

Measuring Economic Distress in San Francisco

Christopher Wimer, Stanford University Emily Ryo, Stanford University

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As the so-called "Great Recession" has unfolded, accounts in the mass media and in everyday life tell us that hardship and economic distress have been increasing dramatically. Stories abound of families whose members have lost jobs, can no longer make housing payments, lost health insurance and access to affordable health care, and who struggle to put food on the table. Yet, beyond journalistic and anecdotal evidence, official statistics have so far told us very little about exactly how much economic hardship and distress is increasing, and whether it shows any signs of abating. Every month we learn the latest unemployment figures, but these merely tell us how many people in the labor force are currently looking for work, making the official unemployment rate a rather poor barometer of real time conditions on the ground. Official poverty statistics are even worse. Setting aside the fact that the official poverty measure has numerous deeply flawed characteristics for measuring actual levels of hardship (Citro and Michael, 1995), the official poverty measure is also woefully out of date. As of this writing, for instance, we only know the official poverty rate for the calendar year 2009. And this was just released in September of 2010, meaning that for much of 2010 we only knew the poverty rate as of calendar year 2008. As such, the official poverty rate (11.6% for the city of San Francisco in 2009) tells us little about the current level and trend of distress felt by San Francisco residents.

This report provides a novel attempt at filling this gap. With support and assistance from New America Media, we have combed administrative and public data to assemble 11 monthly indicators that tap various dimensions of economic distress in San Francisco. Specifically, these indicators are:

- 1) **CalWORKs Enrollment**: CalWORKs is California's temporary financial assistance and employment services program for low-income families with minor children. CalWORKS offers cash assistance, as well as assistance with finding and paying for childcare services. We used total enrollment² in the program in San Francisco.
- 2) CalWORKs Homeless Assistance Requests: CalWORKs also maintains a special program for homeless families and families at risk of homelessness to help meet their housing costs.

- Program benefits and services include temporary shelter payments, permanent housing payments, moving assistance, and rental subsidy. We use the total number of applications for homeless assistance in San Francisco.
- 3) **Bankruptcies**: We use a count of all bankruptcies filed in San Francisco, which are provided by the United States Bankruptcy Court, Northern District of California. The total count includes both personal and business bankruptcy filed under Chapters 7, 11 and 13.
- 4) **Food Stamps Applications**: We use counts of all applications filed by individuals and families for food stamps in San Francisco, from monthly data published by the California Department of Social Services.
- 5) **Food Bank Pantry Visits**: We use counts of the number of households receiving weekly food distributions through the San Francisco Food Bank's neighbourhood pantry network. The total cumulative monthly household numbers are a sum of weekly data on the number of households served that individual pantries submit to the San Francisco Food Bank.
- 6) MediCal Medically Needy Enrollment: MediCal Medically Needy program is for individuals and families who are deprived but whose incomes are too high to qualify for cash assistance or who do not wish to receive cash assistance (under CalWORKs). Program beneficiaries include deprived children up to age 21, pregnant women, parents/caretakers of deprived eligible children and aged, blind and disabled. Because general MediCal enrollment is largely redundant with CalWORKs enrollment, medically needy MediCal participation was used to capture distress above and beyond CalWORKs participation.
- 7) **Healthy San Francisco Enrollment**: Healthy San Francisco is a program initiated by the city of San Francisco in 2008 to provide health services to all San Franciscan residents lacking health insurance whose incomes fall below 500% of the Federal Poverty Level (for one person \$54,150; for a family of four \$110,250). We use total enrollment in the program, as provided by the program administrator.
- 8) **Foreclosures**: We use the number of home foreclosures filed monthly in San Francisco, as provided by DataQuick Real Estate Services.
- 9) **Unemployment**: We use the total number of unemployed persons in San Francisco, as provided by the Bureau of Labor Statistics (BLS).³ These numbers include all jobless

persons who are available to take a job and have actively sought work in the past four weeks.

- 10) **Unemployment Insurance (UI) Recipients**: We use the total number of UI claimnants in San Francisco, as provided by the CA Employment Development Department. These figures represent the number of claimants actively seeking benefits and does not necessarily mean that the claimant received benefits.
- 11) **CAAP Participation**: The County Adult Assistance Program (CAAP) is the San Francisco program serving very low income adults in San Francisco without dependents. It consists of four programs that provide employment services, supplemental security income, cash assistance linked to MediCal, and general assistance. We use total CAAP enrollment as provided by the San Francisco Human Services Agency.

With these 11 indicators, we created two versions of our distress index. One version includes all eleven indicators, which are available for July 2008 to June 2010. We consider this our primary index, as it contains the full range of available data up to the most recent month for which we are able to calculate the index. The second index contains six indicators, excluding four indicators that are not available in our dataset going back to 2000, when most of our other indicators begin.

These are: bankruptcies, Healthy San Francisco enrollment, MediCal Medically Needy enrollment, and CAAP participation. This index also excludes food bank pantry visits, as increases in food bank pantry visits during early years were driven not primarily by increases in need but by the aggressive expansion of San Francisco's food pantry network by the San Francisco Food bank, not necessarily by increases in need (San Francisco Food Bank, personal communication). We present this second index to show how changes since July 2008 compare to longer term trends going back to the early 2000s (January 2000, to be specific). The indices largely track each other in the current period, so moving forward only the first index will be published.

How is Distress Changing in San Franisco?

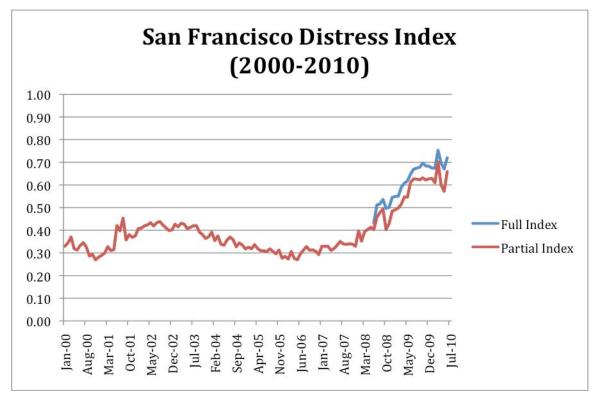
Figure 1 shows our two distress indices. As shown, economic distress increased consistently from July 2008 to October 2009, after which point it continued to increase at a rockier pace. Economic distress reached its peak value in March of 2010, before declining a bit in subsequent months and turning back upward by June of 2010, our last month on record. Our analysis indicates that, since December 2007 (the first official month of the great recession), economic distress in San Francisco has increased a full 100%. In other words, economic distress has essentially doubled.

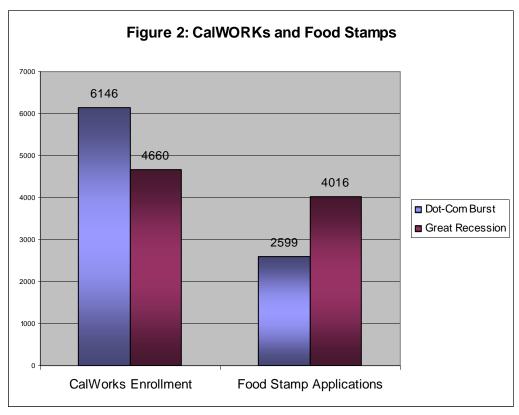
To take a longer view, we next examine the full time series between January 2000 and June 2010. According to this measure, economic distress in San Francisco has been building slowly since as far back as 2006, but has really accelerated with the advent of the recession in late 2007. The levels of economic distress we are seeing in the current recession are far worse than we saw in San Francisco during the last downturn following the dot-com bust of early 2000 and the mild recession of 2001. If we average levels of economic distress during the dot-com bust (3/00 to 6/03, the period of peak unemployment in San Francisco) and the Great Recession (12/07 to present), our results show that economic distress is fully 39% greater in the current downturn than in the early 2000s. And current levels, as of June 2010, are fully 76% higher than the average level of economic distress over the dot-com bust period. Finally, economic distress in June 2010 is 45% higher than distress' peak value during the dot-com bust period (in August, 2001).

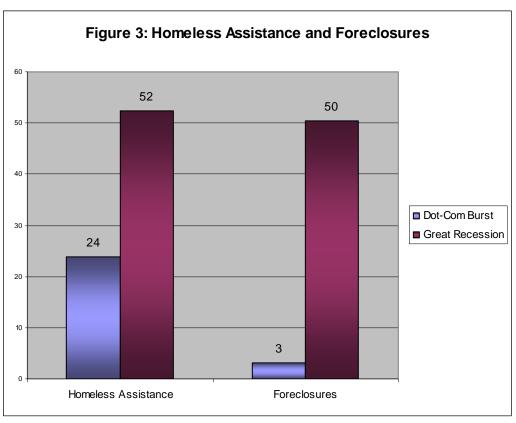
To further illustrate the magnitude of changes in economic distress over the time periods covered here, in Figures 2 through 4 below we show the average values of each of our indicators in the dot-com bust and the current recession, respectively. As shown in Figure 2, CalWORKs enrollment actually decreased between the two periods, by about 2,500 cases. This was the only indicator showing a decrease, however, and this likely stemmed from a pusth to get welfare recipients off the rolls over the period following welfare reform in 1996. All other indicators show much larger spikes over the same time period: Food stamp applications jumped by about 1,400, homeless assistance requests more than doubled, foreclosures jumped enormously – from around 3 per month during the dot-com bust to an average of 50 a month during the Great Recession.

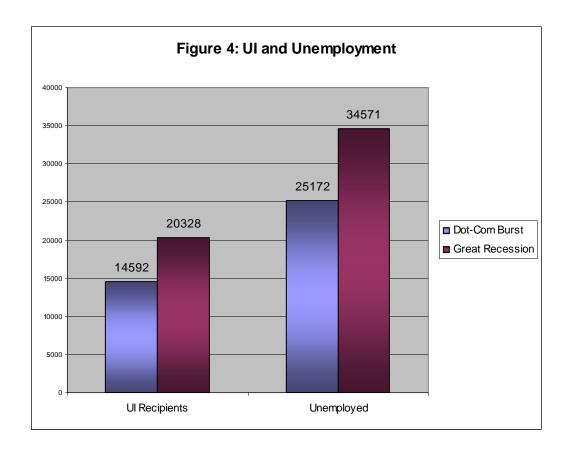
Lastly, the number of UI recipients jumped by nearly 6,000, and the number of unemployed person by over 9,000.

Figure 1: San Francisco Distress Index, January 2000 to June 2010.

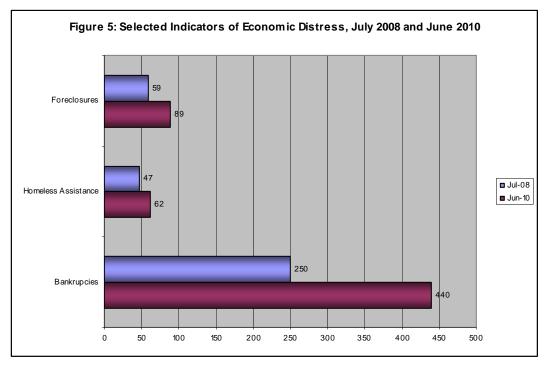


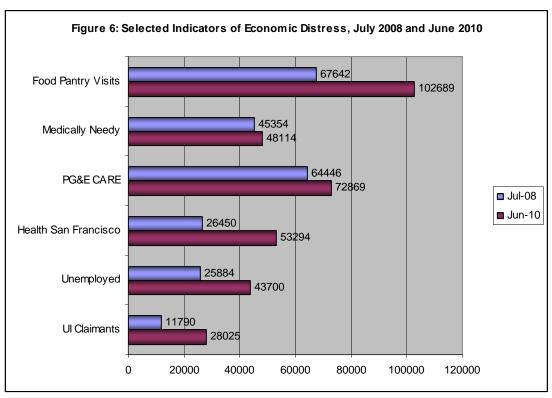


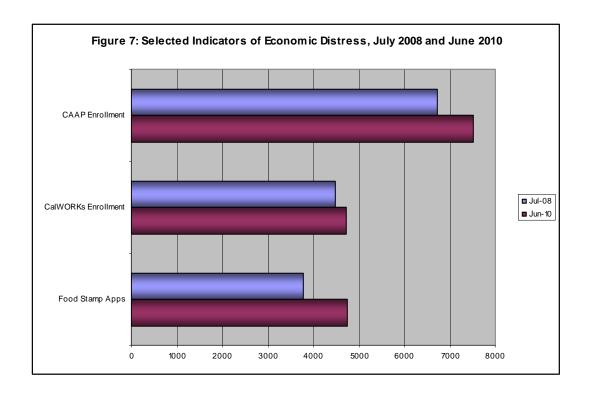




To look at similar changes just during the Great Recession, we also show similar figures for the eleven indicators comprising our short-term index in Figures 5 through 7. All of these indicators are available from July 2008 to June 2010, so we show levels of each indicator during those two months. As shown in Figure 5, foreclosures were already high by July 2008, standing at 59 per month, but by June 2010 we are now at 89 foreclosures. Requests for homeless assistance have also jumped by about a third. Bankruptcies have jumped nearly 80% since July of 2008. The number of households visiting food pantries has jumped by about 35,000, while smaller increases have been seen in low-income medical and energy-assistance programs. Healthy San Francisco, which provides health services to those under 500% of poverty, has more than doubled over the period, as has the number of UI claimants. Finally, the number of people unemployed in the city has jumped by nearly 18,000 people. Clearly, by virtually all accounts, economic distress in San Francisco is markedly higher than during the dot-com bust period, and markedly higher than it was in the early part of the current recession. Looking just at 2010, our index is showing little signs of abating and returning to pre-recession levels.







Discussion

Given the inherent lag in the publication of poverty statistics, there exists a clear need to document how economic distress is evolving and (hopefully) abating in real-time. This report has provided the first attempt at documenting these trends in San Francisco by marshalling various indicators of economic distress that taps conditions up to the present day. When updated regularly from this point on, our distress index will reveal whether and to what extent recovery takes hold and distress is reduced in San Francisco. So far, results provide little indication that this is happening. Economic distress, though following a somewhat more jagged path in 2010, remains at virtually peak levels compared to both the early part of the recession and by longer-term historical standards.

Notes:

- ¹ The City of San Francisco and San Francisco County are coterminous, so we do not distinguish between the two in this report.
- ² Ideally, the index should net out of the trend any changes in the population over the period studied. To net out population growth, we converted each indicator into a rate by dividing it by San Francisco's population size. This is not ideal for two reasons: (1) the population "at-risk" in many indicators is not the full-population, but rather certain subpopulations; for instance, food bank visits are measured in terms of number of households, so ideally we would want the number of households over time in San Francisco rather than the overall population; (2) there are delays in the publication of accurate population statistics (between 1 and 2 years). Thus, the population for the most recent months is unknown. To deal with the first problem, we are continuing to refine the rate measurements to capture more natural population metrics. However, it is worth noting that distress trends as reflected in our indices without this population change adjustment were largely similar to those reflected in the adjusted indices, as population growth in San Francisco over decade was only approximately 4.3%. To deal with the second problem, we extrapolated the rates of population change between our two most recent timepoints (2007 to 2008) and applied this population change to points outward into the future. If population grew more slowly or declined after 2008, this means that the growth in our index will be underestimated. If the population grew more rapidly after 2008, our index's growth will be overestimated. Given San Francisco's high cost of living, it is unlikely that the population grew more rapidly after 2008 than it did before 2008. Indeed, in the previous recession in the early 2000s, San Francisco's population actually declined.
- ³ More specifically, we use U3 statistics provided by the BLS. U1, U2 and U4-6 unemployment statistics are not available at the county level.
- ⁴ We first conducted a principal-factor exploratory factor analysis to examine how well our indicators mapped onto an underlying structure. The factor analysis showed that the 11 items in our short-term index all loaded onto one factor, with an Eigenvalue on that factor of 8.12. Rather than take our first principal component as the index value, however, we sought to keep our index values on a scale that would be intuitively understandable and that would map onto real mathematical values. Thus, for each indicator we took the rates over the full available time period and created for each a floor and a ceiling on this rate. The floor for each rate was determined to be zero for all indicators, given that this is a natural minimum and rates cannot go below zero. For ceilings, we examined the full distribution of values across the available time period, and created for each indicator a ceiling equal to one standard

deviation above the series' maximum value. For each month, the indicators's rate was divided by the ceiling to derive a value that would vary between 0 and 1. Our index is then the row mean of the 11 indicators (or six indicators in the case of the longer-term index) created in this manner. This method allows us to calculate rates of change in our index that correspond to natural rates of change in the underlying indicators. We borrow the intuition behind this methodology from the United Nations' Human Development Index (http://hdr.undp.org/en/statistics/).

⁵ Of course, pantry network expansion is likely to also be driven by increases in need, or rather a "catching up" to need. Nevertheless, depressed levels of visits in the early 2000s given lesser food bank capacity means that including this indicator will overstate the rise in need in the early 2000s period.