Stockpiling, Webisodes and a Reality Check: The Economic Impact of the 2007 Writer's Strike on LA

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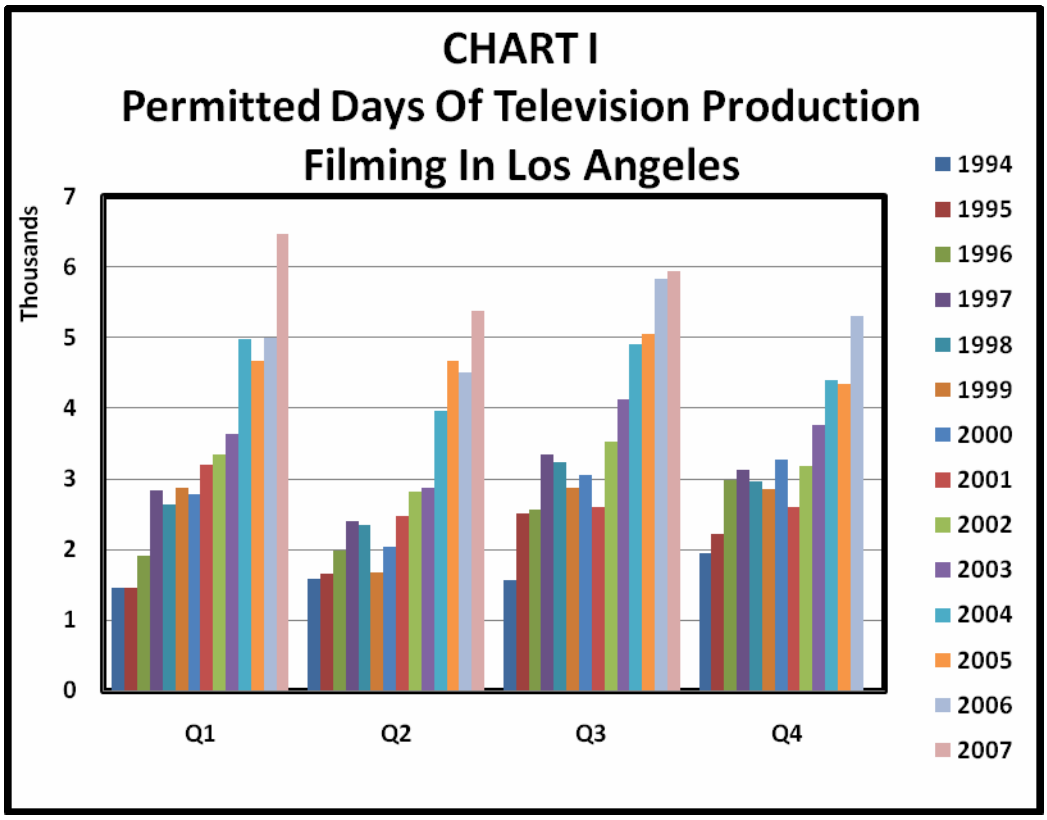
The strike is on and to read the press, the cost is potentially huge. The *Los Angeles Times* reported; "Hollywood's film and television writers went on strike early this morning (Nov. 5)"…"the last WGA strike in 1988 lasted 22 weeks and cost the industry an estimated $500 million (Nov. 6)"…"a slowdown similar to the 1988 strike would cost the area more than $1 billion(Nov. 8)[1]."

Virtually everywhere in the media, in City Hall and in Sacramento this greater than $1B economic impact is taken as fact. But what is behind it and how much faith can we put in this number? Is there a serious public issue for the Los Angeles economy worthy of governmental intervention? As it turns out, a close examination of the economic dynamics of the 2007 WGA strike suggests a much more modest and transitory impact on the Los Angeles economy. The impact, even if the strike runs as long as the record 1988 strike, will be about 1/3 or less of the currently accepted one billion dollar estimate.

When economists have studied the impact of strikes they find that the issues are more complex than first thought and as with the 2007 WGA strike, the initial claims tend to be grossly inflated. For example, in the 2005 New York City Transit strike initial claims of an impact of $660M per day were later found to be not even close to reality[2]. Why such disparity between initial claims and the actual impact? The reason is that the first broad brush strokes at the cost of a strike focus on the wages which would have been paid to employees were no strike to have occurred and assume for simplicity sake that those affected by the strike take no actions to mitigate the effects. But unlike earthquakes, strikes are very predictable events and those affected do try to mitigate their adverse impacts. In addition to trying to end the strike sooner, there are three important actions which can mitigate strike induced losses and affect the economic impact; inventory stockpiling, substitution to other goods and composition of product changes. To be sure, hardships and economic dislocation occur as some people suffer from lost wages which are never recouped. And, one ought not to minimize the difficult situation those individuals find themselves in. But, from an aggregate perspective, once the dynamics of the strike are incorporated, this particular strike ought to have only a minor impact on the L.A. economy.

Analyses of other strikes are instructive in evaluating the economic impact of the 2007 WGA strike. First, neither employers nor employees are ignorant of a looming strike or lockout. They prepare by stockpiling both product and savings to ride out the labor action. In a study of automobile strikes in the U.S. from 1966 to 1979, Gunderson and Melino found that inventory buildups by U.S. auto manufacturers prior to a strike offset much of the impact of the closed production lines during the strike[3]. These temporal effects shifted production forward in time and provided product to shelve for the auto manufacturer, and income to save for the auto workers. For both employer and employee these inventories would carry them at least partially through an impending strike. The 2007 two day GM strike and seven hour Chrysler strike had virtually no regional economic impact because of their short duration and the excess auto inventories created by a weak auto market. In another study of strikes against British Columbia

sawmills by Maki[4], it was found that 30% of the production lost during strikes which occurred between 1954 and 1979 was mitigated by companies' stockpiled inventories of milled timber. These analyses of other labor actions are particularly relevant to the 2007 WGA strike as documented stockpiling of shows by movie and TV producers occurred prior to strike deadlines in each of 1988, 2001 and 2007. Chart I shows the quarterly number of days of permitted television filming in Los Angeles from 1994 to 2007 as recorded by FilmLA[5]. The numbers do not include on-lot or out-of-L.A. location shooting. Nevertheless, one can see in late 2000 an increase in shooting days followed by a fall off in 2001. Similarly there is a bump up in shooting in late 2006 and the first two quarters of 2007. (The big jump in number of days in 2004 is related to the rise in reality programming.) While the graphs do not say what kind of shooting was done, the FilmLA press release identifies it as part of the stockpiling of programming in anticipation of a potential job action[6]. We also see similar indications in the employment data. In September there was a spike of almost 8,000 new employees in the industry[7]. While part of this could be a data anomaly, clearly some is related to the finishing of production on stockpiled programs.



Two interesting events which shed light on the impact of the current strike are the WGA strike of 1988, the longest on record at 153 days, and the averted WGA 2001 strike in which stockpiling occurred in anticipation of a possible strike. In both cases producers built up inventory and then used the inventory during the period past the strike date. In fact, 2001 was a phantom strike in the sense that after the new contract was signed there remained an excess inventory of programs, and producers needed to be burn the excess off before hiring for new projects.

For employees and independent contractors in the industry, the stockpiling of shows means additional income during the pre-strike period. In an industry which is characterized by irregular

spells of employment and unemployment, it is reasonable to assume that this additional income was not viewed as a windfall, an addition to wealth, and was therefore put away as a cushion against the future strike. What is important to note is that if this addition is viewed as cash flow shifting rather than windfall gains, then overall consumption patterns will not change. That is, the cash is earned earlier, but used for consumption later.

While the specific years 1988 and 2002 show an income loss associated with strike or potential strike, it is somewhat illusory. The time shifting of income reduced the actual loss of income, and when properly accounted for, movie and broadcast income fell below its long term trend by only 1.3% to 1.5%.

The question then is, why was there a loss at all? The answer is that not all shows can be stockpiled. Shows with timely content such as late night talk shows and political commentary, and script intensive shows such as soap operas saw a fall off in production, a permanent loss of output. Moreover, support activities such as catering, transportation, security, personal care are time dependent and do not benefit as much from stockpiling.

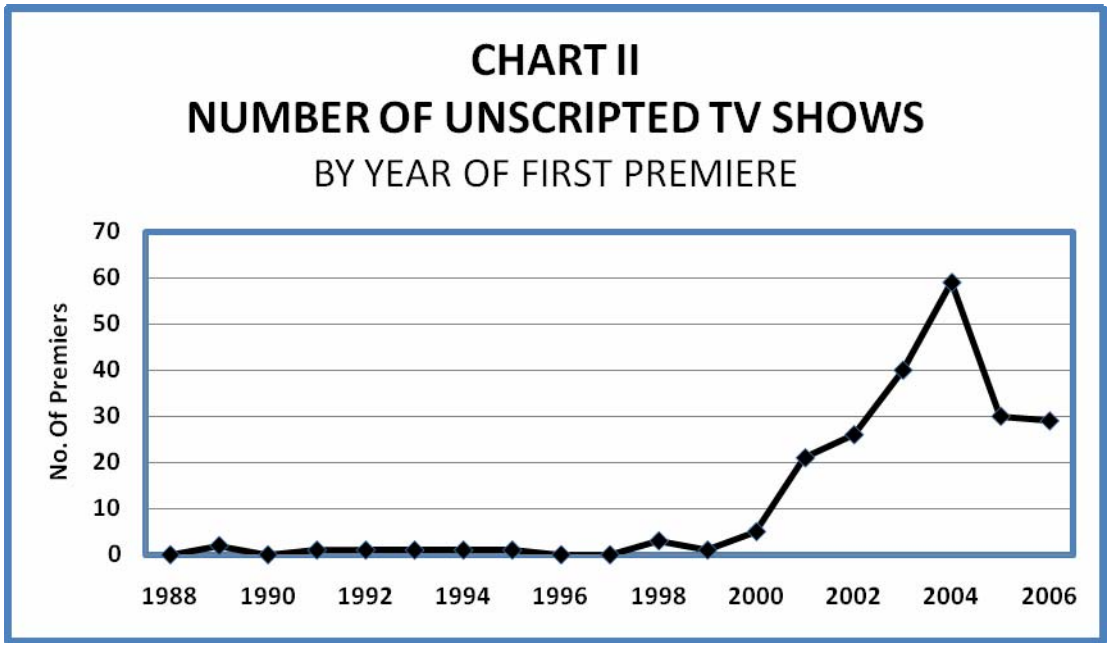
The second effect we want to consider is the substitution effect. The cessation of production of scripted shows, which in the absence of a strike would have been produced, represents lost output for the industry, but not necessarily lost output for the L.A. economy. If consumers who would otherwise watch those shows spend their entertainment time and dollars elsewhere, they will generate expanded economic activity in related industries. This will partially offset the cost to the L.A. economy through the hiring and income derived from this substitution. In their classic 1954 study of strikes against Taft-Hartley eligible strategic industries, Chamberlain and Schilling found that even in basic goods, significant substitution takes place[8]. Studies of strikes against Major League Baseball and The National Football League found that, even though individual striking employees may have lost millions in foregone wages, the economic impact on their communities was not discernibly different from zero[9]. Substitution effects mitigated almost all of the lost wage effects. In the 1985 Philadelphia Newspaper strike, television stations and other print media hired additional staff and expanded output to serve the increased consumer demand[10].

According to the Nielsen Ratings, the 1988 WGA strike resulted in a permanent 10% substitution away from the scripted shows to other entertainment[11]. This loss to the industry is not a loss to the economy any more than a choice to shop at one supermarket over another represents a loss. In fact the power of the substitution effect was purportedly behind the decision by late night hosts Jonny Carson and David Letterman to cross the 1988 picket lines and resume their programming. If over a five month work stoppage a substantial number of their fans developed the habit of going to bed at an earlier hour, and going bowling or dancing as an alternative to late night television it could have a major impact on the value of their shows.

Today the situation for the industry is much more acute. The constellation of alternative entertainment today is immeasurably greater than 1988 and we can expect at least the same amount of substitution to take place. The *Wall Street Journal* reported on November 16 that webisodes, scripted shows delivered over the internet, from such entertainment luminaries as Eisner, the Coen Brothers, and Zwick and Herskovitz are becoming increasingly popular[12]. The November 17 *Los Angeles Times* reports NBC Universal is picking up the webisode *Quarterlife* to add to its programming lineup[13]. Video games, Weiis, Playstation 3s and other devices, content downloaded to iPods, and telephones, YouTube, MySpace and Facebook, are but a few of the threats to the industry of a long strike. But, to the extent that alternative content is produced in L.A., the economic impact must be measured in terms of the net impact. To keep

our analysis of the economic impact from being too conservative, we assume that the strike, if it were to play out like the 1988 strike, would create the same 10% loss to the industry through substitution of other L.A. content producing entertainment.

Finally, there is the issue of composition. The entertainment industry, and in particular television entertainment is quite different than it was in 1988. One cannot simply take the lost wages from the 1988 strike and extrapolate them to today. In 1988 there were very few reality or unscripted television shows. Unscripted shows do not require WGA writers and continue to be produced through the strike period. In the last five years there has been an explosion in reality TV shows (Chart II). They are so prevalent today that FilmLA estimates that they comprise 46% of all television production in L.A.[14]. Extrapolating from the wages not paid during the 1988 strike to today's industry ignores the shrinking importance of scripted television and overstates the impact of the strike.



So the putative wisdom on the $1B is missing some key elements, the Inventory Effect, the Substitution Effect, and the Composition Effect. What do all these add up to? *Entertainment Weekly* claims that the amount of content stockpiled will take TV programs through about mid January and movies through 2008. Some shows will run out earlier, others can continue into February. That is approximately half as long as the 1988 strike and very comparable in terms of the amount of stockpiling experienced at that time. Assuming a 45% unscripted programming rate to remain conservative (most industry observers expect this to increase) and the aforementioned 10% substitution rate we get an economic impact of $380 million. If the strike were to end before the end of March, the impact would be smaller, but efforts to end the strike prior to the burning off of inventories would not have much effect on the cost induced by stockpiling.

To put this in perspective, the industry generates about $20 billion of income annually while the overall Los Angeles economy generates around $380 billion each year[15]. In terms of the forecast of income growth, the impact is to shift growth into 2007 and reduce growth in 2008. The increased activity in the first 3 quarters of 2007 pushed growth rates for each quarter up by

about ¼ of 1%. The largest quarterly impact of strike will be a reduction in 1st Quarter 2008 growth of 1%. On an annual basis, growth of personal income in Los Angeles in 2008 will be lower by ¼ of 1% as a consequence of the strike. It should be noted that the assumption here is that the WGA strike of 2007 is the same length as the record strike of 1988.

Why all of the attention if this is not a billion dollar event of great economic importance to our local economy? Well, this is Hollywood. A strike that affects Desperate Housewives, Prison Break, Leno, Scrubs and other popular shows is going to get lots of attention as these scripted shows beam into homes all across America. Moreover, the real risk to the parties is the substitution effect. Both sides know that a quick settlement is in their interest and therefore making a lot of noise early on is an appropriate negotiating strategy. The issues to be solved by the two sides are serious issues about how to share a considerable amount of income from a rapidly changing and not well defined future distribution system. The individual economic impacts are very real, and even though in the overall L.A. economy they might not add up to much, they can be very substantial and difficult for the people involved.

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