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Fort Lewis College: Office of Business and Economic Research

Overview

This month we begin with **Dr. Lorraine Taylor**, *Assistant Professor of Tourism at Fort Lewis College. Dr. Taylor provides some highlights, concerns, and issues to Colorado tourism as a result of the legalization of recreational marijuana.*

Secondly, we look at microeconomic level data to gain insight into the medium term effects of the Great Recession on the local Region 9 economy.

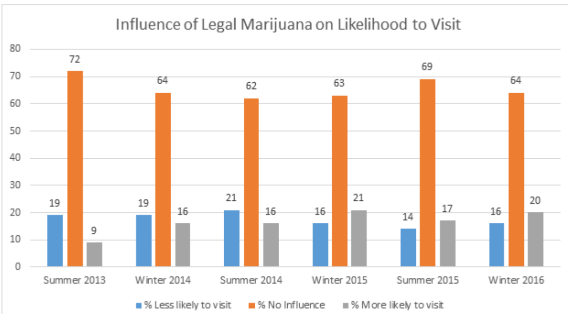
Marijuana Tourism: How has legal recreational marijuana impacted the tourism industry in Colorado?

by Dr. Lorraine Taylor

In Fall of 2013, professionals from the tourism industry gathered at the Colorado Governor's Tourism Conference in Telluride. The mood of the conference was anxious with many unanswered questions about the potential impacts of the impending sale of legal recreational marijuana starting a few months later in January 2014. Now, two and half years in, we have some answers to those questions.

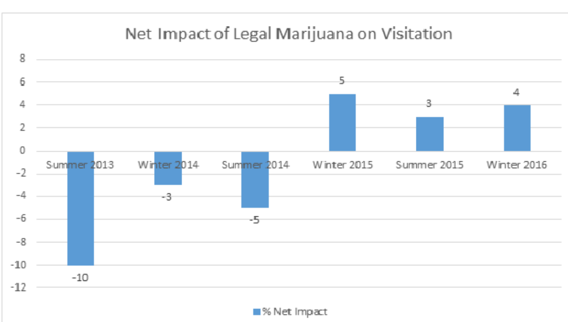
The 2016 Colorado Governor's Tourism Conference was held in Breckenridge in mid-September. For the second year, a panel presentation on Marijuana Tourism was included in the agenda, and it is likely the topic will continue to be a staple at the conference for many years to come. One speaker in the session was Denise Miller, Executive Vice President of Strategic Marketing and Research Insights (SMARI), the research firm hired by the Colorado Tourism Office (CTO) to conduct the ongoing study on the effectiveness of CTO's advertising efforts. That longitudinal study has included questions related to the impact of recreational marijuana on tourists' perceptions of and visitation to Colorado since Summer of 2013.

The SMARI study and the questions related to marijuana tourism have evolved since then. Data that was released in December 2015 was from a question that asked potential tourists about whether the availability of legal recreational marijuana had an influence on their choice to visit Colorado. The Denver Post published an article with the title, "Marijuana has huge influence on Colorado Tourism, state survey says" and reported that legal marijuana was included in travel decisions 49% of the time. There was an immediate reaction from the CTO clarifying in a press release that 49% included both negative and positive influence on travel decisions and the article title was changed the next day to, "Colorado tourism survey shows legal marijuana's influence." The misinterpretation of the data implying that nearly half of visitors were coming for legal marijuana ignited a change in the distribution of the data from the SMARI studies and they now provide a breakdown of whether the influence is positive or negative.



Source: Denise Miller (SMARI), CO Governor's Tourism Conference (9/16/2016)

The most recent data presented at the 2016 conference indicates that marijuana as a motivator for tourism is growing. Since the first questions were asked to a panel of potential visitors about marijuana as a tourism motivator in Summer 2013, the percentage of people who are less likely to visit Colorado because of marijuana has decreased from 19% to 16% and the percentage of people who are more likely to visit Colorado because of marijuana has grown from 9% to 20% and the current net impact has shifted from a negative 10% influence to a positive 4% influence of legal marijuana on visitation of tourists to Colorado.

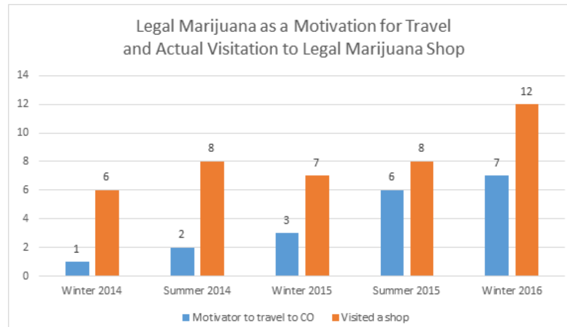


Source: Denise Miller (SMARI), CO Governor's Tourism Conference (9/16/2016)

Marijuana Tourism

"Since the first time the question as asked in Winter 2014, marijuana as a motivator to visit Colorado has jumped from 1% to 7% . . . "

When surveying only people who visited Colorado, there is also an increase in marijuana as a motivator for visitation as well as an increase in actual visitation to marijuana shops. Since the first time the question as asked in Winter 2014, marijuana as a motivator to visit Colorado has jumped from 1% to 7% and visiting a marijuana shop has increased from 6% to 12%.



Source: Denise Miller (SMARI), CO Governor's Tourism Conference (9/16/2016)

Despite the data indicating that marijuana is indeed growing as a motivation for visitors to Colorado, it is still unclear how to proceed with managing this new and emerging target market. Since Amendment 64 was passed, the CTO has taken the firm stance that it will not actively promote marijuana tourism. First off, it is against federal law to market marijuana to states where it has not been legalized. Secondly, the brand image portrayed in Colorado's successful "Come to Life" campaign targets families as a key market segment, and the potential to lose the family market is seen as not worth the risk. Whether it is actively promoted or not, the data shows that an increasing number visitors are purchasing marijuana during their stay. Colorado has so many other attractions that it may not be their primary motivation to visit, but it is increasingly becoming one of the many things they do while they are here.

Tourism businesses are watching closely to see how local economies are impacted by marijuana motivated tourists. The Durango Business Improvement District has been comparing tax revenue from marijuana sales to liquor store sales. While recreational marijuana is not yet outselling liquor, recreational marijuana represented 1.6% of total sales taxes at this time in 2015 and that has increased to 2.6% in 2016.

Liquor store sales represent 3% of total sales tax for the city of Durango in 2016.

A local study conducted at several recreational marijuana shops in Durango asked nonresidents about the influence that legal marijuana had on their visit to Colorado. Key findings confirm the SMARI results that marijuana is increasingly being consumed by tourists but that it is one of many reasons why Colorado was selected as their travel destination over other options. Other contributions of this study are to build a profile of marijuana tourists which may be inconsistent with some stereotypes finding a wide age range and many marijuana tourists well into their 60s, but consistent with other stereotypes with the vast majority of marijuana tourists who were surveyed admitting to being daily users of cannabis products. Safety and accessibility were the highest rated motivators for marijuana tourists who reported that it was safer and easier to access marijuana in Colorado that it is for them at home.

As a trailblazer, Colorado continues to grapple with challenges associated with the recreational marijuana industry. Changes in laws for labeling, packaging, and possession limits are still taking place. Marijuana tourists struggle to find 420 friendly businesses where they can legally consume their purchases on private property. While it is illegal for tourists to cross state borders in possession of marijuana purchased in Colorado, the state had been tied up in a legal battle with our neighbors Nebraska and Oklahoma that went to the Supreme Court over the claim that legal marijuana in Colorado was "harming the welfare of their residents."

The future of marijuana tourism is uncertain, especially because a handful of states may include the legalization of recreational marijuana on their ballot in November. Will Colorado's competitive advantage begin to fade once western states like California, Nevada, and Arizona are also offering legal recreational marijuana as a tourist attraction? Time will tell.

Lorraine Taylor is an Assistant Professor of Management at Fort Lewis College. Her research interests include tourists' motivations, decision making, and behavior and teaches courses in the Tourism and Hospitality Management concentration. She can be reached at 970-247-7344, `lltaylor@fortlewis.edu`

The Aftermath of the Great Recession in Region 9: Microeconomic Evidence

by Robert Sonora

In the last edition we looked at the lasting effects of the Great Recession on labor markets and income to get a sense of its impacts on the region's macroeconomy. In this edition we look at a variety of microeconomic indicators to better understand how individual sectors were, and still are, affected. Overall, most of our local sectors have recovered to pre-recession levels only recently. Others, are still lagging a bit. Needless to say, the Great Recession was a severe shock to the local, national, and international economy and while things continue to improve, there are still signs of its lingering effects.

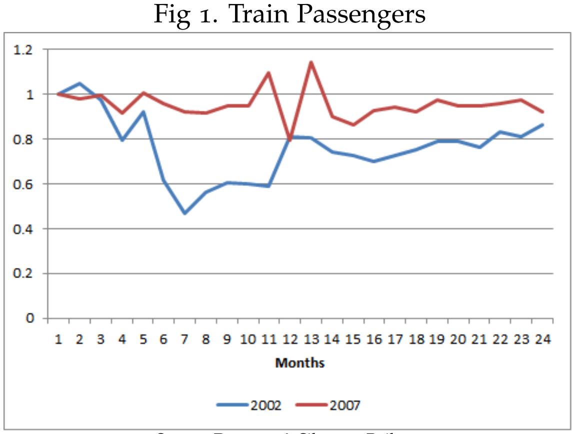
The Office of Business and Economic Research (OBER) has been collecting microeconomic data since 2002 for some variables and later for others. In some cases data begins in 2000. This makes comparing the effects of recessions on some variable difficult as the data is only available for the Great Recession (2007.12 – 2009.06). The 2001 recession dates were 2001.04 – 2001.11, so to make comparisons, data presented will be as close to the dates of the 2001 recession as possible, for example, 2002.01.

We look at a variety of sector specific series to provide an overview of the state of the local economy: Tourism, Real Estate, Resources and Energy, and Banking. While this does not represent the full extent of the local economy, it does yield some insights into how these sectors are faring and the effects on the region.

Tourism

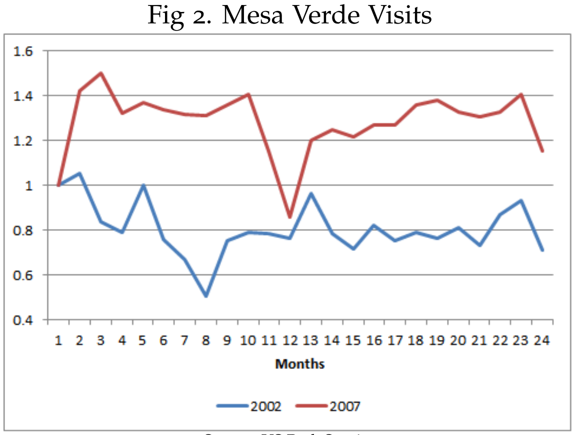
Tourism has been a relative constant in the local area. Two indicators of tourist visits used by OBER are the Durango & Silverton train (La Plata and San Juan counties) and Mesa Verde in Montezuma county. Both of these tourist attractions have done better after the 2007 recession than in the 2001 recession. This could be a function of a few factors. First, the Great Recession was the most severe contraction of the US economy, though not necessarily the deepest, in the post-WWII era. Rising unemployment and falling incomes contribute to more domestic tourism rather than, say, traveling abroad. Secondly, as a fallout of the economic contraction, some baby-boomers may have taken an earlier than expected retirement boosting American tourism. This mass retirement was expected, but the recession hastened some boomers' decision. Next, a relatively weak dollar contributed to more foreign tourism, boosting visits.

Fig 1. Train Passengers



Source: Durango & Silverton Railway

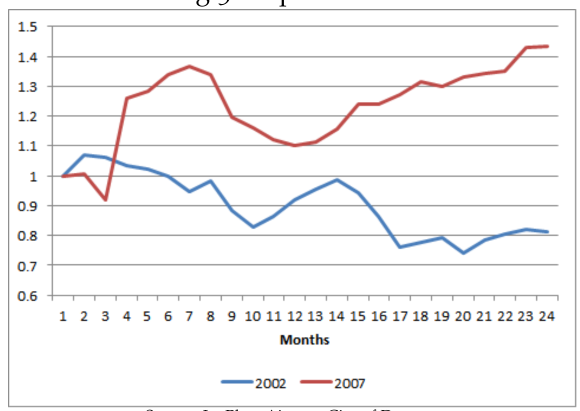
Fig 2. Mesa Verde Visits



Source: US Park Service

A third statistic used to measure economic and tourism activity is enplanements. As shown in Figure 3, these have been rising steadily since the Great Recession. While a percentage of this is from increased travel from outside the region, it is also due to population growth in the region and additional routes to hubs other than Denver, Phoenix and Dallas-Ft. Worth.

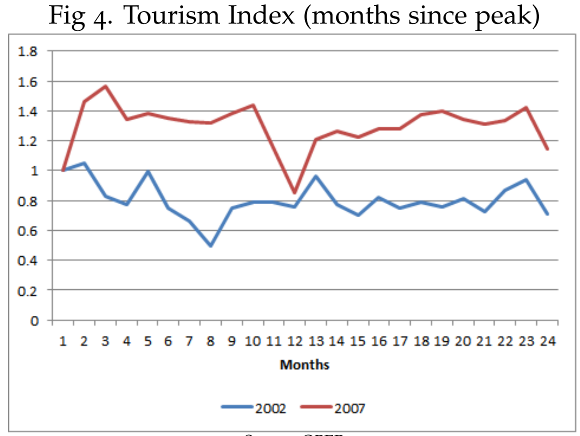
Fig 3. Enplanements



Source: La Plata Airport, City of Durango

As expected the OBER tourism index, Figure 4, largely mimics the trend in each of disaggregated series. Notable, is the sharp decline in tourism about three years into the recovery which is found in each of the individual series as well.

Fig 4. Tourism Index (months since peak)

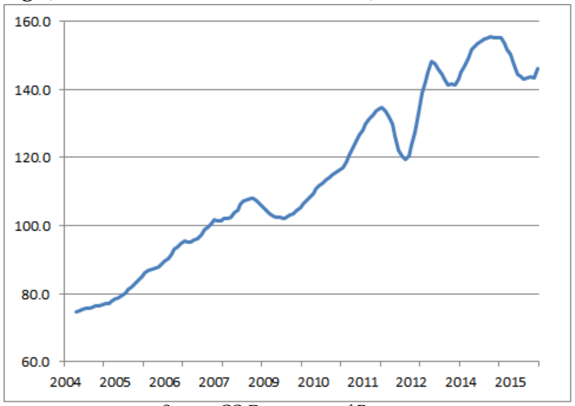


Source: OBER

Lastly, Figure 5 shows retail tax revenues from 2004 – mid-2016. As can be seen, it has been trending upwards, with a couple downturns. As with all taxes, this is largely due to increases in the local population and slowly rising incomes. The recession of 2007 shows up as a relatively minor decline in revenues, less than

5%.

Fig 4. Retail Tax Revenues, 2004 – 2016, 2008=100



Source: CO Department of Revenue

Tourism

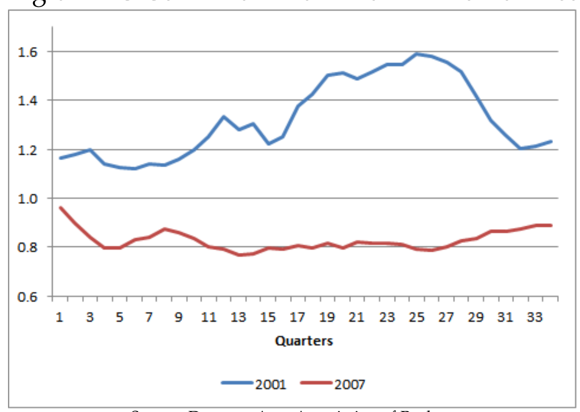
"Overall tourism has largely remained above its' levels at the beginning of the 2007 recession."

Real Estate

Quarterly data for local real estate prices are available from the Durango Area Association of Realtors (DAAR). DAAR has data on a variety of different types of real estate in La Plata County – Durango in town homes, Durango Mountain homes, etc. To get a general sense of real estate prices in La Plata, OBER collects La Plata "combined" data to get a more general sense of prices around the county.

Figure 1. shows the inflation adjusted (real) median home price in La Plata combined for the 2001 and 2007 recessions. As in the previous edition, the figures show the price in any quarter relative to the first quarter of the recession. As can be seen, in the early stages of the 2001 recession, real estate prices jumped about 20% from the pre-recession values. We can also see the effects of the 2008 housing bubble beginning to simmer about 14 quarters (four years) from the peak of the 2001 recession – and its' 'pops roughly 26 quarters later, 2008.1. The 2007 recession begins in the first quarter of 2008, at the same time the Durango real estate bubble burst. As such, the figure shows that as of roughly 36 quarters from this peak, La Plata prices have yet to hit their pre-burst level (more below). In fact, La Plata real estate prices are still about 10% below their 2008 peak. We can also see the housing market didn't really start to recover until 27 quarters after the peak of the housing bubble. The figure shows a short lived beginning of a 'recovery' after six months or so, mid-2009, but lasting only a year or so, before falling back.

Fig 6. LPC Combined: Real Median Home Price



Source: Durango Area Association of Realtors

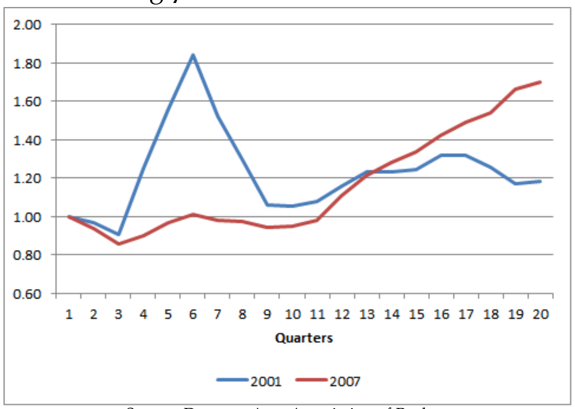
Figures 7 and 8 show the real estate market using numbers sold (per quarter), Figure 7, and days on the market, Figure 8. Both are similarly normalized to the first date of the 2001 and 2007 recessions. As can be seen, the initial quarters of following the 2001 recession we can see a lot of sales activity before it slows down. Numbers sold then more or less remain at 20-30% above 2001 levels until the 2007 recession.

Real Estate

Real estate prices haven't fully returned to pre-recession levels, however, foreclosures are down across the region.

Looking at the post 2007 period, we see that numbers sold remained largely unchanged, or fell slightly, from the peak of 2008. However, we see a substantial increase in the numbers sold three years later. It may be hard to reconcile this sharp increase in houses sold and stagnant prices throughout much of the recovery, however, this is likely due to an excess supply, inventory, of houses in the market, keeping prices relatively low.

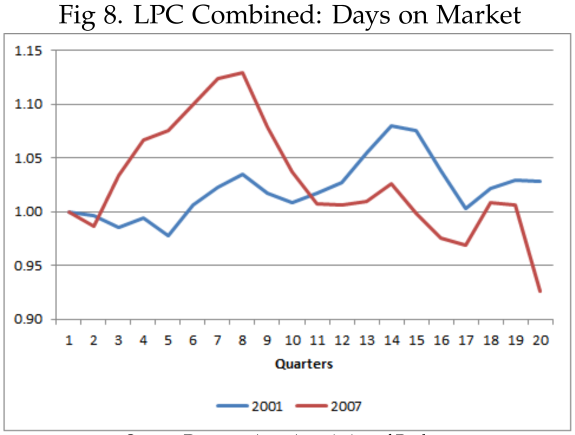
Fig 7. LPC Combined: Sold



Source: Durango Area Association of Realtors

This observation is reinforced when looking at the average days-on-the-market for LPC combined housing. Days-on-the-market peaked about two years after the beginning of the 2007 recession and fallen dramatically since. Currently, days-on-the-market is about 20% below 2008 levels.

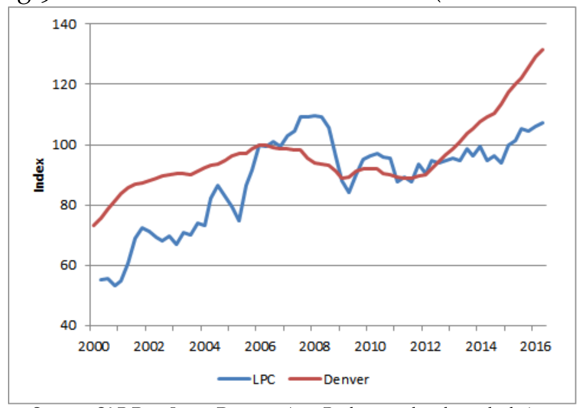
Fig 8. LPC Combined: Days on Market



Source: Durango Area Association of Realtors

A comparison of La Plata Combined median home prices and the Case-Schiller index of housing prices for Denver are somewhat revealing. As the graph shows, real estate prices in La Plata grew significantly faster in the pre-recession period, climbing roughly 50% between 2000 and 2008 while prices in Denver "only" grew 20% from 2000 – 2006. But since 2010 Denver prices have climbed about 45% to La Plata counties 19% growth.

Fig 9. LPC and Denver Home Prices (2006.1 = 100)



Sources: S&P Dow Jones, Durango Area Realtors, and author calculations

It is also worth noting the timing of the price cycles over the cycle. In lead-up to the recession Denver prices peaked in the first quarter of 2006 while in La Plata, the peak didn't occur until 2008.1. Both locations bottomed out at roughly the same time. But prices in La Plata began to recover soon after the trough while in Denver real estate remained largely unchanged until 2012. Part of this can be explained by uncertainties surrounding the *Dodd-Frank Wall Street Reform and Consumer Protection Act* which laid down new rules regarding lending and borrowing practices in the five or so years after the financial crises. Since then, however, price in Denver has surged strongly while in La Plata price growth has been less robust. Indeed, La Plata has yet to fully return to 2008 prices while in Denver, prices are about 31% above their 2006 peak.

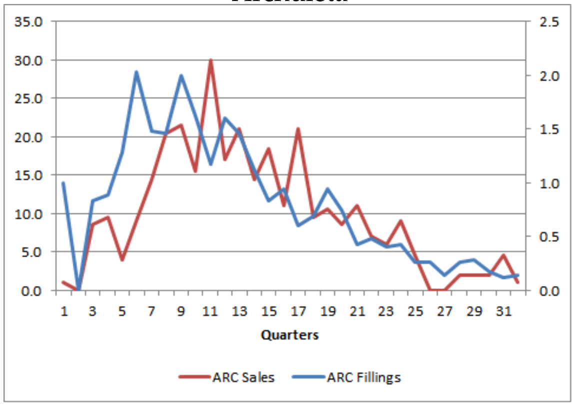
Foreclosures

Foreclosures in Archuleta, La Plata, and Montezuma counties from the 2007 recession, Figure 10, all follow a similar pattern – rising about in the three or so years after the start of the recession, and then falling off. currently, in all three counties, foreclosures are close to their 2007 levels.

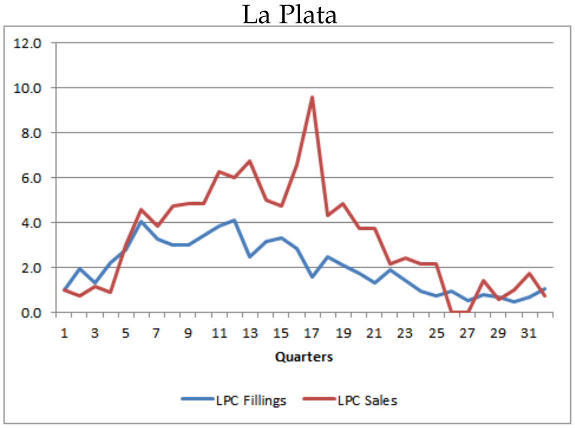
Foreclosure sales were highest in Archuleta county while sales (on the right scale in Archuleta) were on par with the other two counties. Of note, in La Plata sales of foreclosed homes were particularly strong about four years from the recession start date.

Fig 10. Foreclosure

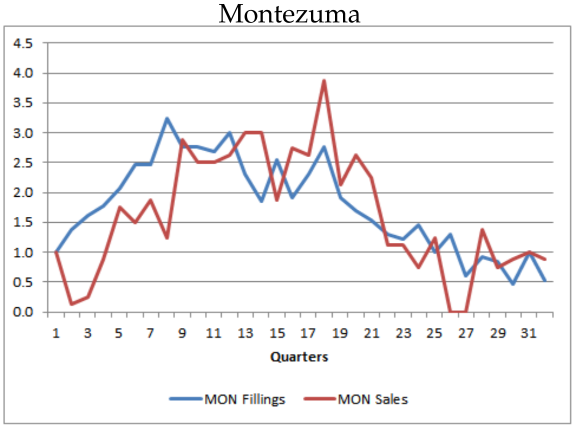
Archuleta



La Plata



Montezuma

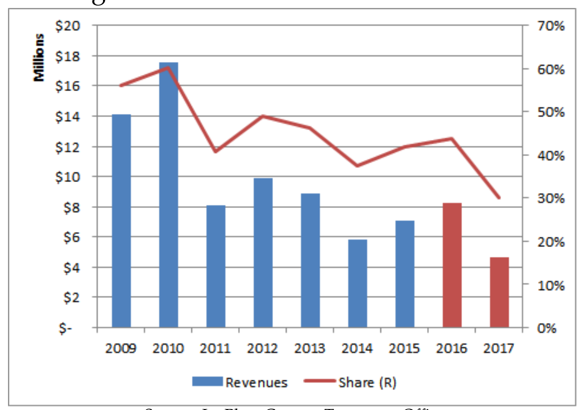


Source: CO Department of Local Affairs

Resources and Energy

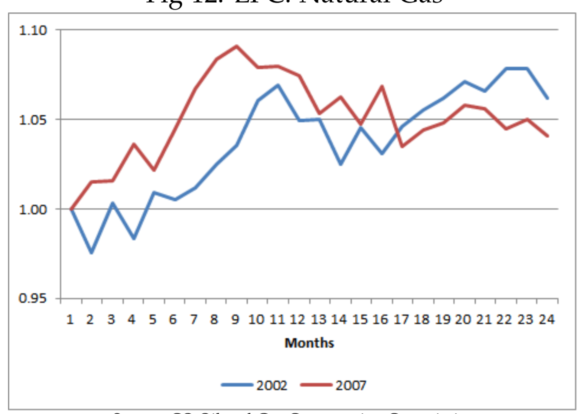
Given the importance of mineral extraction for overall La Plata county tax revenues, see Figure 11, which shows county revenues and the share of tax revenues (right axis), revenues for 2016 and 2017 are forecasts. With futures markets predicting $50 oil for the next five years, or so, and given the close relationship between oil and gas prices, it is unlikely extraction taxes will be be contributing as large a share of county tax revenue for the foreseeable future as in previous years.

Fig 11. Oil & Gas Revenues and Share



Source: La Plata County, Treasurers Office

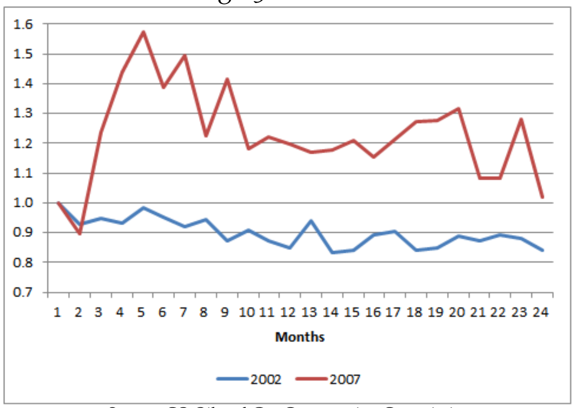
Fig 12. LPC: Natural Gas



Source: CO Oil and Gas Conservation Commission

Figures 12 and 13 show the natural gas and oil extraction in La Plata relative to production in 2002, immediately following the 2001 recession, and the 2007 recession. As can be seen, production in both gas and oil were robust from 2007 onwards. However, this is largely due to changing extraction technology, “fracking”, and the associated falling costs concurrent to rising prices of minerals which increased the feasibility of extracting more costly reserves. Recent falling prices may not reduce extraction, but are likely to stem new wells being drilled, though this is not yet the case, see Figure 14 which shows total oil and gas well growth relative to 2007.

Fig 13. LPC: Oil

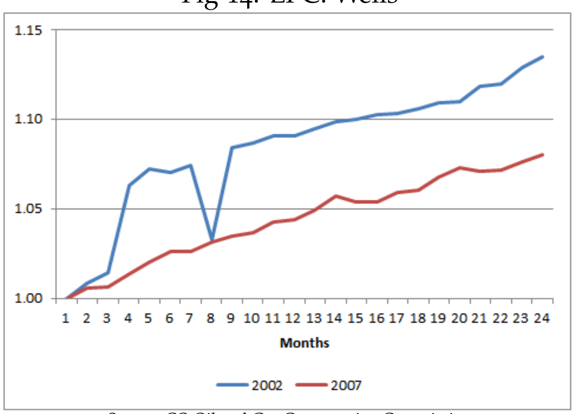


Source: CO Oil and Gas Conservation Commission

Extraction and county revenues

"With futures markets predicting $50 oil for the next five years ... it is unlikely extraction taxes will be contributing as large a share of county tax revenue ..."

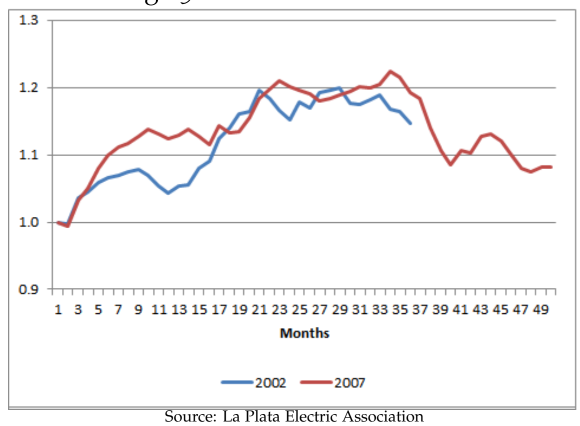
Fig 14. LPC: Wells



Source: CO Oil and Gas Conservation Commission

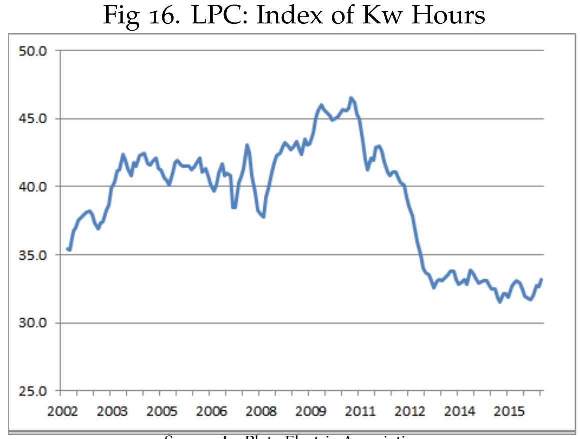
We are seeing no decline in the use of energy in La Plata. As can be seen in Figure 15, energy use rose in the months following the Recession before leveling off and then climbing again. Three years after the recession, electricity use began to fall towards pre-recession levels. Figure 16 shows an index (2007=100) of kw hours from 2002 – present. Clearly, there is a rise in power use in the immediate aftermath of the financial crisis, but, beginning in 2011, use has dropped of markedly. Given that nationally about one-third of electrical use is residential, see Figure 17, and two-thirds commercial and industrial, this is quite a dramatic decline in electricity use. Clearly, some of this drop is conservation and/or higher prices, but some must also be attributed to less use, particularly as the local population grows — according to La Plata Electric, meters in both La Plata and Archuleta counties have been growing steadily since 2000.[1]

Fig 15. LPC: Kw Hours Used



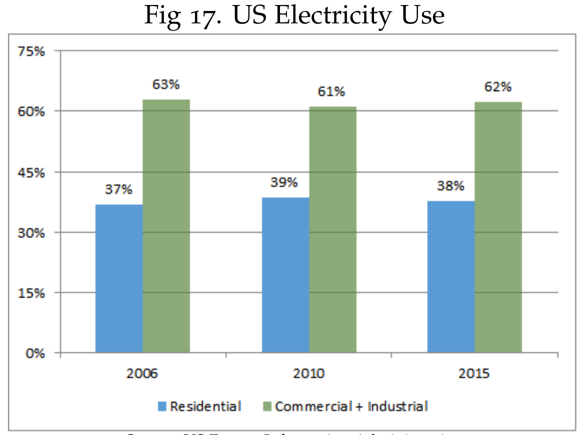
Source: La Plata Electric Association

Fig 16. LPC: Index of Kw Hours



Source: La Plata Electric Association

Fig 17. US Electricity Use



Source: US Energy Information Administration

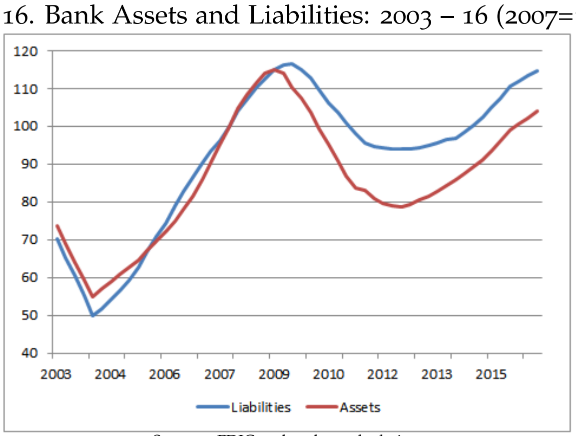
[1] Transportation also uses a share of electricity, but is a relatively small percentage of total use.

Banking

Lastly, we look at the banking sector. The OBER collects data on four locally and regionally owned banks in the Four Corners region. The quarterly asset and liability indices are calculated using net loan and leases (assets) and total deposits (liabilities) from 2003 to the present and are indexed to 2007=100.

The changes over the fifteen years in assets and liabilities is striking and largely reflects the local economy and, particular, real estate. Bank assets grew substantially throughout the 2004 – 08 period. And then shrank commensurately with the after shocks of the real estate crash and recession. Liabilities were somewhat less affected by the downturn, though this is likely due to increases in savings which buffered losses to demand deposits. Assets and liabilities began to recover in 2012 but have yet to reach their 2008 levels and appear to be slowing in late 2015.

Fig 16. Bank Assets and Liabilities: 2003 – 16 (2007=100)

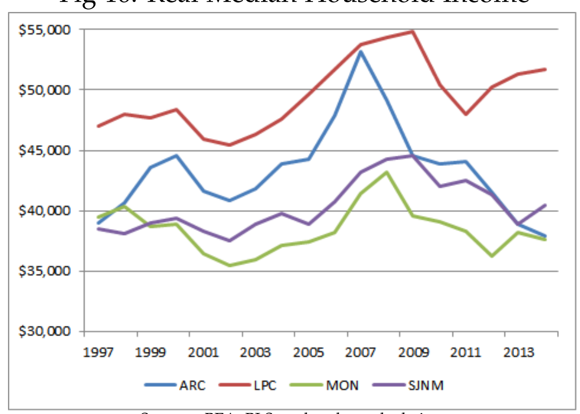


Sources: FDIC and author calculations

Summary

Overall, the reverberations of the Great Recession still linger. Labor markets have fully recovered in terms of unemployment rate. But local household income, adjusted for inflation, has not. Figure 16 shows Archuleta, La Plata, and Montezuma real median household income (in 2007 $'s), deflated using the Denver CPI. All three counties income peaked in the mid- to late 2000s and while LPC income started to rise in 2011, as of 2014 it is still at 2005 levels. On the other hand, as of 2014 (most recent data), neither Archuleta nor Montezuma counties' median income is heading up. More problematic, Archuleta county's inflation adjusted income is now lower than it was in 1997. In San Juan county, NM, household income is close to its' 2004 level.

Fig 16. Real Median Household Income



Sources: BEA, BLS, and author calculations

Locally, we are seeing that there are still after shocks from the recession. But, if we look at in particular the tourism data, there are also signs that we are more in longer terms a steady state. With mineral resource prices likely to stay low for some time, there will continue to challenges for county governments who use revenues to provide local goods and services. Overall, it appears we are getting close to returning to pre-recession levels – there is still a post-recessionary shadow, but the we are getting close to the edge.

The *Four Corners Economic Quarterly* is a newsletter on economic indicators of Southwest Colorado and northern New Mexico published by the Office of Economic Analysis and Business Research in the Fort Lewis College School of Business Administration.

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