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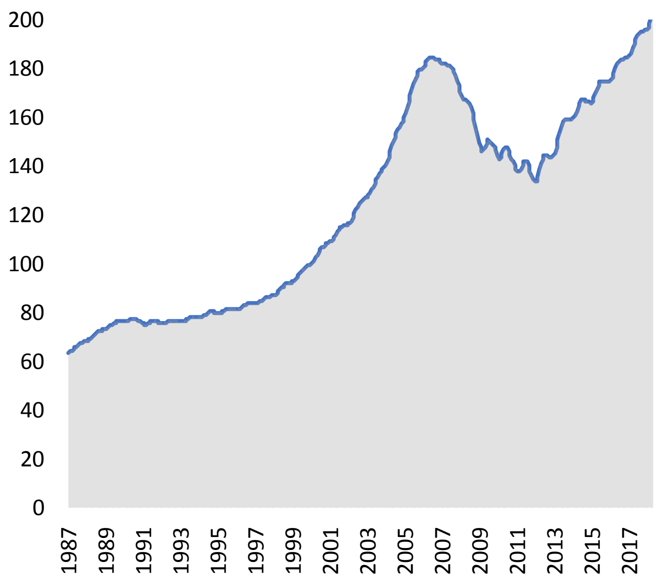
Housing Market Booming:

Bubble or Sustainable?

By Kevin Chambers

The 2007-2008 market crash was one of the largest housing events in modern history. Housing markets around the world crashed, followed by the global stock markets and financial institutions. In 2018, housing has rebounded. Some people point to a reestablishment of a bubble as prices seem to be getting too expensive and they worry about another collapse. However, there are some big differences this time.

Case-Shiller US Home Index



[1] For more info on indicators see Topic Paper—American Household Debt: Post 2008 Credit Crisis Update, April 2016.

What is Different This Time

It is generally accepted that the housing market is booming. Most of the major indicators[1] have increased significantly from the bottom of the housing crisis in 2011-2012. The Case-Shiller Index, the leading indicator for housing prices in the US, is up 51% in the 6 years. Housing starts are up 69%. New house sales are up over 100%. Existing housing sales are up 56%. In other words, the housing market is growing faster than the 6 years prior to the collapse of the housing market in both housing starts and sales. Prices are higher than pre-crisis; however, they are not growing as fast as

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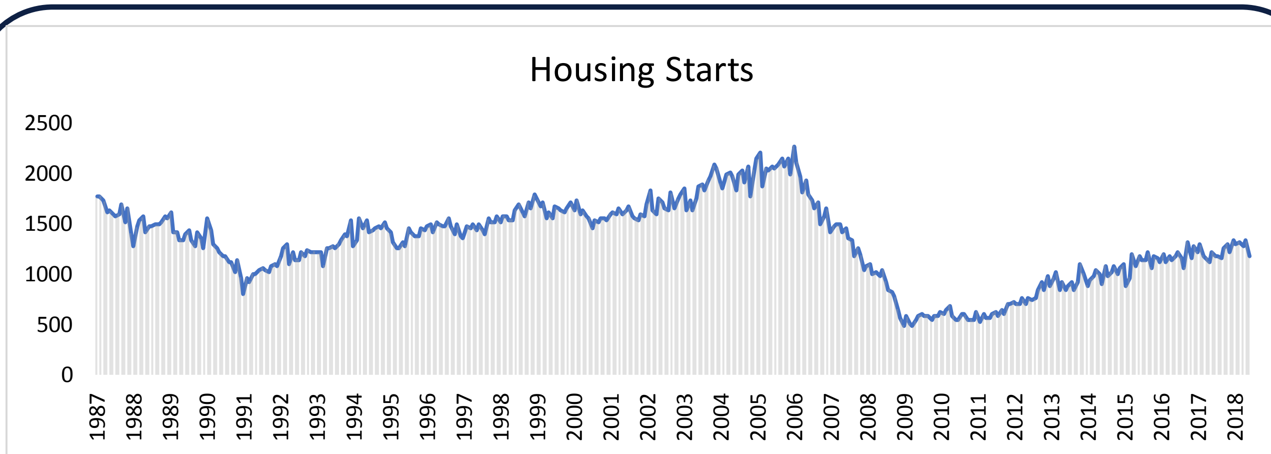
Housing Starts
2500
2000
1500
1000
500
0
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
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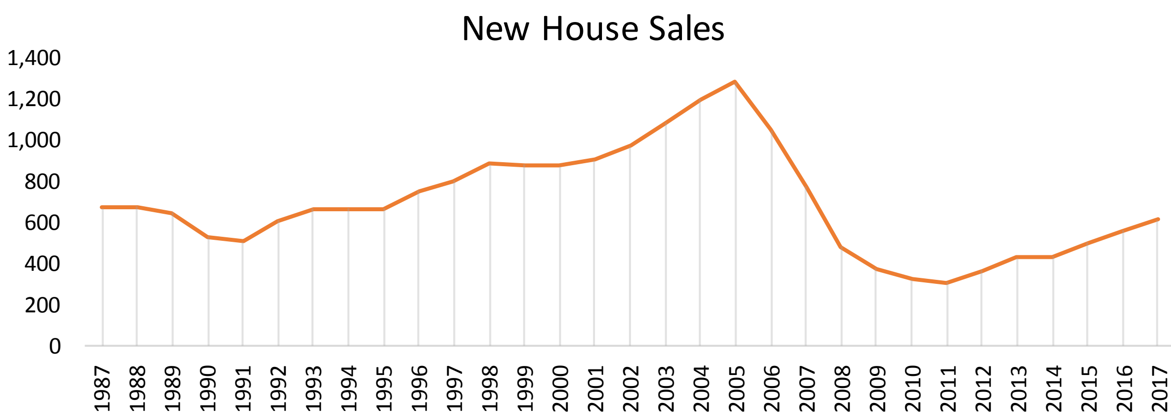
2014
2015
2016
2017
2018


New House Sales
1,400
1,200
1,000
800
600
400
200
0
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
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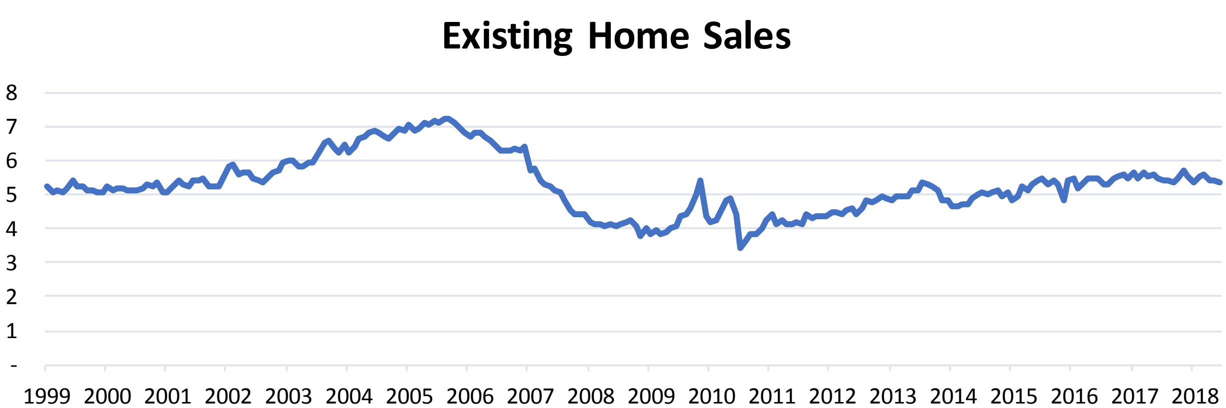
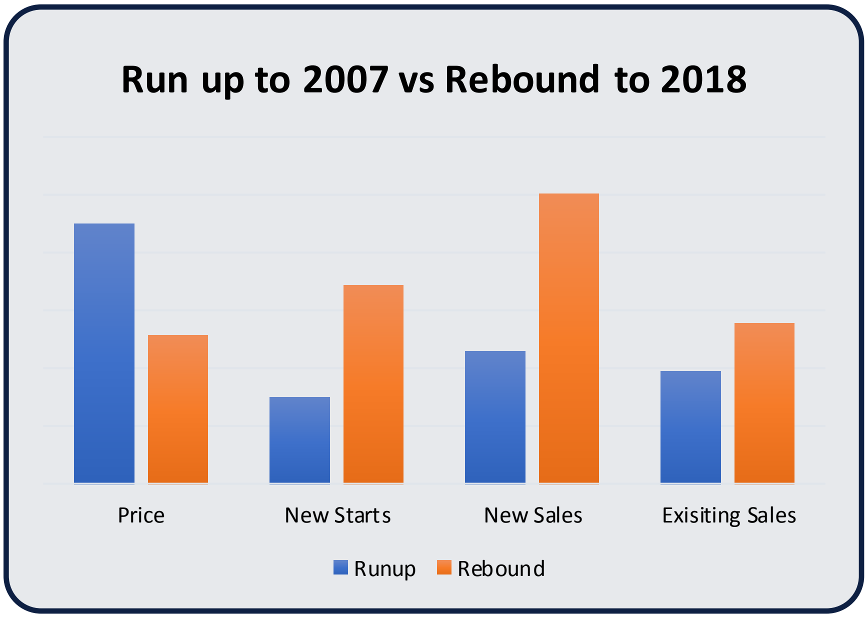
2013
2014
2015
2016
2017

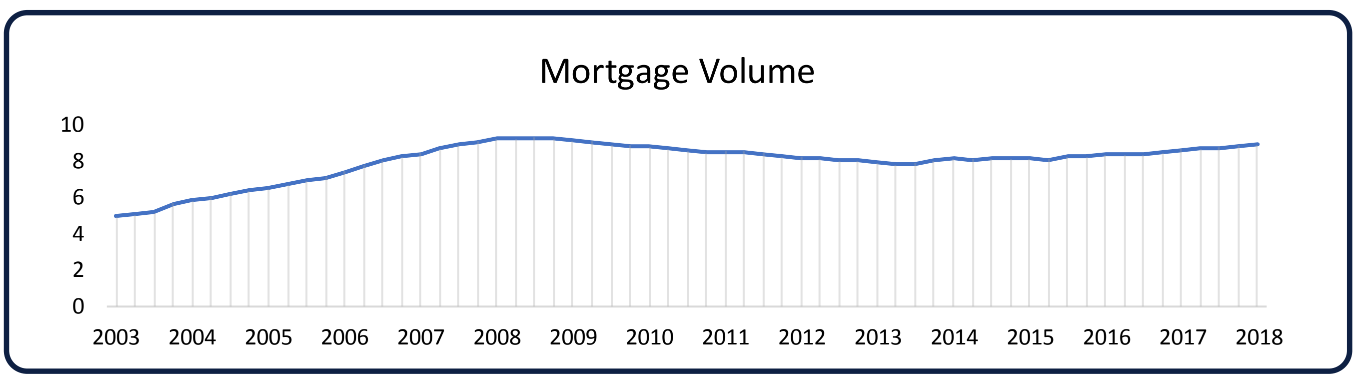

Existing Home Sales
8
7
6
5
4
3
2
1
-
1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018



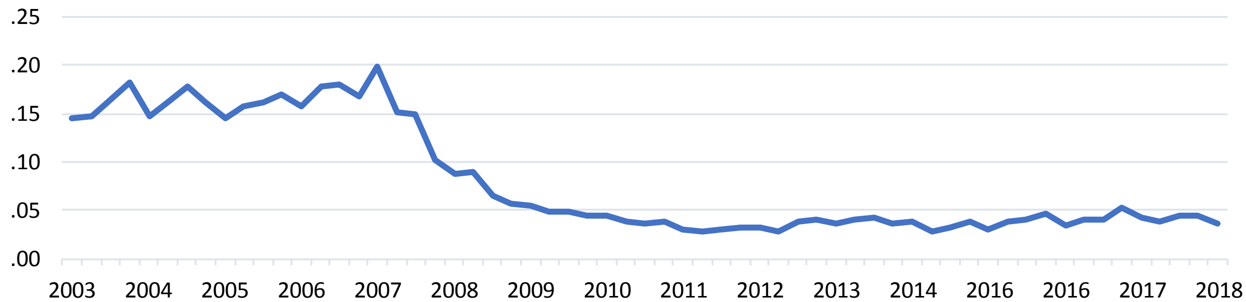
they grew before 2007. Plus the values of other three indicators are still well below the peak values.

The lead up to the 2007 crash was driven by banks and mortgage brokers getting people to buy houses they couldn't afford. The boom in house prices was driven by bad debt. The recent housing boom is more controlled. Mortgages increased sharply leading up to 2007. Rising 88% between 2003 and 2007. After the crash, the volume of mortgages fell slightly and have grown at a more reasonable rate since the bottom.

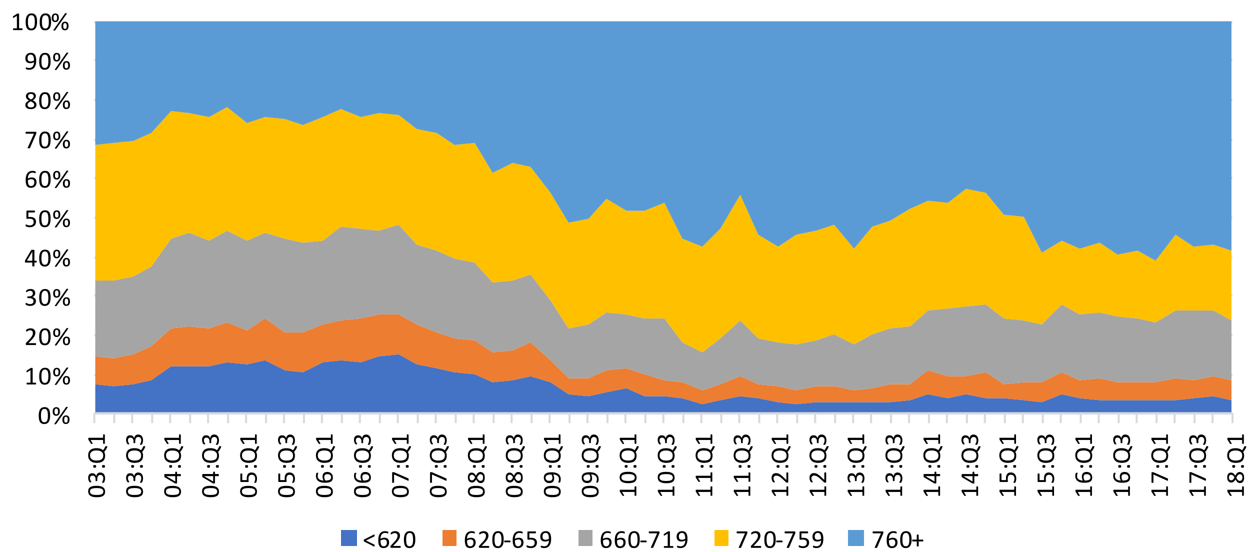
One of the main contributors to the drop in mortgages is the increased regulation from the federal government leading to tighter standards of who can lend to homebuyers. The percentage of mortgage originations for people with a credit score under 660 has fallen from around 2%



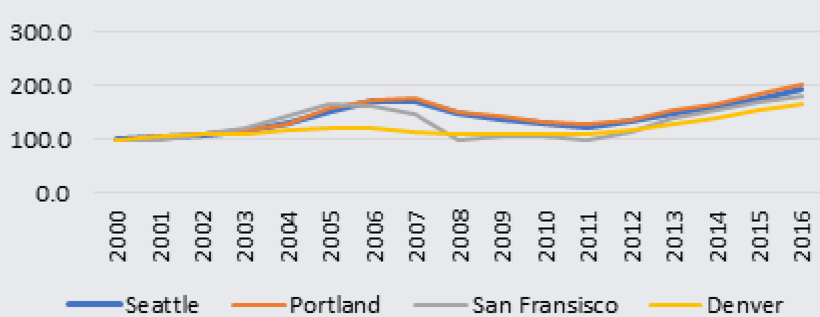
% of Mortgage Origination with Credit Score under 660



Balance of Mortgages by Credit Score



Median Home Price - 2000 price = 100



during the lead up to the mortgage crisis to less than half a percent now.

This means that the majority of mortgages being given to people with credit scores over 760. In 2005 and 2006, close to 80% of all people getting mortgages had a score under 760.

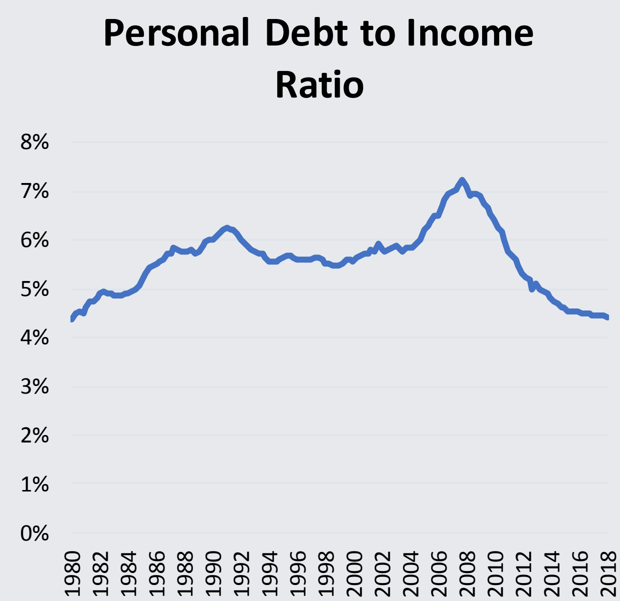
We have also seen a cultural shift. The 2008 crash scared people and instilled a greater fear of debt in our society. Other than student debt, all other types of debt have fallen in volume after the crash. More importantly, the debt-to-income ratio of personal accounts has been falling since the crash to 1980s levels.

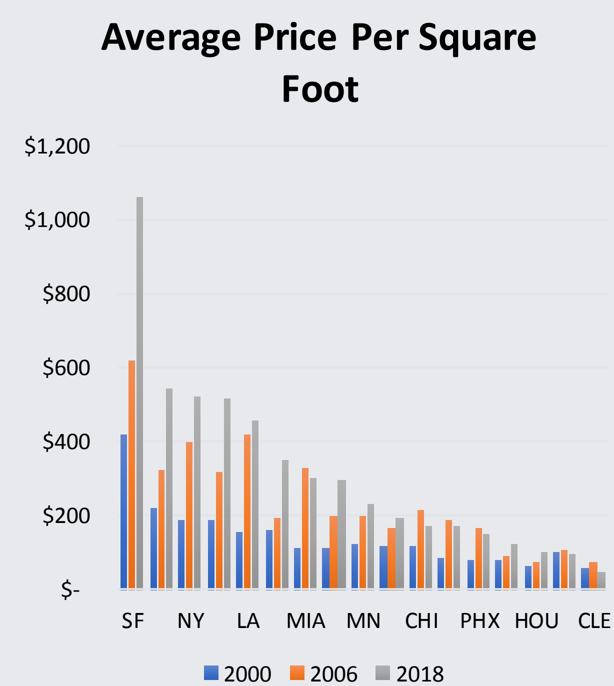
In Oregon, where Headwater Investments is located, we have experienced the recent Housing runup. Prices have increased around 60% in the Portland area in just the last 7 years. There is a distinct difference between this time and last time. We are seeing the rise in real estate prices correlate with increases in population and income. Real estate is local. Each market is different. With lax credit restrictions, we saw markets increasing around the country. In the last 7 years, we have seen certain markets increase substantially with other markets being left behind.

A Closer Look Around the Country

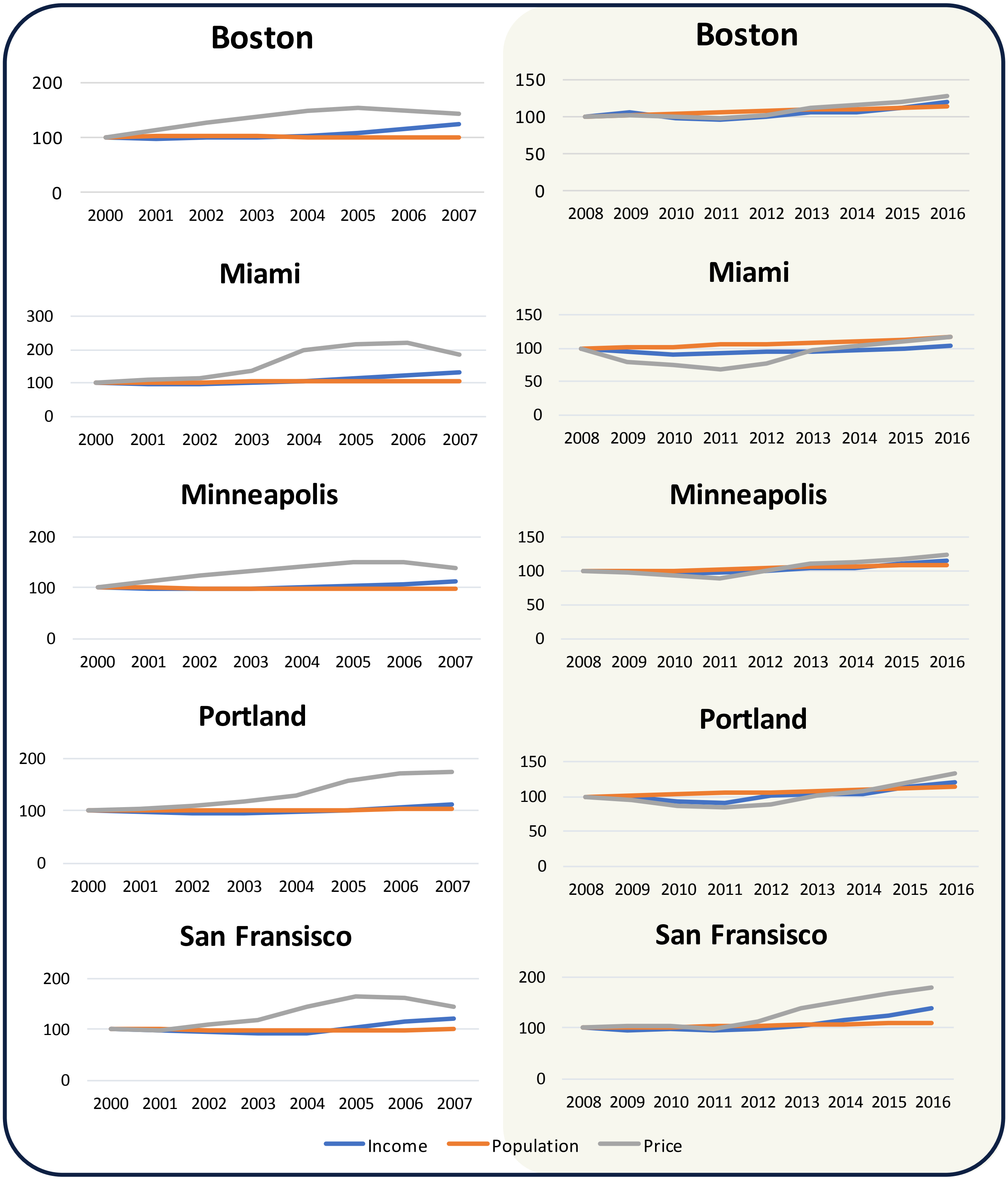
The markets in cities with strong economies and job markets are booming. San Francisco, Seattle, Boston all had Gross Regional Product grow by 26.5%, 19.7%, and 17.9%, respectively, since 2011(Strauss). These markets have also had big jumps in housing prices.

For this project we compiled housing and census data from some of the largest cities in the US.

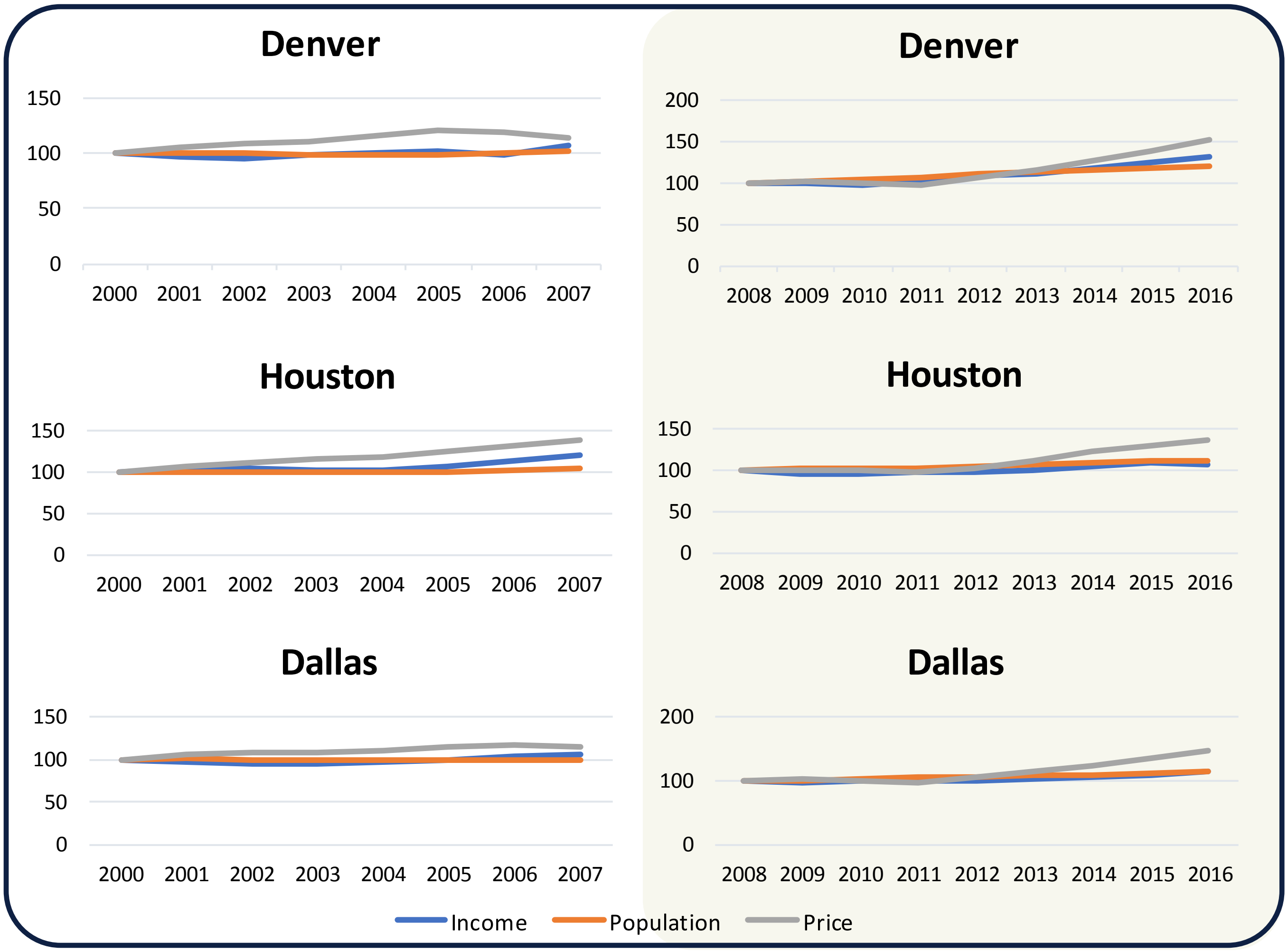




Pre-2008 Crisis ***Post 2008 Crisis***



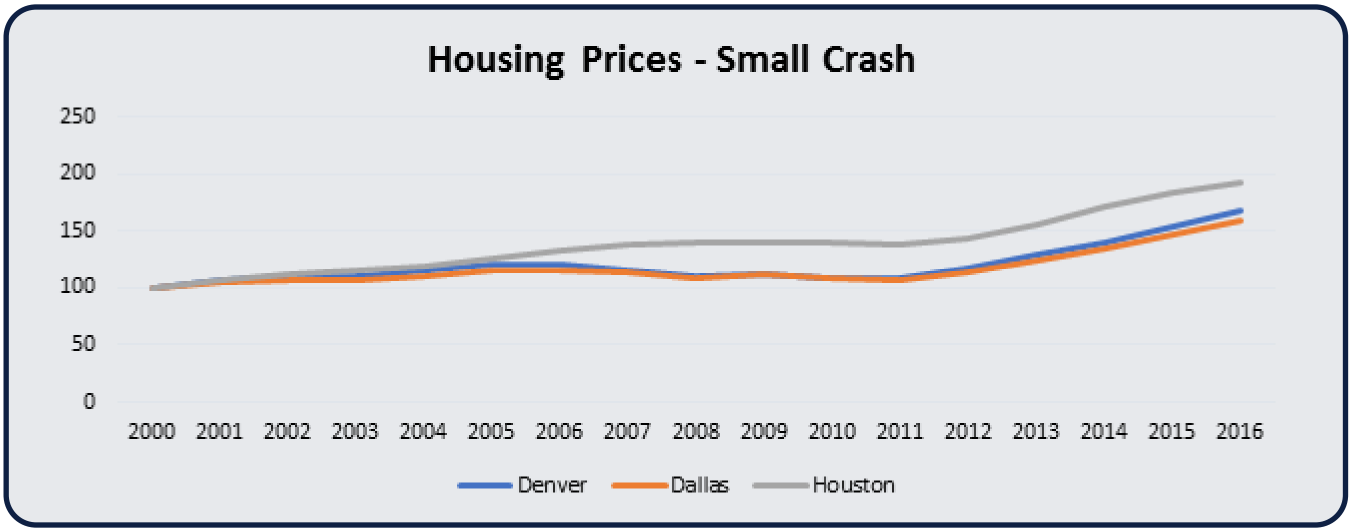
Pre-2008 Crisis ***Post 2008 Crisis***



Looking at the relationship between population and income changes related to housing prices shows a stark example of how this rise in prices is different than the pre-crisis increases, where you can see housing prices diverge from the economy.

Let's take a look at population and income because they are drivers of demand in the housing market. More people moving into an area makes buying homes more competitive, driving up prices. Higher incomes in a market give people more ability to buy more expensive homes, also driving up prices.

In the Pre-crisis graphs, you can see the grey lines separating from the demand factors, rising at a faster rate than income and population. In other words, housing prices rose faster than incomes and population increased. In the second set of graphs from recent months, the grey line shifts are more inline. The exception is San



Francisco, which still has a divergent pattern. This would seem to indicate that the San Francisco market might be more of a bubble than the other cities.

If you look at cities pre-crisis that did not have a divergent price pattern, they experienced significantly less to almost no zero fall during the crash. For example, look at the graphs for Denver, Houston, and Dallas. It seems as if before the mortgage crisis their housing market increases were reasonable to their regional effects.

Although housing prices did exceed the income and population, we do not see the large divergence experienced in other markets. This results in a small to no crash in 2006-2007. Although history is never an indication of future results, hopefully history repeats itself in this case, and we see the correlation of housing prices with income and population as an indication of a lack of a bubble.

Major Takeaways

The US housing market is the largest asset class in the world. It is a crucial sector in our economy. It is important to remember that real estate markets are local, effected by regional differences in economies and demographics. 2008 was more of a national problem, a systemic breakdown of our lending market, not necessarily the housing market. It was more of a credit crisis not a real estate crisis. It seems like now there might be some bubble building in California, but in the rest of the country, it looks like the real estate market has reverted to following indicators. Sometimes it is easy to get swept up in high real estate prices and predict a bubble. Not to say there isn't a bubble brewing in Oregon or other places, just this time looks a lot different then last time.

Works Cited

Strauss, Karsten. “The 10 Big U.S. Cities With the Fastest-Growing (And Slowest-Growing) Economies.” Forbes, Forbes Magazine, 4 Mar. 2018, www.forbes.com/sites/karstenstrauss/2018/01/03/ the-10- big-u-s-cities-with-the-fastest-growing-and-slowest-growing- economies/#58fea13a4734.

Graphs complied from the S&P/Case Shiller Home Price Indices and data points provided by the U.S. Census Bureau.

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