June 23, 2010

MEMORANDUM

TO: Senator Leland Yee
    Attn: Michelle Kim

FROM: Daniel Rounds

Subject: Microenterprises in the Economy

Background and Executive Summary

In January you requested that the Senate Office of Research (SOR) update information that it published in a July 2008 Policy Briefs report concerning the number of microenterprises in the state of California and the number of persons “employed” by these microenterprises. Specifically, you requested that SOR update information through 2008 concerning each of the following:

- Number of microenterprise establishments
- Number of jobs created by microenterprises
- Number of sole proprietorships (also known as the self-employed)
- Microenterprise’s share of the workforce in urban and rural counties
- Changes in tax revenues generated—both federal and state—by microenterprise sector

You also requested that SOR provide analysis with respect to the following questions:

- Are microenterprises continuing to stimulate California’s economy?
• What role should state government have in stimulating the development and preservation of microenterprises?

Summary of Findings

The memo has five principal findings:

1. The microenterprise sector in California is sizable and grew substantially between 2000 and 2007;
   - Estimates of the size of the microenterprise sector suggest that there were between 2.57 million and 3.25 million microenterprises in California in 2007, employing between 2.76 million and 4.07 million persons.
   - Microenterprises constituted between 86.20 percent and 89.03 percent of all California businesses in 2007, and employed between 13.15 percent and 19.42 percent of the “jobs” in California’s economy.¹
   - Between 2000 and 2007, the number of microenterprises grew between 19.33 percent and 28.13 percent, while the number of jobs in the microenterprise sector grew between 16.53 percent and 25.58 percent.

2. Growth in the microenterprise sector is largely driven by increases in self-employment and may be related to large-scale changes in the U.S. economy, including the decline of manufacturing, the growth of the service sector, and greater reliance on outsourcing and subcontracting by employers;
   - Some estimates suggest that the self-employed comprise about 85 percent of all microenterprise businesses and about two-thirds of all of its “employees.”
   - Estimates suggest that only about one in five microenterprise jobs are in traditional employment where a worker applies for a job and is hired to provide labor to the relevant business. On the other hand, four out of five of

¹ The term “jobs” as used here does not necessarily imply the existence of traditional employer-employee relations. Figures include a significant number of the self-employed and estimates of the number of microenterprise business owners.
the jobs in microenterprises require that “employees” create the job by starting a business.

3. On balance, the academic literature suggests that small businesses and microenterprises contribute more to job growth than their larger counterparts;

   o Nationally, between 1992 and 2004, businesses with fewer than 20 employees contributed about 35.1 percent of gross job creation each year, and about 33.9 percent of gross job destruction.

   o Nationally, between 1992 and 2004, employment in businesses with fewer than 20 employees also had a higher average annual growth rate over the period than did larger-sized businesses. For example, annual net employment growth for all businesses with fewer than 20 workers was 2.9 percent. Annual net employment growth in most other business size categories ranged from 1.3 percent to 2.2 percent.

   o A study of employment growth in the lower 48 states between 1977 and 1997 found that states with a higher percentage of businesses classified as microenterprises also had higher rates of employment growth in the service sector, but not in the manufacturing sector, where a higher share of microenterprises was associated with lower manufacturing job growth.

4. Research on the quality of the jobs created by microenterprises differs in its findings;

   o A substantial body of research suggests that traditional wage and salary jobs created by small businesses and in the microenterprise sector are likely inferior, offering lower pay, benefits, and less job security than those jobs created by larger businesses;

   o Nevertheless, research on the comparative earnings of the self-employed vis-à-vis their wage-earning counterparts is somewhat less conclusive. While some studies suggest that the self-employed earn less than typical wage earners, others suggest they earn about the same or more.²

5. Microenterprise promotion may be used as successful strategy for poverty alleviation, but only for a select subset of those in poverty;

- Microenterprises lift some people with the relevant skill sets, drive, and sufficient support out of poverty.

- However, for many individuals, microenterprise employment is not an adequate substitute for wage labor, where monetary returns may be higher; for this reason, education and job training may provide a better path out of poverty.

The sections that follow substantiate these findings and document the sources from which they are drawn. The first two sections provided context to highlight the extent to which the growth of self-employment is driving the expansion of the microenterprise sector, situating recent increases in self-employment within the broader economic context.

The Self-Employed Account for Most Microenterprise Businesses and Jobs

To a large extent, microenterprise employment is self-employment, which has been increasing in the U.S. since the mid-1970s. The self-employed are a diverse group, have a widespread distribution of income, and operate many different types of businesses, including consulting services, technical services, construction, personal services, as well as small-scale retail operations. The relative importance of the self-employed in the microenterprise sector is easily demonstrated with data.

Using the data sources and methods employed by some microenterprise advocates and academics to quantify the size of the sector, Table 1 illustrates the degree to which self-employment numbers drive overall estimates of the size of the sector.3 The table

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3 These figures are derived using the same data sources and methods utilized by the Association for Enterprise Opportunity (AEO), a national microenterprise advocacy organization, and Dr. James McConnon, an academic at the University of Maine who studies job creation by microenterprises. The size of the microenterprise sector is conceptualized as the number of businesses with fewer than five employees on payroll, plus the total number of self-employed operating a business in the economy. The
essentially shows that the self-employed comprise about 85 percent of all microenterprise businesses and about two-thirds of all of its “employees.”

| Table 1: The Self-Employed as Share of the Microenterprise Sector and in the California Economy as a Whole, 2007 |
|-------------------------------------------------|-------------------------------------------------|
| In the Microenterprise Sector | In All Businesses |
| Number of Self-Employed | 2,757,179 | 2,757,179 |
| Number of Businesses | 3,248,830 | 3,649,176 |
| Number of Employees | 4,079,780 | 21,006,254 |
| Self-Employed As Share of Businesses | 84.87% | 75.56% |
| Self-Employed As Share of Employees | 67.58% | 13.13% |

Table 2 takes the analysis one step further and disaggregates microenterprise “employment” into the three categories of “workers” counted in these figures:

- Microenterprise owners with 1–4 employees, as derived from U.S. Census Bureau County Business Patterns data;
- Traditional payroll employees in businesses with 1–4 employees, as reported in the U.S. Census Bureau County Business Patterns data; and
- Incorporated and Unincorporated Self-Employed, as reported in U.S. Census Bureau data on “Non-Employers.”

| Table 2: Microenterprise "Employment" in California, 2007 |
|-------------------------------------------------|----------------|
| Number | Percentage of Total |
| Microenterprise Owners | 491,651 | 12.05% |
| Traditional Payroll Employees in Businesses with 1–4 Employees | 830,950 | 20.37% |
| Incorporated and Unincorporated Self-Employed | 2,757,179 | 67.58% |
| Total | 4,079,780 | 100.00% |

As Table 2 shows, only about one in five microenterprise “jobs,” as this term is used by advocates, are in traditional employment where a worker applies for a job and is hired to

number of microenterprise “jobs” in the economy is treated as the number of traditional payroll workers in businesses with fewer than five employees, plus the number of microenterprise owners, including the self-employed operating their own businesses. Data is taken from U.S. Census Bureau Non-Employer Statistics, U.S. Census Bureau County Business Pattern reports, and the Bureau of Economic Analysis. Greater detail on sources and methods are provided in the Appendix.
provide labor to the relevant business. Four out of five of the jobs in microenterprises require that “employees” create the job by starting a business.

Table 3 further illustrates how estimates of the size of the microenterprise sector and the jobs in the sector change when the analysis focuses only on traditional wage and salary workers. Column 2 of Table 3 reports microenterprise figures using the same data sources and methodology reported in Tables 1 and 2, while Column 3 of Table 3 restricts the analysis to businesses with a payroll that employ 1–4 workers, omitting data pertaining to the self-employed and businesses owners who do not draw a wage or salary from their businesses. Figures for employers in Column 3 only represent those employers with a payroll, and figures for employees in Column 3 are for only those employees that receive a wage or salary.\(^4\)

| Table 3: Microenterprise Numbers With and Without the Self-Employed in CA, 2007 |
|-------------------------------------------------|------------------|------------------|
| Number of                                      | Both Self-Employed | Businesses With |
| Microenterprise Businesses                     | and Businesses    | Payroll\(^5\)    |
| Total Relevant* Businesses                     | 3,649,176         | 891,997          |
| Microenterprises as Share of All Relevant* Businesses | 89.03%            | 55.12%           |
| Number of Relevant* Microenterprise Employees  | 4,079,780         | 830,950          |
| Total Number of Relevant* “Employees” in California | 21,006,254        | 13,771,650       |
| Share of All Relevant* Employees               | 19.42%            | 6.03%            |

* Relevant as defined in each column.

The table demonstrates how restricting the analysis to businesses with a payroll and to employees who receive a wage or salary affects overall estimates of the sector’s size and

\(^4\) Column 3 omits the use of non-employer statistics representing both the incorporated and unincorporated self-employed in U.S. Census Bureau figures. It also does not use the number of business establishments as a proxy for the number of owners working in the microenterprise sector. Column 3 does include counts of the incorporated self-employed and other incorporated microenterprise owners if they draw wages or a salary from these businesses.

\(^5\) It is important to recognize that employee counts in Column 2 of Table 3 treat both the self-employed and microenterprise owners as “employees,” and estimate the number of self-employed and the number of microbusiness owners working in this sector by assuming that U.S. Census Bureau data on the number of relevant businesses can be used as a proxy for the relevant number of individual owners, whether self-employed or operating a small business, who work in these businesses.
the number of jobs generated. While microenterprises appear to make up 90 percent of all businesses in California, they comprise only 55 percent of businesses that employ workers in the traditional sense that these employees appear on a company’s payroll. Similarly, while microenterprises appear to provide work for a little more than 19 percent of people “working” in California, they employ, in the traditional sense of the word, only about 6 percent of California’s workers appearing on a business payroll.

**Microenterprise Growth Contemporaneous With Structural Changes to the Economy**

Expansion in the microenterprise sector has tended to coincide with broader processes of economic change, including the expansion of self-employment after decades of historical decline.

- From 1940 to 1973 self-employment declined in the United States, but since the mid-1970s, self-employment has been on the rise.  

- While increases in self-employment are associated over time with economic downturns and an increase in the number of unemployed, there has also been a secular increase in the number of self-employed since the mid-1970s, which suggests that the increase in self-employment is related to structural changes in the economy, such as the decline of manufacturing and the growth of the service sector.

- Concomitantly, self-employment has increased within the manufacturing and construction sectors at a time when employers have been increasingly securing labor, goods, and services by subcontracting and outsourcing.

- Some of the growth in self-employment may be accounted for by the misclassification of wage laborers as independent contractors. Worker misclassification often occurs when businesses misclassify employees as

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6 The numbers include owners of microenterprises to the extent that they draw a wage or salary from the business.


8 Ibid., p. 998, 1006–1010.

9 Ibid., p. 1006–1010.
independent contractors in order to avoid payroll taxes, workers’ compensation insurance, and labor laws designed to protect workers.\textsuperscript{10}

- According to the IRS, worker misclassification is on the rise throughout the United States; EDD currently estimates that more than 800,000 workers in California could be misclassified.\textsuperscript{11}

- The degree to which the growth in self-employment is directly related to worker misclassification is unknown, but there is likely some relationship between the two. For example, self-employment has been increasing in the construction sector where, according to recent studies, problems of worker misclassification are substantial.\textsuperscript{12}

**Microenterprise Sector in California Grew Substantially Between 2000 and 2007**

SOR has reviewed the microenterprise numbers for the period 2000 to 2005 reported in a July 2008 SOR policy brief and has analyzed the methods and sources used to calculate these numbers.

Based on our review of the figures and the methods previously utilized, we now provide two new alternate sets of estimates on the number of microenterprises in California, the number of “jobs” in these businesses, and the growth of the sector


\textsuperscript{11} Information provided to SOR by EDD suggests that there could be as many as 828,745 misclassified employees in California. EDD estimates are based on figures reported in a GAO report citing IRS research. See, GAO, “Tax Gap: Many Actions Taken but a Cohesive Compliance Strategy Needed,” GAO Report 94–123, May 1994, p. 17–18.

between 2000 and 2007. Data sources, methods of calculation, and the limitations of both sets of estimates are outlined in an Appendix attached to this memo.

**Method 1: Estimates Based on Tax-Return Data Suggest Substantial Microenterprise Growth in California from 2000 to 2007, Driven Primarily by Increases in the Number of Self-Employed**

The first set of estimates is derived using the same data sources and methods utilized by the Association for Enterprise Opportunity (AEO), a national microenterprise advocacy organization, and Dr. James McDonnell, an academic at the University of Maine who studies job creation by microenterprises. To derive the size of the microenterprise sector in the economy, AEO adds the number of businesses with fewer than five employees to the number of businesses with no employees, including in this sum the number of businesses owned by the self-employed. To derive "employment" figures for the microenterprise sector, advocates typically add the number of employees in businesses with fewer than five employees to the number of microenterprise businesses, which is treated as a proxy for the number of business owners employed in the sector. This sum is then added to the number of self-employed incorporated and non-incorporated businesses. Sources and methods utilized are more fully discussed in the Appendix, but one should note that the data are based on tax return information provided to the Census Bureau.

Table 4 provides an overview of the relevant numbers and microenterprise growth, and shows that growth in the sector was driven primarily by increases in the number of businesses operated by the self-employed:

- From 2000 to 2007, the number of microenterprise establishments in California grew by a little more than 28 percent: from 2,535,483 in 2000 to 3,248,830 in 2007. Over 90 percent of the increase in business entities categorized as microenterprises during this period is accounted for by increases in the number of businesses operated by the self-employed.\(^{14}\)

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\(^{13}\) Counts for the number of microenterprise businesses in the original SOR Policy Briefs report may have double-counted a substantial number of businesses by combining EDD data on the number of businesses with 0 to 4 employees with data from the U.S. Census Bureau on the number of self-employed non-employers. According to EDD, employee counts for businesses with 0 to 4 employees include the incorporated self-employed, which are also counted in Census Bureau non-employer data.\(^{14}\) \(654,001/713,347 = 91.68\) percent.
From 2000 to 2007, the number of “employees” in microenterprises, including salaried or wage workers (counted on payroll, including owners taking a wage or salary), microenterprise owners not drawing a wage or salary from the microenterprise, and the self-employed not drawing a wage or salary from the business, increased about 26 percent: from 3,248,836 in 2000 to 4,079,780 in 2007.

About 79 percent of the increase in microenterprise “jobs” from 2000 to 2007 was accounted for by increases in the number of self-employed.15

Net job-growth from increases in the number of self-employed was five times greater than the net job growth for wage and salaried workers employed by businesses with 1–4 workers on payroll.16

Using the same data sources and methods, it was also determined that microenterprises in California’s rural counties represent a larger share of the workforce (25.2 percent) than in the state’s urban counties (19.3 percent).

Table 4: Profile of Growth in the Microenterprise Sector Using Method 1 (2000–2007)

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2007</th>
<th>Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Employed Businesses</td>
<td>2,103,178</td>
<td>2,757,179</td>
<td>654,001</td>
<td>31.10%</td>
</tr>
<tr>
<td>Businesses With 1–4 employees</td>
<td>432,305</td>
<td>491,651</td>
<td>59,346</td>
<td>13.73%</td>
</tr>
<tr>
<td>Number of Microenterprises (Including the Self-Employed)</td>
<td>2,535,483</td>
<td>3,248,830</td>
<td>713,347</td>
<td>28.13%</td>
</tr>
<tr>
<td>Payroll Employees in Businesses With 1–4 employees</td>
<td>713,353</td>
<td>830,950</td>
<td>117,597</td>
<td>16.49%</td>
</tr>
<tr>
<td>Microenterprise “Employment”</td>
<td>3,248,836</td>
<td>4,079,780</td>
<td>830,944</td>
<td>25.58%</td>
</tr>
<tr>
<td>Total Number of California Employers With Payroll</td>
<td>799,863</td>
<td>891,997</td>
<td>92,134</td>
<td>11.52%</td>
</tr>
<tr>
<td>Total Number of Businesses (All Sizes and Including the Self-Employed)</td>
<td>2,903,041</td>
<td>3,649,176</td>
<td>746,135</td>
<td>25.70%</td>
</tr>
<tr>
<td>Total Employment</td>
<td>19,296,091</td>
<td>21,006,254</td>
<td>1,710,163</td>
<td>8.86%</td>
</tr>
<tr>
<td>Microenterprises as Share of Businesses</td>
<td>87.34%</td>
<td>89.03%</td>
<td>1.69%</td>
<td>1.94%</td>
</tr>
<tr>
<td>Microenterprises’ Share of “Employment”</td>
<td>16.84%</td>
<td>19.42%</td>
<td>2.58%</td>
<td>15.35%</td>
</tr>
</tbody>
</table>

15 654,001/830,944 = 78.71 percent.
16 654,001/117,597 = 5.56.

The second set of estimates is derived using data provided by EDD and taken from the U.S. Census Bureau Current Population Survey. These estimates differ from the first set in that the data on the self-employed are collected by different means, requiring a revised set of calculations to address the potential double-counting of self-employed individuals. Sources and methods utilized are more fully discussed in the Appendix.

Estimates derived using this second method also show significant growth in the microenterprise sector between 2000 and 2007. However, these estimates suggest that the size of the sector, the number of people working in the sector, and its growth from 2000 through 2007 are somewhat less substantial. Table 5 provides the same type of figures reported in Table 4 using the EDD data and an alternate estimation method.

- From 2000 to 2007, the number of microenterprise establishments in California grew by a little more than 19.33 percent: from 2,150,810 in 2000 to 2,566,527 in 2007. We cannot ascertain what share of this increase in business entities is accounted for by increases in the number of businesses operated by the self-employed because some non-trivial share of the self-employed are treated as businesses with employees in this particular data set.

- From 2000 to 2007, the number of “employees” in microenterprises, including salaried or wage workers (counted on payroll) and the incorporated self-employed not drawing a wage or salary from their business, increased about 16.53 percent: from 2,371,211 in 2000 to 2,763,218 in 2007.

About 47 percent of the increase in microenterprise “jobs” from 2000 to 2007 was accounted for by increases in the number of self-employed not drawing income in the form of a wage or salary from the relevant microenterprise. The balance of the growth was split to some unknowable degree between increases in the self-employed drawing a wage or salary from their business and other traditional payroll employees employed in the sector.
Table 5: Profile of Growth in the Microenterprise Sector Using Method 2 (2000–2007)

<table>
<thead>
<tr>
<th></th>
<th>2000</th>
<th>2007</th>
<th>Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unincorporated Self-Employed</td>
<td>1,487,300</td>
<td>1,673,100</td>
<td>185,800</td>
<td>12.49%</td>
</tr>
<tr>
<td>Businesses With 0–4 employees</td>
<td>663,510</td>
<td>893,427</td>
<td>229,917</td>
<td>34.65%</td>
</tr>
<tr>
<td>Number of Microenterprises</td>
<td>2,150,810</td>
<td>2,566,527</td>
<td>415,717</td>
<td>19.33%</td>
</tr>
<tr>
<td></td>
<td>(Including the Self-Employed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payroll Employees in</td>
<td>883,911</td>
<td>1,090,118</td>
<td>206,207</td>
<td>23.33%</td>
</tr>
<tr>
<td>Businesses With 0–4 employees</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microenterprise “Employment”</td>
<td>2,371,211</td>
<td>2,763,218</td>
<td>392,007</td>
<td>16.53%</td>
</tr>
<tr>
<td>Total Number of</td>
<td>1,046,790</td>
<td>1,304,291</td>
<td>257,501</td>
<td>24.60%</td>
</tr>
<tr>
<td>California Employers With Payroll</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Number of Businesses</td>
<td>2,534,090</td>
<td>2,977,391</td>
<td>443,301</td>
<td>17.49%</td>
</tr>
<tr>
<td>(All Sizes and Including the Self-Employed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Employment</td>
<td>19,296,091</td>
<td>21,006,254</td>
<td>1,710,163</td>
<td>8.86%</td>
</tr>
<tr>
<td>Microenterprises as Share of Businesses</td>
<td>84.88%</td>
<td>86.20%</td>
<td>1.33%</td>
<td>1.56%</td>
</tr>
<tr>
<td>Microenterprises' Share of &quot;Employment&quot;</td>
<td>12.29%</td>
<td>13.15%</td>
<td>0.87%</td>
<td>7.04%</td>
</tr>
</tbody>
</table>

Review of Relevant Academic and Policy Literature

In your request to SOR, you also requested that we provide analysis relevant to the following questions:

- Are microenterprises continuing to stimulate California's economy?

- What role should state government have in stimulating the development and preservation of microenterprises?

To address these questions we examined two bodies of academic and policy literature.

The first body of literature addresses the role of microenterprises and small businesses in the economy to assess the extent to which microenterprises and small businesses are responsible for job growth and how the growth of microenterprise employment is related to large scale change in the economy.

On balance, this body of literature suggests that microenterprises and small businesses contribute to employment growth to a greater extent than do larger businesses. The reasons for these relationships are likely complex and may relate to major structural changes in the economy, not all of which are positive. For example, a significant share of new jobs created involve self-employment, may be lower paying, may lack benefits,
and may provide less economic security than what is found in the traditional wage sector.

The second body of literature examines whether and to what extent microenterprise promotion can be used as a means to alleviate poverty. The findings here are neither unambiguously positive nor negative. On balance, the literature suggests that microenterprises lift some people with relevant skill sets, drive, and sufficient support out of poverty. However, earnings from microenterprise employment may be less than comparable earnings in the traditional wage sector.

Small Businesses Likely Contribute a Disproportionate Share of New Jobs Created

Whether and to what extent small businesses and microenterprises are dynamic sources of job creation for the economy has been a subject of debate in the academic literature. On the one hand, numerous studies purport to show that small businesses are responsible for a disproportionate share of new jobs created in the economy.

- “During the 1990s, 69 percent of all new jobs were created by start-up businesses with the largest percentage of jobs added by companies with four or fewer employees. These companies had an overall job growth rate of 213 percent during that time.”

- “From 1990 to 2003, small firms (less than 20 employees) accounted for 79.5 percent of the net new jobs, despite employing less than 18.4 percent of all jobs in 2003.

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Skeptics, on the other hand, suggest that some of the relevant research is flawed, overestimates the net share of jobs created by small businesses, and may underestimate net job creation by bigger businesses.\(^{21}\)

In a recent review of the relevant literature, Neumark, Wall, and Zhang (2008) examine multiple studies analyzing the relationship between firm size and net job growth. The studies they review tend to focus on businesses larger than microenterprises, often categorize businesses with fewer than 20 employees as a small business, and compare the performance of these businesses to their larger counterparts.

Based on their review of the literature and their own data analysis, Neumark, Wall, and Zhang (2008) find that small businesses do contribute more to net job growth for the economy than do their larger counterparts. However, their analysis of national job growth figures between 1992 and 2004 also suggests that the small business advantage in job creation may have been overstated in previous studies. They find that between 1992 and 2004:

- Businesses with fewer than 20 employees contributed about 35.1 percent of gross job creation each year, and about 33.9 percent of gross job destruction.\(^{22}\)

- Employment in businesses with fewer than 20 employees also had a higher average annual growth rate over the period than did larger sized businesses. For example, annual net employment growth for all businesses with fewer than 20 workers was 2.9 percent. Annual net employment growth in most other business size categories ranged from 1.3 percent to 2.2 percent.\(^{23}\)

After reviewing several relevant studies, SOR suggests that on balance it is likely that small businesses do contribute a disproportionate share of newly created jobs. Policy makers, however, should also be aware of the context in which this job creation is taking place. First, jobs created by smaller businesses are less stable, as many of these businesses will fail. Second, some experts believe performance differentials between

\(^{21}\) Neumark, Wall, and Zhang, 2008.

\(^{22}\) Neumark, Wall, and Zhang, 2008, p. 16.

\(^{23}\) Neumark, Wall, and Zhang, 2008, p. 17–20 and Table 3.

\textbf{Some Research Also Suggests That Microenterprises Positively Impact Employment Growth}

While comparable academic research focused specifically on the role of microenterprises in job creation is harder to come by, there are a handful of papers addressing the topic, and these suggest that a larger presence of microenterprises in the economy is correlated with higher levels of job growth.

\begin{itemize}
  \item A 2006 paper found that counties with smaller business establishments tended to have higher employment growth rates from 1982 to 1987. This finding suggests that counties with a higher percentage of businesses that are microenterprises are likely to have higher employment growth rates than their counterparts.\footnote{Sherrill Shaffer, “Establishment Size and Local Employment Growth,” \textit{Small Business Economics}, Vol. 26, No. 5, June 2006, p. 439–454.}
  \item An unpublished 2008 paper from a Masters student at the University of Maine examined employment growth rates for counties throughout the United States from 1990 to 2000 and found that counties with a higher share of businesses that were microenterprises had higher employment growth rates.\footnote{Sarah Larochelle, “Effects of Microbusinesses on U.S. Regional Economic Growth,” The Graduate School, University of Maine, August 2008.}
  \item A 2009 paper examining employment growth in the lower 48 states between 1977 and 1997 found that states with a higher percentage of businesses classified as}

\end{itemize}
microenterprises also had higher rates of employment growth. When the authors performed the same analysis by sector, they found that the positive relationship between the share of businesses classified as microenterprises and employment growth rates was true for the service sector but not for the manufacturing sector. In the manufacturing sector, a higher share of microenterprises tended to retard job growth.28

While the findings seem straightforward, it is important to remember that the data do not show that microenterprises are driving the employment growth, only that areas with a lot of microenterprises tend to have higher rates of employment growth.

**Larger Businesses Provide More Security, Higher Wages, More Benefits**

While small businesses and microenterprises may create more jobs than larger businesses, the quality of the jobs produced may be inferior. Some evidence suggests that these jobs may pay less, offer fewer benefits, and offer less employment security than do jobs at larger businesses:

- A 1993 paper examining job survival rates from 1973 to 1988 for manufacturing businesses found that job survival rates were significantly higher for larger businesses than their smaller counterparts.29 More recent research shows that permanent separation rates are nearly three times as high for businesses with fewer than 100 employees than for businesses with a thousand or more employees.30

- In 2005 average hourly wages at businesses with fewer than 100 employees was $15.69, “and increased consistently with establishment size.”31 The average wage at firms with 2,500 or more employees was $27.05.

- Nearly a quarter of all workers at businesses with fewer than 100 employees earned less than $8 an hour in 2004. Only 3 percent of workers at businesses with 2,500 or more workers earned less than $8 an hour.32

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29 Davis, Haltiwanger, and Schuh, “Small Business and Job Creation: Dissecting the Myth and Reassessing the Facts.”
31 Edminster, 2007, p. 80.
32 Kelly Edminster, 2007, p. 80.
In 2006, 59 percent of workers at businesses with fewer than 100 employees had employer-provided medical insurance, while 84 percent of employees at businesses with 100 or more employees had medical insurance.\textsuperscript{33}

EDD data consistently shows lower per-worker payroll expenditures for businesses with 0 to 4 workers than per-worker payroll expenditures for most other categories of larger-sized businesses.\textsuperscript{34}

**Comparative Studies of Wages and Benefits for the Self-Employed and Their Wage-Earning Counterparts Are Somewhat Contradictory**

Some studies examining the income and wages of the self-employed, who make up a large share of those working in the microenterprise sector also suggest that self-employment earnings are less than the earnings of wage and salary workers.

- A frequently cited paper from 2000 that uses data from the mid-1980s found that after 10 years in business, median entrepreneurial earnings for the self-employed were "35 percent less than the predicted alternative wage on a paid job of the same duration, regardless of the self-employment earnings measure used."\textsuperscript{35}

- A 2006 paper using data from the Bureau of Economic Analysis found that in 2004, the average self-employed worker earned $10,000 less than the average wage worker.\textsuperscript{36}

- The same 2006 paper shows how average self-employment earnings have lagged average wage earnings since 1978. From 1983 to 2004, the ratio of self-employment earnings to wage-and-salary earnings has tended to fluctuate between 70 percent and 85 percent. This same data suggests that the historical fall in the relative

\textsuperscript{33} Kelly Edminston, 2007, p. 85.

\textsuperscript{34} Based on data provided to SOR by EDD. Payroll expenditures per worker tend to increase with the size of the business. Businesses with 5–9 workers are the exception, tending to have smaller per-worker payroll expenditures than businesses with 0–4 workers.


earnings of the self-employed has coincided with the historical increase in the number of self-employed.\textsuperscript{37}

- A 2010 PPIC study comparing the earnings of low-skilled workers and the low-skilled self-employed found that the median wage earner tended to earn more than the median self-employed worker/entrepreneur.\textsuperscript{38}

However, the findings are not uniform. Some research also suggests that the self-employed do as well or better than wage earners.

- A 2005 study of disadvantaged youths found that male youths from disadvantaged families were likely to earn more when self-employed than their counterparts earning wages and salaries, but that female youth from disadvantaged families were likely to earn less than their wage-and-salary-earning counterparts.\textsuperscript{39}

- A 2009 study by the Pew Charitable Trust suggests that the median earnings of the self-employed are a few hundred dollars a year more than the median wage earner.\textsuperscript{40}

- A 2010 PPIC study of the self-employed in California found that from 1996 to 2006 low-skilled entrepreneurs had higher average earnings than low-skilled wage workers.\textsuperscript{41}

There is also evidence that the top-earners in self-employment systematically outperform top wage-earners:

- Data from the mid-1980s suggests that top earners in self-employment (those in the 75\textsuperscript{th} percentile and above) make more and have faster income growth than their counterparts in the wage sector.\textsuperscript{42}

\textsuperscript{38} Magnus Lofstrom, “Entrepreneurship Among California's Low-Skilled Workers,” Public Policy Institute of California, April 2010.
\textsuperscript{40} Rich Morin, “Take This Job and Love It: Job Satisfaction Highest Among the Self-Employed,” Pew Research Center, September 2009.
\textsuperscript{41} Lofstrom, 2010.
\textsuperscript{42} Hamilton, 2000, p. 619.
A Recent PPIC paper examining the earnings of the low-skilled self-employed in California found that, from 1996 to 2006, the top 25 percent of male self-employed and the top 10 percent of female self-employed earned more than their wage- and salary-earning counterparts.\textsuperscript{43}

So who earns more, the self-employed or their wage-earning counterparts, and what explains the discrepancy in findings of the various studies? Some of the discrepancy is explained by differences in the data sources used, and some is explained by the way income is measured.

For example, the Pew study uses survey data from the Census Bureau Current Population Survey (CPS), which surveys 50,000 households each month. Estimates of the number of self-employed are smaller in this data source than in other data sources and suggests that a narrower group of people is being sampled. Data from the Bureau of Economic Analysis, however, are based on tax returns, which capture a broader number of the self-employed, including those who earn very little from their enterprises.\textsuperscript{44}

The use of average incomes as a metric to compare income levels is likely to overestimate the earnings of both the typical self-employed person and the typical wage earner because of the well-known right-skew typical of income data. Income data tend to have a relatively small number of large values on the right side of the distribution that drive up measures of average income. The more pronounced the skew, the more problematic it becomes to use average income as a measure of typical income.

If the top earners among the self-employed tend to outperform the top earners among wage and salary workers, as the data in some studies tends to suggest, then measures of average income for the self-employed likely overstate typical income for the self-employed more so than do comparable measures for wage and salary workers. The reason is straightforward: top earners in the income distribution of the self-employed

\begin{footnotesize}
\begin{itemize}
\item 43 Lofstrom, 2010, p. 18.
\item 44 Based on conversations between SOR staff and Stephan J. Goetz, author of “The Place-Based Structural Determinants and Effects of Self-Employment,” Final Report to the Kaufman Foundation, The Northeastern Regional Center for Rural Development, Pennsylvania State University, September 29, 2006.
\end{itemize}
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likely are pulling up the income averages more than are the top wage earners in the income distribution of the non self-employed.

One should also note that, due to a wider distribution of income for the self-employed, aggregate comparisons of typical income for the two groups are likely somewhat sensitive to the data set used for self-employment income and the segments of the self-employed population from which the data is drawn. Analysis shows, for example, that self-employment rates are higher in two distinctive types of community: (a) in “counties with older, more highly educated, and wealthier populations,” and (b) in “counties with more foreign-born populations and greater ethnic diversity.” Self-employed in the latter group of counties tends to be associated with lower earnings from self-employment.

In sum, inferences about self-employment income and its relative purchasing power vis-à-vis the purchasing power of comparative wage earners will likely depend on who is actually being compared to whom and the source of the data on the self-employed for the simple reason that the nature of self-employment is highly variable and extremely differentiated depending on the geographic area under consideration.

- Data consistently show that pay, benefits, and job security tend to be better in larger-sized businesses than in smaller-sized businesses.

- Per-worker payroll expenditures for businesses with 0 to 4 salaried or wage-earning workers (microenterprises) in California tend to be lower than per-worker payroll expenditures for most other categories of larger-sized businesses.

- Studies differ in their findings on the relative earnings of the self-employed who make up a large share of those working in microenterprises and their wage- and salary-earning counterparts. Moreover, there is a wide income distribution for those earning income from self-employment.

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45 Goetz, 2006, p. 3.
46 Ibid.
47 Ibid.
• Whether or not the self-employed earn more, the same, or less than their wage- and salary-earning counterparts depends on who is being compared to whom, the source of the data being used, and the metrics chosen for comparison.

• Top earners in self-employment likely earn more than their wage- and salary-earning counterparts.

The Self-Employed May Have Greater Work Satisfaction and Workplace Flexibility But May Also Have Higher Levels of Stress Related to Economic Insecurity

There are other issues relevant to the comparative quality of jobs for the self-employed vis-à-vis traditional wage earners.

• Self-employment may provide greater work flexibility for those unable to secure child care.\(^{48}\)

• Some research suggests greater work satisfaction among the self-employed than among the traditional labor force.\(^{49}\)

• However, research also suggests that the self-employed face more risks and greater economic insecurity than their wage-earning counterparts.\(^{50}\)

Microenterprises Alleviate Poverty for Some But Not an Appropriate Policy Strategy for Everyone

To what extent are microenterprise programs that provide skills training and/or capital to participants able to help alleviate poverty? It is likely that microenterprises lift some people with relevant skill sets, drive, and sufficient support out of poverty. However, those who decide to open a business may need to secure other forms of income, like a wage-paying job, to make ends meet. Employment in microenterprises, for example, may be second best, but better than nothing. For many, it will not be an adequate

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\(^{49}\) Morin, 2009.

\(^{50}\) Morin, 2009; Mark Shreiner, "The Material Conditions For Microenterprise Programs in the United States and the Third World," Center for Social Development, July 2000.
substitute for wage labor, where the returns may be higher.\textsuperscript{51} Such findings suggest that education and job training may provide better paths out of poverty for the bulk of low-income individuals.\textsuperscript{52}

Some studies suggest that microenterprises help move people off public assistance and toward greater self-sufficiency:

- A longitudinal study of individuals enrolled in a publicly funded microenterprise pilot program in five states during the 1990s estimated from a sample of program participants that about half those that started a business were able to leave AFDC.\textsuperscript{53}

- Of those participants that continued to receive AFDC benefits, about a fifth no longer used AFDC as their primary source of income, and about a third were generating some income from self-employment or jobs.\textsuperscript{54}

- A similar 1998 study examining a three-year pilot microenterprise program in Iowa and western Illinois found that a higher proportion of program participants were able to exit AFDC than were members of a comparison group who did not participate.\textsuperscript{55}

- The same study compared the time on welfare of those who voluntarily enrolled in self-employment promotion programs and those enrolled in other welfare-to-work programs, and found that the former spent significantly less time on welfare than the latter.\textsuperscript{56}

There is also evidence showing that participants in microenterprise programs increase their incomes and may exit poverty after participating in the programs.


\textsuperscript{52} Shreiner, 2000, and Lofstrom, 2010.


\textsuperscript{54} Ibid.


\textsuperscript{56} Ibid.
A longitudinal study of participants in the Self-Employment Learning Project found that 72 percent of low-income entrepreneurs increased their household income over a five-year period.57

A longitudinal study of participants in the Women’s Initiative for Self-Employment program found an 85 percent growth in average personal earned income after participating in the program’s core training programs.58

In the same study, poverty rates for participants in the Women’s Initiative program dropped from 70 percent to 28 percent, 18 months after these women participated in the program.59

Microenterprise promotion as a strategy for poverty alleviation, however, is not without its skeptics or critics.

Ehlers and Main (1998) argue, for example, that microenterprise programs steer women into home-based, small-scale, barely profitable, and under-capitalized businesses that reinforce business and occupational gender segregation.60

A 2005 Urban Institute review of research on microenterprises and poverty alleviation questions the validity of some of the longitudinal research showing positive outcomes for participants following their enrollment in programs:

While research studies such as these are informative, they are not persuasive—they rarely control for the possibility that those who receive the subsidy are more successful than those who do not, or that those who receive the subsidy might have done well without it . . . . The one U.S. microenterprise program evaluation that controlled for selection bias (through an experimental design) found no increase in

58 Ibid.
59 Ibid.
employment or wage rates, but did find decreases in the length of unemployment spells.\textsuperscript{61}

- Research by Sanders (2002, 2004) that uses a quasi-experimental design to compare the economic outcomes of low-income microenterprise program participants with non-participant low-income entrepreneurs and low-income wage workers found that “microenterprise programs result in no significant gains for participants compared with non-participants and low-wage workers in general.”\textsuperscript{62} The same study concluded that “program participants make little progress out of poverty . . . cast[ing] some doubt on the effectiveness of microenterprise assistance programs as an antipoverty strategy in the U.S.”\textsuperscript{63}

- A more recent study examining a microenterprise training and counseling program sponsored by the U.S. Department of Labor and the Small Business Association at seven sites in three states, found in the aggregate that while program participants were slightly more likely to open a business than were members of a control group, program participants had less overall earnings during the period examined than did their control group counterparts. The same study found no difference between program participants and members of the control group with respect to the likelihood of receiving public assistance or the cash value of public assistance benefits received.\textsuperscript{64}

How does one reconcile differences in the research findings? In-depth qualitative analysis by a few national experts on microenterprise may offer a more nuanced view of the matter. Servon (1999), for example, states that the arguments of both proponents and skeptics of microenterprise contain more than an element of the truth:

Microenterprise programs help a segment of the welfare population leave poverty through self-employment. Self-employment alone is unlikely to provide low-income people with the economic security they need. Most


\textsuperscript{63} Ibid.

microentrepreneurs engage in self-employment in combination with other wage and salary jobs or a second self-employment job, and their self-employment activity provides smaller annual earnings than does their salary work. Why, then, pursue self-employment at all? Because the people microenterprise programs target often have trouble obtaining enough wage and salary work to meet their needs.65

Given that entrepreneurship is as demanding as wage labor, is riskier, and often offers lower rewards, it may be that the majority of low-income individuals would better benefit from increased education and job training programs so they are more competitive in the labor market and better able to secure the wage and salary income they have trouble securing.66 On the other hand, there may be a select group of low-income individuals who have the education and skill sets needed to make it as business owners who can benefit from microenterprise programs. Microenterprise programs should focus on these individuals.67

Conclusion

In January you requested that SOR update information that it published in a July 2008 Policy Briefs report concerning the number of microenterprises in the state of California and the number of persons “employed” by these microenterprises. You also requested that SOR provide analysis on whether microenterprises are stimulating California’s economy and the role state government should play in stimulating the development and preservation of microenterprises.

This memo provided new estimates on the size and growth of the microenterprise sector from 2000 through 2007, and provided a brief literature review on relevant academic and think tank research. The findings in brief are as follows:

1. The microenterprise sector in California is sizable and grew substantially between 2000 and 2007;

2. Growth in the microenterprise sector is largely driven by increases in self-employment and may be related to large-scale changes in the U.S. economy,

including the decline of manufacturing, the growth of the service sector, and greater reliance on outsourcing and subcontracting by employers;

3. On balance the academic literature suggests that small businesses and microenterprises may contribute more to job growth than their larger business counterparts;

4. Traditional wage and salary jobs created by small businesses and in the microenterprise sector may offer lower pay, benefits, and job security than those jobs created by larger businesses; nonetheless, research comparing the earnings of the self-employed to their wage- and salary-earning counterparts has not conclusively established whether the self-employed earn more, less, or about the same as their wage- and salary-earning counterparts;

5. Microenterprise promotion may be used as successful strategy for poverty alleviation, but only for a select subset of those in poverty; other policy options, like education and workforce training programs, may be more appropriate means to help the indigent escape from poverty.
Appendix

Methods and Limitations for Two Sets of Estimates on the Size and Growth of the Microenterprise Sector

Advocates for microenterprises generally report two types of numbers to emphasize the importance of microenterprises to the economy.

First, advocates typically report the number of microenterprises in the economy and the share of businesses that are microenterprises to demonstrate that the vast majority of businesses operating at any given time are microenterprises.

Second, microenterprise advocates frequently provide “employment” numbers for the microenterprise sector by reporting the number of individuals “working” in the microenterprise sector and their share of “employment” for the broader economy. These numbers are typically used to emphasize the importance of microenterprises for job creation.

To calculate both sets of numbers, advocates often combine data on the businesses of the self-employed with data relevant to very small traditional employers with workers on payroll, and combine these figures to demonstrate the ubiquitous reach of microenterprises throughout the economy.

Data and Methodology for the First Set of Estimates Explained

The Association for Enterprise Opportunity (AEO), a national microenterprise advocacy organization, in consultation with Dr. James McConnon of the University of Maine, developed a method for estimating the size of the microenterprise sector utilizing three different data sources. These data sources include the following:

- U.S. Census Bureau “Non-Employer” statistics pertaining to the number of businesses operated by self-employed persons, including both the incorporated and unincorporated self-employed⁶⁸

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⁶⁸ According to Dr. McConnon, none of the self-employed “non-employers” reported in this data set draw a salary or wage from these businesses.
• U.S. Census Bureau "County Business Patterns" statistics pertaining to the number of employers and the number of workers employed by these businesses; the data is organized by employer size; employment counts in these figures may include business owners if the owners draw salaried or wage income from the business; business counts may also include figures for the self-employed when business owners draw a salary or wage from the business.

• Bureau of Economic Analysis employment data that provides counts of employees, business owners, and corporate officers; this data source purports to report the numbers for everyone "working" in the economy, including business owners and the self-employed; the data is used to make calculations pertaining to the share of microenterprise employment in the economy.

To derive the size of the microenterprise sector in the economy, AEO adds the number of businesses with fewer than five employees to the number of businesses with no employees, including in this sum the number of businesses owned by the self-employed. Then, to derive the share of businesses in the economy that are microenterprises, advocates divide the number of microenterprises by the total number of businesses in the state.

To derive "employment" figures for the microenterprise sector, advocates typically add the number of employees in businesses with fewer than five employees to the number of microenterprise businesses, which is treated as a proxy for the number of business owners employed in the sector. This sum is then added to the number of self-employed incorporated and non-incorporated businesses. To derive the microenterprise sector's share of "employment," advocates then divide the foregoing microenterprise "employment" number by a total employment figure that includes the sum of all business owners, self-employed, and employees.

As shown in the memo, applying the foregoing methodology to the data specified above does suggest that there was significant growth in the microenterprise sector in California from 2000 through 2007. However, there are potential limitations to the data and the methodology one should be aware of when interpreting the results:
Potential Limitations for the First Set of Estimates

- The method used by AEO to calculate the employment numbers uses the number of businesses with 1–4 employees as a proxy for the number of owners with a payroll working in the microenterprise sector, and adds this number to "employment" totals. This approach assumes that each microenterprise has one and only one owner working for these businesses and that these owner/"employees" are all mutually exclusive. Approaching the data in this manner could lead to an overestimate of the number of individuals who own and are employed by microenterprises when these individuals own more than one microenterprise. Conversely, the use of the number of businesses as a proxy for individual owners could also lead to undercounts of the number of owner/"employees" of microenterprises when these businesses have multiple owners.

- Employment and business counts used to estimate aggregate microenterprise employment likely count some of the same individuals and/or businesses multiple times across categories of source data. Because the relevant numbers are added together to derive total employment, some of the individuals working in microenterprises are likely counted multiple times, leading to an overestimate of the number of "jobs" in the sector. For example, some business owners likely enter the employment figures twice whenever owners draw wages or salary from the relevant microbusinesses. In these situations, the relevant individuals may be counted both as establishment owners and employees (someone receiving wages or a salary). The degree to which this is occurring is unknown, but advocates for the data's reliability believe the problem is minimal.\(^{69}\)

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\(^{69}\) Some data suggests that very small businesses, especially those run by the self-employed, are unlikely to incorporate, minimizing the problem of owner/employee double counting. According to Professor McConnon, U.S. Census Bureau data suggests that fewer than 10 percent of the self-employed incorporate. Such data suggests that few microenterprise owners are drawing income from their businesses in the form of wages or salary, are not being counted as employees in the relevant data sources that report workers on payroll, and as a result, are not being double-counted. Based on this data, Professor McConnon suggests that the double-counting problem is minimal. Data from the Bureau of Labor Statistics, however, suggests that as many as 30 percent of the self-employed are incorporated, and other IRS data suggest that more than 20 percent of all businesses are incorporated. The share of business owners who draw a wage or salary from these incorporated businesses is not known. As that share increases, the potential for double-counting also increases.
Estimated net increases in the number of jobs in the microenterprise sector do not measure new jobs created. The data measures the number of jobs categorized as microenterprise jobs at a given point in time whether or not these jobs were recently created. Some of the jobs categorized as microenterprise jobs are newly created jobs and some are newly categorized as microenterprise jobs because larger businesses shed a portion of their workforce and became microenterprises.\textsuperscript{70}

The data do not contain figures for businesses operating in the informal or underground economy. Presumably many of these businesses are microenterprises that are not being counted.

The data for the self-employed are based on IRS tax data that generally include the number of businesses run by the self-employed who are reporting self-employment income (often on a Form 1099) and are taking in between $1,000 and a $1 million in business receipts during the course of the tax year. Potentially, a great number of very tiny businesses not serving as an individual’s principle source of income are being included in the figures even though the self-employed running these businesses may be spending very little time engaged in any activity related to these businesses.\textsuperscript{71}

Estimate Method Two: Using EDD Figures to Develop a Second Estimate

A second way to estimate the size of the microenterprise sector and employment in this sector is to use EDD data pertaining to the self-employed and small businesses with a payroll. EDD has provided SOR with two different sets of relevant data:

- EDD self-employment statistics pertaining to the number of businesses operated by unincorporated self-employed persons in California; these counts differ from

\textsuperscript{70} For example, a business with five or more workers could shrink to become a microenterprise by shedding some portion of its workforce. The workers at that business would then become categorized as microenterprise employees, thereby increasing the size of the microenterprise sector even though the process that led to the net gain in microenterprise jobs was job loss, not job creation. The converse is also true. A microenterprise that grew to more than four employees would no longer be categorized as a microenterprise, and job growth for that business would not show up in the data.

\textsuperscript{71} One academic expert on self-employment contacted by SOR indicated that he likely shows up in the self-employment figures used to measure microenterprise employment as calculated in McConnell/AEO methodology even though he probably devotes only around 20 hours a year to self-employment activities recorded as taxable self-employment income to the IRS.
Census Bureau non-employer statistics that count both the incorporated and unincorporated self-employed who have no known payroll. EDD self-employment statistics are taken from the Census Bureau’s Current Population Survey, “a monthly survey of 50,000 households conducted by the Census Bureau for the Bureau of Labor Statistics.”

- EDD third quarter payroll statistics pertaining to the number of businesses that employ wage and salary workers and the number of these workers; the data is organized by employer size; employment counts in these figures refer to actual counts of traditional workers plus any incorporated business owners who have drawn wages or salaries from their businesses during the third quarter, including any incorporated self-employed drawing wages or salary from their businesses.

The approach used to develop this second set of estimates differs from the McConnon/AEO approach in five respects, and it is important to understand the differences and the manner in which these differences affect the estimates and their reliability.

- The primary data sources are different and have different limitations.

- The data on the number of establishments and the number of businesses with fewer than five employees includes businesses with 0–4 employees, rather than businesses with 1–4 employees. As a result, the number of establishments and employees reported by EDD are greater than the numbers reported in the County Business Patterns data used in the McConnon/AEO calculations.

- Presumably the EDD numbers for businesses with fewer than five employees differ from the U.S. Census Bureau County Business Patterns statistics because a larger share of the incorporated self-employed are also being counted in the EDD figures for business establishments and in the corresponding figures for employment.

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Data files sent to SOR by EDD state that the incorporated self-employed tend to be counted as employees in their data sets on wage employment. A comparison of the ratio of workers to establishments in the two data sets also suggests a greater presence of the self-employed in the EDD data because there are fewer average workers per business in the EDD data than in the County Business Patterns data. According to County Business Patterns Data, there were 1.69 workers per business in California in 2007. According to EDD-supplied data, there were 1.22 workers per business in California in 2007. An increase in the number of establishments combined with a decrease in the
• Microenterprise owners of establishments with 0–4 employees are omitted from employment counts if they do not draw a wage or salary from the business, which likely results in an undercount of the number of owners “working” in the sector.\textsuperscript{74}

• In this second set of estimates, the total employment figure for microenterprises is treated as the sum of the non-incorporated self-employed and the number of workers on payroll for businesses with 0–4 employees. This figure includes microenterprise owners and the self-employed drawing a wage or salary from their businesses when these owners are reported as part of payroll.

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\textsuperscript{74} EDD includes the incorporated self-employed in their data-sets on businesses with fewer than five workers, which raises the risk of double-counting if one were to follow the McConnon/AEO methodology and treat the number of relevant business establishments as a proxy for the number of owners working in these businesses. Employment counts using EDD data attempt to minimize this problem by not using the number of microenterprise establishments with 0–4 employees as a proxy for the number of owner/employees working in these businesses. This remedy, however, creates a second problem: Because only those owner/employees counted on the businesses’ payroll are used as addends in the employment figures, there is likely some and possibly a substantial degree of undercounting of those owners who work in the sector.