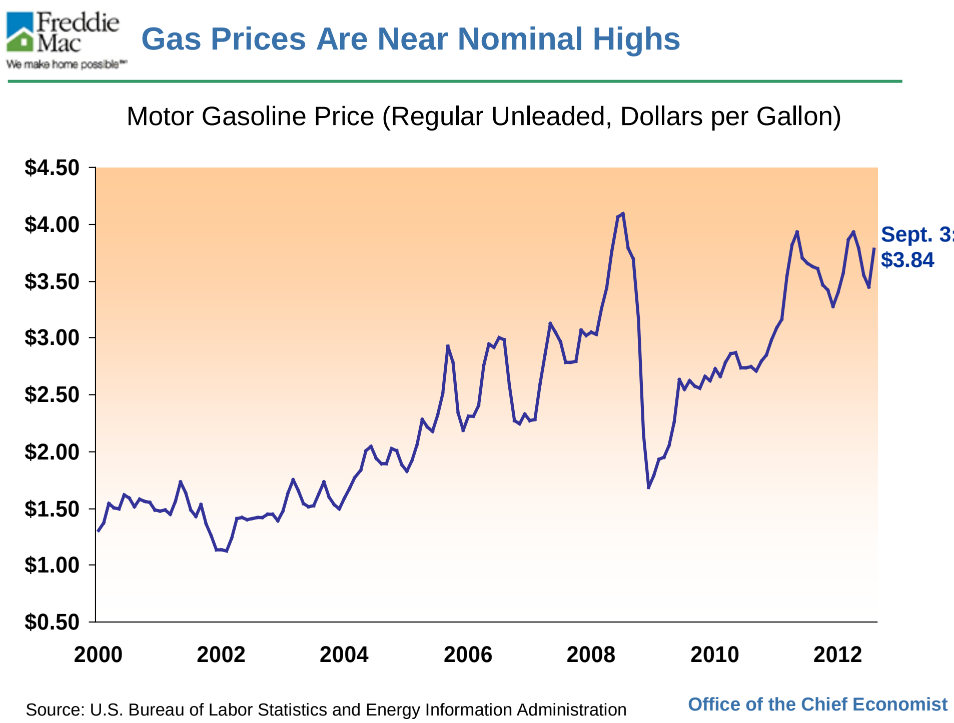
Office of the Chief Economist

September 2012 U.S. Economic & Housing Market Outlook

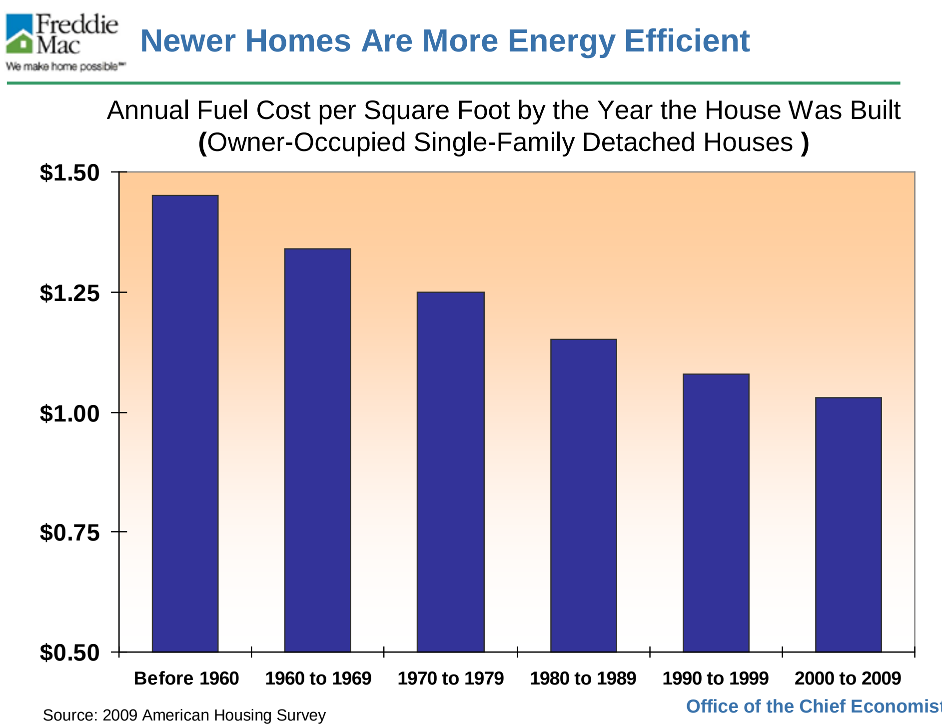
Energy

Energy costs have remained high and increased in recent weeks, placing a further dent in consumers' and business' spending plans. The U.S. Department of Energy reported the average price of a gallon of regular gas reached $3.84 on Labor Day, up about $0.50 over the past two months and about $0.25 below the July 2008 record peak. The 15 percent increase in gasoline prices since early July diverts purchases away from other consumer goods and can forestall business investment spending. This in turn can slow the pace of economic growth, and with it the recovery of the housing sector. However, a fuel-price spike doesn't pack the same punch it once used to in part because of more efficient use of energy.



While a spike in energy costs does not bode well for economic activity, the relatively high cost of energy over many years has incented consumers and businesses to find ways to use energy more efficiently. Between 1949 and 1973, a period of relatively cheap energy and growing uses for it, energy consumption per person grew at a 2.2 percent annualized rate, rising to 357 million British Thermal Units (BTUs) of energy consumed per capita. Between 1973 and 2011, energy consumption *fell* by 0.3 percent (annualized) to 314 million BTUs per capita. Fuel economy of passenger cars has also improved, rising from an average of only 13.4 miles per gallon (MPG) in 1973 to 22.6 MPG in 2008.

Over time, houses have also become more energy efficient. New homes tend to include the latest construction technology and newer appliances, consuming less energy than older homes. As shown in the next exhibit, annual fuel costs measured relative to square footage are lower for more recently built homes. For example, measured relative to square footage, homes built since 2000 have fuel costs that are about 30 percent lower than that of homes built before 1960.This is true even after home improvements have been made to many of these older homes over the last quarter century to increase their energy efficiency. And some home buyers have begun to value newly built houses that have energy efficient certifications. One research study observed a 9 percent price premium that home buyers paid in California for houses that had a "green" certification.[1]



.

And while a sustained rise in energy costs is likely to increase inflation over time, the recent spike is unlikely to raise concerns among monetary policy officials. The reason is energy prices are very volatile and introduce "noise" into indexes that try to measure inflation trends. For this reason, the Federal Reserve's long-term inflation objective of 2 percent is based on the Personal Consumption Expenditures (PCE) price index after netting out energy and food, the so-called "core" PCE. Energy and food account for roughly one-quarter of consumer spending and tend to have the most volatile prices. To obtain a cleaner signal as to true

[1] Nils Kok and Matthew E. Kahn, "The Value of Green Labels in the California Housing Market: An Economic Analysis of the Value of Green Labeling on the Sales Price of a Home," July 2012.

inflationary pressures in the economy, the Federal Reserve focuses on core PCE, which has remained within the Federal Reserve's long-term inflation objective of 2 percent: Over the 12 months through July 2012, the core of the PCE price index is up 1.6 percent.

With inflation largely in check, the Federal Reserve has been able to extend its Maturity Extension Program through year-end, thus keeping long-term interest rates, such as 30-year fixed-rate mortgages, at extremely low levels. Low mortgage rates and a high degree of affordability have helped to energize the housing market recovery. Through the first seven months of 2012 compared with the same period in 2011, home sales are up 8 percent, housing starts have rebounded by 19 percent, and national house-price indexes have recorded a gain on a year-over-year basis. We anticipate this favorable interest-rate environment will remain at least through the end of this year.

Frank E. Nothaft
Chief Economist
September 12, 2012

www.freddiemac.com/news/finance **chief_economist@freddiemac.com**

September 2012 Economic and Housing Market Outlook

Freddie Mac
We make home possible®

Office of the Chief Economist

Revised 9/10/2012

Major Economic Indicators

Indicator	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	Annual Totals 2008	2009	2010	2011	2012	2013	2014
Real GDP (%)	0.1	2.5	1.3	4.1	2.0	1.7	**2.0**	**2.3**	**2.5**	**2.8**	**3.2**	**3.5**	-3.3	-0.1	2.4	2.0	**2.0**	**3.0**	**4.0**
Consumer Prices (%) a.	4.5	4.4	3.1	1.3	2.5	0.8	**1.9**	**2.0**	**2.0**	**2.0**	**2.0**	**2.0**	1.6	1.5	1.2	3.3	**1.8**	**2.0**	**2.0**
Unemployment Rate (%) b.	9.0	9.0	9.1	8.7	8.3	8.2	**8.2**	**8.1**	**8.0**	**7.9**	**7.8**	**7.7**	5.8	9.3	9.6	9.0	**8.2**	**7.9**	**7.3**
30-Year Fixed Mtg. Rate (%) b.	4.9	4.7	4.3	4.0	3.9	3.8	**3.6**	**3.7**	**3.8**	**3.9**	**4.0**	**4.1**	6.0	5.0	4.7	4.5	**3.8**	**4.0**	**4.5**
1-Year Treas. Indexed ARM Rate (%) b.	3.3	3.1	2.9	2.9	2.8	2.8	**2.8**	**2.8**	**2.9**	**2.9**	**3.0**	**3.1**	5.2	4.7	3.8	3.0	**2.8**	**3.0**	**3.6**
10-Year Const. Mat. Treas. Rate (%) b.	3.5	3.2	2.4	2.1	2.0	1.8	**1.6**	**1.7**	**1.8**	**1.9**	**2.0**	**2.1**	3.7	3.3	3.2	2.8	**1.8**	**2.0**	**2.5**
1-Year Const. Mat. Treas. Rate (%) b.	0.3	0.2	0.1	0.1	0.2	0.2	**0.2**	**0.2**	**0.2**	**0.2**	**0.3**	**0.3**	1.8	0.5	0.3	0.2	**0.2**	**0.3**	**0.5**

Housing and Mortgage Markets

Indicator	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	Annual Totals 2008	2009	2010	2011	2012	2013	2014
Housing Starts c.	0.58	0.57	0.61	0.68	0.72	0.74	**0.74**	**0.78**	**0.83**	**0.88**	**0.93**	**0.98**	0.91	0.55	0.59	0.61	**0.75**	**0.91**	**1.20**
Total Home Sales d.	4.63	4.48	4.55	4.69	4.92	4.90	**4.92**	**5.00**	**5.10**	**5.20**	**5.30**	**5.40**	4.59	4.72	4.51	4.57	**4.94**	**5.25**	**5.80**
FMHPI House Price Appreciation (%) e.	-1.3	1.5	-1.9	-2.4	0.6	4.8	**0.0**	**-4.2**	**0.0**	**2.5**	**0.5**	**-1.0**	-11.7	-2.3	-5.6	-4.1	**1.0**	**2.0**	**3.0**
S&P/Case-Shiller® Home Price Index (%) f.	-4.0	4.1	0.1	-3.8	-1.7	6.9	**0.0**	**-4.2**	**0.0**	**2.5**	**0.5**	**-1.0**	-18.4	-2.5	-3.7	-3.7	**1.0**	**2.0**	**3.0**
1-4 Family Mortgage Originations g.																			
Conventional	**$263**	**$220**	**$277**	**$373**	**$337**	**$355**	**$382**	**$301**	**$246**	**$262**	**$262**	**$230**	$1,310	$1,549	$1,300	$1,133	**$1,375**	**$1,000**	**$780**
FHA & VA	$77	$70	$73	$72	$83	$95	**$108**	**$89**	**$74**	**$78**	**$78**	**$70**	$290	$451	$377	$292	**$375**	**$300**	**$220**
Total	**$340**	**$290**	**$350**	**$445**	**$420**	**$450**	**$490**	**$390**	**$320**	**$340**	**$340**	**$300**	$1,600	$2,000	$1,677	$1,425	**$1,750**	**$1,300**	**$1,000**
ARM Share (%) h.	8	11	12	14	12	11	**10**	**11**	**12**	**13**	**14**	**15**	7	3	5	11	**11**	**14**	**15**
Refinancing Share - Applications (%) i.	69	70	78	81	81	77	**73**	**70**	**70**	**65**	**60**	**50**	48	70	76	75	**75**	**61**	**45**
Refinancing Share - Originations (%) j.	**71**	**56**	**65**	**75**	**76**	**74**	**72**	**70**	**70**	**65**	**60**	**50**	50	68	67	67	**73**	**61**	**45**
Residential Mortgage Debt (%) k.	-2.7	-2.4	-2.0	-1.8	-3.2	**-1.0**	**-1.0**	**-0.5**	**1.0**	**2.0**	**2.0**	**3.0**	-0.4	-1.6	-3.0	-2.2	**-1.4**	**2.0**	**5.0**

Note: Quarterly and annual forecasts (or estimates) are shown in shaded areas; totals may not add due to rounding; quarterly data expressed as annual rates.
Annual forecast data are averages of quarterly values; annual historical data are reported as Q4 over Q4.

a. Calculations based on quarterly average of monthly index levels and stated as an annual rate; index levels based on the seasonally-adjusted, all-urban consumer price index.
b. Quarterly average of monthly unemployment rates (seasonally-adjusted); Quarterly average of monthly interest rates (not seasonally-adjusted).
c. Millions of housing units; quarterly averages of monthly, seasonally-adjusted levels (reported at an annual rate).
d. Millions of housing units; total sales are the sum of new and existing single-family homes;quarterly averages of monthly, seasonally-adjusted levels (reported at an annual rate).
e. Quarterly growth rate of Freddie Mac's House Price Index (FMHPI); not seasonally-adjusted; annual reates for yearly data.
f. National composite index (quarterly growth rate); not seasonally-adjusted; annual rates for yearly data.
g. Billions of dollars (not seasonally-adjusted).
h. Federal Housing Finance Agency (FHFA); quarterly averages of monthly shares of number of loans of conventional, home-purchase mortgage closings (not seasonally-adjusted).
i. Primary Mortgage Market Survey®; quarterly averages of monthly shares of all single-family mortgage applications (not seasonally-adjusted).
j. Home Mortgage Disclosure Act for all single-family mortgages (not seasonally-adjusted); Annual share is dollar-weighted average of quarterly shares.
k. Federal Reserve Board; growth rate of residential mortgage debt, the sum of single-family and multifamily mortgages(not seasonally-adjusted, annual rate)

Prepared by Office of the Chief Economist and reflects views as of 9/10/2012 (MAS); Send comments and questions to chief_economist@freddiemac.com.