June 2013 Housing Commentary



Urs Buehlmann

Department of Sustainable Biomaterials
Virginia Tech
Blacksburg, VA
540.231.9759
buehlmann@gmail.com

and

Al Schuler

Economist (retired)
Princeton, WV

Table of Contents

Slide 3: Housing Scorecard

Slide 4: New Housing Starts

Slide 5: <u>Housing Permits and Completions</u>

Slide 6: New and Existing House Sales

Slide 8: Construction Spending

Slide 9: Conclusions

Slide 10 - 60: Additional Comments&Data

Slide 61: Disclaimer

June 2013 Housing Scorecard

	M/M	Y/Y
Housing Starts ^A	∇9.9%	Δ 10.4%
Single-Family Starts ^A	∇ 0.8%	Δ 11.5%
Housing Permits ^A	∇ 7.5%	Δ 16.1%
Housing Completions ^A	$\Delta 6.3\%$	$\Delta 20.2\%$
New Single-Family House Sales ^A	$\Delta 8.3\%$	$\Delta 38.1\%$
Existing House Sales ^B	$\nabla 1.2\%$	Δ 15.2%
Private Residential Construction Spending ^A	v 0.4%	Δ 9.7%
Single-Family Construction Spending ^A	v 0.8%	$\Delta 28.2\%$

M/M = month-over-month; Y/Y = year-over-year

New Housing Starts

	Total Starts*	Single- Family Starts	Multi-Family 2-4 unit Starts	Multi-Family 5 or more unit Starts
June	836,000	591,000	9,000	305,000
May	928,000	596,000	10,000	306,000
2012	757,000	530,000	8,000	219,000
M/M change	-9.9%	-0.8%	-10.0%	-0.3%
Y/Y change	10.4%	11.5%	12.5%	39.3%

^{*} All start data are presented at a seasonally adjusted annual rate (SAAR)

New Housing Permits and Completions

	Total S Permits*	Single-Family Permits	Multi-Family 2-4 unit Permits	Multi-Family 5 or more unit Permits
June	911,000	624,000	26,000	261,000
May	985,000	620,000	27,000	338,000
2012	785,000	501,000	24,000	260,000
M/M change	-7.5%	0.6%	-3.7%	-22.8%
Y/Y change	16.1%	24.6%	8.3%	0.4%
	Total Completions	Single-Family * Completions	Multi-Family 2-4 unit Completions	Multi-Family 5 or more unit Completions
June			2-4 unit	5 or more unit
June May	Completions	* Completions	2-4 unit Completions	5 or more unit Completions
	Completions 755,000	* Completions 554,000	2-4 unit Completions 13,000	5 or more unit Completions 188,000
May	755,000 710,000	* Completions 554,000 560,000	2-4 unit Completions 13,000 10,000	5 or more unit Completions 188,000 140,000

^{*} All data are SAAR

New and Existing House Sales

		The second second				
	New Single-Family Sales*	Median Price	Month's Supply	Existing House Sales ^{B*}	Median Price ^B	Month's Supply ^B
June	497,000	\$249,700	3.9	5,080,000	\$208,000	5.2
May	459,000	\$262,800	4.2	5,140,000	\$191,800	5.0
2012	360,000	\$232,600	4.8	4,660,000	\$180,300	5.9
M/M change	8.3%	-4.9%	-7.1%	-1.2%	8.4%	4.0%
Y/Y change	38.1%	6.8%	-18.8%	15.2%	15.4%	-18.8%

^{*} All sales data are SAAR

Existing House Sales

National Association of Realtors (NAR®)^B June 2013 sales data:

Distressed house sales: 15% of sales – (8% foreclosures and 7% short-sales)

Distressed house sales: 18% in May and 26% in June 2012

All-cash sales: decreased to 31% - 33% in May

Investors are still purchasing a substantial portion of "all cash" sale houses – 17%; 18% in May 2013 and 19% in June 2012

First-time buyers: decreased to 29% (28% in May 2013) and were 32% in June 2012

June 2013 Construction Spending

Private Construction: \$322.08 billion (SAAR)

0.0002% above the revised May estimate of \$332.08 billion (SAAR) 18.1% above the May 2012 estimate of \$281.13 billion (SAAR)

June SF construction: \$164.83 billion (SAAR)

-0.8% greater than May: \$166.18 billion (SAAR)

28.2% greater than June 2012: \$128.54 billion (SAAR)

June MF construction: \$30.97 billion (SAAR)

-3.3% greater than May: \$32.02 billion (SAAR)

40.6% greater than June 2012: \$220.03 billion (SAAR)

June Improvement^C construction: \$136.28 billion (SAAR)

1.7% greater than May: \$133.95 billion (SAAR)

13.8% greater than June 2012: \$119.81 billion (SAAR)

^C The US DOC does not report improvements directly, this is an estimation.

Conclusions

The housing market continues to heal and the U.S. economy is slowly improving. Thus, our near-term outlook on the U.S. housing market remains unchanged, with some macro factors having the potential to damage a robust housing recovery.

Why?

- 1) rising interest rates
- 2) a lack of well-paying jobs,
- 3) a sluggish economy
- 4) declining real median annual household incomes,
- 5) strict home loan lending standards, and
- 6) new banking regulations.

Housing comments –July 2013

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 -
 - 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, debt and uncertainty are some serious problems that are impacting the economy – but, getting better
- Two major concerns going forward
 - (1) can the economy (and housing) stand on its own (without Fed stimulus) ???
 - (2) Uncertainty is key reason holding back job creating investments. Ex., impact of health care legislation; Dodd/Frank; dysfunctional "Washington";
 - (3) Will rising rates derail the housing market?
- . <u>Bottom line housing is on the mend and getting stronger back to normal</u> <u>(1.5 million starts) by 2015!</u>

A note on July's housing numbers

Total starts were disappointing, but the drop of 10% was due almost entirely to the 26% drop in the multifamily sector. Single family starts were down less than 1%.

Multifamily starts are historically volatile – due in large part to financing – it is more difficult than SF; and it goes In spurts.

My opinion – housing continues to improve and yesterday's Numbers did not change my mind.

Some questions going forward:

- (1) Sustainable housing recovery?
- (2) Economy inflation; deflation; or disinflation?

 Hyper Inflation from running the printing presses for past 3 5 years

 Deflation 1930's weak demand

 Disinflation slower rate of inflation
- (3) Dollar weaker or stronger? If U.S. raises interest rates before others, then US\$ will strengthen it is already happening this will hurt exports while encouraging imports. If it doesn't get too strong, a stronger dollar is good for the economy.

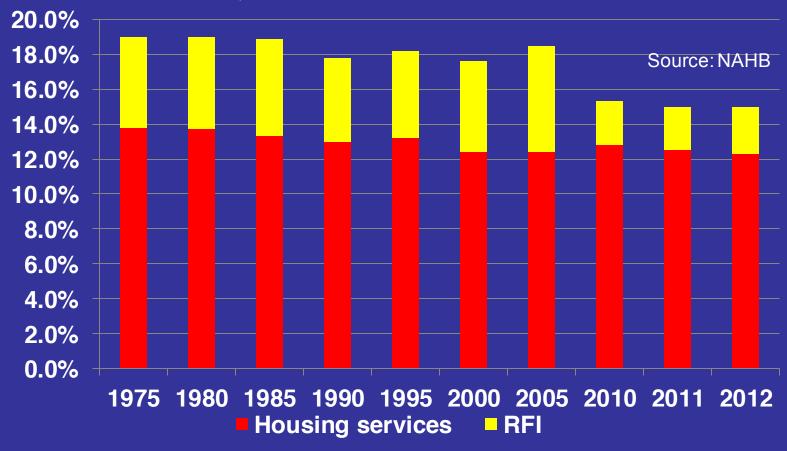
Housing, Economy, and wood products

They are "joined at the hip"

Housing's contribution to GDP (%) — historically, it is almost 20% of the economy when you include housing services and fixed investment, but today it is down to 15%. In reality, it is even more important when you include purchased furniture, landscaping, general maintenance, etc. key reason why the economic recovery remains muted

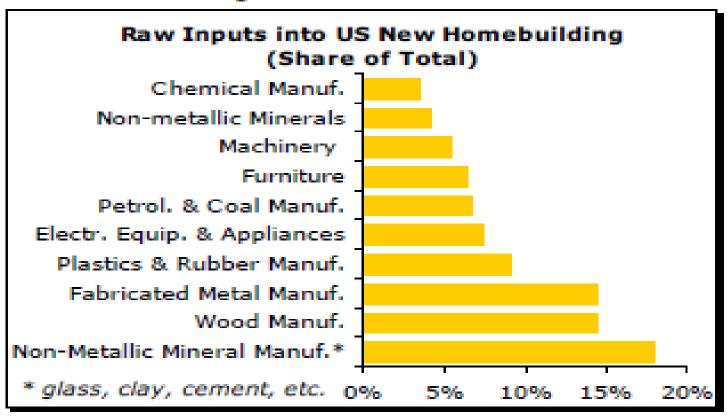
<u>Housing services</u> = gross rents paid by renters (incl utilities) + owner's imputed rent (how much lt would cost to rent owner occupied homes) plus utility payments

<u>RFI (residential investment)</u> = construction of new SF and multifamily structures, remodeling, manufactured homes, plus broker's fees



Housing is important to wood products, but other Products benefit too

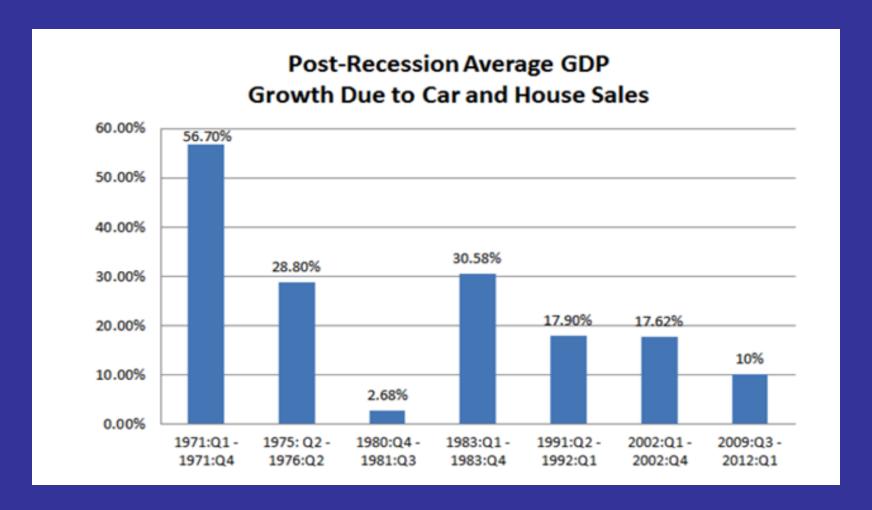
US Homebuilding: Not Just Lumber



Source: US Bureau of Economic Analysis, CIBC

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

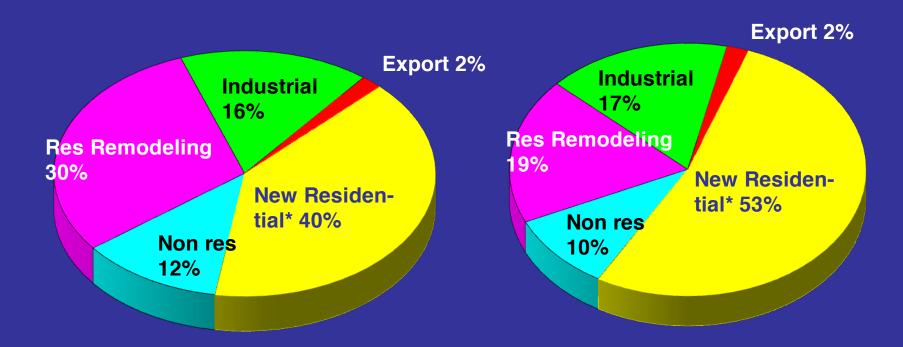


Source: (http://www.theatlantic.com/business/archive/2012/12/the-most-overlooked-statistic-in-economics-is-poised-for-an-epic-comeback-household-formation/266573/)

Softwood Market Shares: Average during 1998 – 2007

U.S. Softwood Lumber

U.S. Structural Panels

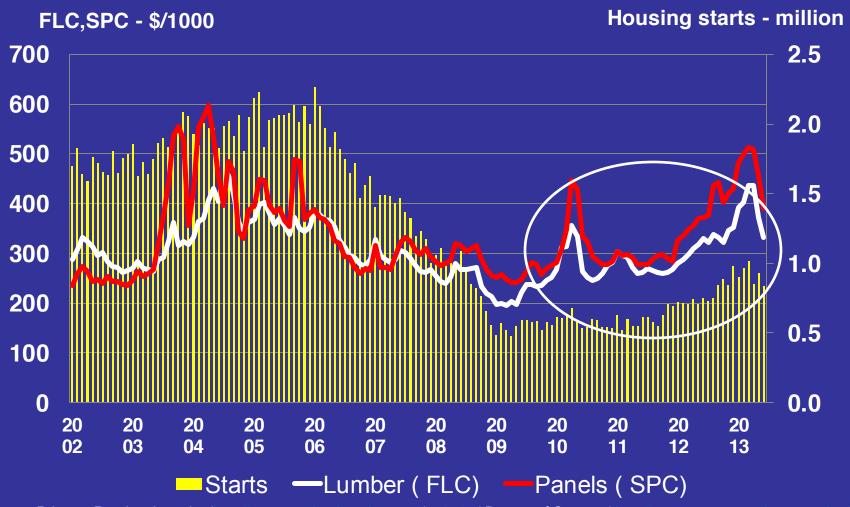


*New Residential incl. SF, MF, and Mobile Homes

Source: Lumber – WWPA; Panels - APA

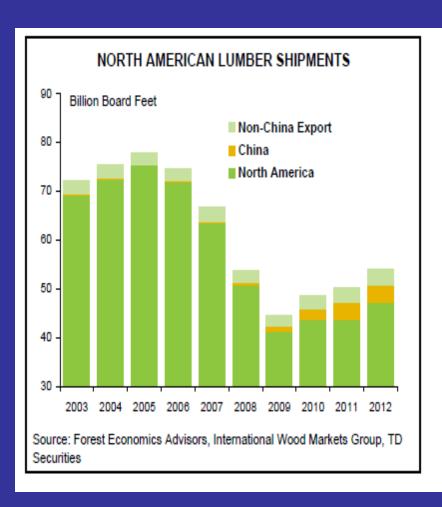
Housing starts and wood product prices - Economics 101

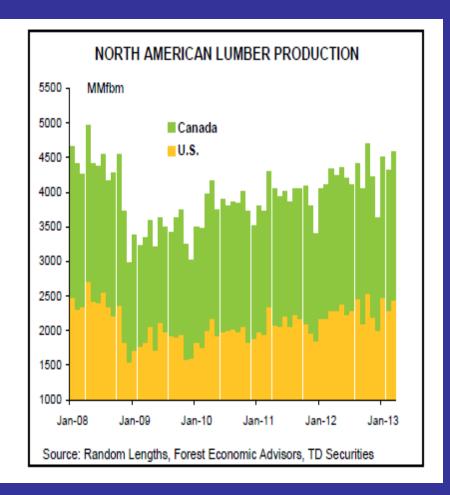
Following housing bust in 2008, wood prices fell and production capacity was reduced. So, when housing starts increased, there was an imbalance between demand and supply of wood products. The price mechanism brings demand and supply into balance. Initially, prices fell almost 50% - this instigated production cutbacks of 50% or more – then, as housing began to turn around, prices increased - this encourages production increases for wood products – and the cycle starts over.



Sources: Prices – Random Lengths (http://www.census.gov/construction/nrc/); starts (Bureau of Census (http://www.census.gov/construction/nrc/)

North American Lumber Shipments and Production





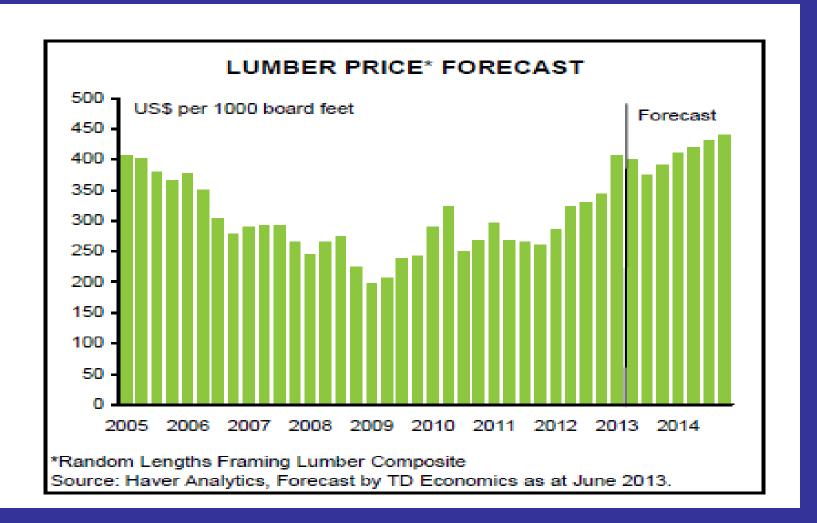
British Columbia's Lumber Supply projected to fall 40% (Impact of Mountain Pine Beetle Infestations)

	AAC	Lumber production
2005	68 MMCM	15 BBF
2013	59 MMCM	
2018	40 MMCM	9 BBF <u>40% drop</u>

BC's share of NA production \sim 20- 25% A 40% drop in BC \sim 8 – 10% drop in NA production This has to impact lumber pricing

Source: Random Lengths (May 31, 2013)

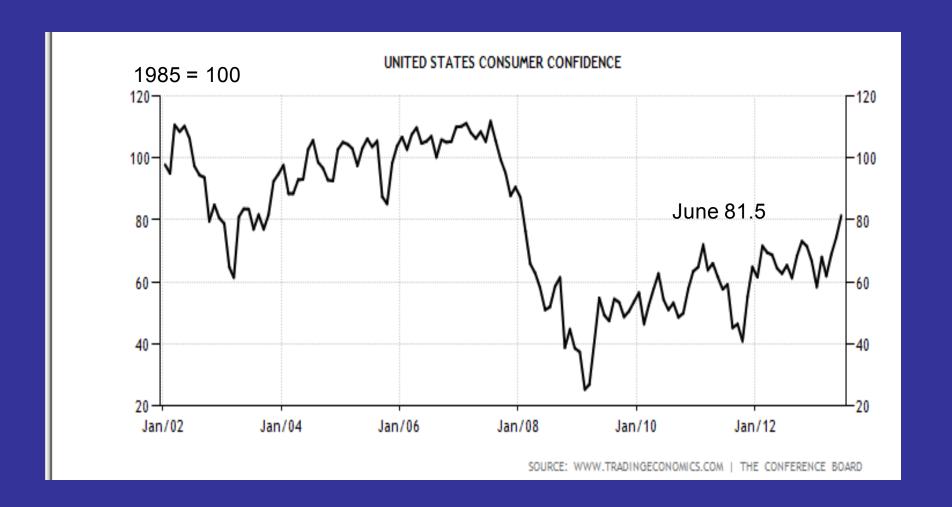
Lumber Price forecast from TD Economics



Wood product pricing should be solid for the next two years or so due to - -

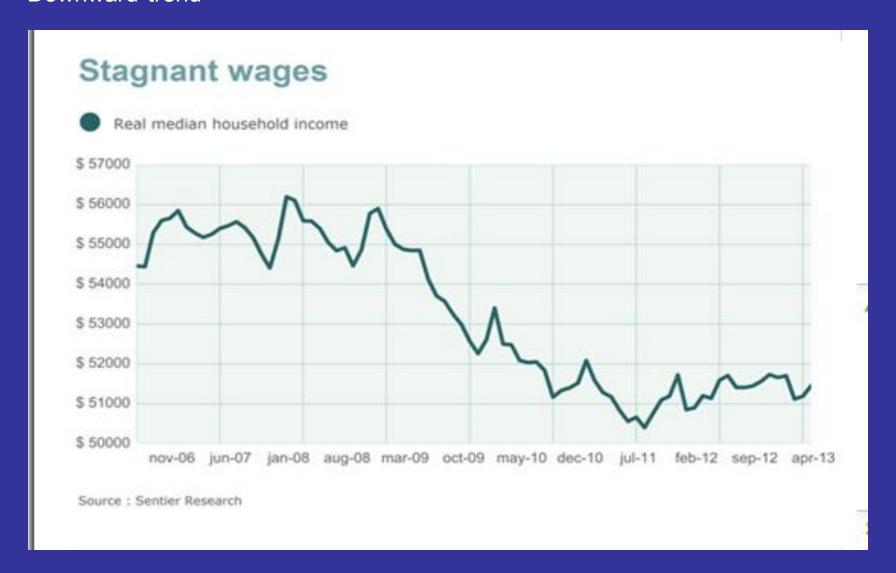
- (1) improving domestic housing market and export
- (2) demand for wood products outstrips supply as previous production cutbacks catch up with demand
- (3) structural products (framing lumber, OSB, plywood), and hardwood based products like furniture, kitchen cabinets, flooring, all benefit from residential construction including new construction plus remodeling.

Consumer Confidence at 5 year high – good news as consumer spending is 70% of the economy



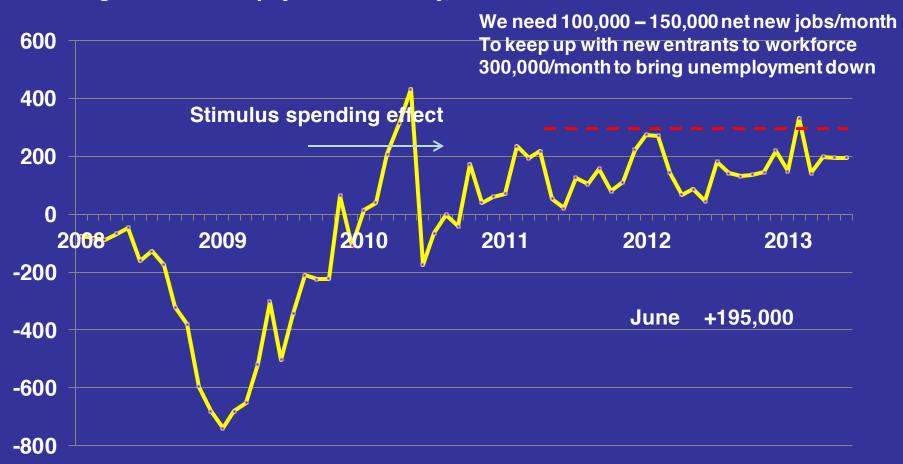
Source: (http://www.tradingeconomics.com/united-states/consumer-confidence)

Although confidence is up, Wages continue a disturbing Downward trend



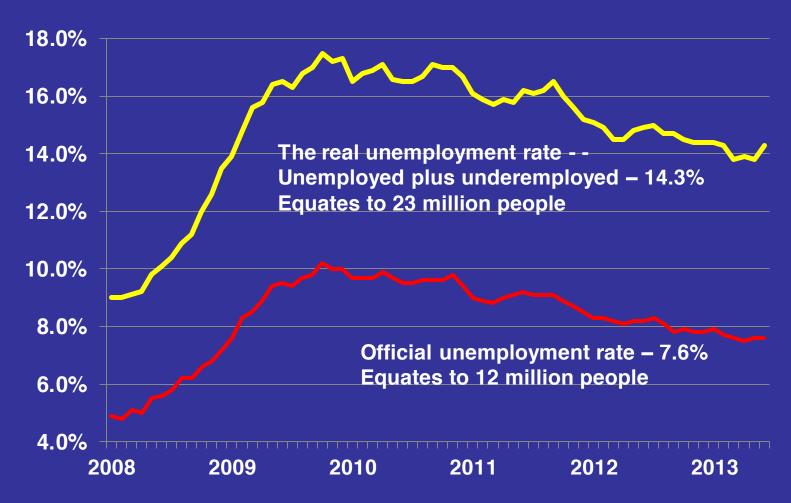
Employment situation - our biggest problem - it's getting better, but the jobs recovery remains weak by past standards, and many jobs don't include health care or retirement benefits (because they are often part time jobs) - those kinds of jobs don't encourage people to buy houses

Net change in non farm payrolls – monthly, thousands



Unemployment remains high and will remain relatively high for several years – but, it's getting better "slowly"

There are about 23 million people either unemployed, underemployed, or stopped Looking – **they are not buying houses



Other economic issues –

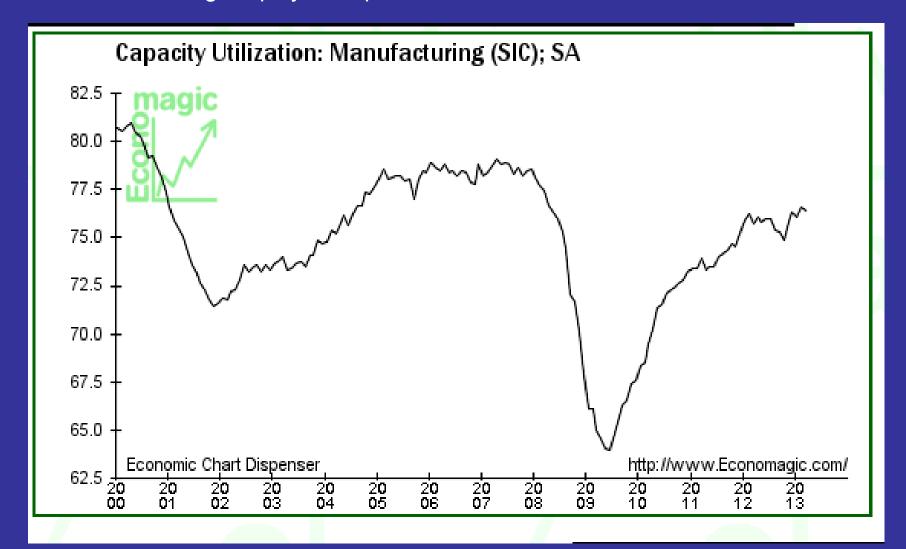
- ➤ The workforce is shrinking and
 Labor force participation rate is lowest since WWII
 Some implications more problems funding social programs
- Capacity utilization remains below 80% that means firms won't invest and that means weak job growth (and weak income growth)
- Inflation not a problem yet
- ➤ Going forward, unemployment will be a huge drag on the federal (and other government levels) budgets implications for taxes, spending, domestic programs, and job creation
- ➤ Major questions going forward are inflation, disinflation, deflation, continued weak growth (disinflation is weakening inflation (i.e., today) whereas deflation is general fall in prices (i.e., 1930's). My guess is continuing weak growth (less than 3% GDP) with moderate pick up in inflation. There are too many headwinds for stronger growth, and deflation is just too ugly to contemplate.

Labor force participation rate is shrinking -

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



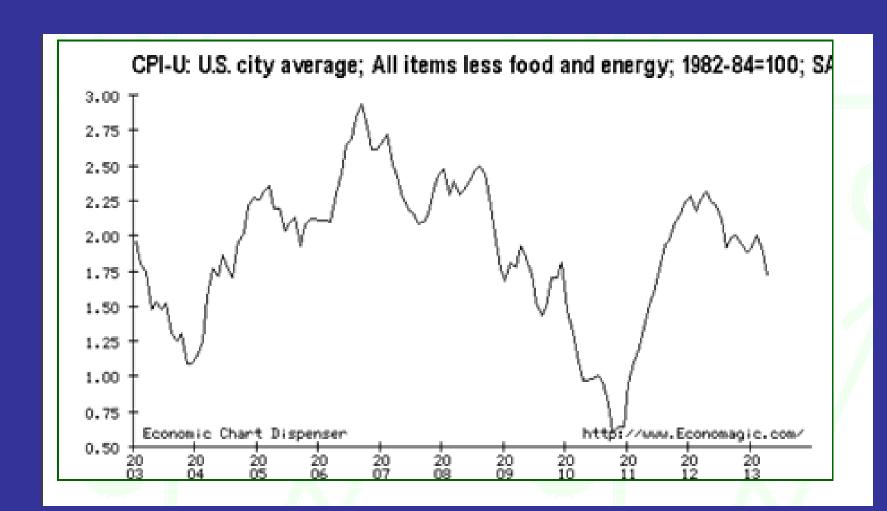
Manufacturing Excess Capacity: Until we get back to 80%, Firms won't invest in new capacity – that means weak income growth and continuing employment problems



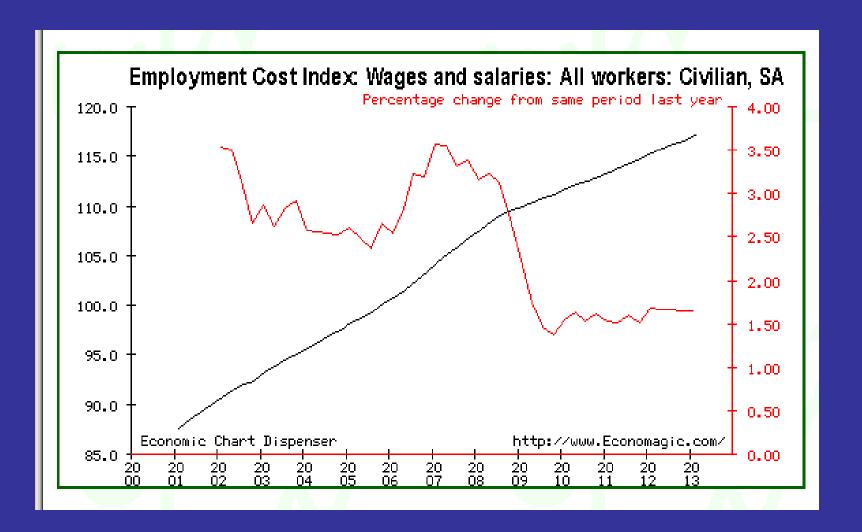
Inflation not a problem yet



Core Inflation (year over year) not a problem either



Wages are main source of inflation – this chart suggests that Inflation is not a problem yet!



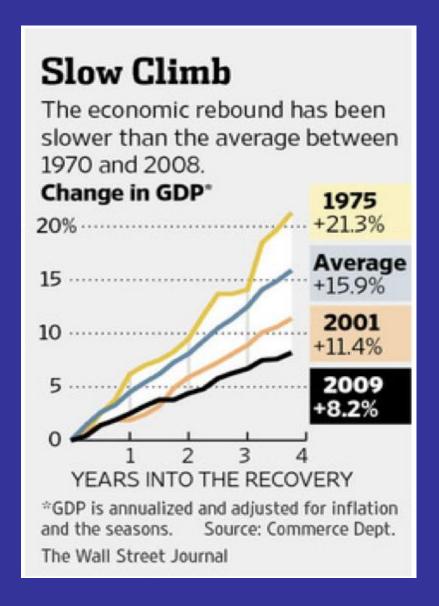
Some additional housing headwinds

A. This economic recovery is much slower than previous ones

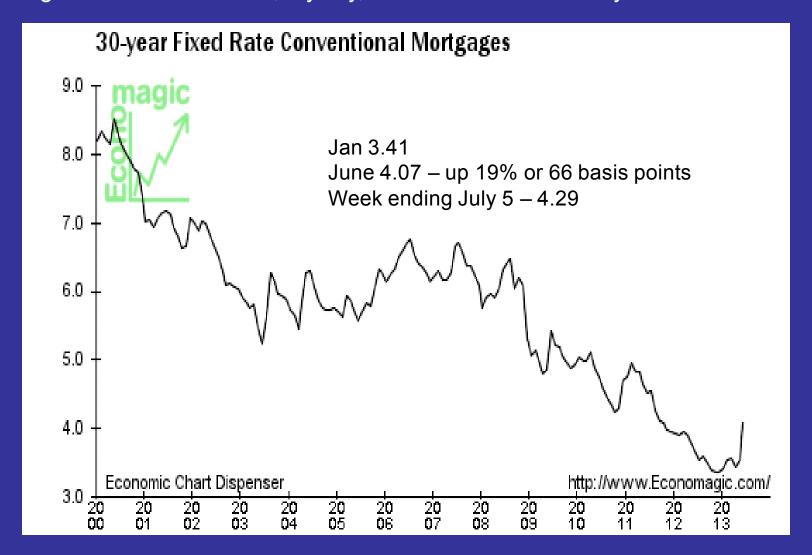
Why

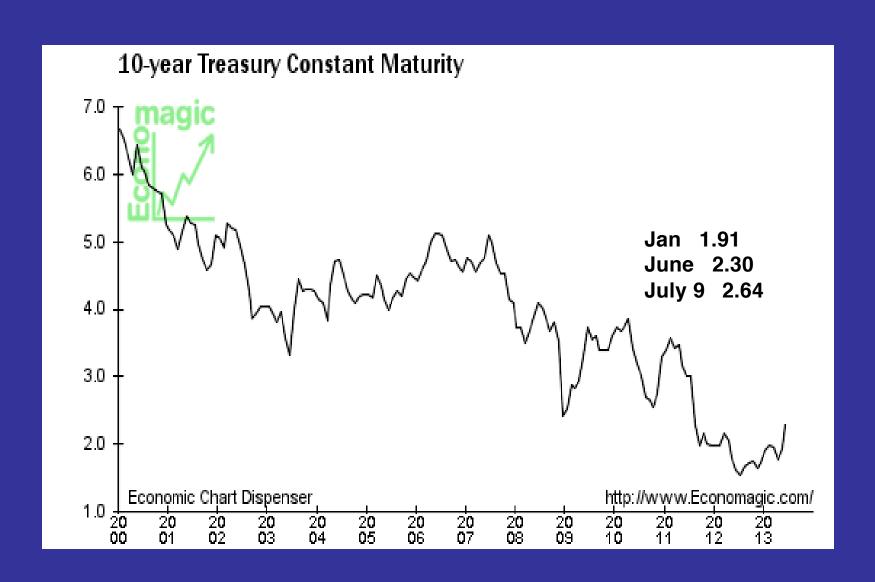
- (1) This recession was a financial recession
- (2) Previous ones were typical economic recession (i.e., economy overheats, the Fed increases interest rates to cool things down,)
- (3) Financial recession are more serious and require more time to heal damaged credit, etc.
- B. And, mortgage rates are trending upward as the Fed pulls back on QE/money printing

A comparison of GDP growth following recessions Recovery from this recession much slower



Source: Wall Street Journal (http://online.wsj.com) Higher Mortgage rates on the way May actually be good for housing – it forces many people
To "get off the fence" and ,anyway, rates are still historically low.





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??

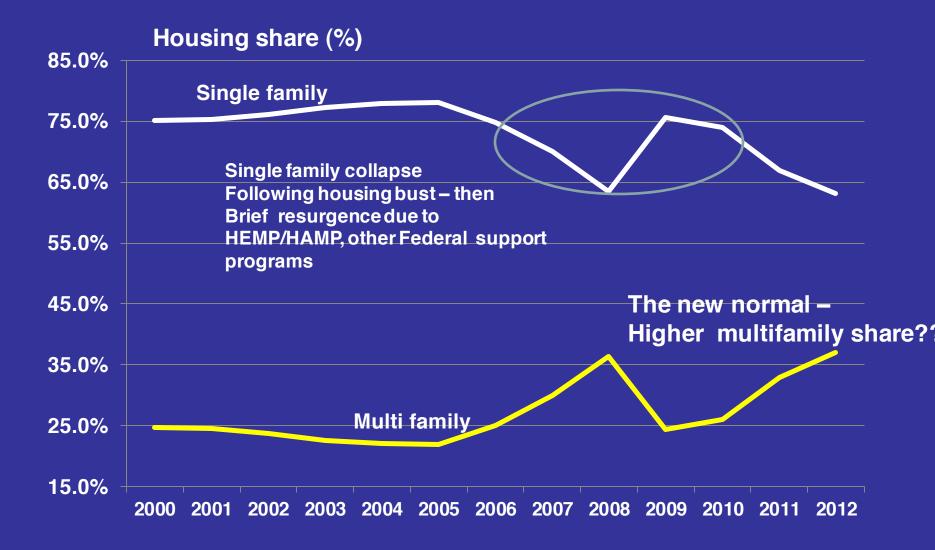
Problems going forward: distressed resales (i.e., foreclosures) and jobs. Rising prices will moderate the foreclosure problem while good paying jobs will create demand – this will take more time!

Single family starts, Thousand units, SAAR

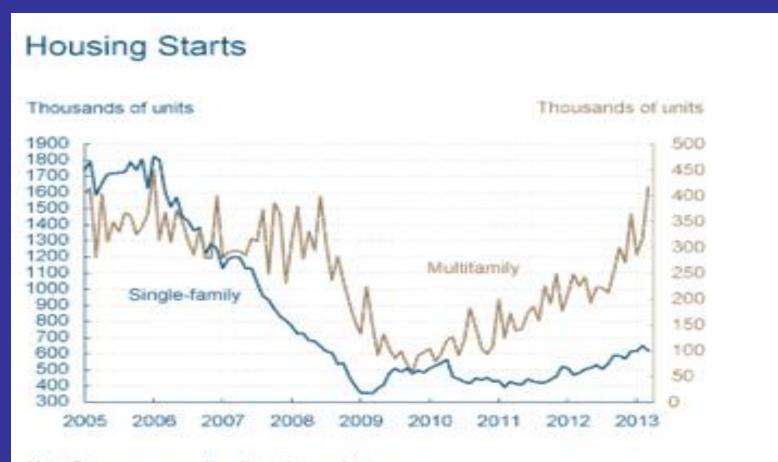


Source: Census (http://www.census.gov/const/www/newresconstindex.html)

Multi family share is increasing – will it continue?



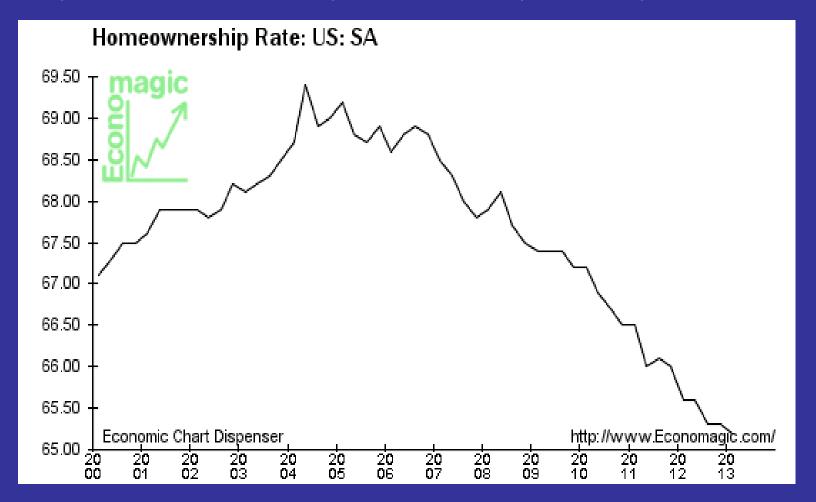
Multi family back to normal – will it keep going up??



Note: Data are seasonally adjusted annual rates.

Source: Census Bureau.

Homeownership rates have been falling for the past seven Years – big question – when the economy gets back to normal, Will people go back to single family or will we see more multi Family?? To date, the "recovery" has been mainly multifamily

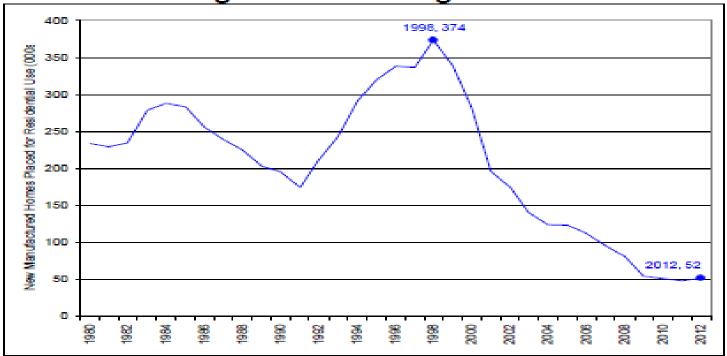


Source: Census (http://www.census.gov/housing/hvs/files/qtr412/q412press.pdf)

In this report, when we discuss housing, we're referring to ("conventional housing")

- Housing built to a specific building code (ICBO/UBC). Manufactured housing, previously called "mobile homes", are built to a different building code, (HUD code). Limited conventional financing options are major reason for downturn (ex., less developed 2nd market for loans and titling of homes as personal property). At one time, manufactured housing was 15% of total housing (conventional plus manufactured) – today, it is 5%.

Exhibit 1. The Slump in Manufactured Housing Production Began 15 Years Ago.



Source: U.S. Census Bureau, Manufactured Homes Survey.

New Single Family Home sales is the key statistic to watch – Sales drive housing starts – this drives demand for wood products!!!

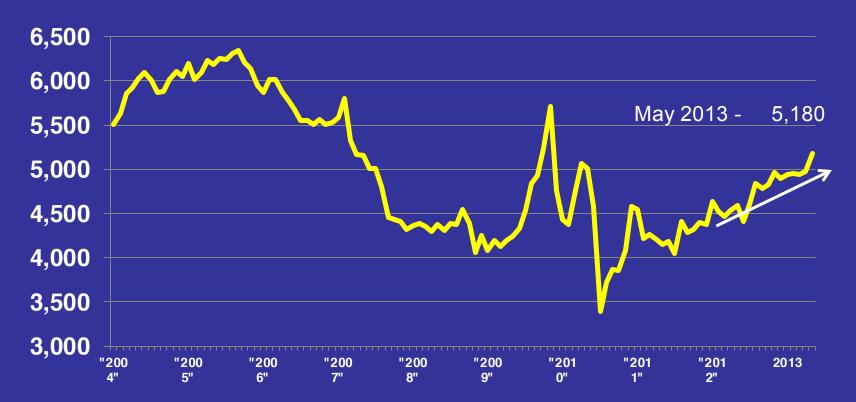
Problem is price competition with resale homes, particularly distressed sales



Source: Census (http://www.census.gov/const/www/newressalesindex.html)

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



Some comments on recent house price increases - -

Let's hope they keep increasing because higher prices Will encourage builders to build more homes –

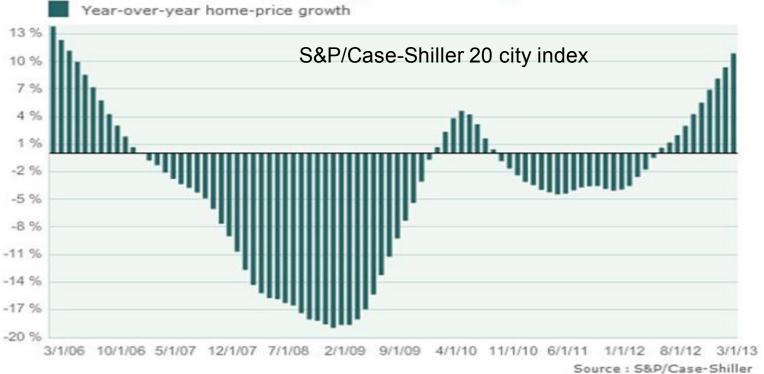
- - in addition -
- (1) higher prices are needed to slow foreclosures;
- (2) enable people with negative equity to sell homes and move to better jobs;
- (3) apply for refinancing -
- (4) this will turn housing market around along with improving economy

Price increase due in large part to weak supply, but, still good news –

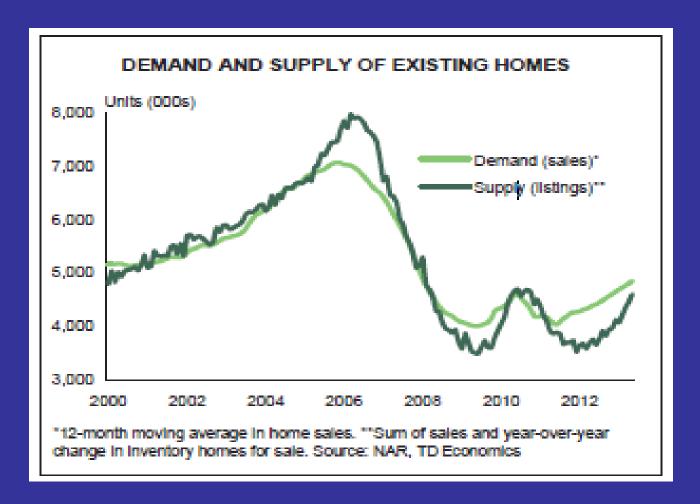
U.S. home-price growth fastest in nearly 7 years

By Ruth Mantell, MarketWatch

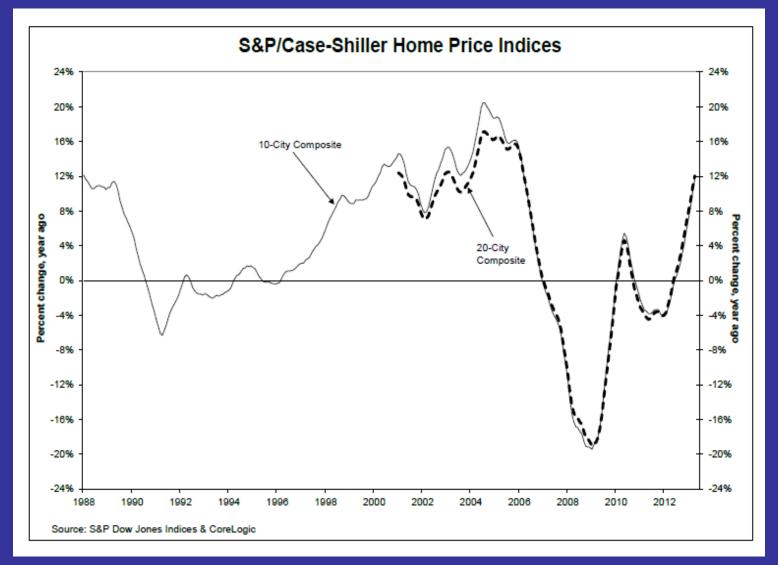
Annual home-price growth highest since 2006



When demand exceeds supply, price rises "Economics 101"



House prices up 12% year over year – Good news Because it will drive supply (housing starts) – Economics 101!



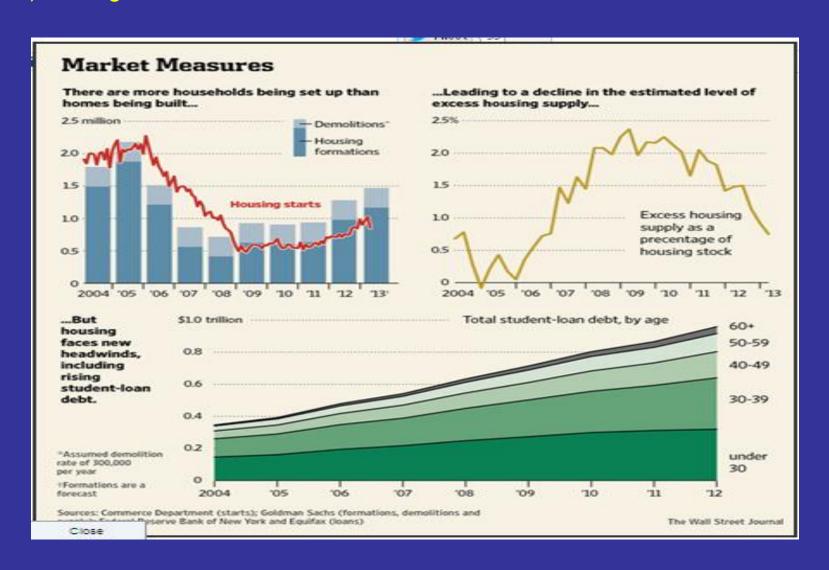
Some comments re: recent house price increases

- (1) Is it real and sustainable?

 Due in large part to demand/supply mismatch

 (Mike Santoli/Daily Ticker, May 28)
 - (a) Low inventories plus weak new home starts
 - (b) 25% of homeowners are still "underwater"
 - (c) 18% have little equity i.e., 40% are "virtually trapped in their houses"
- (2) Are we setting ourselves up for another "bubble" no, we can't be that dumb?
- (3) Yes, it's sustainable as long as the economy continues to move forward!!!
- (4) Rising prices are a good thing (because it means demand is improving)

Sound Housing Rebound? – Problems include tight credit, Excessive debt with 1st time buyers (echo boomers' student loans) – rising interest rate environment



Latest Housing Forecasts – and change from forecast Six months ago – multi family is leading the way

The Forecasts of the Analysts

2013 Housing Starts (thousands)

	Single- Family	Multi- family	Total
APA - The Engineered Wood Assn	645	330	975
Forest Economic Advisors	639	332	971
National Assn of Home Builders	644	311	955
Mortgage Bankers Assn	635	325	959
Fannie Mae	659	318	977
Average	644	323	967
% change from average of the ana- lysts' projections for 2013 in January	+0.3	+12.5	+4.1

Source: Random Lengths, July 12

Good News --

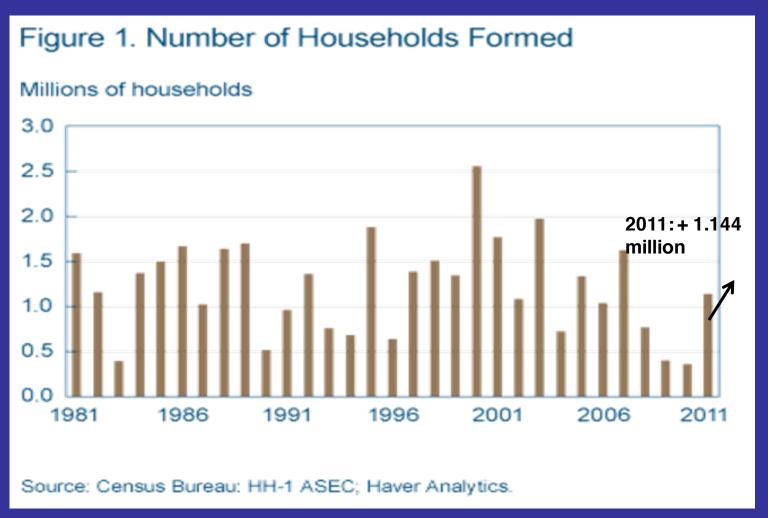
- (1) Household formations are key to the housing recovery - there is a growing "pent up demand"
- (2) Formations are improving but, further improvement depends on a stronger economy

Good news is that household formations exceed starts - Plus, when you include demolitions, there is considerable
"pent up demand" for shelter – again, demand exceeds supply –
A good thing

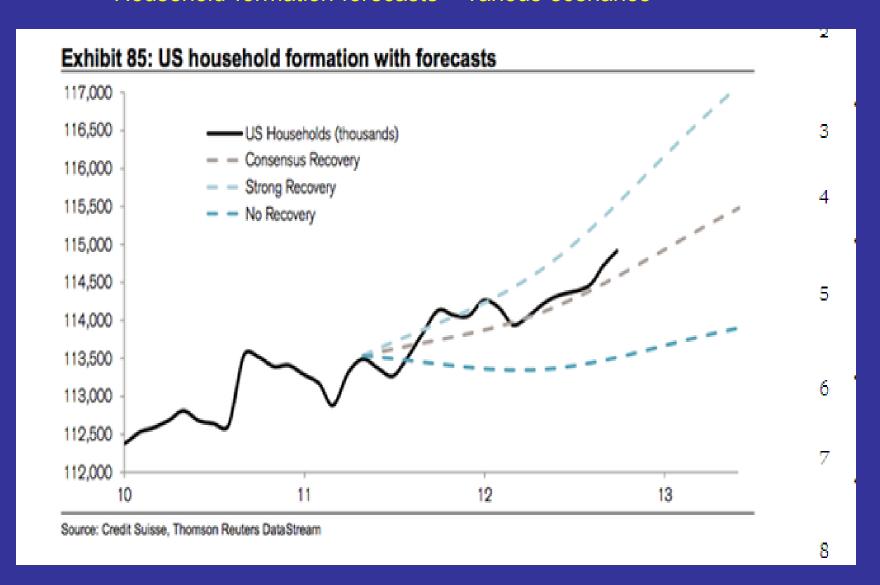


Household formation - Key to Housing Demand – Stronger economy will drive HH formations

Historically, household formations account for 65% of housing demand – Since 2007, they are 1/3rd the historical rate – when the economy picks up, HH formations will go back to normal – again the key is the economy (jobs)



Household formation forecasts – various scenarios



Household (HH) formations Shortfall*

Facts:

- (1) 1995 2007: 1.5 million HH formed per year 2008 2010: 500,000 HH formed per year (1/3 of normal)
- (2) During 1995 2007, population increased 2.9 million annually 2008 2010, the increase was 2.7 million annually

HH formation Shortfall(cumulative)*

2008 - 600,000

2009 – 1.7 million

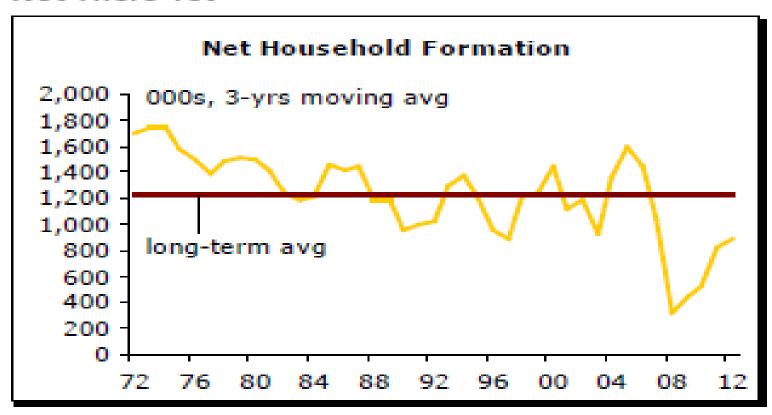
2010 – 2.5 million

<u> 2011 – 2.6 million - this is the shortfall</u>

^{*} Shortfall based on model developed by Tim Dunne of the Cleveland Fed Based on historical relationship between economy, headship rates, population increase, Social norms, etc. (http://www.clevelandfed.org/research/commentary/2012/2012-12.cfm)

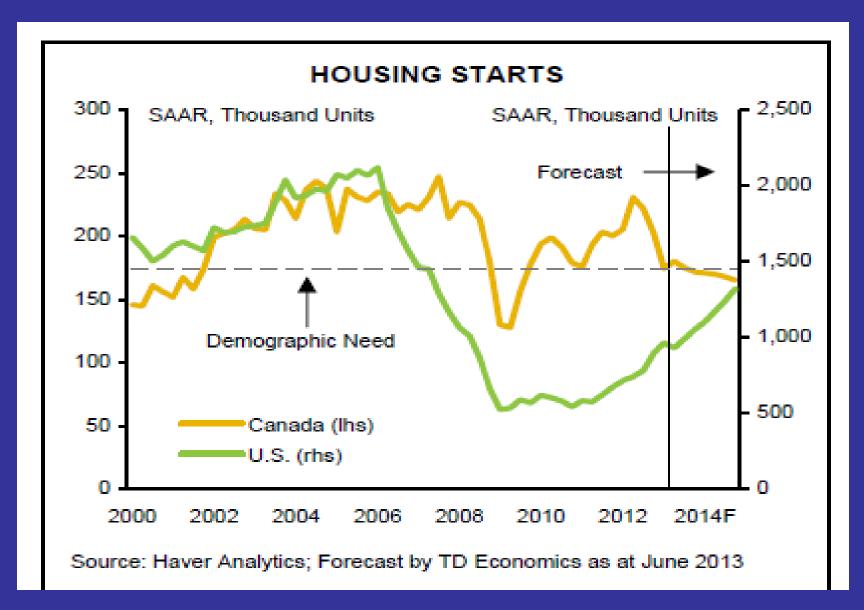
Another way of looking at the "shortfall" in household formations





Source: Census Bureau, Haver Analytics, CIBC

North American Housing outlook from TD Bank



Bottom line – when economy returns to normal, Demand for shelter will return to normal.

Question – what will the mix be between detached single Family and multi family housing and what are the Implication for the wood products industry?

Most of you have seen this article by Craig Adair and Myself and it is three years old, but there is some material There that addresses the question posed above as it Relates to the wood products industry

http://www.nxtbook.com/nxtbooks/naylor/EWAB0110/index.php?startid=16#/16)

In addition, there are many other excellent references to the future of homeownership – here is one by Eric Belsky From the Harvard Joint Center for Housing studies.

(http://www.jchs.harvard.edu/research/publications/dream-lives-future-homeownership-america)

Another one by Fannie Mae

http://www.fanniemae.com/resources/file/research/ownrent/pdf/own-rent-data-analysis-presentation-2012.pdf)

Some conclusions – housing continues to improve – back to Normal by 2015

- (1) Economy will muddle along until 2015? Depends on world economy, China, Europe, Question can the economy "stand on its own"?
- (2) Inflation or deflation?

 probably disinflation (rate of inflation continues to slow) weak demand is big problem here

hyperinflation not a high probability unless the dollar falls significantly – this would could come from concerns about the ability of U.S. to repay debts and ability to unwind its balance sheet – i.e., interest rates would rise to compensate for added risk.

- deflation (1930's) let's hope this doesn't happen because it is extremely difficult to exit (e.g., Japan since the early 90s)
- (3) We're in "uncharted waters" territory right now (i.e., massive money printing) to date, it has helped prevent worsening of economy, but, certainly hasn't had the impact the FED had hoped for (i.e., jump start the economy)
- (4) Housing will continue to improve, albeit more slowly than hoped for
- (5) Problems going forward are higher interest rates and continuing uncertainty. We have headwinds, but we're making good progress

Disclaimer of Non-endorsement

Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not constitute or imply its endorsement, recommendation, or favoring by Virginia Tech. The views and opinions of authors expressed herein do not necessarily state or reflect those of Virginia Tech, and shall not be used for advertising or product endorsement purposes.

Disclaimer of Liability

With respect to documents sent out or made available from this server, neither Virginia Tech nor any of its employees, makes any warranty, expressed or implied, including the warranties of merchantability and fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights.

Disclaimer for External Links

The appearance of external hyperlinks does not constitute endorsement by Virginia Tech of the linked web sites, or the information, products or services contained therein. Unless otherwise specified, Virginia Tech does not exercise any editorial control over the information you may find at these locations. All links are provided with the intent of meeting the mission of Virginia Tech's web site. Please let us know about existing external links you believe are inappropriate and about specific additional external links you believe ought to be included.

Nondiscrimination Notice

Virginia Tech prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact the author. Virginia Tech is an equal opportunity provider and employer.