Employment, Houses and College Degrees

Chuck Vawter III

A financially astute parent, at the beginning of 1997, decides to start saving for their infant's college education.

IRS Section 529 plans and Series EE US Savings Bonds both allow earnings to grow tax free. For the sake of illustration, let's use Savings Bonds. As this child heads to 1st grade, the parent's view of their college savings follows.

Planning for Your Child's College Education Just Getting Started - Staying on Track				
	1997	1998	1999	2000
Interest Rate on EE Savings Bonds (Avg)	5.0%	4.8%	4.8%	5.6%
Western Region Inflation Rate (Jan)	2.1%	2.1%	2.8%	4.3%
ASU Tuition Increase (Fiscal Year)	3.0%	2.4%	4.9%	4.7%

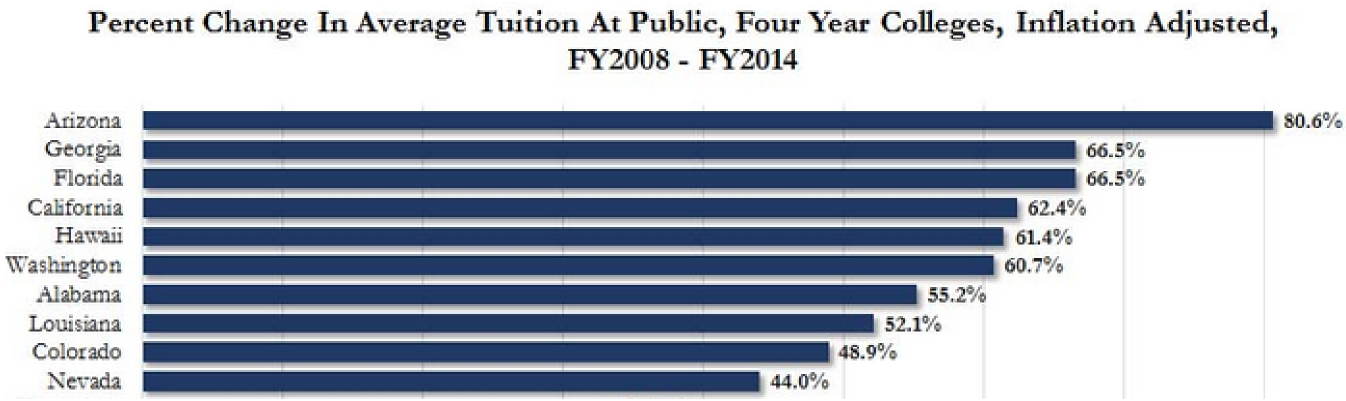
Few children stick with their occupational dream from grade school. Even if this child's choice is not college, income taxes can be paid on the bonds and they are still ahead of inflation. If the child stays the course, their tax exempt investment is also ahead of plan.

As this child approaches college admission, the financial scene turns almost nightmarish.

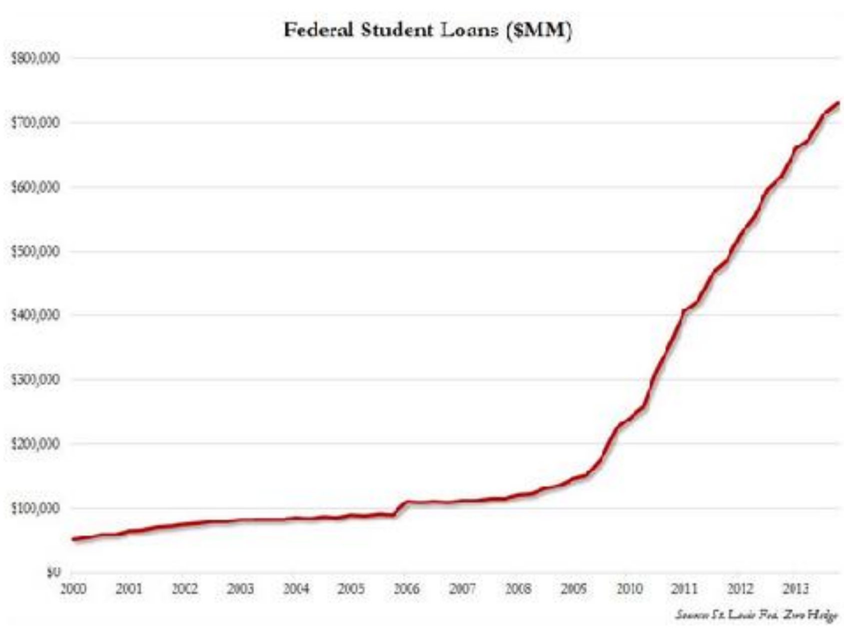
Planning for Your Child's College Education Next Up College Admission - Who Could Have Planned For This?				
	2010	2011	2012	2013
Interest Rate on EE Savings Bonds (Avg)	1.0%	0.9%	0.4%	0.2%
Western Region Inflation Rate (Jan)	1.4%	2.6%	1.7%	1.7%
ASU Tuition Increase (Fiscal Year)	20.9%	18.8%	19.5%	0.0%

Your interest earned no longer keeps up with the cost of living and there is nothing that can keep up with that bottom line.

A recent article, dated May 7, 2014, covered the annual report by the Center on Budget and Policy Priorities. The report calculated how much annual tuition has changed, by State, for the period from fiscal 2008 to 2014. The reader is advised that these amounts are adjusted for inflation. Without that adjustment, the percentages shown would be higher. A graph for the top ten states - the only ones sporting greater than a 40% increase - follows. The US Average is an inflation adjusted increase of 28.2% during those six years. Yes, there is a clear cut winner.



A combination of the Federal Reserve's zero interest-rate policy and Arizona's housing induced recession have provided a one-two punch to this parent and child's college plans. **Even the most financially prudent parent could not have planned for this scenario.** This parent (or student) are now facing the following alternative.



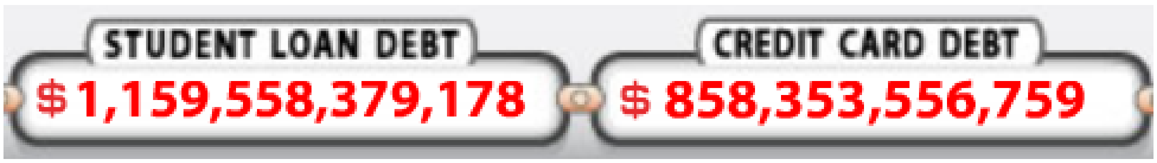
While the above was prepared with data from the St. Louis Federal Reserve Bank, their colleagues at the New York Bank provide the following:

Student loan debt is the only form of consumer debt that has grown since the peak of consumer debt in 2008.

Two points with respect to the previous graph:

1) That graph is not inclusive since it reflects only ***federally owned*** student loans. There are other sources.

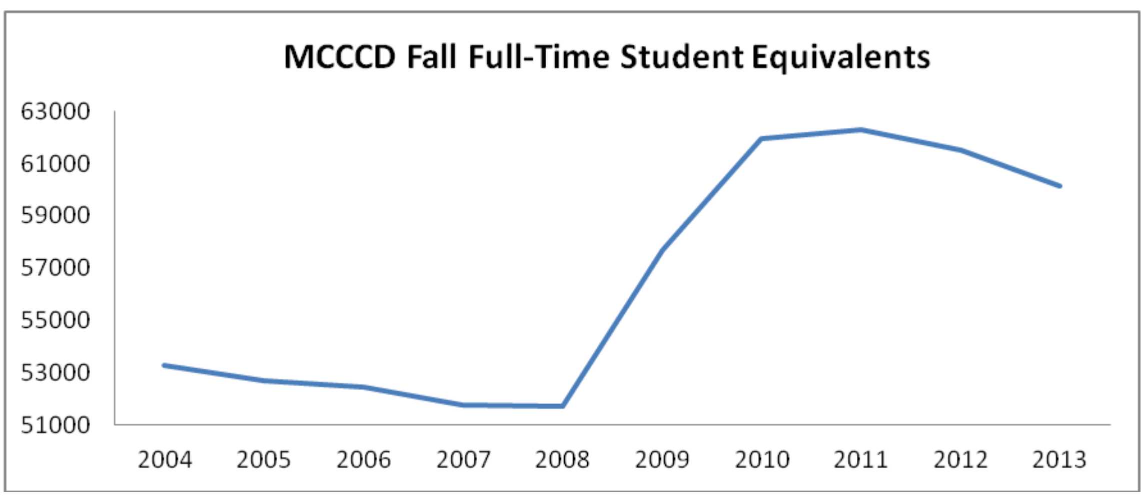
usdebtclock.org contains the following amount, on May 16, 2014, which is always on the move:



The credit card amount was included for comparative purposes.

2) Is that increase sustainable? There will come a day.

The most recent recession kicked in around 2008. It is interesting to note that with the advent of the recession, there was a slingshot move in enrollment (shown below) and student loan debt dovetailed nicely with that.



Perhaps, when families/students have had their fill of debt - student loans particularly - they will choose an alternative course. A recent story in the New York Times, dated April 25, 2014, lends support to that notion (passage shortened for readability purposes).

The proportion of new American high school graduates who go on to college — a figure that rose regularly for decades — now appears to be declining. Last October (2013)***, just 65.9 percent of people who had graduated from high school the previous spring had enrolled in college, the Bureau of Labor Statistics said this week. The high point came in 2009, when 70.1 percent of new graduates had gone on to college.***

If 70.1, of every 100, students previously attended college and that number drops to 65.9, that represents a decline of 6.0%.

The author adds: many colleges and universities, during the last decade, went on a bit of a building spree. With enrollment starting to decline and some classes being pushed online, capacity utilization may prove punk.

Capacity was added at the Maricopa Community Colleges, with their 2004 Bond Election. Enrollment has dipped at some of those campuses with some lower than their 2004 total. Administration who gave them the buildings has now decided to cut funding to a few of those campuses and let them find their own means to maintain. As a student at one of those campuses might say, "that's pretty messed up."

For those students that decide to continue their education, they are looking for a return on their investment of money (and time). The reader should look no further than to the May 10, 2014 Arizona Republic. An interview was included, with the President of the Arizona Board of Regents (underling added for emphasis):

Is college overpriced?

Students in Arizona get a high-quality education at respected public research universities for a moderate price compared with their peer institutions. If you look at this from a future-earnings perspective, <u>I'd say that you can't afford not to go to college</u>.

The (housing induced) recession begat the surge in enrollment and that surge begat the explosion in student loan debt.

The presumed payoff to the student is that as a result of their collegiate experience they will be firmly entrenched in the middle class (or above). The presumed payoff to the government cheerleaders is with a higher income earning citizenry, their tax base will increase. Dancing unicorns in everyone's future.

The author, as both of his long-time readers know, has argued since 2009 that there will certainly be an increase in the ***supply*** of college graduates. The problem will arise when there is not an increase in ***demand*** for college graduates to meet that supply.

Let's turn to an authoritative source for jobs data - the Bureau of Labor Statistics (Bureau or BLS). On December 19, 2013 they provided their best estimate of the jobs to be created during the next decade. The top twenty occupations with the projected largest job growth follows.

Bureau of Labor Statistics Occupations with the Largest Job Growth *(ordered by projected jobs)* 2012 to 2022		
Employment Title	**2012 Median Annual Wage**	**Projected Ten-Year Increase**
Personal Care Aides	$19,910	580,800
Registered Nurses	65,470	526,800
Retail Salespersons	21,110	434,700
Home Health Aides	20,820	424,200
Serving Workers, Including Fast Food	18,260	421,900
Nursing Assistants	24,420	312,200
Secretaries, Except Legal, Medical & Executive	32,410	307,800
Customer Service Representatives	30,580	298,700
Janitors and Cleaners, Except Maids	22,320	280,000
Construction Laborers	29,990	259,800
General and Operations Managers	95,440	244,100
Laborers & Freight, Stock & Materials Movers	23,890	241,900
Carpenters	39,940	218,200
Bookkeeping, Accounting, & Auditing Clerks	35,170	204,600
Heavy and Tractor-Trailer Truck Drivers	38,200	192,600
Medical Secretaries	31,350	189,200
Office Clerks, General	27,470	184,100
Childcare Workers	19,510	184,100
Maids and Housekeeping Cleaners	19,570	183,400
Licensed Practical and Vocational Nurses	41,540	182,900

The Bureau projects that 15.6 million jobs will be created in the next decade. The "top thirty" jobs (1 - 20 shown above) include approximately 47% of the total. If those 7.4 million jobs are created at their median wage (not likely at hiring), the average wage earned will be $35,791 - in 2012 dollars. In most cases, not exactly worth the entire trip through college to completion of a Bachelor's degree. (The community colleges can still be of assistance to many of those.)

The BLS' projections are nationwide. Anyone reading along is most likely in Maricopa County or in Arizona, for sure. This is where the author will focus his attention. If you have made it this far, you are strongly encouraged to keep going. You are about to view some statistics that most likely you have never seen before (and may not again - these aren't too nice).

Each month, typically on the first Friday, the Bureau announces the current unemployment rate. Although it doesn't receive as much publicity, rates are published for each County.

Below is the eleven year trend for the County's March unemployment rate. March was chosen because it is the most recent percent available. The reader is advised that the earlier years should be firm. The later years, particularly that last one, are subject to revision.

Maricopa County Unemployment Rate *(not seasonally adjusted)* March										
2004	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
4.60%	**4.10%**	**3.60%**	**3.00%**	**3.80%**	**8.30%**	**9.90%**	**8.60%**	**7.30%**	**6.70%**	**6.30%**

The surge in the County's unemployment rate began five years ago (2009).

No surprise, the surge in MCCCD's enrollment began five years ago (2009).

The author has issues with using the unemployment rate. If an individual is going to college, they are not included as unemployed. If an individual has given up looking for work, they are not counted as unemployed. And, the list goes on. In a word, the rate - in the author's opinion - is tortured. Given this is an election year, some kinky stuff may happen, to the rate, between now and the first Tuesday in November.

The author has chosen instead to use the total number employed, in the County, to gauge the health of the local job market. Stated succinctly: How many have a job?

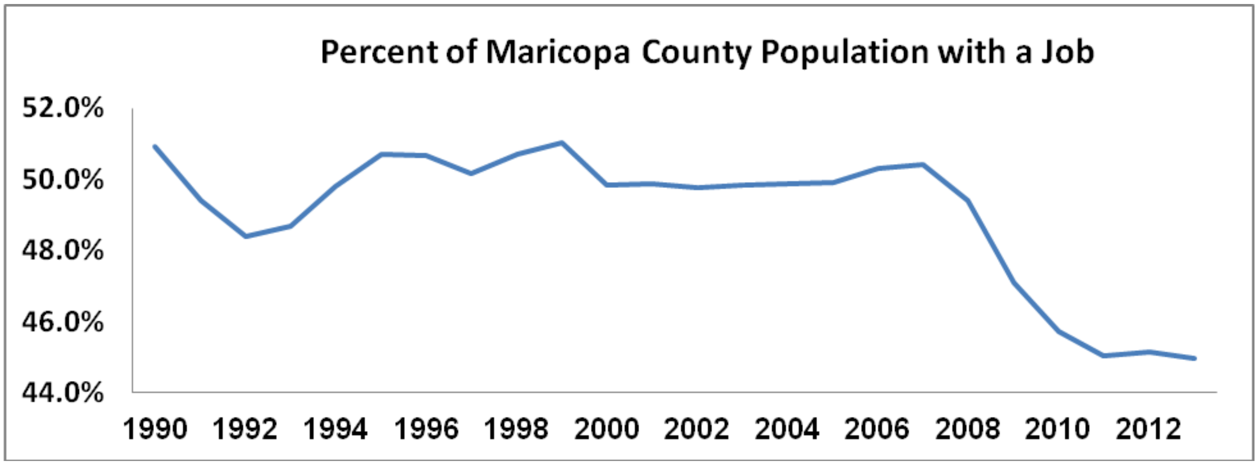
Total Employed in Maricopa County, in June - Not Seasonally Adjusted *(in thousands)*									
2004	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
1,705	**1,761**	**1,833**	**1,871**	**1,863**	**1,791**	**1,750**	**1,731**	**1,753**	**1,773**

The most current amount available - subject to revision - shows 1,814,000 individuals employed during March of this year - still below the peak of 2006 to 2008. (In the author's opinion, the amount looks ripe for revision - downward. It appears out of sequence.)

Given all the assumptions, estimations and machinations that occur with the unemployment rate, the author's measure of employment health is this: Take the above amounts, that reflect those employed in June, and divide by the population in the County at July 1 - the only date available for intercensal amounts. This explains the author's choice in using June employment figures.

The last year a census was conducted was in 2010. All of the estimates before that date have been revised, by the Census Bureau, to reflect the change from 2000 through 2010. The most recent three years are estimates by the State Department of Administration (subject to revision).

What happens if you take the number employed, in the County, and divide it by the population? The reader is encouraged to stare at the following until it burns in their memory.



The author is challenging anyone that has made it this far to replicate his methodology and refute the above chart. His data table follows (and for the only time, he included his sources in the body of this paper).

Percent of Maricopa County Population with a Job
(amounts in thousands)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Employed	1,086	1,086	1,100	1,149	1,232	1,317	1,369	1,407	1,475	1,534	1,541	1,584
Population	2,132	2,198	2,273	2,360	2,475	2,598	2,703	2,805	2,909	3,005	3,092	3,176
% w/ Job	50.9%	49.4%	48.4%	48.7%	49.8%	50.7%	50.6%	50.2%	50.7%	51.0%	49.8%	49.9%
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Employed	1,621	1,658	1,705	1,761	1,833	1,871	1,863	1,791	1,750	1,731	1,753	1,773
Population	3,255	3,328	3,418	3,529	3,643	3,712	3,771	3,804	3,827	3,843	3,885	3,945
% w/ Job	49.8%	49.8%	49.9%	49.9%	50.3%	50.4%	49.4%	47.1%	45.7%	45.0%	45.1%	44.9%

Sources: **Employment -** **http://www.bls.gov/lau/ (Scroll down under "databases")**
Population - **http://www.census.gov/popest/data/intercensal/ (1990 - 2010)**
http://www.workforce.az.gov/population-estimates.aspx (2011 - 2013)

This is not the picture painted in the media. This is not the portrait students want to see after making the time and money investment higher education requires.

For seventeen of the most recent twenty-four years, the percent employed was between 49.0% and 51.0%. For only four of those years - the most recent four - the percent is 45.1% or lower.

To get back to the historical norm of approximately 50% of the population employed, the County would need population to freeze at its 2013 level while simultaneous adding 160,000 jobs to the March 2014 tally.

If the reader would be kind enough to take a glance back, they will notice it took from June 2004 to June 2007 to add that many jobs during the boom-boom days of housing.

<u>Additional points to ponder:</u>

1) If there were the means to add those jobs, there is no guarantee those would be college level jobs (see previous projections from BLS).

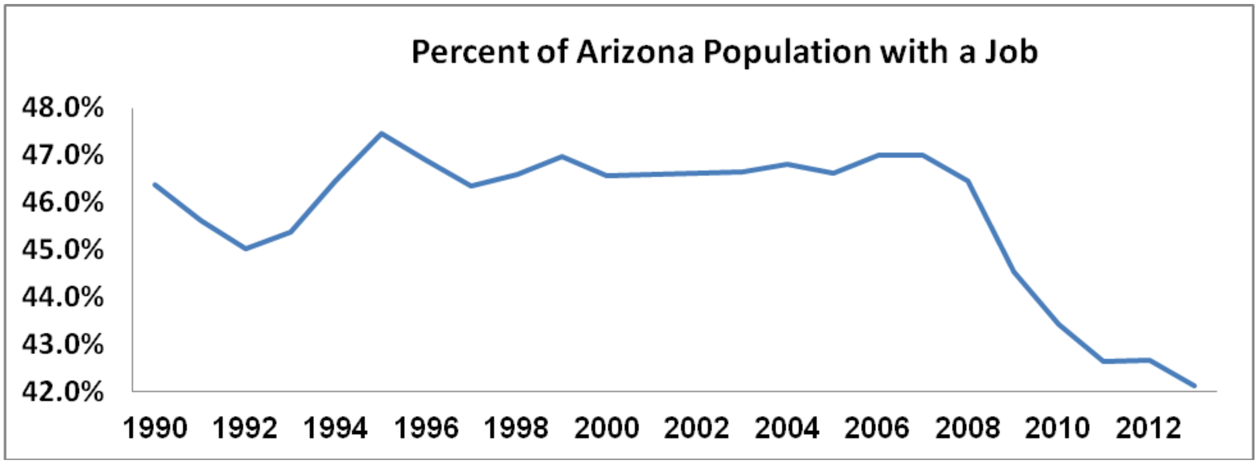
2) Achieving the historical average of 50% employment would still not get the job done, so to speak.

The author's thesis is that during the recent housing bust, there were too many personal balance sheets turned upside down. It will take a sustained level of employment, above the historical average of 50%, to adequately repair the financial damage that was done.

3) Is it any wonder, given the current employment situation, that every time a full-service gas station or fast food restaurant closes their doors, a pawn shop, payday or auto title loan shop takes its place? Those latter omnipresent businesses are de facto proof of a weak economy. At the point when those latter business are shuttered, we can begin speaking of a strong economy again.

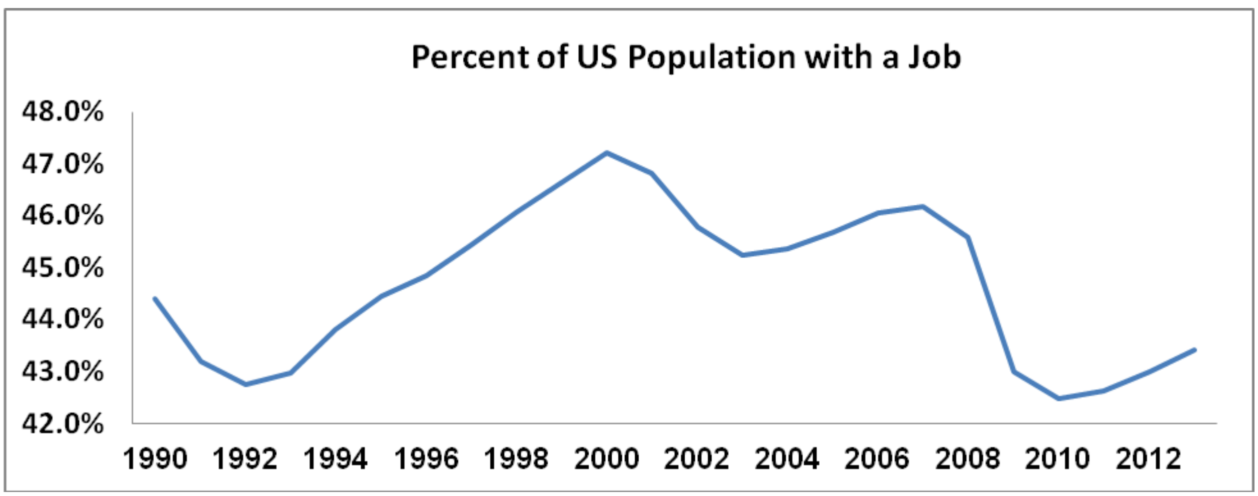
Perhaps, our students can look outside of Maricopa County for greener employment pastures.

In some cases that may work, although Arizona may not prove the most fertile ground for job hunting.



For the first nineteen of the twenty-four years shown, the percentage oscillated between 45.0% and 47.5%. For the last five years, that percent has dipped below 45.0% and declined with each year. In the author's opinion, it is realistically impossible to undo the damage done, to the State and County's employment levels, in the matter of a few short years.

Let's expand our scope to our nation's employment levels.



The reader will notice the recession in the 1991 - 1992 area. The stock market decline in 2000 is very visible on the national chart, but barely registered a blip on the State chart. The housing market bust damaged all. The reader is advised that the employment figures are from June since any population estimates reflect a July 1 date making them unavailable for the current year.

It is encouraging, on a national level, to see the uptick since 2010. That move has carried through to the current year, as figures through April 2014 will support.

Total US Employment in April - Not Seasonally Adjusted (in millions)											
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Employed	138.4	140.9	143.4	145.3	145.9	140.6	139.3	139.7	142.0	143.7	145.8

The good news is:

The employment level, in this *country*, is almost on par with the peak reached in 2008.

The bad news is:

1) Those jobs were not added locally.

2) Population has grown by approximately 15 million during that time frame, meaning it would take another 7 million jobs to get back to the percent employed in 2008. This country did create 7 million jobs from 2004 to 2008 during the boom-boom housing years.

a) Don't expect that to happen again (in such a short period of time).

b) Population will keep growing, during those four years, if it did happen again - meaning it will take longer than four years of peak job creating years.

c) The author stands firmly with the belief that this country needs to get past typical levels of employment to heal those financially damaged from the recent housing bust.

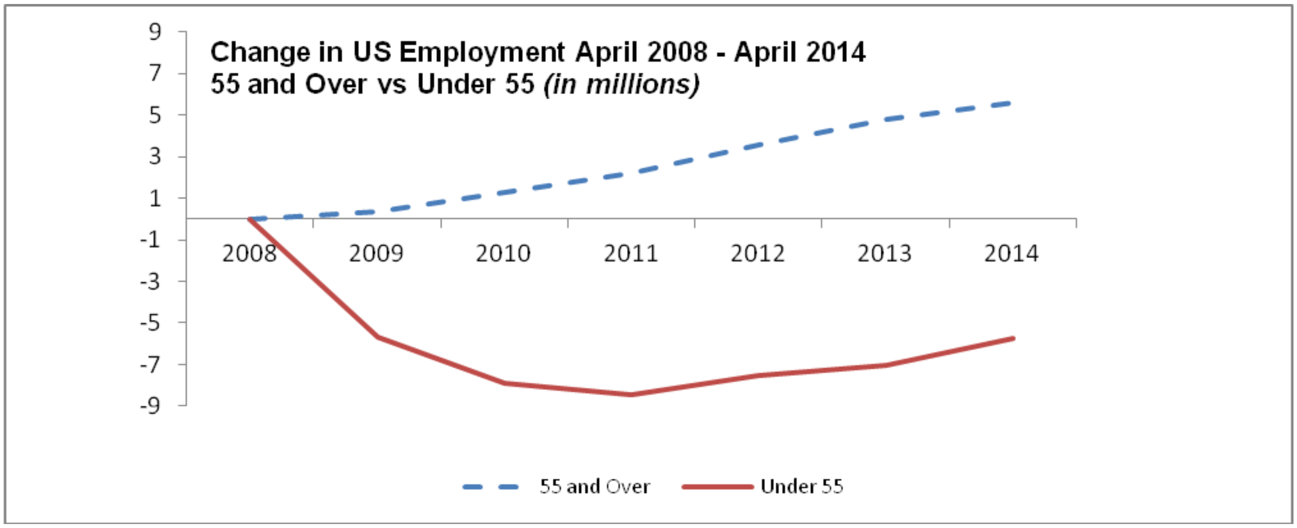
3) The old people are hanging on their jobs. (The author genuinely wishes he had local data for the following.)

Total April Employment in US - Not Seasonally Adjusted (in millions)											
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Employed	138.4	140.9	143.4	145.3	145.9	140.6	139.3	139.7	142.0	143.7	145.8
55 and over	21.9	23.4	24.7	25.5	26.7	27.1	28.0	28.9	30.3	31.5	32.3
Under 55	116.6	117.5	118.7	119.8	119.2	113.5	111.3	110.7	111.7	112.2	113.4

Beginning with April 1993, there has not been a down year in the total 55 and over employed in this country.

Yes the population is aging, but the employed segment of that demographic is growing faster. A higher percentage of older individuals are working than ever before.

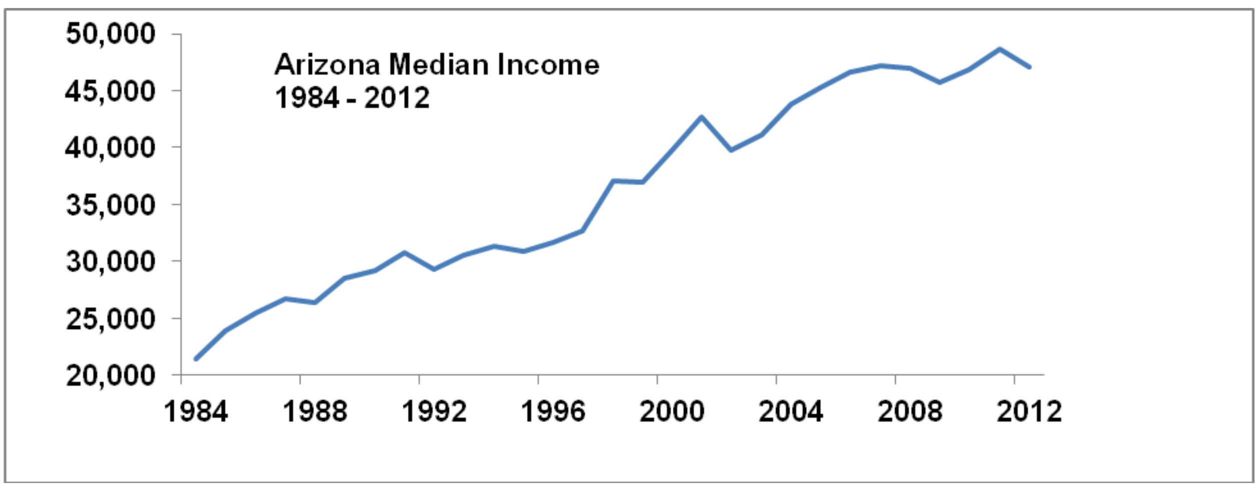
From the preceding table, the following can be constructed.



The older workers are hanging on to their jobs and the younger ones (under 55) are down approximately six million jobs from the peak. (It may be worse in this part of the country, given the damage the housing market inflicted in this State.)

Why won't the old people leave the job market? They can't afford to.

Switching back to local, here's a visual of the household median income in the State.

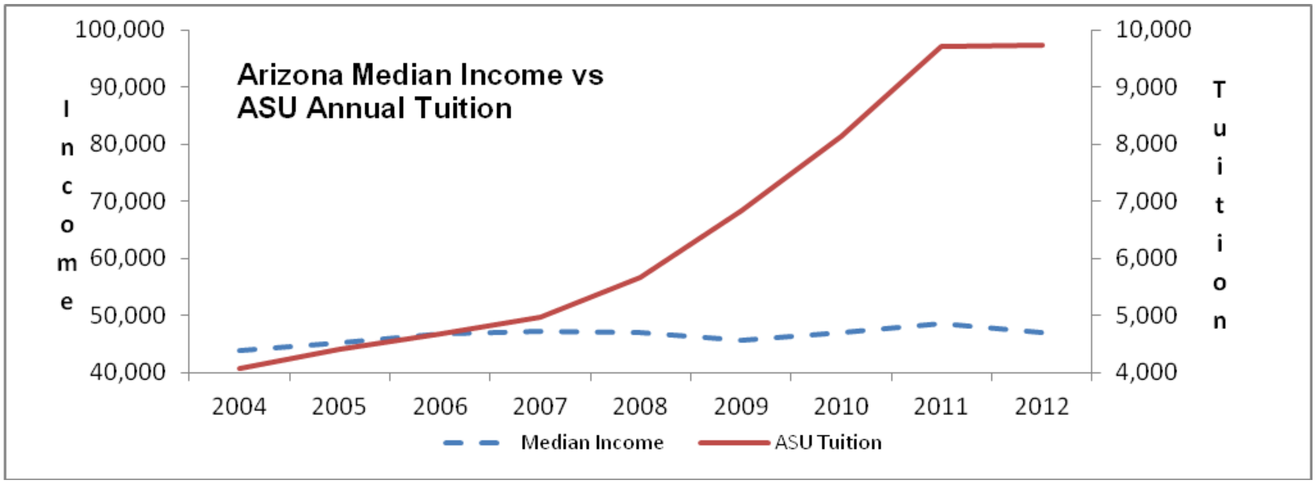


A cursory glance reveals a seemingly nice upward trend until you consider the following:

1) Income doubled from 1984 to 2001 (that's a healthy 4% compounding).

2) Income in 2012, the latest year available, is lower than 2007. The same money in 2012 wouldn't go as far as 2007.

Pity the parent of a University (community college or private school) student.



Nothing wrong with the scales the author chose on the vertical axes, they are symmetrical.

In many cases, there is simply nothing left at the end of the month for retirement.

In a Gallup poll, published April 22, 2014, the following was found (underlining added for emphasis):

A firm majority of Americans, <u>59%, are worried about not having enough money for retirement</u>, surpassing eight other financial matters.

Retirement is Americans' number one financial worry.

Wells Fargo conducted a survey during the fourth quarter of 2013 of middle-class workers.

... 34% said they plan to work until they're at least 80 ... 37% said they'll never retire and plan to either work until they get too sick or die.

So the old people just keep on working, not providing the traditional level of attrition seen in years past.

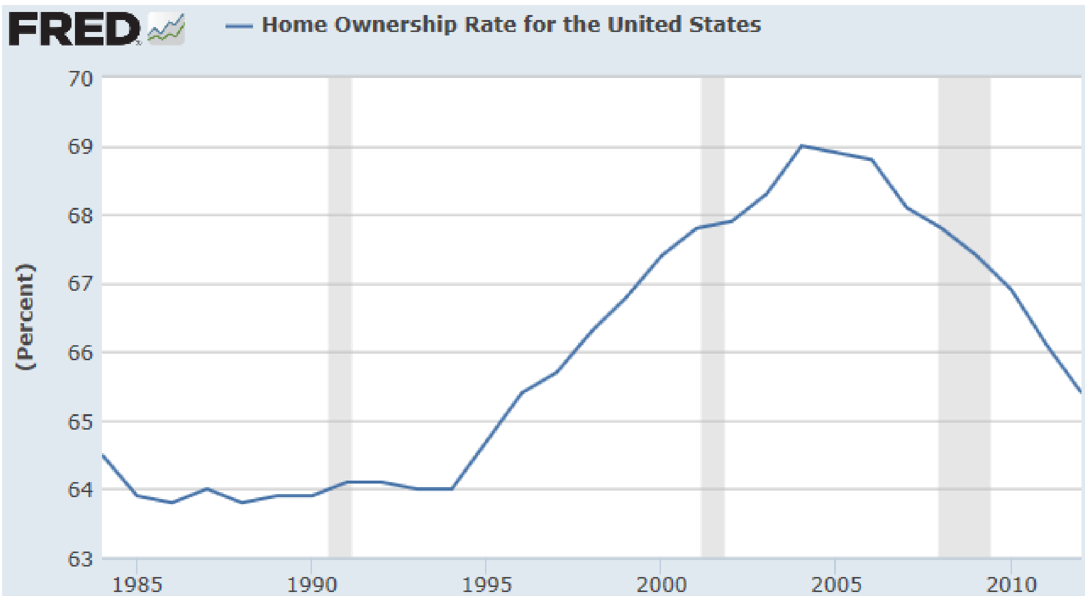
One of the reasons can be found in a May 2014 report issued by the Consumer Financial Protection Bureau (CFPB).

The CFPB's analysis of Census data shows that the percentage of homeowners' age 65 and older carrying mortgage debt increased from 22 to 30 percent (3.8 to 6.1 million) from 2001 to 2011.

The roots of some of the above problem which has spilled over into the labor market, especially in Arizona, can be found in the following quote (underlining added for emphasis).

"We can put light where there's darkness, and hope where there's despondency in this country. And part of it is working together as a nation to <u>encourage folks to own their own home</u>."

- President George W. Bush, Oct. 15, 2002



From Bloomberg, on April 29, 2014:

The share of Americans who own their homes was 64.8 percent in the first quarter (2014) ***... The rate is the lowest since the second quarter of 1995, when it was 64.7 percent.***

Don't you just love when the government tries to influence its citizens' financial behavior? The big guys make a killing and the little guy gets caught holding.

Of late, the government has gone into the business of promoting college degrees.

How many lives were ruined on the roller coaster ride down in the housing market?

The author needs to look no further than his personal life.

1) The dental hygienist who cleaned his teeth less than one month ago is an approximately 54 year-old single female. Five years ago she lived in a three bedroom house, today in a studio apartment. The author has heard her remark more than once, during semiannual scrapings, that she doesn't believe she will ever be able to retire.

On the street where you live ...

2) The old couple that lived across the street, and a little bit down from the author, were booted out of their house and moved in with another elderly couple next door.

3) The kindly gentlemen next door was booted approximately three years ago.

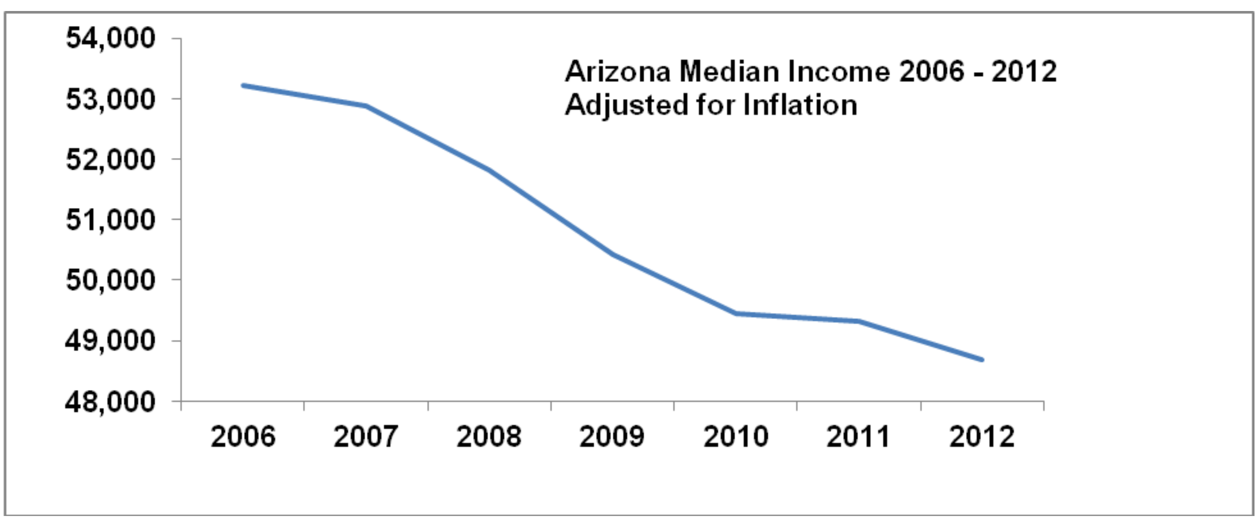
4) A family of three, very close by, held on until approximately Thanksgiving of 2013. That house is still on the market.

5) Having lost his job and unable to pay his mortgage, another neighbor across the street, didn't wait to get thrown out like the others above. One night he fired one shot out the back window and then turned the gun towards himself. The author watched, for two days, the HazMat vehicle parked out front.

Somewhere in the vicinity of 30% or more (a *wild guess* by the author) of individuals/families were financially injured, some severely, by the housing market. The education market is on target to get some that the housing market missed. And, if you are fortunate enough to dodge both of those, no worries - inflation is looking for you. It's like a heat seeking missile. It will find those that the others missed.

Retirement and inflation *will* prove a combustible mix.

Here's another angle on household median income in Arizona. Half of households, in the State, are above the line, the other half below. This one uses three-year moving averages and unlike the previous is adjusted for inflation.



That sinking feeling - an 8.5% drop in purchasing power from 2006 to 2012.

The number one financial worry - retirement - just received an exclamation point.

If the reader has a child attending a pay-for-school institution, at *any* level, you have been hit even harder.

Enter the Arizona Board of Regents with a stated goal, reminiscent of those uttered about housing in the early years of this millennium.

52% increase in Bachelor's degrees awarded by 2020

- ABOR Strategic Plan 2008 - 2020

Rhetorical question: Will the State have increased college-level jobs 52% by 2020?

The reader is gently reminded that the author believes it would take more than that to make whole those maimed by the housing fallout and currently sitting on the sidelines.

He has shared that belief, on more than one occasion, with his duo of readers.

More importantly he has shared that thesis with his students.

Forewarned is forearmed.

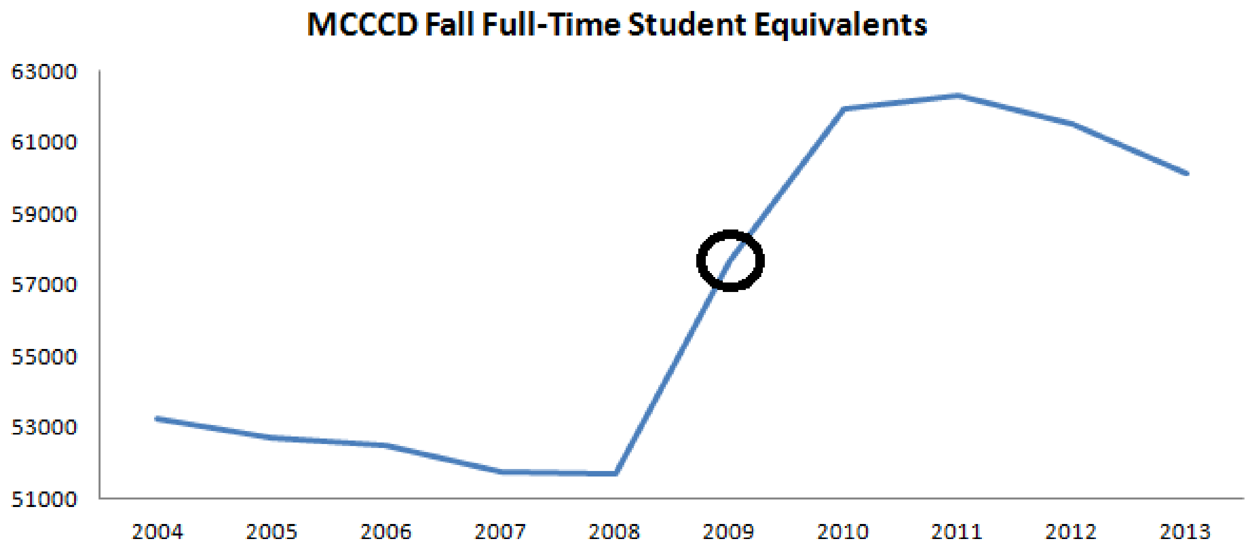
After a two year hiatus, a three-course alumnus of the author checked in with the following.

@gmail.com> Mon, Jul 8, 2013 at 3:31 PM
To: chuck.vawter@gccaz.edu

Mr. Vawter,

It's , I took a few of your accounting classes while at GCC. After my two years there I went to ASU and finished my finance degree with a certificate in international business as well (why the hell not?). I know you like when ex-students email you so you can get real material to read to your class so I'll tell you where I'm at: Graduated in four years (unlike some of my colleagues), only 14k in debt (unlike ALL of my colleagues, 34+ each...), AND I have a great career I started in early June (unlike ALL of my colleagues, who still work at American Eagle or moved back into their parent's). I remember you reading all of your horror stories about loans, jobs, and education and wanted to let you know they were *mostly* accurate (see: my colleagues) but that there is hope if you network and get done.

Hope all is well on your end, take it easy, A portion of this student's fortune, in the author's opinion, exists in his timing. His starting point is circled on the following graph. He beat the coming rush to the exits.



He completed his studies in four years. Few students - approximately one-third - do. And, he saved money doing so (keeping his loans to a minimum).

With completion rates hovering around 60% after six years of college, competition for the limited supply of jobs the old people don't hold, should be ultra-intense within one year (May 2015). Those entering at the peak, of the above graph, should find the competition level (for jobs) fierce.

The other part of the author's former student's job attainment was all him. He had the personality that inherently screamed "take me, I won't let you down." He was always there (perfect attendance) and made many contributions, as he did two years removed from GCC.

As for his classmate(s), with the $30,000 plus in student loans, living at home with a job in retail - expect to be reading more (than you have already) about those in the coming year(s).

In the author's opinion, a newly minted graduate has about one year to cash in on their degree. Failing to do so during that period of time will mean that not only has their newly acquired knowledge started to stagnate but, more importantly, the pipeline of students that filled during 2009 and 2010 will be emptying out behind them in earnest looking for the same thing that they are.

Meanwhile, the institutional goals of ever-increasing enrollment to justify the money misspent on buildings (at land locked campuses) and the governmental strategic goals of attempting to increase the wealth of their citizenry, which will increase their tax revenues, plows forward. This will leave some students, much like the homeowner thrown upside-down, in a worse financial position than when they started.

There will be winners in the education market - witness the author's former student. But, there will be (University) students left worse-off than many from the housing market debacle. Student loan debt, unlike mortgage debt, is non-dischargeable in bankruptcy court. The government can garnish your Social Security check to satisfy your outstanding balance.

In an article, dated May 13, 2014, the following is found.

... in Q1 (first three months of 2014) ***total Federal student loans rose by another $31 billion to a record $1.11 trillion, and up a whopping $125 billion, or 12% from this time last year.***

... we would estimate that at this moment some $250-$300 billion in student debt is already 1 or more months delinquent with no intentions of ever being repaid.

File the following quote that printed May 10, 2014, right next to the former President's, and revisit it in three years or less.

"I'd say that you can't afford not to go to college."

The author begs to differ.

There are less jobs today, per capita in both Arizona and Maricopa County, than at almost any other time in the past twenty-four years. Yet, there are more college graduates today per capita than at any other time - period.

The mathematics of so many acquiring a degree, a college-level job to go with it, paying off their student debt, buying a house to help that slumping market, and living a prosperous life doesn't seem to compute. Saving for retirement? Forgettaboutit.

Some will wake up at the end of their collegiate journey with a unicorn in their back yard. Others will be glad if a bill collector is not camped out there.