Living Wage
Urban Chengdu, China
Context Provided in Hi-Tech Manufacturing

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SECTION I: INTRODUCTION .......................................................................................................................... 3
1. Background .................................................................................................................................................. 3
2. Living wage estimate ................................................................................................................................. 3
3. Context in Chengdu .................................................................................................................................. 4
   3.1 Workers in Chengdu are young and mostly single .............................................................................. 5
   3.2 The majority of workers come from rural areas around Chengdu in Sichuan province ............... 5
   3.3 Minimum wage in Chengdu ................................................................................................................ 6
4. Concept and definition of a living wage ..................................................................................................... 6
5. How a living wage is estimated ................................................................................................................ 7
SECTION II: COST OF A BASIC BUT DECENT LIFE FOR A WORKER AND THEIR FAMILY .................. 9
6. Food costs .................................................................................................................................................. 9
   6.1 General principles of model diet .......................................................................................................... 9
   6.2 Model diet .......................................................................................................................................... 10
   6.3 Food prices ....................................................................................................................................... 14
   6.4 Seasonality of Food Prices ............................................................................................................... 16
7. Housing costs .......................................................................................................................................... 17
   7.1 STANDARD FOR BASIC ACCEPTABLE HOUSING .................................................................. 17
   7.2 Rent for basic acceptable housing .................................................................................................... 18
   7.3 Utilities and other housing costs ....................................................................................................... 26
   7.4 Summary of housing costs ................................................................................................................ 27
8. Non-food and non-housing costs ............................................................................................................ 28
9. Post checks of non-food and non-housing costs ..................................................................................... 28
   9.1 Health care post check ....................................................................................................................... 29
   9.2 Education post check .......................................................................................................................... 30
   9.3 Transportation and communication post check ................................................................................ 30
10. Provision for unexpected events, Parental Support, and to ensure sustainability ......................... 31
SECTION III: LIVING WAGE FOR WORKERS ....................................................................................... 34
11. Family size needing to be supported by living wage ............................................................................ 34
12. Number of full-time equivalent workers in family providing support ............................................ 34
13. Take home pay required and taking taxes and mandatory deductions from pay into account ........ 34
SECTION IV: ESTIMATING GAPS BETWEEN LIVING WAGE AND PREVAILING WAGES .................. 37
14. In-Kind Benefits .................................................................................................................................. 37
   14.1 Value of housing subsidy as partial payment of living wage ............................................................ 37
   14.2 Value of transportation in-kind benefits .......................................................................................... 38
   14.3 Meals as partial payment of living wage ........................................................................................... 39
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Living wage report for urban Chengdu with focus on hi-tech manufacturing

14.4 Cash allowance as partial payment of living wage

15. Living wage in context and compared to other wages

15.1 Minimum wage in Chengdu

15.2 Prevailing wages for factory workers in Chengdu

15.3 Other income index in Chengdu

15.4 Wage ladder

15.5 Recent wage trends

16. Conclusions

REFERENCES
Living Wage Report
Chengdu, China
Urban
Context provided in the manufacturing industry

SECTION I
INTRODUCTION

1. BACKGROUND

This report estimates a living wage for urban Chengdu for August 2015 with a focus on the Chengdu Hi-tech Industrial Development Zone. This report uses the methodology developed by Richard Anker and Martha Anker (2017) that builds and improves on their earlier work on living wages published by the ILO (see Anker, 2006a, 2006b, 2011). There are over 20 other living wage reports using this methodology including 5 reports for other Chinese cities.

This report was commissioned by Social Accountability International, a member of The Global Living Wage Coalition. The Global Living Wage Coalition brings together Fairtrade International, Forest Stewardship Council (FSC), Goodweave International, Rainforest Alliance (RA), Social Accountability International (SAI), Sustainable Agriculture Network (SAN), UTZ, and the ISEAL Alliance, with the shared mission to see continuous improvements in workers' wages, in the farms, factories and supply chains participating in their respective certification systems and beyond, and the long term goal for workers to be paid a living wage. Each living wage benchmark commissioned by the Coalition is made public to further this aim and to increase the opportunity for collaboration toward payment of a Living Wage.

2. LIVING WAGE ESTIMATE

Our estimate of living wage for urban Chengdu for August 2015 is RMB 2,634 per month and therefore RMB 121 per workday for permanent workers. This is before consideration of mandatory social insurance deductions from pay. Taking all of it into account, we get an estimated cash net living wage take home pay of RMB 2,160 per month (RMB 99.3 per workday\(^1\)). It is more than 1.76 times the minimum wage of RMB 1,500\(^2\) for workers in

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\(^1\) From talks with local workers, we learned that on average they work 21.75 days per month (equally, 43.5 hours per workweek).

\(^2\) Chengdu Municipal Labor and Social Security Bureau Notice about Adjusting the City's Minimum Wage Standard, issued on 1st July 2015.

http://www.chengdu.gov.cn/wenjian/detail.jsp?id=7bVvxLBNdHmzJyzKmx56&ClassID=07030202090102


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Living wage report for urban Chengdu with focus on hi-tech manufacturing

Chengdu, and higher than the average basic wage on a local representative factory of RMB 2,272\(^3\). It’s still much lower than the average real income (RMB 3,629) including overtime payments and bonuses received by local manufacturing workers. It is important to point out that the living standard used to estimate the living wage is very basic and represents the minimum level for decency.

This report provides a detailed explanation of how our living wage was estimated. The level of detail in this report is provided for several reasons. First, transparency is felt to be essential, since it is very important that stakeholders understand the basis for the living wage estimate in this report. Stakeholders should feel that the living wage estimate is solid and representative of the cost of a basic but decent life in a high-tech zone in Chengdu, regardless of whether or not employers are able to pay this wage in practice in the near future. Transparency also helps to ensure that the living wage estimate is as accurate as possible and receives as wide an acceptance as possible. Second, it is hoped that transparency will help the ongoing process of stakeholder dialogue.

Considerable thought and effort was put into making this estimate. This included visits to workers’ houses, visits to stores where workers typically shop, and discussions with and collection of information from various key informants in the area as well as statistics, papers and reports from researchers, the government and international agencies.

3. CONTEXT IN CHENGDU

Chengdu, the central city of the western part of China, is a sub-provincial city. It has direct jurisdiction over 9 districts, 4 county-level cities and 6 counties. Established in 1988, Chengdu Hi-tech Development Zone (Chinese: 成都高新技术产业开发区; pinyin: Chéngdū Gāoxīn Jīshù Chǎnyè Kāifā Qū) was approved as one of the first national hi-tech development zones in 1991. In 2000, it was open to Asia-Pacific Economic Cooperation and has been recognized as a national advanced hi-tech development zone in successive assessment activities held by China’s Ministry of Science and Technology. It ranks 5th among the 53 national hi-tech development zones in China in terms of comprehensive strength.

According to the Chinese government, “Chengdu Hi-tech Development Zone covers an area of 82.5 square kilometers (31.9 square miles), consisting of the South Park and the West Park. By relying on the city sub-center, which is under construction, the South Park is creating a modernized industrial park of science and technology with scientific and technological innovation, incubation research and development, modern service industry, and headquarters economy playing leading roles. Priority has been given to the development of the software industry. Located on both sides of the "Chengdu-Dujiangyan-Jiuzhaigou" golden tourism channel, the West Park aims at building a comprehensive industrial park targeting at

industrial clustering with complete supportive functions. The West Park gives priority to three major industries i.e. electronic information, biomedicine and precision machinery. 

Figure 1: Chengdu map and identification of hi-tech industrial zones

3.1 Workers in Chengdu are young and mostly single

According to a survey report on the largest and typical factory in this region released by FLA in 2012, the average age of workers in this plant was 23.4 years. Another study found that the majority of workers in this region are between 17 and 25 years of age, accounting for 90.5%, out of whom 71.6% are single. We confirmed this information with discussions with local residents and vendors around the plants. Also, the supporting living facilities near the plants were found to cater to the tastes of young people, including KTV (karaoke), a cafe cube, restaurants, a shopping mall and other things young people like. Being mostly young and unmarried, local manufacturing workers usually spend a lower proportion of their income on

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Living wage report for urban Chengdu with focus on hi-tech manufacturing

their daily life and save a large proportion to prepare for their career and marriage in the near future. So, when we talk about living wage for manufacturing workers in this region, we should keep this in mind.

3.2 The majority of workers come from rural areas around Chengdu in Sichuan province

Industrial manufacturing workers in Chengdu mostly come from rural areas of Sichuan Province. Generally, their home areas are within a days’ drive from the working place. Usually they go out to work alone and spend their daily lives at their working place while leaving some of their family members living at home in rural area. For a young couple, the distribution of their family members may well be like this: The young couple works in a factory in the city, their children are left to stay in the countryside and be looked after by their grandparents who mainly engage in agricultural production. Therefore, a substantial proportion of the young couple’s salary would be sent back to their home for children and the old. Meanwhile, they will also go home regularly, in which case, two results are produced. First, they will sometimes bring back some agricultural products produced by their family members, such as rice, oil, vegetables, and fruits. Since it is difficult to establish prices for self-produced agricultural products, and we thought that a living wage should be sufficient to buy the food in Chengdu, we took the prices of local food as the criterion when estimating food costs. Second, consumption of the left-behind family members occurs in workers’ home area. So, the standard of living wage of workers is influenced by the costs not only around their working place, but also at their home area. Considering the diversity of their home areas, it is unrealistic to investigate all these places. Meanwhile we hold the opinion that a decent wage should be sufficient so that a couple must no longer endure the pain of being apart from their family, and also be able to meet the consumption requirements of a decent life for all the reference family members in their workplace area. So, only the living costs of Chengdu were taken into consideration when we estimate the living wage for Chengdu.

3.3 Minimum wage in Chengdu

In June 2015 a few months before this study, the Chengdu government increased the minimum wage from RMB 1,400 to RMB 1,500 per month. This substantially increased the cost of production for factories. This report should be read in this context of significant pressure for increased wages and a recently increased minimum wage.

4. CONCEPT AND DEFINITION OF A LIVING WAGE

The idea of a living wage is that workers and their family should not have to live in poverty. But a living wage should do more than simply keep workers and their families out of poverty. It should also allow them to participate in social and cultural life. In other words, wages should be sufficient to ensure that workers and their families are able to afford a decent basic lifestyle considered acceptable by society at its current level of economic development. Workers should receive a living wage in normal work hours without having to work overtime.
The following definition of a living wage has been agreed to by the Global Living Wage Coalition which includes Fairtrade International, Rainforest Alliance/SAN, UTZ, Goodweave International, FSC and Social Accountability International (SAI) as well as ISEAL:

“Remuneration received for a standard work week by a worker in a particular place sufficient to afford a decent standard of living for the worker and her or his family. Elements of a decent standard of living include food, water, housing, education, healthcare, transport, clothing and other essential needs including provision for unexpected events.”

5. HOW A LIVING WAGE IS ESTIMATED

Figures 2, 3 and 4 at the end of this section indicate how our living wage for industrial parks in urban Chengdu was estimated. We started by estimating the cost of a basic living standard that would be considered decent for present-day urban Chengdu. This was done by summing up separate estimates for urban Chengdu of the cost for a low cost but nutritious diet, basic decent housing, and all other needs at a decent level. Before accepting our preliminary estimate of the cost of all non-food and non-housing items, we checked to make sure that the living wage included sufficient funds for basic health care, education, transportation and communication, because health care and education are considered human rights around the world, and transport as well as communication are important expenses. A small margin was then added above this total cost of a basic but decent lifestyle to help provide for unforeseen events, such as illnesses and accidents, to help ensure that common unplanned events do not easily throw workers into poverty. In addition, a small margin was added to provide some small support for parents and other family members as this is an important social obligation in China. This new total estimate of the cost of a basic but decent quality life, that up to now was mostly expressed in per capita terms, was then scaled up to arrive at cost for a typical family size in the area. For this part, we assume that the typical family size in Chengdu is 3.5 people (2 adults and 1.5 children). This figure does not only rely on statistical data on family sizes and fertility rates in Chengdu, but is based on research and considers large-scale migration in the area, which isn’t captured by public statistics because migrant workers are usually not included in statistics due to the practical challenges. And in reality, a typical family in rural areas usually has one or two children, which is always the situation for most manufacturing workers (generally rural-urban migration workers) in the city. Then we estimate the typical number of full-time equivalent workers per family to estimate the necessary take home pay for each worker to afford a decent life for their families. In the end, we take payroll taxes, deductions and bonuses into consideration to estimate the final gross living wage for workers in Chengdu.
Living wage report for urban Chengdu with focus on hi-tech manufacturing

Figure 2: Components of a basic but decent life for a family

![Diagram showing the components of a basic but decent life for a family]

Figure 3: From cost of basic but decent life to net living wage

![Diagram showing the calculation from cost of basic but decent life to net living wage]

Figure 4: From net living wage to gross living wage

![Diagram showing the calculation from net living wage to gross living wage]

Source: Anker and Anker (2017).
SECTION II
COST OF A BASIC BUT DECENT LIFE FOR A WORKER AND THEIR FAMILY

6. FOOD COSTS

The food cost for a living wage in urban Chengdu was estimated using local food prices and a low-cost nutritious model diet for an average person in a family of 3.5 persons (2 adults and 1.5 children). It is RMB 10.57 (1.65) per person per day and RMB 37 for a typical family per day. It is important to point out that we assumed workers mainly cook and eat at home.

6.1 General principles of model diet

Food is the most important expense of households in almost all developing countries. The following principles were used to establish the model diet to estimate food costs for our living wage for urban Chengdu. Our model diet should be:

i. **Nutritious**: (i.e. have sufficient calories as well as acceptable quantities of proteins, fats, carbohydrates, minerals and vitamins) to help ensure that workers and their families have enough to eat and can be healthy. Our model diet has a sufficient number of calories (2297) and meets the World Health Organization’s (WHO/FAO, 2003) nutritional recommendations of: a minimum of 10 percent of calories from proteins (with a reasonable proportion of proteins coming from “higher quality” sources such as legumes and animal-origin foods, see WHO/FAO/UNU 2007); 15-30 percent of calories come from fats; and 50-75 percent of calories come from carbohydrates. It also meets nutritional recommendations for proteins (70g per day per person), fats (no more than 30 percent of all calories), and cereals and grain (more than 50 percent of all calories) as outlined in the Development Outline of Food and Nutrition in China: 2014-2020.

ii. **Relatively low in cost for a nutritious diet**: Our model diet includes less expensive types of cereals, beans, meat, fish, fruits and vegetables to keep down the total cost and mimic how cost-conscious workers shop for food while maintaining nutritional standards.

iii. **Consistent with Chengdu’s development level**: Proteins and animal-origin foods are relatively expensive per calorie and their consumption is known to increase with economic development.

iv. **Consistent with local dietary preferences and food availability**: Chengdu is located in the south-western part of China, where people prefer rice. The Sichuan Province is famous for dishes that have a peppery taste, and in addition to salt and garlic, people enjoy cooking with many kinds of condiments in this province. So in our
model diet, we take rice as the representative cereal and set the percentage of food costs for salt, spices and condiments as 3% of the model diet cost.

### 6.2 Model diet

The model diet that was used to estimate a living wage for urban Chengdu is shown below in Table 1.

Our model diet has 2297 calories. It was determined based on the average height of males and females in China and the assumption that a typical industrial manufacturing worker has a moderate physical activity level since most of them have to engage in somewhat strenuous assembling work on their feet for at least 8-hours per workday and conduct housekeeping activities after work. This is similar to the number of calories (2172 calories) Chinese people consume on average per day according to the “Report on Nutrition and Disease Status of Chinese Residents”. And it’s in the range of 2200-2300 calories proposed for the year 2020 in the Development Outline of Food and Nutrition in China: 2014-2020. Percentages of calories from proteins (13.0%), fats (21.2%) and carbohydrates (65.8%) meet minimum WHO/FAO standards for a nutritious diet. The 424 edible grams of fruit, vegetables and beans included in our model diet helps to provide a variety of micro-nutrients and minerals.

Our model diet shown in Table 1 includes:

- 360 edible grams of rice per day
- 50 edible grams of noodles per day (close to 3 breakfasts per week)
- 35 edible grams of firm tofu per day
- 83 edible grams of UHT milk per day (close to 1 and a half packages for adults per week and 4.5 packages for children per week, roughly equivalent to a cup of milk per day as one package contains 200ml (206 grams) of milk)
- 49 edible grams of eggs per day (one egg per day)
- 72 edible grams of meat per day (six meat meals per week)
- 44 edible grams of fish per day (one fish meal every other day)
- 299 edible grams of vegetables per day (207 edible grams of green leafy vegetables and 92 edible grams for other vegetables).
- 65 edible grams of potatoes and starchy vegetables per day (44 edible grams of potatoes and 21 edible grams of pumpkin).

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90 edible grams of fruit per day
- 34 edible grams of cooking oil per day (close to 3 tablespoons)
- 20 edible grams of sugar per day (4 teaspoons)
- 1 edible gram of tea per day (1 cup of tea per day for adults)

The above is a basic diet for an industrialized city like Chengdu. It is worth noting that the quantities of vegetables and fruits are generally consistent with the amount typically consumed by workers while quantities of eggs and milk are considerably higher than the quantities that workers actually consume as indicated in published data. For example, according to data from the National Bureau of Statistics of China, urban residents purchase only 29 grams of eggs and 39 grams of milk per person per day on average. The higher quantity of milk was felt to be required for nutrition (especially for calcium), especially for children. The consumption of eggs and milk included in our model diet was considered acceptable after we checked it with local workers. From discussions with them, we learned that it’s normal for them to have one egg per day and 2 and half packages of milk (each package contains 200 ml (206 grams) of milk per week.

The idea behind using a model diet to estimate food costs for a decent standard of living is that a worker and his or her family should be able to afford a nutritious diet. This does not mean that people are expected to eat exactly the same foods in exactly the same quantities in the model diet every day - but rather that they should have sufficient income to afford a nutritious diet. It is for this reason that the cost of the model diet shown in Table 1 is increased by 15 percent to allow for some variety, as well as increased by 4 percent to allow for minimal spoilage and wastage. After taking into consideration the local preference for spicy food, we also increased the cost of the model diet by 3 percent for salt, spices, and condiments. This is reflected in typical recommendations of nutritionists and government departments.
Table 1: Model diet and estimated food costs per person per day, urban Chengdu

<table>
<thead>
<tr>
<th>Food items</th>
<th>Grams purchased</th>
<th>Grams edible</th>
<th>Cost per kg RMB yuan</th>
<th>Cost RMB yuan</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>360</td>
<td>360</td>
<td>4</td>
<td>1.44</td>
<td>Rice is the most favorable staple food in this region. They eat it every day.</td>
</tr>
<tr>
<td>Noodles</td>
<td>50</td>
<td>50</td>
<td>7.9</td>
<td>0.4</td>
<td>Vermicelli is the least expensive noodle. They usually have it at breakfast 3-4 times per week.</td>
</tr>
<tr>
<td>Potato</td>
<td>47</td>
<td>44</td>
<td>4</td>
<td>0.19</td>
<td>Potato is the least expensive root and tuber.</td>
</tr>
<tr>
<td>Pumpkin</td>
<td>24</td>
<td>21</td>
<td>1.36</td>
<td>0.03</td>
<td>Pumpkin is the least expensive starchy vegetable.</td>
</tr>
<tr>
<td>Tofu (firm)</td>
<td>35</td>
<td>35</td>
<td>4</td>
<td>0.14</td>
<td>Tofu is the least expensive bean product.</td>
</tr>
<tr>
<td>UHT milk</td>
<td>83</td>
<td>83</td>
<td>10</td>
<td>0.83</td>
<td>Price for a box of milk, which contains 200ml (206g) *16 packages. Approximately, an adult consumes 2 and a half packages per week and a child consumes half a package per day. UHT is the least expensive liquid milk, and local people didn’t like milk powder.</td>
</tr>
<tr>
<td>Chicken eggs</td>
<td>56</td>
<td>49</td>
<td>9.6</td>
<td>0.53</td>
<td>Chicken egg is the least expensive egg. This is on average one egg per day.</td>
</tr>
<tr>
<td>Pork (lean)</td>
<td>72</td>
<td>72</td>
<td>28</td>
<td>2.02</td>
<td>Lean pork is less expensive meat. This is on average six meat meals per week.</td>
</tr>
<tr>
<td>Silver carp</td>
<td>72</td>
<td>44</td>
<td>9.8</td>
<td>0.71</td>
<td>Silver carp is the least expensive fish. Local people</td>
</tr>
</tbody>
</table>
## Living wage report for urban Chengdu with focus on hi-tech manufacturing

<table>
<thead>
<tr>
<th>Food items&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Grams purchased&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Grams edible&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Cost per kg RMB&lt;sup&gt;e&lt;/sup&gt;</th>
<th>Cost RMB&lt;sup&gt;f&lt;/sup&gt;</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetable 1</td>
<td>129</td>
<td>102</td>
<td>3</td>
<td>0.39</td>
<td>Least expensive green leafy vegetable in each market used for vegetable 1. (瓢儿白)</td>
</tr>
<tr>
<td>Vegetable 2</td>
<td>130</td>
<td>105</td>
<td>4</td>
<td>0.52</td>
<td>Second least expensive green leafy vegetable in each market used. Here, it is bok choy.</td>
</tr>
<tr>
<td>Vegetable 3</td>
<td>110</td>
<td>92</td>
<td>3.16</td>
<td>0.35</td>
<td>Least expensive non-green leafy vegetable.</td>
</tr>
<tr>
<td>Fruit</td>
<td>153</td>
<td>90</td>
<td>4</td>
<td>0.61</td>
<td>Bananas are the least expensive fruit.</td>
</tr>
<tr>
<td>Cooking oil</td>
<td>34</td>
<td>34</td>
<td>10</td>
<td>0.34</td>
<td>Local people prefer coiza oil and use a lot of oil when they cook.</td>
</tr>
<tr>
<td>Sugar</td>
<td>20</td>
<td>20</td>
<td>6.56</td>
<td>0.13</td>
<td>White sugar used as it is less expensive than brown sugar. And local people don’t like sweet tastes.</td>
</tr>
<tr>
<td>Tea</td>
<td>1</td>
<td>1</td>
<td>50</td>
<td>0.05</td>
<td>Local people, especially men, like to have a cup of tea during workouts.</td>
</tr>
<tr>
<td><strong>Total of above</strong></td>
<td></td>
<td></td>
<td></td>
<td>¥8.67 ($1.32)</td>
<td></td>
</tr>
<tr>
<td><strong>Total with 22% miscellaneous food costs</strong></td>
<td></td>
<td></td>
<td></td>
<td>¥10.57 ($1.61)</td>
<td></td>
</tr>
</tbody>
</table>
6.3 Food prices

6.3.1 Collecting Food Prices

To estimate the cost of our model diet, we collected food prices from places where workers typically shop. In this way, we are able to ensure that the cost of our model diet would reflect the actual prices that workers pay for different food items.

We visited two large open-air fresh food markets (including eight vegetable vendors, four meat vendors, three fish vendors, two chicken vendors and five fruit vendors) and one supermarket around the industrial park. All these sites are places where workers typically shop for food and were identified through interviews with workers. We purposely visited markets during the times workers typically shop for food. Generally, food sold in open-air markets is fresher than food sold in the supermarket. So, food prices were relatively lower in the supermarket than in the open-air market. Almost all foods are sold by weight. Figure 5 shows the overall environment of the open-air market. And Figure 6 demonstrates prices of green leafy vegetables in supermarket.

We collected prices for a range of foods that workers tend to purchase for daily life, the prices of which were certainly of different quantities and qualities and varied from different sellers. We assumed that workers buy the least expensive food items of acceptable quality in food groups available in a store. For each seller we visited, we took down the lowest price per...
kilogram for relatively less expensive food items in every food group. For example, we planned to include two green leafy vegetables in our model diet, so we took down two kinds of least expensive green leafy vegetables at each vegetable vendor we visited. Then we put all these records together, and took those that are most frequent on the list as the representative of its food group to form our model diet. To mimic the workers consuming behavior, we decided to use the median of prices observed in different vendors for food items in our model diet. Also, due to the market competition and convenient transportation, the lowest prices of certain food types with certain quantities and qualities didn’t differ too much among vendors in the same open-air market. When collecting food prices, we also assumed workers who receive a living wage have sufficient funds to purchase large quantities of rice, cooking oil, milk. Price per kilogram for many items is relatively high when purchased in small quantities. As a result, rice was assumed to be purchased in a 5 kg bag and cooking oil in bottles of 5 liters.

We assumed that workers mainly cook and eat at home. This is important because quantities typically bought by workers mainly depend on whether they live together with family members (those workers who live together with family members tend to cook more frequently than those who live alone), and whether they have enough time to cook (workers told us they didn’t have time to cook when they need to work overtime), and whether they have other more convenient methods for having meals (workers who worked in factories with refectories told us they always had lunch and sometimes dinner at factory refectories to save time). The price was RMB 8 per meal on average to ensure sufficient nutrition and calories for a typical lunch, which is substantially higher than cost (RMB 4.2\(^8\)) of lunch eaten at home. Even though our model diet is nutritious and consistent with workers’ dietary preferences and relatively low in cost, the food costs estimated using our model diet is lower than the cost of food at factory refectories.

\(^8\) We assumed workers consume 40% of the food they need per day at their lunch, so the cost of lunch at home will be 0.4*10.57=4.2.
6.4 Seasonality of Food Prices

Another thing needing to be clarified is seasonal fluctuation in food price. We collected all prices in August, which implicitly assumes that these prices are indicative of prices over the year. To determine if August prices are reasonably representative of prices throughout the year, we referred to papers about the volatility of food price in China. According to a published paper from Zhao Jiang (“The Price Fluctuation of Fresh Agricultural Product in China and Price Regulation Policy Recommendations”), we learned that in China, the grain prices remain stable throughout the year while the prices of fresh agricultural products fluctuate with the season. We further determined that on average the prices of fresh agricultural products in August are 2% higher than the average price throughout the year. However, the general price index can be easily influenced by a few goods whose prices change a lot during the study period, and regardless of the season, food included in our model diet are always the least expensive items in season in each food group. For these reasons, we think the 2% difference between prices in August and the average price can be ignored when it comes to the food cost for our model diet which always includes least expensive food in season and therefore the food cost of our model diet in August can represent the cost throughout the year. So, we do not make adjustments of food prices for seasonality.

Last, to be in accordance with the concept of a nutritious low-cost diet, soft drinks, candy or cakes were not included in our model diet.
7. HOUSING COSTS

Our housing costs were estimated by adding up costs of:

v. rent for a basic acceptable dwelling;
vi. utility costs (water, electricity, gas fee);

vii. routine repairs and maintenance.

We estimated housing costs for urban Chengdu as **RMB 830** per month-based on approximately **RMB 600** for rental equivalent value of housing, **RMB 190** for utility costs (including water, electricity and gas fee for a family of 3.5 people), **RMB 40** for routine repairs and maintenance as well as property management fees. How these estimates were determined is explained below.

### 7.1 STANDARD FOR BASIC ACCEPTABLE HOUSING

To estimate the cost for basic acceptable housing, it is necessary to set minimum standards for what is acceptable basic housing for our family size of 3-4 persons in urban Chengdu. This standard was based on: maximum number of persons per room to avoid being considered overcrowded housing according to UN-HABITAT (2007); minimum number of square meters of living space used for government-supported housing of low income families in Chengdu and for accommodation of workers in Chengdu; and need for electricity, protection from
elements in terms of floor, walls and ceiling, water, and sanitary facilities that meet what we feel are minimum decency standards for an upper middle income country like China in the 21st century, as well as consistent with current housing conditions in Chengdu.

Our housing standard includes:

- building in safe and reasonable location;
- cement or tile floor;
- durable earthquake-resistant cement walls;
- durable leak-proof cement roof;
- ceiling at least 2.8 meters at lowest point;\(^9\)
- sufficient number of windows for adequate lighting and ventilation (preferably 1 window per room);
- electricity;
- piped water inside the house;
- flush toilet inside the house;
- at least 2 potential sleeping rooms\(^{10}\);
- kitchen and bathroom;
- 48 square meters of living space (60 square meters of floor space); and
- located within a reasonable distance from workplace.

Data from the National Bureau of Statistics of China indicate our standards above are reasonable. For example, in 2013, all families in urban Chengdu had access to electricity and piped water in their house, 98.3% of them had flush toilets, and 73.9% had access to gas. However, the standards of living space are usually beyond most workers’ actual living conditions in Chengdu at present. From interviews, we learned that the majority of local workers live in crowded dormitories provided by employers. And those who rent houses outside of the factories also live in limited space in consideration of cost. For example, single

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\(^{10}\) According to UN-HABITAT (2007) and United Kingdom government standard in force since 1930s, housing requires at least 2 potential sleeping rooms (e.g. at least 1 bedroom and 1 living room) for a 3.5 person household to avoid being considered as overcrowded.

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workers usually rent a single room under 15 square meters, and 3 households may share about 90 square meters. Overcrowded dwelling conditions are common for workers in big cities like Chengdu. In our field survey, only some middle-level cadres had housing that met our decent standards. Despite being much better than current housing conditions for workers in Chengdu, our housing standard of 48 square meters of living space is very basic. It is slightly higher than the minimum housing standard in Chengdu for government supported low-rent housing for low-income families, because we expect that industrial manufacturing workers receiving a living wage should be in the low-middle-income group but not the low-income group.11

According to the standard for low-rent housing in Chengdu (2011), floor space should be more than 16 square meters per capita. Taking into consideration that around 20 percent of area’s for housing in multistory buildings is for walls and apportioned common areas such as stairwells, hallways and elevators, 56 (16*3.5) square meters of floor space means approximately 45 (56*0.8) square meters of living space, which is just 3 square meters lower than our standard for living space.

### 7.2 Rent for basic acceptable housing

To get an idea about rent for basic acceptable housing in urban Chengdu, we: (i) interviewed more than 10 workers about their housing conditions and costs, (ii) consulted 2 real estate agencies in the area, (iii) visited 2 houses of workers and 5 houses for rent around the industrial park (since most workers’ houses were sub-standard, we mainly visited houses which met with our minimum standards and were available to rent), (iv) asked various key informants, including municipal authorities, about the local housing conditions and costs, and (v) looked at websites with leasing information about houses in this area for reference.

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Since the majority of workers are between 17-25 years old and usually single, most of them chose to live in a factory dormitory, and those we saw were definitely sub-standard. The living conditions of the dorms in the representative local factory is shown in Figure 7. According to our field survey, the accommodation in this factory is already above average compared to living conditions in other factories in this region. The factory charges each worker RMB 150 per month for accommodation. Workers living in dorms share one big room of 30 square meters with 7 workmates, and sleep in bunk beds. The room looked even messier due to congestion. The workers shared toilets and bathrooms with residents on the same floor. There was no room for a kitchen. Obviously, it didn’t meet our housing standard.

The young single workers who rent a flat outside the factory tended to rent a small single room without a toilet or kitchen, in consideration of cost. Obviously, this kind of flat was not up to our housing standard either. According to workers we spoke with, one single room without a toilet and kitchen rents for RMB 200-400 per month.

For those who can afford a higher rent, there were also hotel-style apartments that meet with our minimum housing standards for reference homes. Usually, this kind of flat is located in communities with complete modern utilities and equipped with around 45-55 square meters of living space, a flush toilet, a kitchen, a bathroom, and a big room acting as living room as well as a bedroom (big enough to be divided into a small living room and a bedroom with a curtain or other things). There were supermarkets, restaurants, and other domestic installations within 500 meters. The lowest rent we found for this kind of flat without any furniture or electronic appliances was RMB 600 per month. Figure 8 indicates the image of this kind of house. And a picture of this flat is shown in Figure 9.
Considering the interest of young workers for the above-mentioned flat, the local land agent preferred to construct the hotel-style flat rather than the standard flat with 4 rooms (1 living room, 1 bedroom, kitchen and bathroom). It’s difficult to find the standard flat in this area, and hence it is more expensive for this rare house type. Figure 10 provides an example of this kind of flat. The flat is 58 square meters of living space with one living room, one bedroom, one kitchen, one toilet and one small room that can act as another bedroom. The landlord also provided household appliances (including a bed, a sofa, a television, air conditioner, a refrigerator and a washing machine). The rent for this flat is RMB 900 per month.
The house shown in Figure 11 was rented by a worker who accepted our interview. This house has living space of 49 m², with a private bathroom and kitchen. And it is only 1 km away from his factory. The landlord supplied a television, air-conditioner, washing machine, bed, sofa, and a closet. The worker pays RMB 900 per month for all of these things.
Table 2 indicates information for the cost of rented housing in urban Chengdu that we got from local workers and real estate agents. Among the 15 houses listed in table 2, 7 houses were visited, and workers described the other 8 houses in detail.
Table 2: Example of cost of rented housing units

<table>
<thead>
<tr>
<th>Housing Number</th>
<th>Visited?</th>
<th>Acceptable standard?</th>
<th>Rent pm (^a) in current RMB</th>
<th>Size (^c&amp;) rooms</th>
<th>Comments</th>
<th>Distance to Workplace (^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No</td>
<td>No</td>
<td>200</td>
<td>15 sq m, 1 room</td>
<td>Crowded. Tiny rooms. Public toilet near the house. No kitchen. Bed and chairs provided by landlord.</td>
<td>10 mins' walk (1500m)</td>
</tr>
<tr>
<td>2</td>
<td>No</td>
<td>No</td>
<td>300</td>
<td>20 sq m, 1 room</td>
<td>Crowded. Public toilet around the house. No kitchen. Bed and chairs provided by landlord.</td>
<td>3 mins' walk (500m)</td>
</tr>
<tr>
<td>3</td>
<td>No</td>
<td>No</td>
<td>400</td>
<td>25 sq m, 1 room</td>
<td>Crowded. Tiny rooms. Shared living room, bathroom and kitchen with 2 other households living in the same flat. Bed and chairs provided by landlord.</td>
<td>6 mins' walk (1000m)</td>
</tr>
<tr>
<td>4</td>
<td>No</td>
<td>No</td>
<td>450</td>
<td>20 sq m, 1 room</td>
<td>Shared living room, bathroom and kitchen with roommate. Furniture (including bed, sofa, washing machine, television, kitchenware etc.) provided by landlord.</td>
<td>9 mins' walk (1500m)</td>
</tr>
<tr>
<td>5</td>
<td>Yes</td>
<td>Yes</td>
<td>600</td>
<td>49 sq m, 1 room (big enough to be divided into 1 LR and 1 BR), K, Bath</td>
<td>House in fair to good condition. Complete community supporting facilities near the house. No furniture except for closet and flush toilet.</td>
<td>3 mins' walk (500m)</td>
</tr>
<tr>
<td>6</td>
<td>No</td>
<td>Yes</td>
<td>700</td>
<td>49 sq m, 1 LR, 1 BR, K, Bath</td>
<td>House in fair to good condition. Simple furniture including bed, chairs and closet provided by landlord. Complete community supporting facilities near the house.</td>
<td>3 mins' walk (500m)</td>
</tr>
</tbody>
</table>
## Living wage report for urban Chengdu with focus on hi-tech manufacturing

<table>
<thead>
<tr>
<th>Housing Number</th>
<th>Visited?</th>
<th>Acceptable standard?</th>
<th>Rent pm a in current RMB</th>
<th>Size &amp; rooms</th>
<th>Comments</th>
<th>Distance to Workplace b</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Yes</td>
<td>Yes</td>
<td>700</td>
<td>53 sq m, 1LR, 1BR, K, Bath</td>
<td>Old building. Simple furniture including bed, chairs and closet provided by landlord. Balcony.</td>
<td>3 mins' walk, (500m)</td>
</tr>
<tr>
<td>8</td>
<td>Yes</td>
<td>Yes</td>
<td>750</td>
<td>50 sq m, 1LR, 1 BR, K, Bath</td>
<td>House in fair to good condition. Complete community supporting facilities near the house. Bed, chairs, closet, and an old television provided by landlord.</td>
<td>8 mins' walk (1300m)</td>
</tr>
<tr>
<td>9</td>
<td>Yes</td>
<td>Yes</td>
<td>800</td>
<td>53 sq m, 1LR, 1 BR, K, Bath</td>
<td>House in good condition. Complete supporting facilities around the house. New furniture including sofa, bed, washing machine, television provided by landlord.</td>
<td>15 mins' walk (2500m)</td>
</tr>
<tr>
<td>10</td>
<td>No</td>
<td>Yes</td>
<td>900</td>
<td>58 sq m, LR, 2 BR, K, Bath</td>
<td>House in good condition. Full set of home appliance (including two beds, washing machine, air-conditioner, LCD television, refrigerator, kitchenware) provided by landlord.</td>
<td>15 mins' walk (2500m)</td>
</tr>
<tr>
<td>11</td>
<td>Yes</td>
<td>Yes</td>
<td>900</td>
<td>48 sq m, 1 room (big enough to be divided into 1 LR and 1 BR), K, Bath</td>
<td>Building with elevator. Furniture (including bed, an old television, air-conditioner, water heater, washing machine and kitchenware) provided by landlord.</td>
<td>6 mins' walk (1000m)</td>
</tr>
<tr>
<td>12</td>
<td>Yes</td>
<td>Yes</td>
<td>1,000</td>
<td>49 sq m, 1 room (big enough to be divided into 1 LR and 1 BR), K, Bath</td>
<td>New building with elevator. Very good condition. Complete community supporting facilities near the house. Furniture (including bed, closet and an old sofa)</td>
<td>3 mins' walk (500m)</td>
</tr>
</tbody>
</table>

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Living wage report for urban Chengdu with focus on hi-tech manufacturing

<table>
<thead>
<tr>
<th>Housing Number</th>
<th>Visited?</th>
<th>Acceptable standard?</th>
<th>Rent pm (^a) in current RMB</th>
<th>Size (^c) &amp; rooms</th>
<th>Comments</th>
<th>Distance to Workplace (^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Yes</td>
<td>No</td>
<td>1,000</td>
<td>60 sq m, 1 LR, 2 BR, K, Bath</td>
<td>Old building. House in fair condition. Furniture (including television, air-conditioner, water heater, one piece of old sofa) provided by landlord.</td>
<td>2 mins' walk (300m)</td>
</tr>
<tr>
<td>14</td>
<td>Yes</td>
<td>Yes</td>
<td>1,100</td>
<td>62 sq m, LR, 2 BR, K, Bath</td>
<td>New building with elevator. House in good condition. Furniture (including beds, sofa, refrigerator, air-conditioner, television) provided by landlord.</td>
<td>15 mins' walk (2500m)</td>
</tr>
<tr>
<td>15</td>
<td>No</td>
<td>Yes</td>
<td>1,200</td>
<td>68 sq m, 1 LR, 2 BR, K, Bath</td>
<td>New building with elevator. Very good condition. Balcony. Good ventilation. Full set of new furniture (including beds, sofa, refrigerator, washing machine, air-conditioner, television, water heater) Exquisite decoration.</td>
<td>5 mins' walk (800m)</td>
</tr>
</tbody>
</table>

Notes:
Dwellings in this table meet the standards of safety, durable structure, access to safe water and a sanitary toilet, adequate lighting, adequate ventilation and other facility requirements. Living space is the main critical concern of acceptable housing in our survey.
\(^a\) pm indicates per month. \(^b\) LR indicates living room. BR indicates bedroom. Bath indicates bathroom. K indicates kitchen. \(^c\) Size is measurement of living space.

Since RMB 600 is the lowest rent for an acceptable apartment and an apartment charging RMB 900 is well above our minimum standard, we made a judgment to set the monthly rent for acceptable housing at RMB 600. After discussions with local real estate agents, we reconfirmed that RMB 600 is the minimum cost to rent an apartment meeting our standards.
7.3 Utilities and other housing costs

Utility and other housing costs also need to be estimated. This includes the cost of electricity, water and gas for cooking. This also includes the cost of minor repairs and maintenance as well as property management fees.

Utility costs were estimated by asking workers, key informants and real estate agents how much is typically spent for various utilities. Based on information received from 14 workers, we estimated the total utility cost as RMB 230 per month for the reference family. It included RMB 110 per month for electricity, RMB 30 per month for gas, RMB 50 per month for water and property management fees together with minor repair and maintenance cost of RMB 40 per month.

We checked this estimated cost with 3-4 people households investigated, and found it was proper. This represents around 5.9 percent of our estimated living costs for a living wage which is reasonable. This is only slightly higher than around 4.7% paid for electricity and water and other services according to the expenditure weights of urban residents in Sichuan published in China Statistical Yearbook 2013. This comparison implies that our estimates of electricity and water costs are reasonable.

7.4 Summary of housing costs

Our estimate of housing costs is RMB 830 per month (consisting of RMB 600 for rent, RMB 190 for electricity, water and gas fees, RMB 40 for property management fees and routine maintenance). This represents around 21.6% of our estimated cost for a decent life for a reference size household in Chengdu, which is much higher than the 8.1% indicated in Sichuan Statistical Yearbook 2014 for lower middle-income families in urban areas and slightly higher than 17% indicated as the share of residence expenses in the Consumer Price Index (CPI). But it (21.6%) is very close to the 22.7% of the housing cost of total living cost indicated in China Yearbook of Household Survey 2014. These differences can be explained. The 8.1% indicated in Sichuan Statistical Yearbook 2014 covered many residents who owned their houses of which the rent would not be counted, so 8.1% is a substantial underestimate. And 17% (the share of residence expense in CPI) has long been challenged by many scholars as too low comparing with the real-life. Only the 22.7% from China Yearbook of Household Survey 2014 that considered imputed rent for houses owned by residents could be taken as a proper reference, so we think that our 21% is reasonable.

121.6% = 830/3846*100%.
8. NON-FOOD AND NON-HOUSING COSTS

The total for all non-food and non-housing costs is estimated at RMB 1,541 per month, which is 1.37 times the food cost. This covers clothing and footwear; household facilities, articles and services; alcohol, medicine and medical service; transportation and communications; recreation, education and cultural services; miscellaneous commodities and services such as insurance, bank services, funeral burials and personal care. How we arrived at this estimate of non-food and non-housing costs for our living wage is explained below.

Non-food and non-housing costs were estimated in three steps. First, non-food and non-housing costs were estimated based on current expenditure patterns (using urban household income and expenditure data from Sichuan Statistical Yearbook, 2014). This approach, which relies on Engel’s law,\(^\text{14}\) is simple and it provides a first ballpark estimate of non-food and non-housing needs. It avoids having to make a long list of needs and then find the cost for each of these. It is worth noting that this simple approach is often used to estimate living wages (see Anker 2011 review) and poverty lines (Anker, 2006b). Also note that there is no attempt in step 1 to ensure that decency is achievable in this estimate of non-food and non-housing costs. Step 2 eliminates expenditures that we feel are unnecessary for a decent standard of living (e.g. tobacco). Step 3 looks more carefully at important expenditure groups such as health care, education, transportation and communication to evaluate whether available funds estimated in step 2 are sufficient for decency, and adds additional funds for these when required to ensure adequate funds for decency.

For step 1, we deviate from the typical approaches used to estimate poverty lines and living wages that estimate all non-food costs in one go. We divide non-food needs and costs into two components: housing, the cost of which is based on normative standards for decent housing (see previous section), and all other non-food and non-housing needs. It is only the latter that is estimated using a variant of Engel’s law. This is done using household expenditure data for urban areas from the Sichuan Statistical Yearbook, 2014.

According to the Sichuan Statistical Yearbook, 2014, lower middle-income urban households in Sichuan Province, which is the target group that workers receiving a living wage should be expected to be relevant, spent 44.1% of household expenditure on food, 8.1% on housing, and 47.7% on all other expenditures in 2013. Therefore, the ratio of non-food and non-housing expenditure to food expenditure is 1.08 for urban Sichuan according to these data.

For step 2, we made the three small adjustments that have been made in Anker methodology living wage studies in other countries before using the ratio indicated in the previous paragraph. We (i) excluded funds for tobacco because we do not feel it is necessary for

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14 Engel’s law is from 1857 and states that the percentage of total expenditure that households spend for food decreases as household income increases (see Anker 2011a).
decency,\textsuperscript{15} (ii) excluded funds for alcohol from food cost and put it into non-food and non-housing cost, and (iii) took into consideration that meals away from home reduce the need to prepare food at home.\textsuperscript{16} Taking these three adjustments into consideration increased the ratio of non-food and non-housing expenditure to food expenditure from 1.08 to 1.31. We used this ratio of 1.31 to make a preliminary estimate of non-food and non-housing costs for our living wage.

Because blind use of the typical extrapolation method in steps 1 and 2 (even after separately estimating housing costs using a normative standard) has the possibility of replicating poverty levels found in urban Sichuan, we introduce a step 3 where below we look specifically at whether funds included for health care, education, transportation and communication are sufficient, because these are necessary in workers’ life. Note that we implicitly assume that other non-food and non-housing expenditures are not critical to decency and so funds indicated by the extrapolation method are sufficient (or that families could use part of the 10% provided for emergencies and support for parents for minor discretionary spending if this is felt to be necessary). Based on the following in-depth examinations of health care, education and household furnishings and equipment, we raised the ratio of non-food and non-housing expenditure to food expenditure from 1.31 to 1.37 (see following sections).

\textbf{9. POST CHECKS OF NON-FOOD AND NON-HOUSING COSTS}

\textbf{9.1 Health care post check}

Our preliminary estimate of funds for health care included in our estimate of non-food and non-housing costs from step 2 was approximately RMB 178 per family per month. To get an idea if RMB 178 for health care is sufficient, we estimated the actual cost for health care based on papers, statistical data, and discussions with workers.

It was reported that more than 99% of the resident population in Sichuan Province was covered by basic health insurance in 2014.\textsuperscript{17} All workers we interviewed told us that they, as well as other workers in the same factory, were covered by urban employees’ health insurance system (UEBMI). We noticed that there were public hospitals and community health service centers located in or near the industrial parks, which facilitated timely medical services for workers. So, we assume that public health care in Chengdu is acceptable for decency, in particular for major health problems and hospitalization. And when confronted with health

\textsuperscript{15} Since expenditure for tobacco is not indicated in Sichuan Statistical Yearbook 2014, we use data from China Statistical Yearbook 2013 to estimate the ratio of tobacco cost to total living cost (1.9%) and reduced the total living expenditure from Sichuan Statistical Yearbook 2014 by 1.9%.

\textsuperscript{16} We assumed that 50% of the cost of meals away from home in household expenditure data is for the food in these meals and 50% is for profits and services such as food preparation, cooking, serving and cleaning.

problems, most workers in Chengdu mainly rely on urban employees’ health insurance system, especially for major problems and hospitalization. We learned from government websites that a worker insured by UEBMI could receive 80% of reimbursement of his or her medical expenses and a child insured by basic medical insurance could receive 70% of reimbursement of his or her medical expenses.  

Though the average reimbursement of 75% is obviously an attraction, workers don’t always go to public hospitals when they get sick. For one reason, there are many limitations in the scope of medical insurance reimbursement in UEBMI. Only fees incurred in certain hospitals can be reimbursed by the insurance. For another reason, it usually takes a considerable amount of time to wait in line for health care at designated hospitals. For workers, loss of a workday means missing the attendance bonus. So, for minor and routine health problems, workers usually seek medical advice or buy over-the-counter (OTC) medications from private clinics where fees are usually not covered by health insurance. Private clinics are always available in and near the industrial parks.

To get an idea of the extent to which the RMB 178 per month included in our living wage for health care is sufficient, we estimated possible health care costs to families based on information on medical costs. According to Sichuan Statistical Yearbook 2014, health care cost RMB 766 per person per year for lower-middle income households in 2013. For a family with 3-4 people, the cost was RMB 223 per month – which is 25% higher than RMB 178 included in our living wage for health care. Since the data from Sichuan Statistical Yearbook 2014 covered many aged residents who spent considerable amounts on health care, which substantially increased average health care cost, we thought the amount included in our living wage can cover the health cost of the reference family with 2 adults and 1.5 children, and so decided not to make an adjustment for health care.

9.2 Education post check

China’s educational system has 6 years of primary school (beginning at age 6), 3 years of junior high school and 3 years of senior high school. Tuition fees were abolished for primary school and junior school education in China in 2008 in order to enhance opportunity and reduce barriers to education amongst the poor. Consequently, enrollment rates for primary and secondary school in Chengdu are very high (100% and 99.94%, respectively). Almost all children from low and middle-income families attend a public school rather than a private school, because the cost of private schools is much higher than that of public ones.


Therefore, we assume workers who receive a living wage always use public schools for their children. And it is feasible for children of non-native permanent residents (such as most workers) to apply for public schools in Chengdu when their parents can provide the required documents. However, only few workers interviewed have their children study in Chengdu. They told us that it was a saving of time, labor and money to rely on the children’s grandparents to take care of their children in rural areas. Regardless of this, we felt it reasonable that a living wage should support a decent life in which children in our reference family could study and live with their parents. So, we still estimated education cost for a reference family with 1.5 kids in Chengdu, using information from official documents.

Although students from first grade to ninth grade can enjoy the compulsory education without paying any tuition fees, they still have to pay for their school books, learning materials, stationary, outings and other miscellaneous fees. Note that school uniform costs are included under the clothing expenditure group and transportation costs to school are included under the transportation expenditure group in China’s household expenditure statistics.

According to household expenditure data from Sichuan Statistical Yearbook 2014, 6.8 percent of expenditure of the medium-low income households (20-40% percentile of the income distribution) is spent on education. This implies approximately RMB 194 per month (RMB 2,328 per year) is included in our preliminary NFNH estimate for education. This is probably reasonable for a family with 1.5 children with 1 child in primary or secondary school and the remaining “0.5 child” less than primary school age in our living wage. Because tuition fees for kindergarten increase costs for education on average, the implied amount for education included in NFNH cost does not appear to be excessive.

We checked this with information from workers with children in the living wage study in Chengdu and they felt it can generally cover education costs for a family with 1.5 children. We decided not to adjust funds included in our living wage for education.

9.3 Transportation and communication post check

Transportation and communication costs account for the third largest cost for households in China and is an important cost for households at all income levels. Most workers in urban Chengdu commute by public means.

To help estimate the necessary transportation costs for workers living near a factory, we (i) collected information about the cost of transportation to the nearest town by bus; (ii) collected information about the cost of transportation from where they work to their home area; and (iii) made assumptions on the number of visits the workers and their families would make to the local town and their home area that would be “necessary for decency”.

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Local workers and key informants were asked how much it costs per person for a bus trip from where they live to the nearest town. RMB 4 return was the most common costs mentioned. And the cost of transportation from their workplace to their hometown was usually between RMB 20 and RMB 300 round trip, depending on distance.

We also made assumptions about what could be considered to be a reasonable number of trips to town per month for workers and their families, since they need to go to town to shop, visit doctors, visit banks, have time off for entertainment, etc. So, we made the following assumptions for trips to the local town: (1) once per week per adult to the nearest town for shopping, entertainment and variety of reasons such as visits to bank and doctors, and (2) twice per month for children to go to the nearest town for various reasons. What’s more, we also assumed that workers and their families visit their home area (mostly in Sichuan Province) twice a year during major festivals. These assumptions work out to a total approximate cost of RMB 137 per month for the transportation for a reference family.

For communications, we were told it usually cost RMB 50 to RMB 100 per adult per month to pay for their cellphone bills and RMB 600 for one year for broadband service. (We were told that all families purchased broadband service in this region.)

In light of the above, total cost for transportation and communication for the reference family is approximately RMB 337. The amount of funds per month implicitly included in our preliminary non-food and non-housing (NFNH) estimate for transportation and communication was around RMB 267 per month per family. This means that transportation and communication funds included in our preliminary estimate cannot cover the actual cost for workers family. So, we decided to increase NFNH by RMB 70.

10. PROVISION FOR UNEXPECTED EVENTS, PARENTAL SUPPORT, AND TO ENSURE SUSTAINABILITY

Since large unforeseen expenses (such as illnesses, accidents, funerals, weddings etc.) can quickly throw workers living at a basic lifestyle into poverty and debt from which they may not be able to recover, it is common when estimating a living wage to add a small margin above the cost of a basic quality life to allow for unexpected events. It is also typical to include some additional funds to allow for some discretionary spending. Margins of 5 and 10 percent are common.

First, to be consistent with living wage reports of other countries we add a 5% margin to allow for unforeseen emergencies and some discretionary spending. Second, in view of the special conditions in China, we add another 5% margin to our estimate of living wage in Chengdu. The special conditions we refer to are the strong family links in China, especially in rural areas.

21 \( 137.3 = (1\times4\times2+2\times1.5\times4+160\times3.5\times2)/12 \).
22 \( 337 = 137+75\times2+600/12 \).
23 \( 70 = 337-267 \).
where adults are expected to provide economic support for their elderly parents and send cash gift to their relatives and friends who have big events (such as a funeral, a wedding, an illness, etc.). So, we add another 5% margin (for a 10% margin in total) to allow for unforeseen emergencies and some discretionary spending and some assistance to family members and in particular parents. This works out to be RMB 350 per month. Note that interest and debt payments are ignored in our calculations. We assume that a living wage would enable workers to stay out of crippling debt.
SECTION III
LIVING WAGE FOR WORKERS

11. FAMILY SIZE NEEDING TO BE SUPPORTED BY LIVING WAGE

Living wage is a family concept. This is clearly shown by the comprehensive ILO review of living wages (Anker, 2011). It is, therefore, necessary to determine an appropriate family size for urban Chengdu that workers would typically need to support on their wage. We used 3.5 persons (two adults with 1.5 children) as our reference family size based on practical experience and statistical information.

To help in deciding what family size would be appropriate, we referred to: (i) total fertility rate (TFR), which is an estimate of the number of children women typically have over their life at present, and (ii) average household size of families with 2+ members.

Although total fertility rate is available for different areas and population groups for Sichuan Province, including the Chengdu area, we used the data for the whole province as our reference, in consideration of the fact that the majority of local workers are from every part of the Sichuan province. According to the data of the Sixth National Population Census, TFR for Sichuan Province appears to be around 1.25 for the whole province. And readers should note that TFR in 2010 according to the Sixth National Population Census has been criticized by scholars as less than its real rate. Average household size can also be estimated from the Sixth National Population Census. Average household size for households with 2+ members is around 3.37 for the whole province. But one important thing needing to be noted is the fact that most industrial manufacturing workers came from relatively undeveloped rural regions where it is considered superior to live with a big family. So, rural families usually have more members than average households in the province and we thought a family size of 3.5 - which is slightly higher than the 3.37 average household size for households with 2+ members in Sichuan Province - is not unreasonable.

What’s more, information from workers we spoke to showed that either one child or two children is very typical among married workers. Based on all this information, we feel the assumed size of 3.5 persons (two adults with 1.5 children) as our family size for the living wage estimate is appropriate.

12. NUMBER OF FULL-TIME EQUIVALENT WORKERS IN FAMILY PROVIDING SUPPORT

Considering living wage is a family concept, it is appropriate to expect that more than one adult in a family can provide support through work in a typical family that includes two adults.

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24 According to the Sixth National Population Census, there were 25,794,161 households in Sichuan Province in 2010 including 4,523,874 households with 1 member. And there was a population of 76,207,174 in all these households. So, we could calculate the average size for households with 2+ members as 3.37.
Living wage report for urban Chengdu with focus on hi-tech manufacturing

The most common assumptions used for this in previous living wage studies are 1 worker or 2 workers per family (see Anker, 2011 review), neither of which are reasonable assumptions.

To determine a reasonable estimate of the equivalent workers per family in order to estimate a living wage for workers in urban Chengdu, we gathered data on labor force participation rates (LFPR), and unemployment rates from government websites and publications. First, we assumed that an industrial manufacturing worker is employed full-time. This means that it is only necessary to estimate the likelihood that the worker’s spouse/partner is working full-time. ILO reports labor force participation rates (LFPR) by age and sex for 5-year age groups for all of China in 2015, and the LFPR for ages 25-59 is 89.2%25. Urban registered unemployment rate is 4.1% for urban China in 2014. But it is known that registration systems significantly understate actual unemployment. The unemployment rate in China averaged 10.9% in 2002-2009 using a more reliable and nationally representative household survey26. We decided to use 10.9% as our unemployment rate here. We did not have data on the rate of part-time employment, so we used 5% for our part-time employment assumption. With the above statistics, it is possible to estimate the likelihood that a person is working. It came out as 77.5 percent (i.e. 89.2 x [1-10.9%] x [1-0.5x0.05])27. This implies that 77.5 percent of spouses/partners are employed full-time on average, and therefore there are on average 1.78 full-time equivalent workers per family for industrial workers.

13. TAKE HOME PAY REQUIRED AND TAKING TAXES AND MANDATORY DEDUCTIONS FROM PAY INTO ACCOUNT

Mandatory taxes that are deducted from pay need to be taken into consideration, because workers need to receive sufficient take home pay to afford a decent life.

In Chengdu, insurances, including pension, medical, unemployment, disability, and maternity, are compulsory for all workers except for undocumented workers. We had to determine the applicable social insurance base and the proportion paid by workers (we don’t need to consider the proportion paid by employers here) for our living wage estimate. Based on official documents about social insurance, it’s proper to use the actual wages of workers as the social insurance tax base28. The proportion paid by individuals is 9% (8% for pension and 1% for unemployment)29.

25 Average LFPR for ages 16-59 in Chengdu in 2010 was 75.33% according to a published paper, but we don’t use this value, because many 15-24 year olds in China are still in school and so out of the labor force, which will result in underestimation of the real labor force participation rate for ages 25-59.


27 Average proportion of full-time work per adult = Average adult labor force participation rate x (1.0 - unemployment rate) x (1.0 - 0.5 x part-time employment rate). For more details, see Anker and Anker (2017).

28 社会保险基数是指职工在一个社保年度的社会保险缴费基数。是按上年 1-12 月申报个人所得税的工资、薪金税项的月平均额来进行确定。

In addition to insurances, workers in Chengdu must pay another portion of their income into the Public Housing Fund as housing provident funds to be eligible for low-interest loans, while their employers also contribute. In Chengdu, the proportion paid by individuals is set as 9% of their wage.

Taken together, 18% of wage as mandatory deductions was taken into consideration to make sure workers would have sufficient take home pay.\textsuperscript{30}

\textsuperscript{30} Note that unlike UIF, income tax is not paid at the level of our living wage estimate.
SECTION IV

ESTIMATING GAPS BETWEEN LIVING WAGE AND PREVAILING WAGES

14. IN-KIND BENEFITS

In-kind benefits provided by factories can reduce the amount of cash income that workers require to ensure they receive a living wage. For this reason, it is reasonable to take into consideration the value of some free in-kind benefits when determining if workers receive a living wage. At the same time, it is necessary to be careful in valuing in-kind benefits as partial payment of a living wage to avoid it being abused or resulting in a dependency wage.

To help determine which free in-kind benefits are reasonable to consider as partial payment of living wage, as well the value of such benefits, ILO conventions and national practices from around the world were used. ILO conventions 95 and 99 (ILOLEX, 2013) allow for in-kind benefits to be considered partial payment of wages if they “are either customary or desirable because of the nature of the work”, and if they are “appropriate for the personal use and benefit of the worker and his family.” And, “The value attributed to such allowances (should be) fair and reasonable.”

To be considered as partial payment of living wage in this report, in-kind benefits needed to be: (i) regular (so workers could count on receiving benefit); (ii) considered of value by workers; (iii) customary in that a reasonable percentage of factories provide the benefit and workers receive it; and (iv) worth at least around RMB 200 per year to avoid being too petty. To be considered as partial payment of the living wage, the benefit also had to meet minimum standards of decency.

To estimate the value of in-kind benefits as partial payment of living wage, the following general guidelines were used. Value for any particular in-kind benefit could not: (i) exceed the employer’s cost, in order to prevent employer from “profiting” on providing in-kind benefits; (ii) exceed replacement cost to workers if they had to provide or purchase this on their own; (iii) exceed 15% of the living wage. Furthermore, the total value for all in-kind benefits could not exceed 30% of the living wage. Limits were placed on the value of in-kind benefits as partial payment of the living wage so that the cash payment of a living wage remains high and workers maintain the option to choose how to spend most of their wages. The principles of choice and self-determination are important. Note that it is common for national minimum wage law to set limits.

Another thing worth noting is that it is common for factories to provide permanent workers with free or low-cost dormitories, free or low-cost meals, and free transportation to nearby towns on weekends. Not surprisingly, there are considerable differences in forms and values of in-kind benefits between factories.
14.1 Value of housing subsidy as partial payment of living wage

It is common for employers in urban Chengdu to provide accommodation for their workers. However, it is never free. In most circumstances, workers have to pay RMB 100-150 per month for accommodation provided by employers. For example, we learned that one of the largest factories in this region charged workers RMB 150 per month per worker for accommodation. Dorms provided by the factories were rarely up to our decency standards, and the best dorm accommodation we found in this region is a single room of 30 square meters shared by 8 workers. This room comes without a kitchen and bathroom and the rent is RMB 150 per worker per month which is equivalent to RMB 1,200 per month in total. But, according to our field survey, apartments of the same condition on the market usually rent for only around RMB 500 per month at most. Put in this light, factories can even make a profit from providing accommodation to workers, so we decided not to include accommodation as an in-kind benefit.

14.2 Value of transportation in-kind benefits

Some factories in this region provide their workers with free transportation to work. Factory vehicles pick up workers from fixed points generally near to where workers typically live and bring them to the workplace. This service is a win-win program, for it provides convenience for workers as well as guarantees that workers arrive to work on time. Figure 12 shows the bus of a local factory.

Although the commuter bus arranged by the employer is safe and comfortable, this benefit has little significance to the workers. From interviews with workers, we learned that: firstly, most workers lived in the dormitory inside the factory and they didn’t need this service at all. Secondly, workers who lived away from the factory prefer to walk or ride to the factory on their own because it’s more flexible. Thirdly, since most workers live near their workplace, usually within a 15 minutes ride from where they work, walking and riding are the most common means of transportation. Even if workers take the commuter bus to work, that won’t save them much money because they still have to buy a bike or an e-bike for use on their days off. Since this service is more favorable for employers and of little value to most workers, this item is not included as an in-kind benefit.
Figure 12: The commuter bus of a local factory

14.3 Meals as partial payment of living wage

Generally, local factories have dining rooms inside the plants, but meals are not free for workers; they are not even discounted. Taking one of the largest manufacturing plants in this region as an example, we learned from interviews that workers need to pay RMB 3 on average for breakfast and lunch and supper would cost RMB 8 to ensure sufficient nutrition and calories. If workers cook and eat the same meals at home, we estimate using our model diet it would only cost RMB 2.1 for breakfast and RMB 4.2 for lunch and supper. Some workers said that even compared with outside restaurants, there is no benefit on price and quality in their dining rooms. It is their forced decision to not go out to eat due to the limited time for the noon break. Since workers do not benefit in terms of cost from this service, food supplied by dining rooms is not considered as an in-kind benefit.

14.4 Cash allowance as partial payment of living wage

In general, we decided not to take in-kinds benefits into consideration for our living wage partly because of: (i) lack of detailed data that would allow us to consider such benefits and (ii) the finding that the value of common in-kind benefits to workers is low and sometimes even negative. Neither do we take cash allowances into account because of a lack of information on this. On the one hand, workers couldn’t figure out which part of their income was from cash allowances. In addition, we didn’t hear much about cash allowances from workers. Cash allowances are expected to increase wages by a fairly small amount in general. When comparing our living wage to other wages, we will remind readers to note the connotation of wages to help understand wages compared in this report.
15. LIVING WAGE IN CONTEXT AND COMPARED TO OTHER WAGES

Table 3 at the end of this report provides a summary for calculation of the living wage per month. We estimated that the gross living wage was RMB 2,634 per month. It is useful to compare our living wage to other wage indicators to get an idea of the extent to which our living wage is relatively high or low. This is done in a wage ladder in Figure 13.

15.1 Minimum wage in Chengdu

Even though Chengdu raised its minimum wage to RMB 1,500 per month for full-time workers and RMB 14.6 per hour for part-time workers on July 1, 2015, it still ranks in the lower half of 34 provinces and cities in China. It is expressly stated that the minimum wage of RMB 1,500 includes the social insurance charge and housing provident funds and excludes overtime pay, subsidies under special working conditions, cash allowances, and in-kind benefits, as well as other fees outside the minimum wage under law.

Our living wage is 1.75 times the current minimum wage in Chengdu. The wage implied by the minimum living security line in Chengdu for 201531 (RMB 983) and the wage implied by the World Bank's $3.1 and $6.2 a day poverty lines (RMB 723 and RMB 1,446 respectively32) are even lower than the current statutory minimum wage in Chengdu. Our living wage is 80% of the Asian Floor Wage, which is suggested by Clean Clothes Campaign for the garment industry, and is often referred to by certifiers and multi-national companies. The latest value posted online is RMB 3,847 for 2015.

15.2 Prevailing wages for factory workers in Chengdu

According to our field survey, basic wages in this region did not differ very much for front-line workers in the same industry. However the total income of workers varied a lot depending on work available and possibilities for bonuses or overtime pay.

There is a wide range of bonuses and subsidies that workers receive in manufacturing factories. For example, workers who have never been late or absent from work or left early, can receive a full-attendance bonus of RMB 100 per month. Overtime pay constitutes a major source of income for workers. Workers earn 1.5 times their regular pay when they work overtime on weekdays, which is common during peak periods for factories. To restrain costs, factories prefer to increase overtime work on weekdays rather than weekends or legal holidays, because twice or three times regular pay is required for work on these days.

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31 Minimum living security line for Chengdu for 2015 is RMB 500 per person. This was multiplied by 3.5 family size and divided by 1.78 full-time workers per family to get an implied wage.

32 We applied the adjusted poverty line and rural/urban adjustments of 2011 PPPs for China (Ferreira, F. H. G., et al., 2015). The urban PPP is 3.9 in 2011. And a second poverty line of $3.10 in 2011 PPPs has also been proposed as the comparable equivalent to the previous $2 a-day poverty line in 2005 PPPs, commonly used as a poverty line for middle-income countries.
From a survey report on a representative factory in this region, we learned that incomes for most workers in this industry are mainly composed of a basic wage and an overtime wage. The survey found that although the legal limit for overtime in China is 36 hours a month, manufacturing workers still regularly exceeded it by wide margins. The survey also reports that during high season for manufacturing, workers, on average, work 80 hours of overtime per month. Taking both slack season and peak season into consideration, industrial manufacturing workers log in 58 hours of overtime per month on average, equal to working 3 hours of overtime on 19 weekdays per month. In light of the above information, we can get a rough estimate of workers’ actual income at RMB 3,629, which is composed of average basic wage (RMB 2,272) and overtime payment (RMB 1,357). We discussed this with local workers and they told us that they usually earn RMB 5,000-6,000 in high season for production when working overtime is the norm and only a basic wage of RMB 2,000-3,000 in the slack season when there is no need for overtime work. And they thought the average actual income of RMB 3,629 per month is a reasonable estimate.

Our living wage estimate is lower than workers’ actual income including overtime, equivalent to only 72.6% of the latter, especially when overtime pay is common for workers employed in the manufacturing industry. The only thing to note here is that our living wage definition requires that wages are to be earned within normal work hours and without overtime.

15.3 Other income index in Chengdu

According to an announcement published by the Sichuan Bureau of Statistics, the average cash wage for employment in all units was RMB 4,306 per month, and RMB 3,809 for employment in manufacturing in Chengdu in 2014. Our estimate of living wage is 61.2% of the mean wage of employment in all units and 69.2% of the mean wage of employment in the manufacturing sector.

15.4 Wage ladder

Figure 13 provides a wage ladder. It includes our living wage along with other wage benchmarks for comparison such as: statutory minimum wage, average wage for manufacturing industry in Chengdu for 2014; average basic wage in a representative factory in this region; average wage of employment in all units in urban Chengdu for 2014; minimum living security line (which can be regarded as urban poverty line and every city has its own line); and wages implied by $3.1 and $6.2 World Bank poverty lines, Asian Floor Wage, and our estimation of the prevailing wage of electronic workers in this region.

\[ \text{RMB 1,357} = \text{RMB 15.6} \times 1.5 \times 58 \text{ hours}. \text{ Regular hourly wage on weekdays is RMB 15.6.} \]

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41

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Figure 13: Wage ladder

Notes: The minimum living security line payments was derived from the notice published by the General Office of the People’s Government of Chengdu, September 27, 2014. The average basic wage in a representative factory was taken from “Foxconn Wage, Labor Hours and Business Management Status Survey Report in 2015”, issued on April 25, 2015. Average wage of employment in the manufacturing sector, and average wage of employment in all units in urban Chengdu are derived from an announcement published by Chengdu’s Bureau of Statistic, June 3, 2015. Asian Floor Wage was suggested by Clean Clothes Campaign for the garment industry and it is often referred to by certifiers and multi-national companies. For prevailing real income, average wage of employment in all units and average wage for the manufacturing industry in urban Chengdu in 2014, overtime pay is included and in-kind benefits are excluded. However, our living wage as well as statutory minimum wage and wages calculated from poverty lines neither include overtime pay nor take account of in-kind benefits.

15.5 Recent wage trends

It’s useful to observe wage trends in past years. Figure 14 indicates wage trends in the statutory minimum wage and in average wages over the past 9 years in Chengdu after taking inflation into consideration. Both have increased significantly in recent years. It is obvious that the real increase in the past 9 years in minimum wage (125%) has been greater than the real increase in average wage (85%). This is in part because average wages fell between 2006 and 2009.
Living wage report for urban Chengdu with focus on hi-tech manufacturing

Notes: Inflation has been taken into consideration by adjusting the figure by CPI (Consumer Price Index) in Sichuan Province. CPIs for 2006-2014 were gathered from the National Bureau of Statistics of China (NBS). Real wages are indexed to 2006. Data of average wage of employment in all units in urban Chengdu from 2006-2013 was gathered from NBS, and data for 2014 from Chengdu Bureau of Statistics (NBS). Data of the minimum wage in urban Chengdu were gathered from the websites of the Sichuan Provincial People’s Government.

16. CONCLUSIONS

Our living wage estimate for urban Chengdu of the net take home pay necessary is RMB 2,160 per month. This means that the 1.78 workers in our reference family have to get this amount of money per month to afford a decent life for themselves and their family. Our gross living wage estimate for urban Chengdu is RMB 2,634 taking into consideration mandatory deductions for taxes. This is 16% higher than average prevailing wage - without overtime - in Chengdu electronics factories, but at the same time this is 28% lower than typical wages when overtime is considered.

Although, the prevailing basic wage for manufacturing workers in Chengdu high-tech zones is lower than our estimate of a living wage for a basic but decent life, we heard from worker interviews that the basic wage was too low to cover the cost of a decent life. We think there were three reasons contributing to this feeling. First, what we called “decent life” may not be what the workers thought of as a “decent life”. This is entirely possible, because the idea of a living wage is that it represents a basic but decent lifestyle. In principle, it should represent a floor wage of what is acceptable. Many workers can reasonably have higher aspirations and expectations to live at a higher standard of living than a basic but decent standard. This is especially likely to be common in countries where the basic needs of all or almost all workers
have been met and exceeded. Urban China may be at this level of development. One example of this is that our estimation of a living wage assumes that workers’ families rent a house. But in traditional Chinese culture, workers believe that a decent life should include owning a house or apartment. The housing cost in our living wage estimation can definitely not cover a house purchase in Chengdu. Second, our assumption that all meals are prepared at home is not a realistic assumption for electronics workers in this region because there is so much overtime work and lunch breaks are too short to go home for lunch. For example, manufacturing workers in Chengdu usually have lunch in the factory canteen on workdays instead of at home and this increases food costs quite a lot compared to cooking all meals at home. However, this working lifestyle is a reluctant choice for workers under the time pressure of short lunch break. And the cost of meals away home is certainly higher than meals at home. Third, in China intra-generational and family ties are strong, especially in undeveloped rural areas where most workers we studied are from. Workers have to take a great proportion of their income to support their parents and children in their hometown. For these reasons, it is easy to understand why workers might think that our living wage would not cover the cost of a decent life for family of 3 or 4 persons.

Our living wage estimate is much higher than the statutory minimum wage in Chengdu (RMB 1,500) while they are much lower than the average wage for the manufacturing industry (RMB 3,809) and the average wage for staff and workers (RMB 4,307, 2014). These differences appear to be reasonable since considerable overtime work is common among manufacturing workers. Remember that our living wage should be paid without overtime. Meanwhile, we don’t include in-kind benefits in our living wage partly because the conditions of different factories vary too much but more importantly because the value of in-kind benefits for the workers appears to be low.

Considerable thought and effort was put into making our living wage estimate. It is based on a solid methodology; including the review of numerous national and international data sources; visits to workers’ homes and places where workers typically shop for food; and discussions with workers, industry managers, cooperative officials and others. This process also included the review of many papers, reports and statistics from researchers, government and international agencies. This effort was made, because we feel that transparency is essential for stakeholders and others to understand the basis for our living wage estimate as well as to feel that our estimate is solid and credible, regardless of whether or not it will be possible to pay this wage in full in the near future.

As indicated in this report, conservative assumptions were used to estimate our living wage. This means that our living wage is a conservative estimate and not overly generous. Firstly, our low cost nutritious model diet is basic for a major city in an upper middle-income country. Secondly, the standard we set for acceptable housing is basic for workers at around 48 square meters of living space with one living room, one bedroom, a kitchen and bathroom. At the same time, our housing standard is much better than what most manufacturing workers currently live in. Thirdly, we estimated non-food and non-housing (NFNH) costs using the ratio
of NFNH costs to food costs according the consumption structure of the lower-middle income households in Chengdu. Meanwhile, we assume that families rely on public transport, public schools (for children), and public medical service (with sometimes private clinics).

Finally, it is important that our living wage estimate is viewed in the context of present day Chengdu where the cost of living is high and the statutory minimum wage is much lower than our living wage; and workers have to earn their livelihood by working overtime, although the overall prevailing wage in Chengdu is not low nowadays compared to previous decades.

Table 3: Summary table for calculating living wage

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost in RMB</th>
<th>Cost in USD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PART I. FAMILY EXPENSES</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Food cost per month for reference family</td>
<td>1,125</td>
<td>176</td>
</tr>
<tr>
<td>Food cost per person per day</td>
<td>10.57</td>
<td>1.65</td>
</tr>
<tr>
<td><strong>2. Housing costs per month</strong></td>
<td>830</td>
<td>130</td>
</tr>
<tr>
<td>Rent per month for acceptable housing</td>
<td>600</td>
<td>94</td>
</tr>
<tr>
<td>Utilities and minor repairs per month</td>
<td>230</td>
<td>33</td>
</tr>
<tr>
<td><strong>3. Non-food non-housing costs per month taking into consideration post checks (no post checks adjustments made)</strong></td>
<td>1,541</td>
<td>241</td>
</tr>
<tr>
<td>4A. Additional funds for helping parents (5%)</td>
<td>175</td>
<td>27</td>
</tr>
<tr>
<td>4B. Additional for sustainability and emergencies (5%)</td>
<td>175</td>
<td>27</td>
</tr>
<tr>
<td><strong>5. Total household costs per month for basic but decent living standard for reference family</strong></td>
<td>3,846</td>
<td>601</td>
</tr>
<tr>
<td><strong>PART II. LIVING WAGE PER MONTH</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Net living wage per month, take home pay</td>
<td>2,160</td>
<td>338</td>
</tr>
<tr>
<td>6b. Living Wage per workday (1.78 full-time workers in family)</td>
<td>99.3</td>
<td>16</td>
</tr>
<tr>
<td>7. Mandatory deductions from pay</td>
<td>474</td>
<td>74</td>
</tr>
<tr>
<td><strong>8. Gross wage required per month for Living Wage (8) [8=6+7]</strong></td>
<td>2,634</td>
<td>412</td>
</tr>
</tbody>
</table>

Notes: In-kind benefits were not involved in our estimate. This issue could be of importance, but we lacked sufficient information about it.

RMB values were converted into dollars based on an exchange rate of RMB 6.4 to a dollar.

Table 4: Key values and assumptions for a living wage estimate

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<table>
<thead>
<tr>
<th>KEY VALUES AND ASSUMPTIONS</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location &amp; industry</td>
<td>Chengdu, China &amp; Hi-Tech Manufacturing</td>
</tr>
<tr>
<td>Exchange rate of local currency to USD</td>
<td>6.4</td>
</tr>
<tr>
<td>Number of full-time workdays per month</td>
<td>21.75</td>
</tr>
<tr>
<td>Number of hours in normal workweek</td>
<td>40</td>
</tr>
<tr>
<td>Number of workers per household</td>
<td>1.78</td>
</tr>
<tr>
<td>Reference family size</td>
<td>3.5</td>
</tr>
<tr>
<td>Number of children in reference family</td>
<td>1.5</td>
</tr>
</tbody>
</table>
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