Still lots of headwinds to deal with:

- economy is getting better, albeit very slowly
- government debt issues – all levels of government – exacerbates the job problem
- Much of Europe in recession – major banking problems – Cyprus is latest – China is slowing too
- Housing’s main problems - Weak domestic economy made worse by slowing world economy; weak job market; poor income growth; high debt levels; and tight credit environment

• Demand (not enough), Debt and uncertainty are some of serious problems that are impacting the economy.

• Job creation is key to better demand!!! – this requires better vision from “Washington”
**Background:**

Housing Markets are getting better –

Have we turned the corner? – Probably, but the climb back will remain muted until we see economic growth of 3% or more for an extended period of time!!! That probably won’t happen for until 2014 or 2015?

Today, there is lots of slack in the economy – i.e., there is a gap between what the economy can produce and demand for goods and services. As long as that continues, wage and income growth will remain weak, and the economy will limp along.

So, how do we get 3% GDP growth. We need demand – that means job creation – that means “Washington” has to get its’ “collective act together” and show much needed leadership. As of March 2013, I don’t see nearly enough “leadership” from our elected officials – we need cooperation to deal with thorny issues like debt, entitlement reform, taxes, ..... So far, very little progress. All the while, our debt situation keeps getting worse – sometime in the future we will need to pay those debts off and when interest rates rise (and they will), just paying the interest will take a much bigger share of our GDP.
Before we discuss the latest housing data, let’s briefly look at the relationship between the economy, housing, and wood products.

1st two slides show that the economy and housing are closely related.

3rd slide shows that both panels and lumber demand is driven by housing, both starts and remodeling.

4th slide shows how wood prices respond to housing starts.
- This is essentially economics 101 – housing (demand) drives prices.
- Wood prices – strong demand drives prices up and vice versa.

5th slide shows conference board’s latest U.S. outlook.
Housing’s contribution to GDP (%) – housing is extremely important to the economy – in a good year, it is almost one fifth or 20% of the economy, but with the housing collapse, it is down to 15% - key reason why the economic recovery remains muted.

Housing services = gross rents paid by renters (incl utilities) + owner’s imputed rent (how much it would cost to rent owner occupied homes) plus utility payments
RFI (residential investment) = construction of new SF and multifamily structures, remodeling, manufactured homes, plus broker’s fees

Source: NAHB
Housing (and car sales) help drive the economy - 
But you can see how much less impact there has 
Been with the latest recession. - i.e., 10% impact during 2009 – 2012 
Versus almost 18% during 2002 and 1991/1992, and 31% during 1983

Source: (http://www.theatlantic.com/business/archive/2013/12/the-most-overlooked-statistic-in-economics-is-poised-for-an-epic-comeback-household-formation/266573/)

Post-Recession Average GDP Growth Due to Car and House Sales

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971:Q1-1971:Q4</td>
<td>56.70%</td>
</tr>
<tr>
<td>1975:Q2-1976:Q2</td>
<td>28.80%</td>
</tr>
<tr>
<td>1980:Q4-1981:Q3</td>
<td>2.68%</td>
</tr>
<tr>
<td>1983:Q1-1983:Q4</td>
<td>30.58%</td>
</tr>
<tr>
<td>1991:Q2-1992:Q1</td>
<td>17.90%</td>
</tr>
<tr>
<td>2002:Q1-2002:Q4</td>
<td>17.62%</td>
</tr>
<tr>
<td>2009:Q3-2012:Q1</td>
<td>10%</td>
</tr>
</tbody>
</table>

U.S. Softwood Lumber

- R&A: 30%
- Industrial: 16%
- New Residential*: 40%
- NR: 12%

U.S. Structural Panels

- R&A: 19%
- Industrial: 17%
- New Residential*: 53%
- NR: 10%

*New Residential incl. SF, MF, and Mobile Homes

Source: Lumber – WWPA; Panels – APA
Housing starts and wood product prices – Economics 101

Following housing bust in 2008, wood prices fell and production capacity was reduced. So, when housing starts increased, there was an imbalance between demand and supply of wood products. The price mechanism brings demand and supply into balance. Initially, prices fell almost 50% - this instigated production cutbacks of 50% or more – then, when housing begins to turn around, prices increase - this will encourage production increases for wood products – and the cycle starts over.
## Latest Economic outlook from the Conference Board

### The U.S. Economic Forecast

*Updated: April 10, 2013*

Percentage change, seasonally adjusted annual rates (except where noted)

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IV Q</td>
<td>I Q</td>
<td>II Q</td>
<td>III Q</td>
<td>IV Q</td>
</tr>
<tr>
<td>Real GDP</td>
<td>0.4</td>
<td>3.5</td>
<td>0.8</td>
<td>1.6</td>
<td>2.1</td>
</tr>
<tr>
<td>Real Consumer Spending</td>
<td>1.8</td>
<td>3.6</td>
<td>1.7</td>
<td>2.1</td>
<td>2.0</td>
</tr>
<tr>
<td>Housing Starts mil. Units</td>
<td>0.90</td>
<td>0.93</td>
<td>0.99</td>
<td>1.06</td>
<td>1.10</td>
</tr>
<tr>
<td>Real Capital Spending</td>
<td>13.1</td>
<td>3.7</td>
<td>5.7</td>
<td>6.2</td>
<td>8.1</td>
</tr>
<tr>
<td>Net Exports Bill</td>
<td>-384.7</td>
<td>-389.6</td>
<td>-394.4</td>
<td>-398.6</td>
<td>-410.6</td>
</tr>
</tbody>
</table>

* Actual Value

Source: Conference Board (http://www.conference-board.org/data/usforecast.cfm)
Economic growth is challenging without the help of a healthy housing market

I keep repeating this slide, but there is no way housing can return to “normal” (~ 1.5 million starts) without a robust economy and the economy can’t get “revved up” without a healthy housing market
Employment situation - our biggest problem - it’s getting better, but the jobs recovery remains weak by past standards, and many jobs Don’t include health care or retirement benefits (because they are Often part time jobs) – those kinds of jobs don’t encourage people to buy houses

Net change in non farm payrolls – monthly, thousands

We need 100,000 net new jobs/month To keep up with new entrants to workforce 300,000/month to bring unemployment down

Stimulus spending effect

March +88,000

Source: U.S. BLS (www.bls.gov)
Unemployment remains high and will remain relatively high for several years – **but, it's getting better “slowly”**

**There are about 21 million people either unemployed, underemployed, or stopped looking – they are not buying houses**

Other employment issues –

- Labor force participation rate, lowest since WWII
  implications – more problems funding social programs

- 42% of U.S. households with the head of HH <65 (excl. SSI),
  are receiving government aid – food stamps, Medicaid;
  disability; housing allowance; UI; etc. This is unprecedented
  and suggests that our employment problems are more serious
  than the monthly UI numbers suggest. Also indicates serious
  personal problems related to unemployment. **Why job
  creation should be number one priority!!!**


- Going forward, this will be a huge drag on the federal
  (and other government levels) budgets – implications for
  taxes, spending, domestic programs, and job creation
Labor force participation rate - -

Major problems for social programs with our aging population – fewer people paying taxes, but more people collecting SSI, Medicare, etc.

% of civilian population, 16 years and older, that are working

Source: BLS
More than 120 million people on various assistance programs. This doesn’t include “seniors” with SSI, Medicare – i.e., these are working age people on various forms of government assistance.
Since the recession, more people (on net) have gone on disability than have joined the workforce – once on SSDI, less than 1% get off.

The Ailing Economy

The rate of disabled workers in the U.S. receiving SSDI is rising...

SSDI beneficiaries as a share of the population, age 20-64 years:

- 2012: 4.8%
- 2013: 6.3%

...and it's cost as a share of the overall economy is growing.

SSDI benefit payments as a percentage of GDP:

- 2012: 0.87%

Sources: Labor Dept. (top); Social Security Administration and Commerce Department (GDP); The Wall Street Journal

Recent Housing statistics

Background:
Markets are getting better –
Have we turned the corner? – Probably, but
The climb back will remain muted
Until we see economic growth of 3% or
More for an extended period of time!!!
Starts are finally turning the corner??
Problems going forward: distressed resales (i.e., foreclosures) and jobs.
Rising prices will moderate the foreclosure problem while good paying jobs will create demand – this will take more time!!

Source: Census (http://www.census.gov/const/www/newresconstindex.html)
Multi family making a comeback??

Source: (http://www.census.gov/construction/nrc/)
Multi family share is increasing – will it continue?

Housing share (%)

- **Single family**
  - Single family collapse
  - Following housing bust – then
  - Brief resurgence due to
  - HEMP/HAMP, other Federal support programs

- **Multi family**
  - The new normal – Higher multifamily share??

Source: Census (http://www.census.gov/construction/nrc/ )
Resale market getting better – however, in 2012, about 25% of sales were cash only, mostly by investors – these homes were then rented - i.e., this is not your typical housing recovery

Single family (incl condos), Monthly, Thousand units, SAAR

Source: NAR (http://www.realtor.org/research)
New Single Family Home sales is the key statistic to watch – Sales drive housing starts – this drives demand for wood products!!!

Problem is price competition with resale homes, particularly distressed sales

Source: Census (http://www.census.gov/const/www/newressalesindex.html)
Key metric: Resale Home Prices are increasing—needed to stop foreclosures; enable people to sell homes and move to better jobs; apply for refinancing—this will turn housing Market around along with improving economy

Annual increase of 8% - Best in 6 years
What’s behind the price increases? – low inventories, pent up demand, low interest rates, and tight credit standards mean many owners postpone selling because they can’t get a new mortgage. I.e., reduced supply and increased demand.
Low Inventories help drive prices higher

**Inventory is Exceptionally Lean in Existing Home Market...**

- **Existing Single-Family Houses for Sale (NSA, Millions)**
- **Months' Supply of Single-Family Existing Houses (Months)**

![Graph showing inventory and months' supply over time](image)

*Source: National Association of REALTORS®*
1.7 million Fewer underwater homeowners in 2012 vs 2011
Significance: as equity increases, people spend more; easier to refinance; Confidence increases; move to new jobs; Great for the economy

Source: WSJ, March 19, [http://online.wsj.com/article/SB10001424127887323639604578368640417542244.html?KEYWORDS=more+homeowners+dig+out](http://online.wsj.com/article/SB10001424127887323639604578368640417542244.html?KEYWORDS=more+homeowners+dig+out)
Good News stories - -

(1) Remodeling share of private residential construction to increase
(1) Household formations are improving – but, depends on stronger economy
Construction Value Put In Place – remodeling
Equals new SF construction for past four years

Source: Bureau of Census (http://www.census.gov/construction/c30/privpage.html)
In 2011, half of U.S. homes were 37 years old or older. Good news for remodeling business – in fact, over time, we will emulate Europe where remodeling expenditures routinely exceed expenditures on new construction.

Source: AHS (http://www.census.gov/hhes/www/housing/ahs/nationaldata.html)
Household formation - Key to Housing Demand –
Stronger economy will drive HH formations
Historically, household formations account for 65% of housing demand –
Since 2007, they are half the historical rate – when the economy picks up,
HH formations will go back to normal – again the key is the economy (jobs)

Source: (http://www.clevelandfed.org/research/Commentary/2012/2012-12.cfm)
Household formation forecasts – various scenarios

Exhibit 85: US household formation with forecasts

Source: Credit Suisse, Thomson Reuters DataStream

Harvard* Housing Demand Forecasts 2010 – 2020 (latest - September 2010)

Vacancy demand – 2nd homes, speculation building
Removals – net loss from existing inventory of housing stock

Annual rate (000)

Low Scenario

- Household growth
- Vacant unit demand
- Net removals

High scenario

- Household growth
- Vacant unit demand
- Net removals

2012 demand = 831
Incl. mfg. homes

Strong economy
Will drive household formations

Low rate: lower household formations & Lower immigration projections

Source: HJCHS, W10-9, amended (http://www.jchs.harvard.edu/sites/jchs.harvard.edu/files/w10-9_masnick_mccue_belsky.pdf)
Homeownership rates have been falling for the past seven years – lower homeownership means less demand for single family housing and increased numbers for multi family/rental housing - that means less demand for wood

Source: Bureau of Census

Source: Census (http://www.census.gov/housing/hvs/files/qtr412/q412press.pdf)
But, Continuing Problems with Housing

(1) Tight Credit remains big problem and the Private sector has to return to the mortgage Market

Essentially, the housing finance market is broken and it needs To be fixed (i.e., private sector returns) before housing gets Back to normal!!! Today, "Washington" has too much Influence over housing markets.

(2) Debt and income growth remains a problem too

Difficult to buy a house if you can’t make mortgage payments
Housing Finance market is Broken – future prospects are not good until federal “footprint” shrinks – i.e., private sector needs to return to mortgage market

Bottom line - unless you have cash, you will have difficulty Buying a house

E.g, the Federal government is the mortgage market today. Fannie, Freddie, and FHA issue, insure, hold 90% or more of residential mortgages written in past 5 years. Fannie and Freddie are in conservatorship (fancy word for bankruptcy), and FHA announced on November 20 that they need taxpayer Assistance (i.e., their liabilities exceed their assets).
Combined Enterprise Share (Fannie and Freddie) of Residential Mortgage Market – Fannie and Freddie Are “in conservatorship” – How would you feel if your savings were in a bank that was insolvent?

Source: Federal Reserve

Residential Mortgage Debt = $11.4 trillion
Fannie and Freddie = $5.3 trillion
Debt, Wealth, and Income Problems
If housing (and standard of living) is to improve on sustainable basis,
Incomes will have to increase in real dollars
Median Annual Incomes in Inflation Adjusted $
We’re keeping up with inflation, but that’s it!!

Household – includes family and non family members living within a housing unit
Family – includes people related by birth, marriage, or adoption

Inflation adjusted incomes today are same as 1996
i.e., no growth in 15 years

Some conclusions – housing remains weak till economy fixed

(1) “Washington” has to deal with the thorny issues - until they do, private sector will remain on the sidelines with their $2 trillion “stash”. That will delay investments needed for job creation. Here is my guess at what will happen over the next 12 - 18 months:
- no decisive action (i.e., tax reform – broadening the tax base; hard look at entitlements*; spending cuts; develop a realistic budget) – instead, they will “kick the can down the road” because too many don’t have the guts to make the tough decisions (that they were elected to do) - “Washington” will do nothing major until one of two things happen: (a) the bond markets force them to (raise interest rates, etc.); (b) angry taxpayers vote in enough new members of Congress in 2014.

(2) World economy continues to slow, particularly China and Europe

(3) End result – U.S. economy avoids a recession, but only “limps along” in 2013 (i.e., 2% GDP) and the housing recovery remains muted. 2014 will bring continuing improvement (maybe 3% GDP). This means housing will see only gradual improvement, hopefully reaching 1.5 million starts by 2015.

* my apologies for using this term - most people earn SSI and Medicare, so they are not entitlements, but something they already paid for. That said, Washington must make the necessary changes to match future expected revenues and costs to insure these important programs remain solvent for our younger taxpayers.