Rates: Canadian Dollars per U.S. Dollar



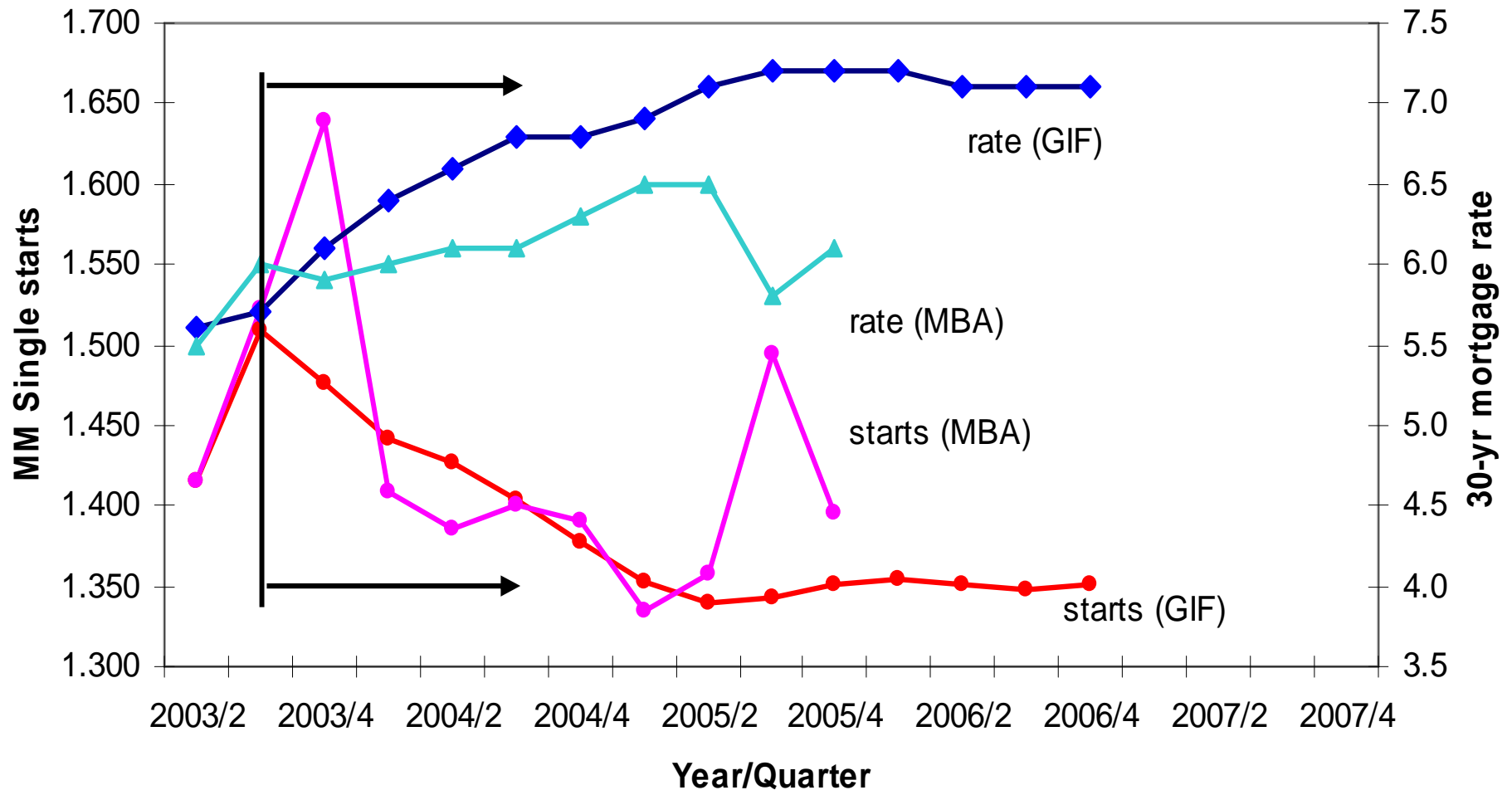
# Red Hot Housing Weakens

## US Housing Starts Outlook from 04 Global Insights



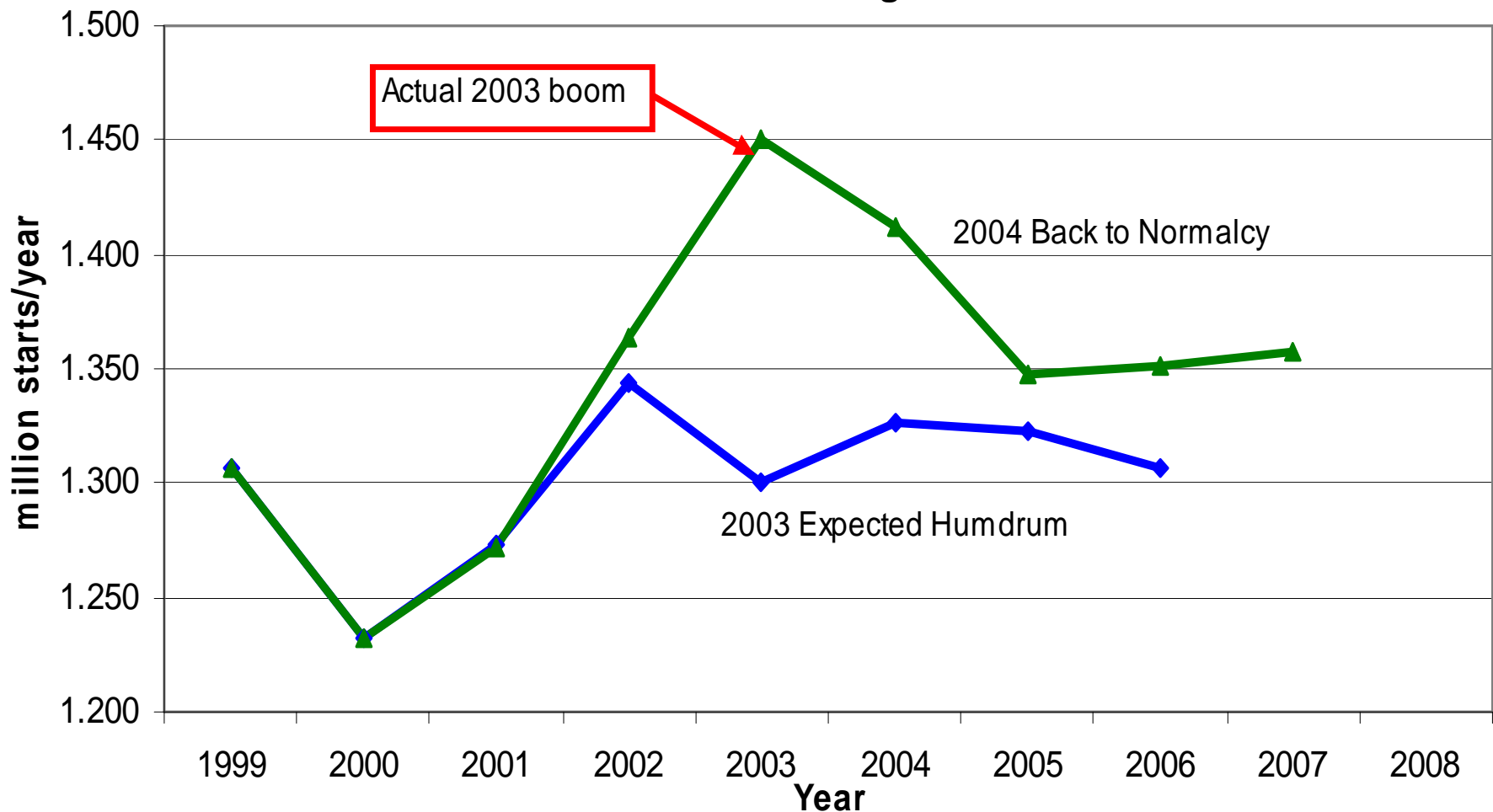
# Recovery means Fed Policy Reverses to Stop Inflation

**Single Housing & Mortgage Rate Forecasts**  
Global Insights & Mortgage Bankers Assn 1/04



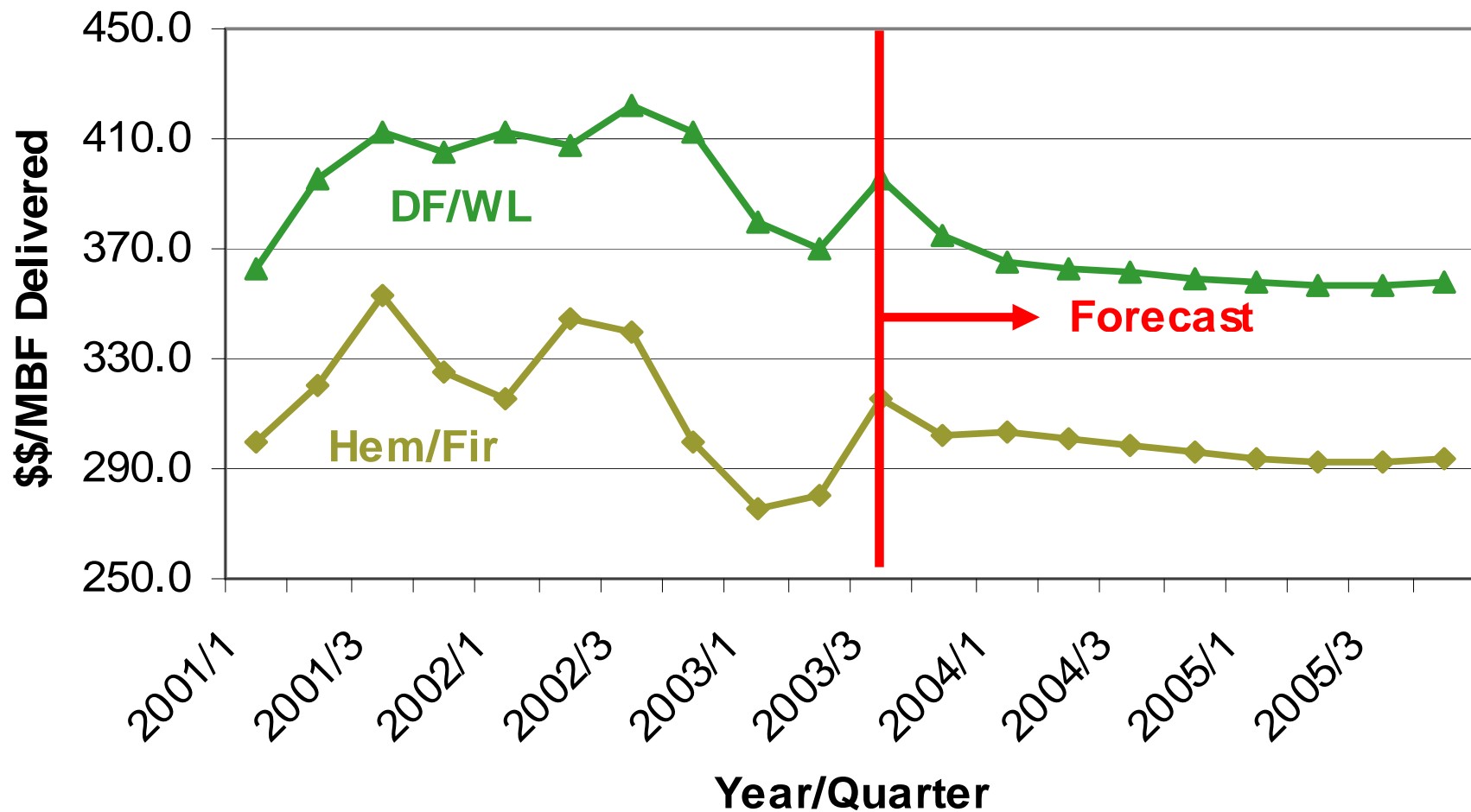
# Just How Sure Are We?

Single Family Forecasts--A Year Later  
from 03 & 04 Global Insights model



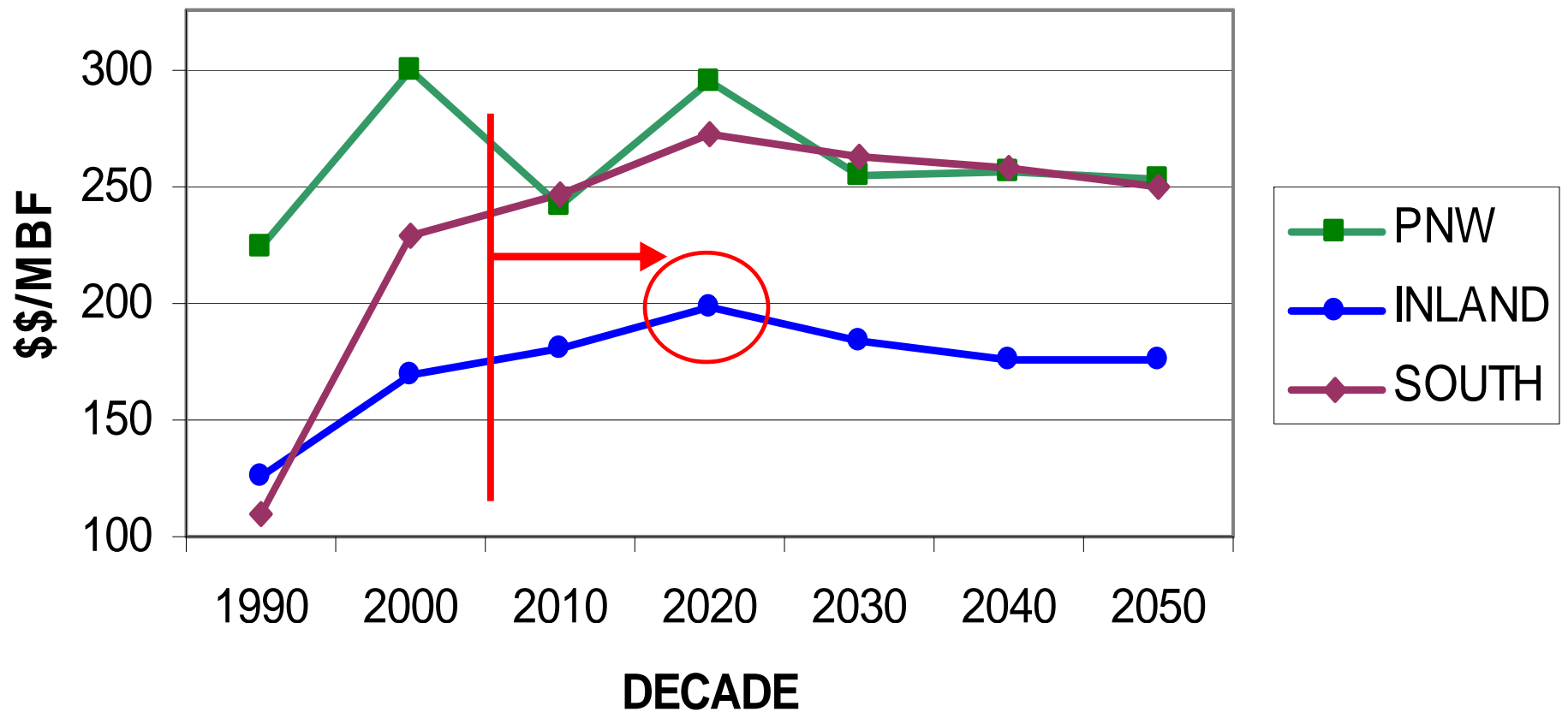
# Future Log Prices

**Mean N. Idaho Log Price Projections**  
Based on 1/04 Global Insight single housing forecast



# The Long Look--2020 Demand Blip Still There

## Regional Softwood Stumpage Prices RPA 2000





# What's the NIPF to do?

- Either .....
  - harvest soon
  - Or hold for another cycle
- Optimize logs grown
  - Eg. GF is higher risk/ lower revenue
  - Start sorting harvests to markets
  - Think fat butts with tonwood tops
  - Plant & manage western red cedar
- Get Analytical & Quantitative

# Where Do I Learn More?

- Random Lengths Wood Products Markets  
[www.randomlengths.com](http://www.randomlengths.com)
- RPA website  
[www.fs.fed.us/pnw/sev/rpa/](http://www.fs.fed.us/pnw/sev/rpa/)
- NW Management Log Markets  
<http://consulting-foresters.com>
- Inland Forest Management Log Markets  
[www.inlandforest.com](http://www.inlandforest.com)
- Steve Shook's Forest Products Website  
[www.forestdirectory.com](http://www.forestdirectory.com)
- Data Resources Inc: ID Economic Outlook  
[www.state.id.us/dfm/econinfo.htm](http://www.state.id.us/dfm/econinfo.htm)
- Forest Econ Inc. analytical services & treecents  
[www.treecents.com](http://www.treecents.com)