

Study Casts Doubts on Apple's Ethical Standards:

Research on 1,261 pay stubs shows that Apple's protection of workers is false advertisement



February 24, 2016

Introduction

In 2013, China Labor Watch (CLW) began investigating the labor conditions of workers at Pegatron Corporation factories in China making products for Apple. In February 2015, CLW published a research report based on analysis of 96 pay stubs collected from workers of Pegatron Shanghai, discovering difference between the working hours which Apple publicly promotes and the reality on the production line.

This year, CLW collected 1,261 pay stubs from Pegatron Shanghai workers, 13 times as many as stubs as last year. The documents were gathered with the assistance of 18 Pegatron workers coming from 12 departments, who in turn collected pay stubs from workers of many other departments. Of the 1,261 pay stubs collected, 1,122 valid pay stubs were from the months of September and October 2015, which are in the busy season for iPhone production at Pegatron. Among those pay stubs, 1,035 were from October; in a factory of 70,000, the sample error is 1% at a 99% confidence interval.

CLW used data from the pay stubs, especially for the months of September and October, to calculate wages and working hours for Pegatron workers. Results of this research demonstrate that workers making Apple products continue to work tremendous amounts of overtime in order to make up for their minimum wage compensation. A worker surnamed Zhou told CLW, "When it is busy, we have to work very long hours and take only one or two days off each month. Sometimes we cannot stand it and ask for leave, but it's not granted." Another worker surnamed Zhang said "Wages aren't enough to live without overtime pay. I will quit if monthly wages drop below 4,000 RMB (\$612)."

This report seriously questions Apple's sustainability reporting. CLW's findings suggest severe discrepancies between what Apple tells the public and its investors about the working hours of workers making its products and the reality on the production line. The discrepancies in Apple's claimed working conditions and actual working conditions are important not only because they highlight problems in Apple's monitoring. The findings also clarify that despite being the most profitable company in history, Apple does not raise the bar to a commensurate level for workers making its products. They still earn minimum wage. They still depend on tremendous overtime to make ends meet.

The following are the primary findings of this report, followed by a summary, methodology, and a more detailed report.

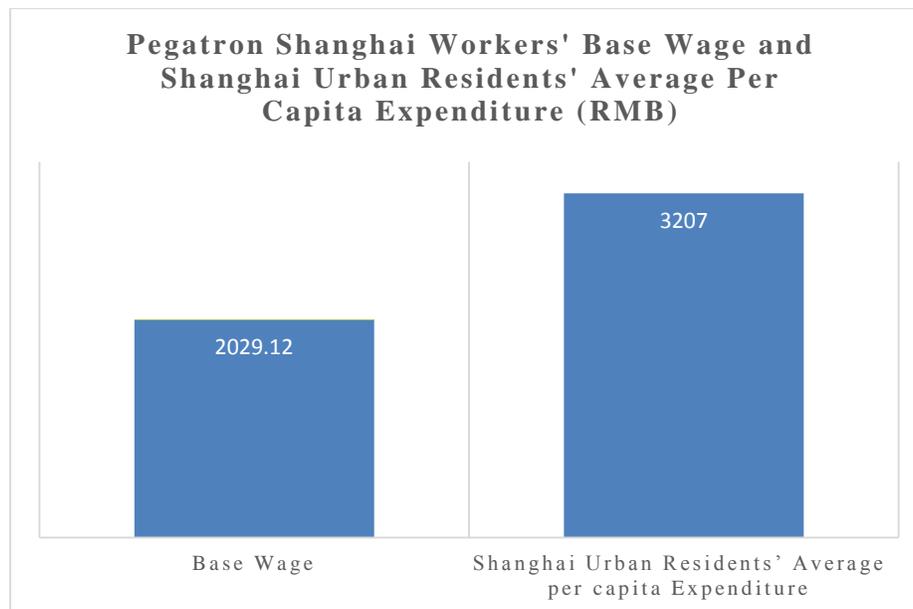
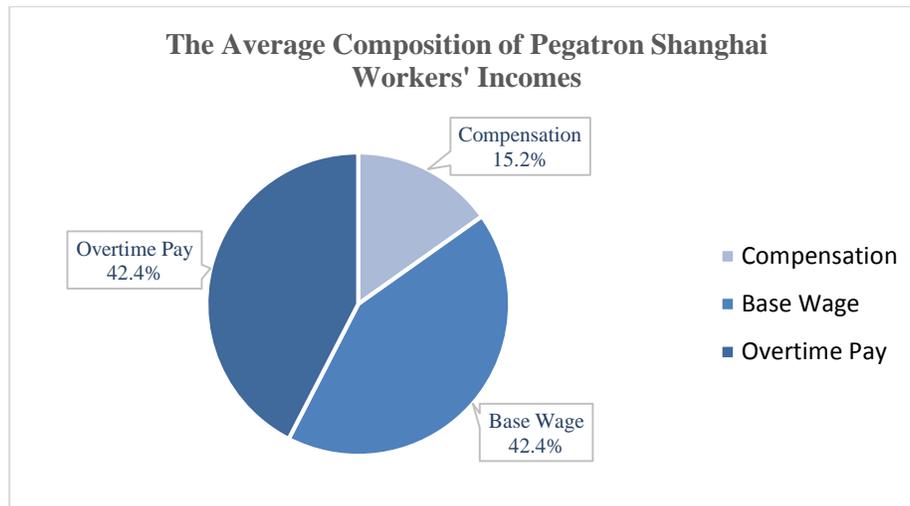
Primary Findings

- 1) Workers are paid at a rate of 1.82 USD/hour.
- 2) On average, overtime pay as a percentage of workers' gross wages is 42.4%.
- 3) Workers work more than 10 hours a day, 6 days a week. 83.8% workers' monthly overtime hours exceed 80 hours.
- 4) In October 2015, 71.1% of workers' average weekly working hours exceeded Apple 60-hour maximum limit.
- 5) Pegatron Shanghai workers must participate in an average of 15 minutes of mandatory pre- and post-shift meetings every day, or 90 minutes per week. If we assume that Pegatron Shanghai workers all have hidden, unpaid overtime, as CLW interviews suggest, then the total unpaid wages amount to US\$11.85 million
- 6) The total value of Tim Cook's stock growth up to February 2016 is equal to the combined annual base wages of 78,847 Pegatron workers.
- 7) The combined base wages of 1.6 million workers on Apple's supply chain only accounts for 2.6% of Apple annual revenues.

Report Summary

1. The base wage paid to workers on Apple's production line is too low, so workers need do excessive overtime work to support their lives in Shanghai.

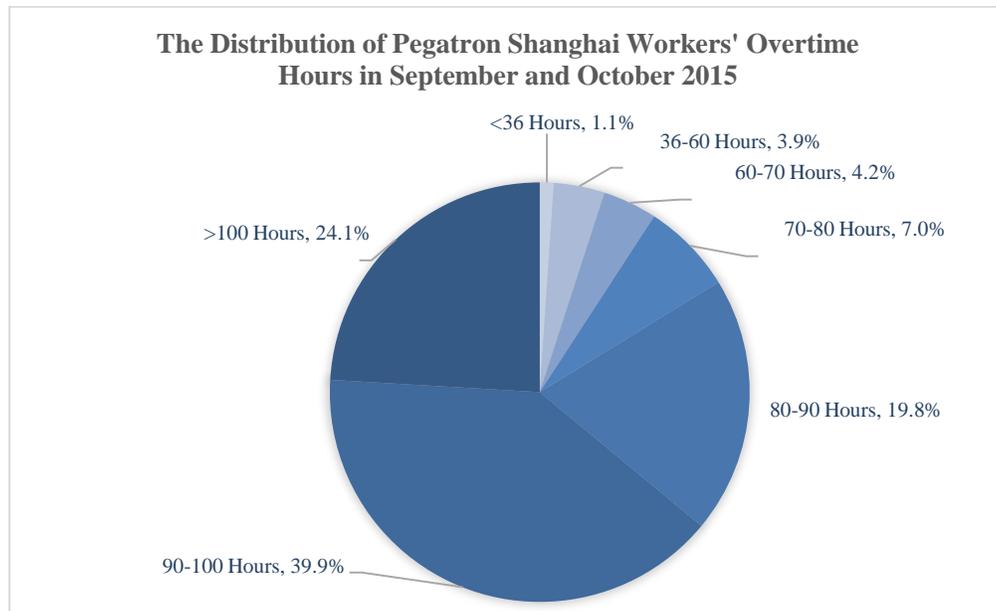
- Overtime pay as a percentage of workers' gross income is as high as 42.4%.
- The base wage (the local minimum wage) alone is not enough to meet workers' living expenses in Shanghai.



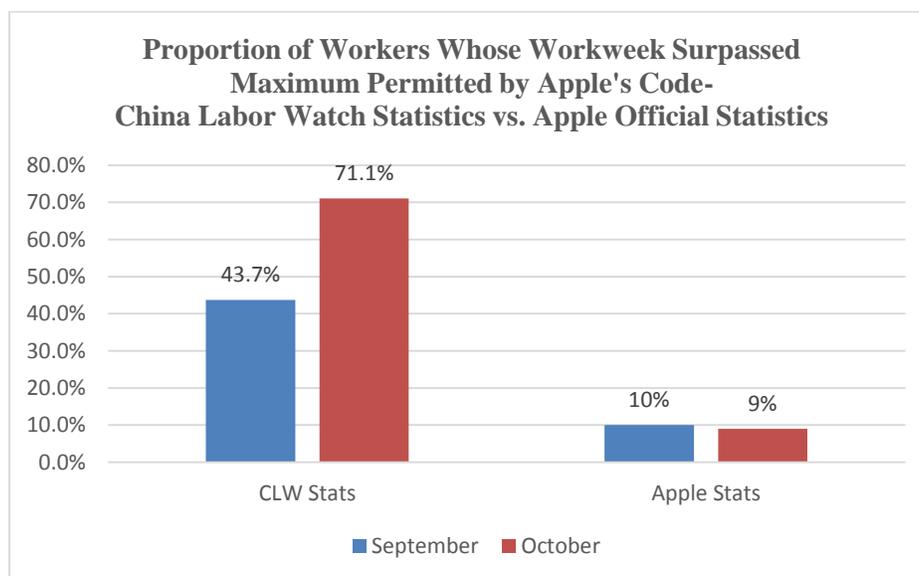
Note: According to Shanghai Statistic Administration's statistics, Shanghai urban residents' average per capita expenditure in 2014 was 2,543 RMB, but the housing expenses (253 RMB) do not include house purchases or construction costs. Most workers are residents of other regions and cannot purchase housing, so living expenses were replaced with rent of 917 RMB, the value of the average rent in Shanghai Pudong District (location of Pegatron facility). $2,543 \text{ RMB} - 253 \text{ RMB} + 917 \text{ RMB} = 3,207 \text{ RMB}$. Because the Shanghai Statistics Administration has not released the 2015 data yet, we used the 2014 expenditure data of Shanghai urban residents.

2. The weekly working hours and monthly overtime hours of workers on Apple's production line far exceed the upper limits set Chinese law as well as statistics published by Apple.

- Chinese Labor Law requires that monthly overtime hours not exceed 36 hours, but at Pegatron Shanghai, only 1.1% of workers' overtime hours are within this limit.
- In Apple's "Supplier Responsibility 2015 Progress Report", it is stated that in 2014, 92% of all workweeks were compliant with its 60-hour workweek standard set out by Apple. But according to pay stubs of Pegatron Shanghai workers in October 2015, 71.1% of workers' average weekly working hours exceeded this limit.



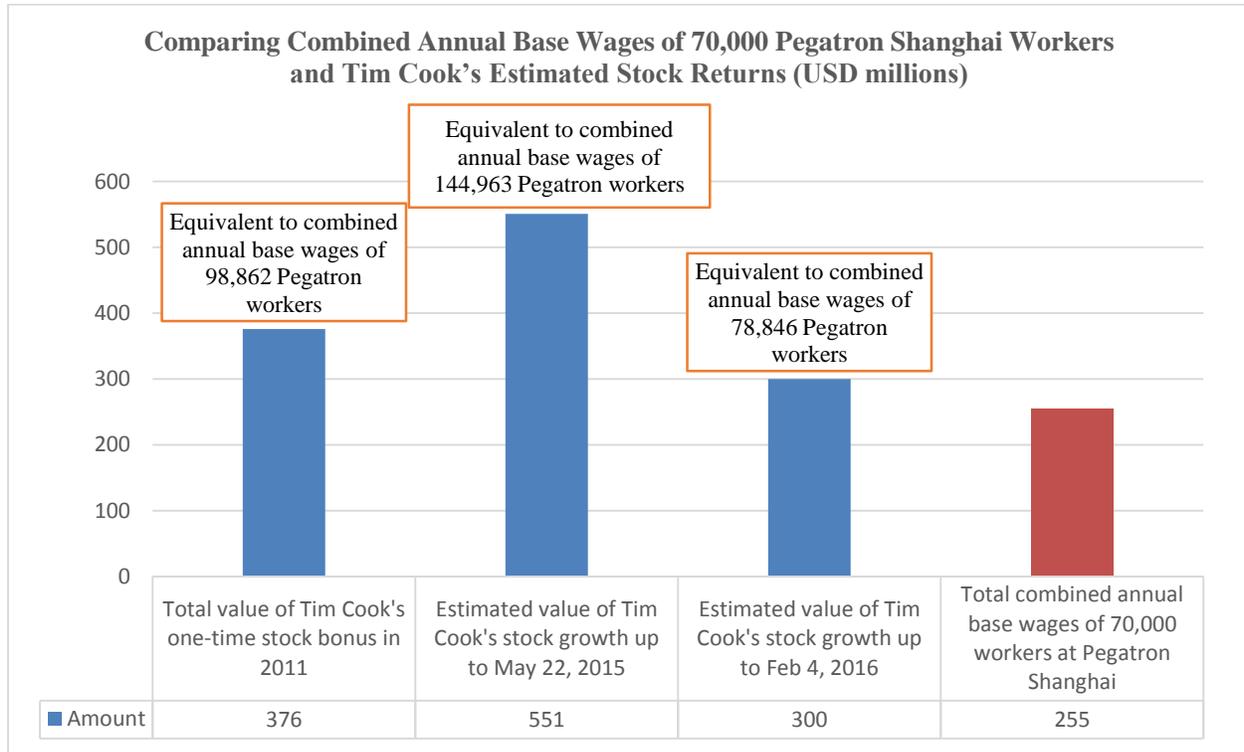
Note: 36 hours is the upper limit of overtime hours set by the Chinese Labor Law



Note: On the "Supplier Responsibility" segment of Apple's website, Apple has posted a record of working hours in its supply chain from September and October 2015. Because Apple does not provide specific percentages in the chart, the "10%" and "9%" provided here are CLW's conservative estimates. For details of Apple's statistics, please see Figure 2.2c.

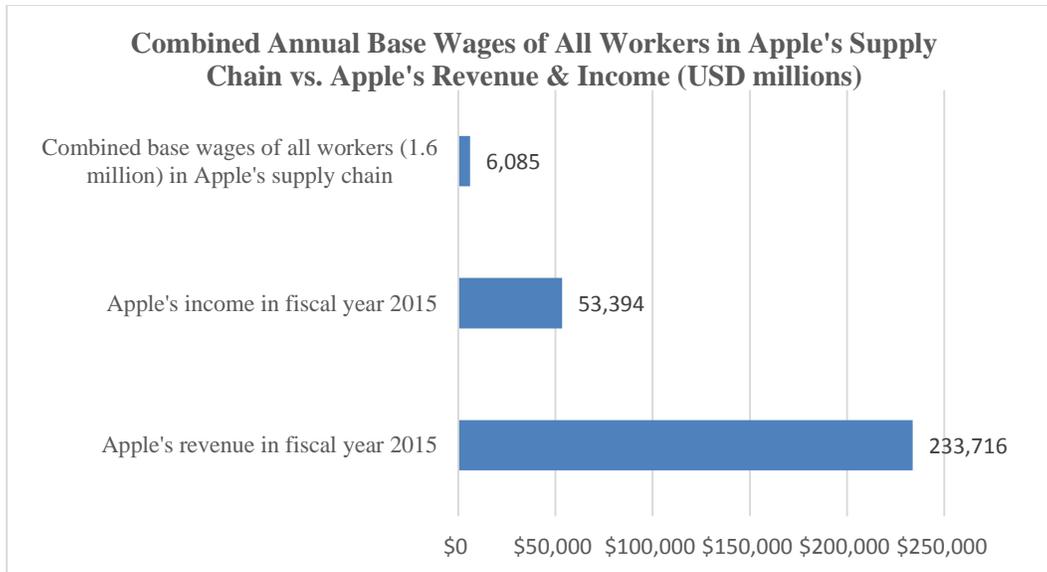
3. Apple's profit distribution is severely imbalanced; it must take more responsibility to improve labor conditions

- Tim Cook's stock bonus in 2011 was equivalent to the combined annual base wages of 98,862 Pegatron Shanghai workers, even though Pegatron only employs approximately 70,000 workers.¹
- Apple earns sufficient profits to improve labor conditions. But if we assume that all 1.6 million workers in Apple's supply chain (a number provided in Apple's official report) earn the same base wage as Pegatron workers (which is the local minimum wage in Shanghai), the combined annual wages of all 1.6 million workers only equals 2.6% of Apple's total revenue in fiscal year 2015. Apple's efforts to protect labor rights are very limited.



Note: Tim Cook's estimated stock returns are calculated according to Apple's stock price. The value of Tim Cook's stock growth at a given date is equal to: 376 million USD*stock price at given date/stock price on Aug 24 2011 - 376 million USD. For Apple's stock price, please refer to <http://www.msn.com/en-us/money/stockdetails?symbol=US:AAPL>.

¹ Base wage = gross income - overtime pay – compensation. In Pegatron Shanghai, the base wage is equal to the local minimum wage of 2020 RMB (US\$303/month, or 1.82US\$/hour). The average monthly gross income is 4895 RMB (US\$734).

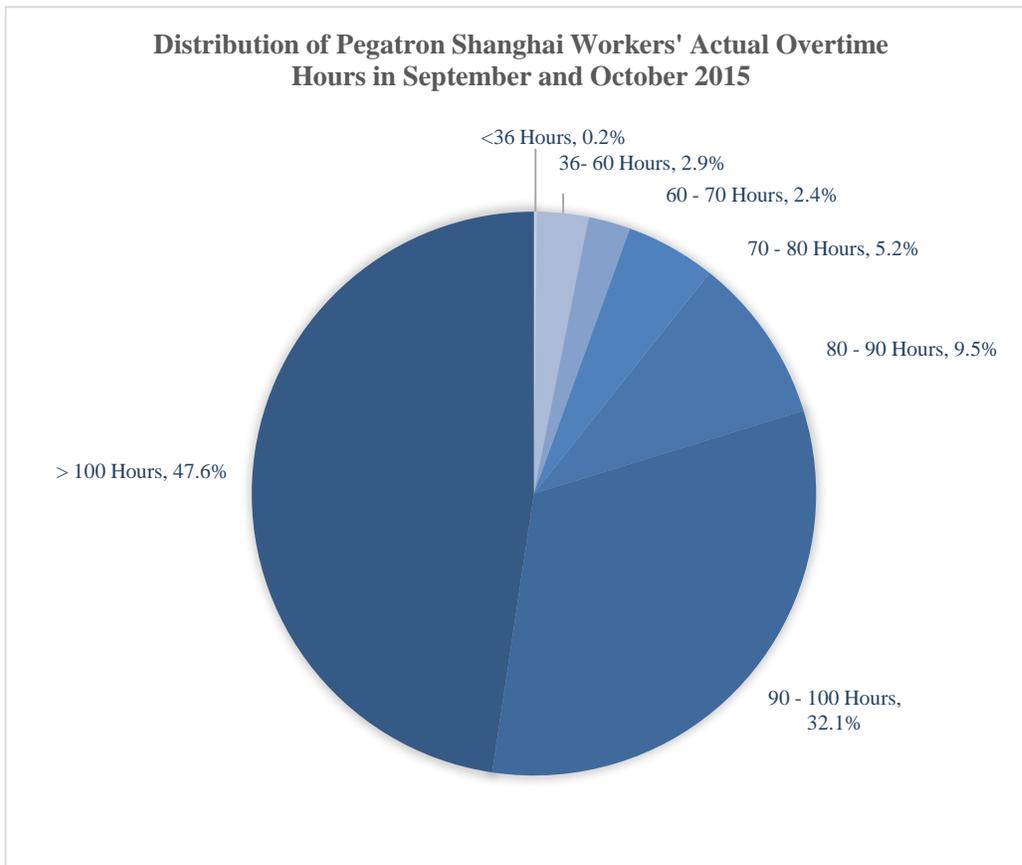


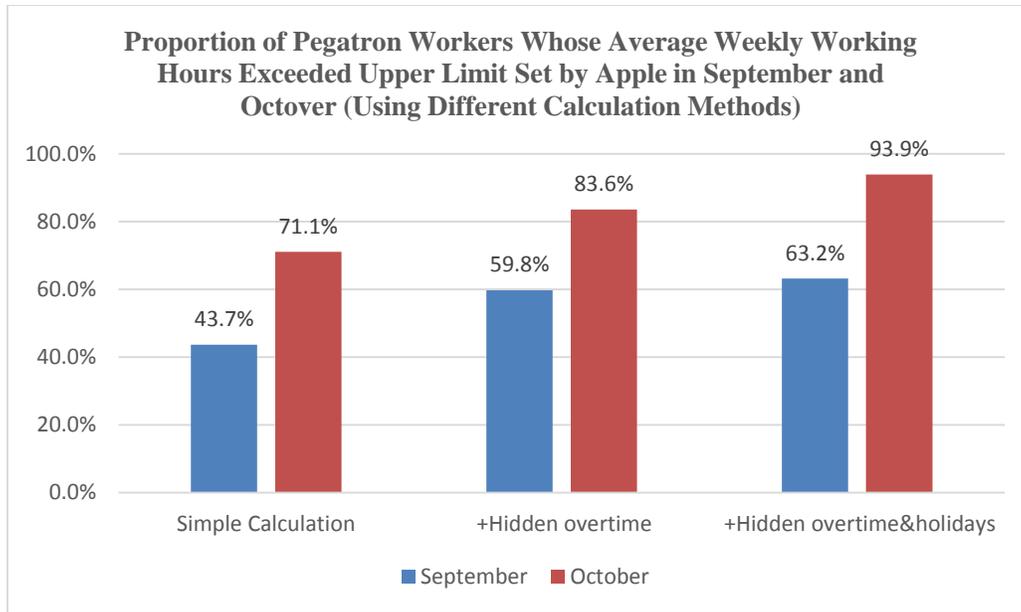
Note: The combined annual base wages of “all workers in Apple’s supply chain” is an estimate based on most (96.9%) Pegatron Shanghai workers’ individual annual base wage, 24,240 RMB, or \$3,803.

4. Workers’ Hidden Weekly Overtime Hours are Not Paid

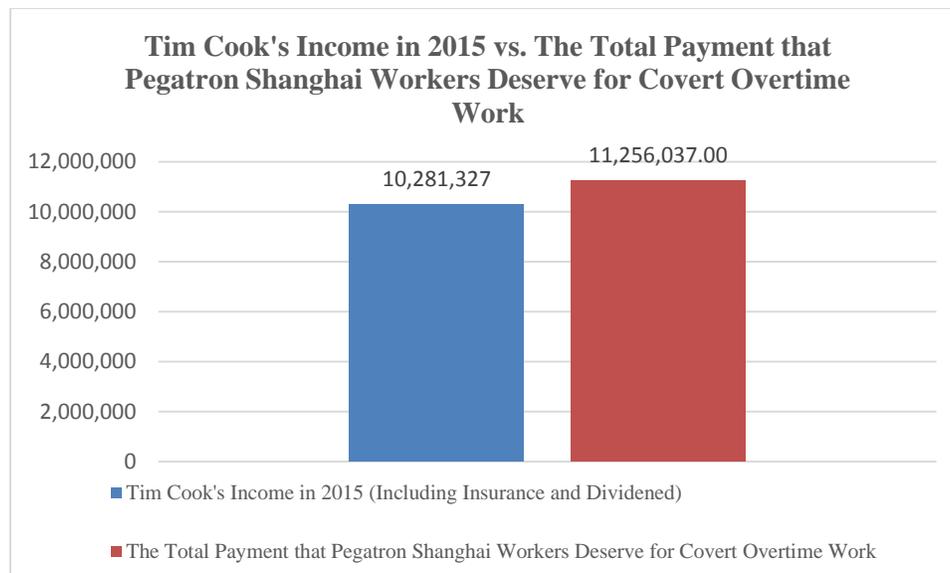
- According to CLW’s discussions with over 100 Pegatron workers and research on pay stubs in both September and October 2015, Pegatron Shanghai workers must participate in an average of 15 minutes of mandatory pre- and post-shift meetings every day, or 90 minutes per week. However, all of the workers interviewed expressed that the meetings are not included in their paid working time. Thus, workers’ actual weekly working time is 90 minutes (1.5 hours) longer than that written on their pay stubs.
- If we assume that Pegatron Shanghai workers all have hidden, unpaid overtime, as CLW interviews suggest, then the total unpaid wages amount to US\$11.85 million, greater than Tim Cook’s 2015 annual income. (Note that this estimate is calculated based on workers’ hidden overtime work in September and October 2015, which is the busy season.)
- One male worker surnamed Zhang said, “In many departments, workers have meetings in the morning and evening before and after their shifts. It is said that we begin working at 8 am, but the meeting and attendance check start at about 7:40 am. We have meetings after working too, and all these are not calculated in working hours.”

- Taking the 1.5 hours of weekly unpaid overtime into consideration, the real circumstance for excessive overtime work is shown in the figures below. Note that after including unpaid overtime, nearly none of the workers at Pegatron have monthly overtime hours at or below the maximum set out by Chinese labor law.





Note: “+ hidden overtime” includes the daily meeting time (15 minutes a day, or 1.5 hours a week) in the calculation of weekly working hours, so the actually working hours under this calculation are 1.5 hours longer than the those under “Simple Calculation”. “+ hidden overtime & holidays” takes into account both daily hidden overtime as well as national holidays in September and October. If we assume a 5 regular work days in a workweek, then the weekly working hours formula is equal to: monthly overtime hours/(statutory working days in this month/5)+40 hours+1.5 Hours.



Note: In Apple's fiscal year 2015 (September 27, 2014 to September 26, 2015), there are 248 statutory working days. Taking the 15 minutes of unpaid daily meeting time into account, each worker has 62 hours of annual hidden overtime work with an overtime wage of 17.4 RMB (\$2,61) per hour, or 1,078.8 RMB (\$162) of unpaid overtime wages per person for the entire year. Based on approximately 70,000 workers at Pegatron Shanghai workers, assuming all of them have unpaid hidden overtime hours, combined unpaid hidden overtime wages are 75,516,000 RMB, or \$11,848,460.

Methodology

With the help of 18 workers/investigators, China Labor Watch collected 1161 pay stubs from Pegatron Shanghai in November and December. The workers/investigators work at different departments, and the pay stubs include employees of different positions and in different departments. Among the 1161 pay stubs, 1121 of them are in September and October, and 1061 are in October. According to our research and analysis, we believe these pay stubs can to a certain degree reflect workers' wage and overtime work situation in Pegatron Shanghai. In addition to gathering pay stubs, China Labor Watch also conducted interviews with Pegatron workers.

Mingwei Liu (Associate Professor of Labor Studies and Employment Relations at Rutgers University) said the following about the methodology of this report:

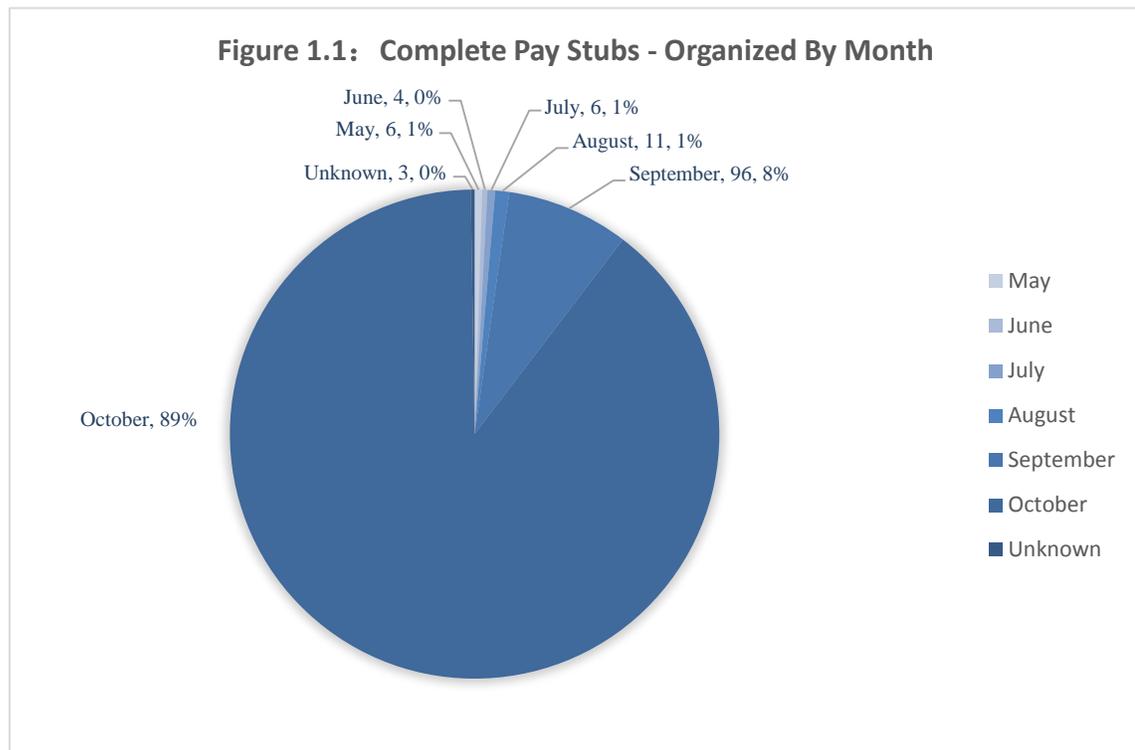
“Multinational companies' CSR audits have been widely criticized for their inaccuracy and ineffectiveness. The latest report of CLW on working conditions in Apple's supplier Pegatron further strengthens this criticism. The data collected by CLW are impressive. Although the workers were not randomly sampled, the investigation methodology is reasonable and in fact often used by researchers due to the lack of sincere cooperation of employers. In my view, the data have good quality and reliability and the findings are largely consistent with the existing literature on factory conditions in China. All in all, this report will help us better understand the reality of working conditions at the Chinese end of electronics supply chains.”

2015 Pegatron Shanghai (Apple's Supplier) Pay Stubs Research Report

1 Research Background, Data Collection and Processing

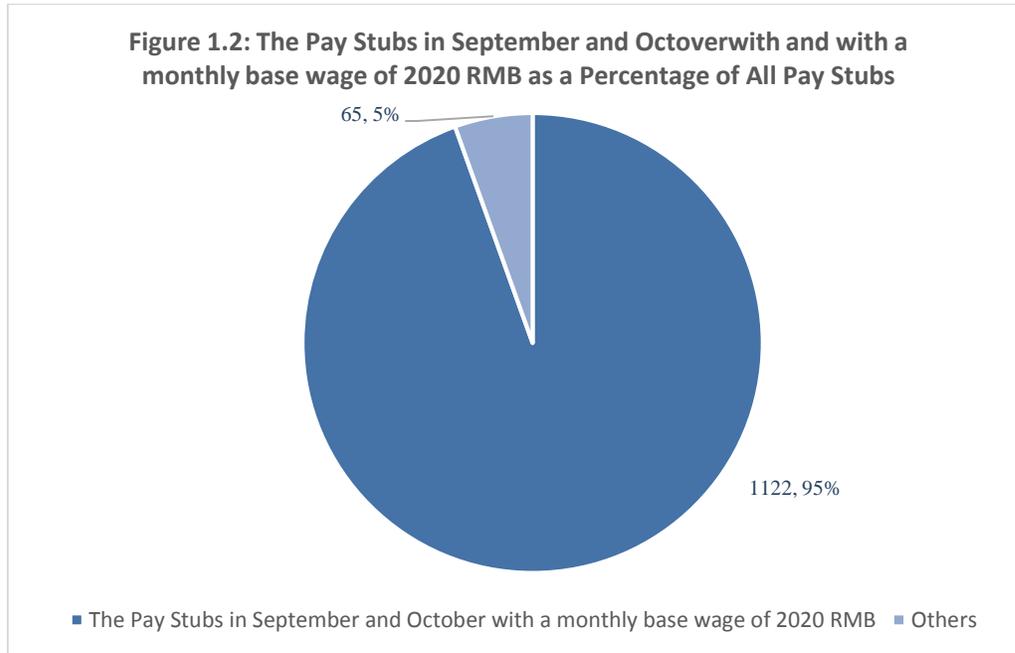
1.1 Research Background and Data Collection

1.1.1 Original Pay Stubs: In the 2015 research, CLW with the assistance of 18 workers, collected 1,261 Pegatron Shanghai workers' original pay stubs from January 2015 to October 2015. Please reference the Appendix for the raw data entered from original pay stubs. **Complete Pay Stubs:** Among the 1,261 original pay stubs, 1,187 of them contain clear and complete information of workers' full-month wages (namely base wage \geq 2020 RMB)², covering wage information from May 2015 to October 2015. The vast majority of these pay stubs are from September and October 2015, especially October 2015 (1,035 pay stubs). The distribution of pay stubs by month is shown in the graph below:



² According to Pegatron Shanghai's official website (<http://pegatron.com/Reception/add.aspx>), workers' monthly base wage is 2,020 RMB, the minimum wage in Shanghai. This indicates that those whose "base wages" are below 2,020 RMB have not worked for a whole month yet, and we have excluded them from the list of complete monthly pay stubs.

1.1.2 Pay Stubs with a Base Wage of 2020 RMB in September and October



Because Pegatron Shanghai’s official website only provides the hourly wage information of those whose base wages are 2,020 RMB, and because the vast majority of pay stubs that show a base wage of 2,020 RMB are in September and October (1,122/1,187=94.5%, see Figure 1.2), for the convenience of calculation, unless otherwise noted, all the numbers and calculations below are based on the 1,122 September and October pay stubs with a base wage of 2,020 RMB.

1.2 Calculation Methods of Hourly Wage and Overtime Hours

1.2.1 Hourly Wage Calculation: According to the calculation methods provided on Pegatron Shanghai’s official website, workers’ hourly overtime pay is calculated as follows:
 $2020 \div 21.75 \div 8 \times \text{overtime pay coefficient (1.5 on weekdays/2 on weekends/3 on holidays)}$. So the overtime pay rates are: **17.4 RMB/hour on weekdays, 23.2 RMB/hour on weekends, and 34.8 RMB/hour on holidays**, and we can infer from this that the regular hourly wage is $17.4 \div 1.5 = 11.6$ RMB

1.2.2 Overtime Hours Calculation: through the regular hourly wage mentioned above, we can infer the actual overtime hours (if workers are paid in accordance with the regular weekday wage). For the calculation progress, please refer to “Overtime Hours Calculation” on the *Attachment B: Calculation Process* page 2.4 the six lines on the right: the “Monthly Overtime Hours” is the sum of Weekday Overtime Hours, Saturday Overtime Hours, and Holiday Overtime Hours; “Average Weekly Overtime Hours” equal to the product of 7 and Monthly Overtime Hours divided by the number of days in that month. “Average Weekly Working Hours” equal to “Average Weekly Overtime Hours” plus “Monthly Base Hours” (5×8=40 Hours).

2. Primary Findings

The findings below are calculated by China Labor Watch in accordance with the rules of data collection and processing mentioned above.

2.1 Distributions of positions of Pegatron Shanghai workers with complete pay stubs (1,187)

2.1.1 Distribution of positions: Most workers are regular operators whose base wage is 2,020 RMB

In the statistics, the majority of workers (79.6%) are basic operators (Figure 2.1a), whose average and median monthly base wages are both 2,020 RMB (Figure 2.1a), which is also the local minimum wage. The base wages of other positions may vary slightly, but the medians of most positions' base wages are 2,020 RMB, and the averages are lower than 2,400 RMB, except a few other "senior positions" such as engineer and senior division leader.

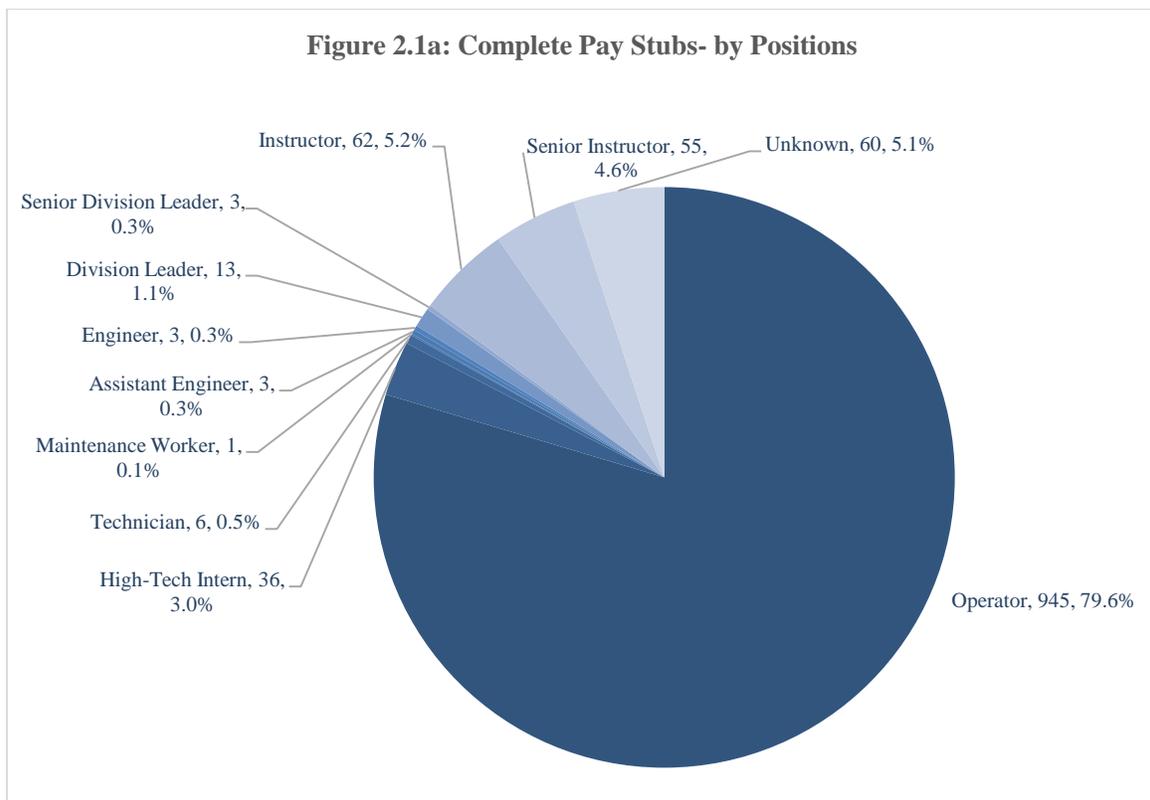


Chart 2.1a: Complete Pay Stubs –by Positions (Unit: RMB)

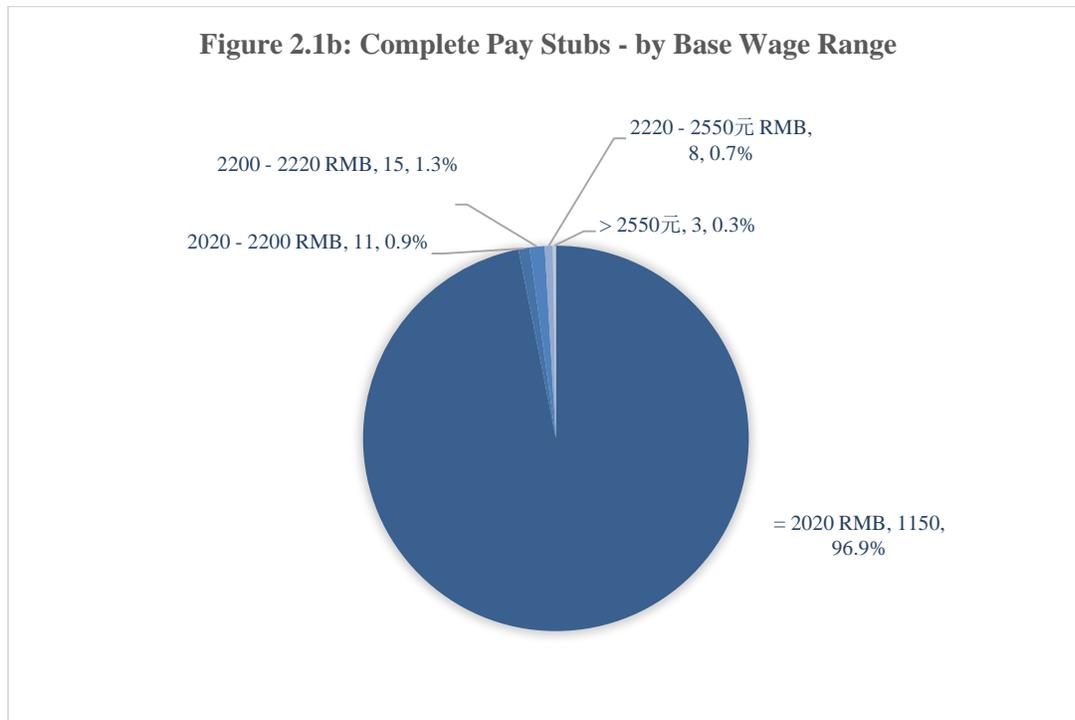
Position	Number	Percentage	Avg. Base Wage (Monthly)	Median Base Wage (Monthly)	Avg. Taxable Income (Monthly)	Avg. Real Income After Tax (Monthly)	Avg. Position Wage (Yearly)
Operator	945	79.60%	2020.4	2020	4816.4	4169.5	24244.8
High-Tech Intern	36	3.00%	2034.7	2020	4109	3572.9	24416.4
Technician	6	0.50%	2213.3	2220	5878.3	5132.8	26559.6
Maintenance Worker	1	0.10%	2020	2020	5972.4	5390.4	24240
Assistant Engineer	3	0.30%	2376.7	2350	4860.6	4580.8	28520.4
Engineer	3	0.30%	2783.3	2800	6083.6	5563.6	33399.6
Division Leader	13	1.10%	2204.9	2220	5690.8	4940.8	26458.8
Senior Division Leader	3	0.30%	2543.3	2550	5090.6	4507.4	30519.6
Instructor	62	5.20%	2020	2020	5081.6	4500.9	24240
Senior Instructor	55	4.60%	2020	2020	5167.3	4524.5	24240
Unknown	60	5.10%	2044.2	2020	4624.6	4009	24530.4
All	1187	100%	2029.1	2020	4835.3	4196.8	24349.2

As is shown in Chart 2.1a, there is not much room for wage raises for regular workers at Pegatron Shanghai. For example, operators, the predominant position in our sample, have an annual position wage of 24,244.8 RMB, while the average annual position wage of all workers is only 24,349.2 RMB, far below Shanghai residents' annual per capita disposable income 47,710 RMB.³

³ Xinmin, “上海 2014 年城市居民家庭人均可支配收入 47710 元”; last modified on February 27th 2015; <http://shanghai.xinmin.cn/msrx/2015/02/27/26908033.html>.

2.1.2 Distribution of Base Wages: 2,020 RMB for the Vast Majority of Workers (96.9%)

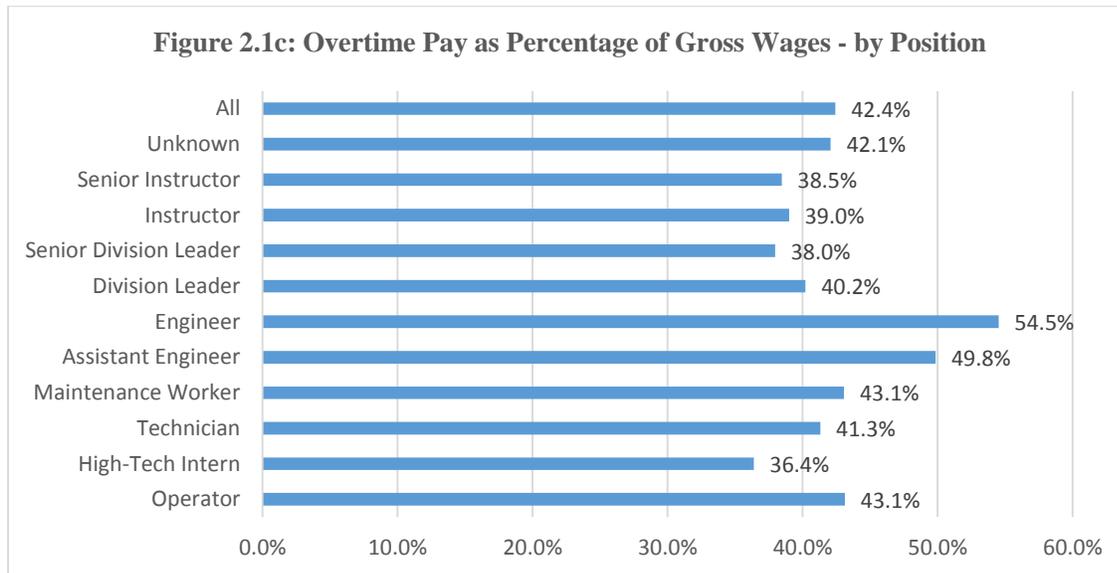
The following statistics about base wage distribution further explains that regardless of positions, the workers whose base wages equal minimum wage (2,020 RMB) are the vast majority of workers at Pegatron, accounting for 96.9% of our overall sample.



Combining Chart 2.1a and Figure 2.1b, we can see that although workers' wages after taxes (base wage + overtime pay + compensation – deductions) is somewhat higher than the base wage, the latter is still too low to meet workers' living expenses. As a result, workers have to rely on lots of overtime work in order to compensate for living expenses in Shanghai.

2.1.3 Overtime Pay as a Percentage of Gross Wages: Average is Higher than 40%

In order to describe overtime pay's impact on workers' total income more precisely and conservatively, China Labor Watch calculated the combined income of three types of overtime pay (weekday OT pay + weekend OT pay + holiday OT pay) and its share of "adjusted gross wages" (gross wages - leave wages - sick leave wages - absent wages).



From the figure above (2.1c) we can see that on average overtime pay accounts for 42.4% of Pegatron Shanghai workers' adjusted gross wages (more than two-fifths). This number ranges from 36.4% to 54.5% among all positions, with the minimum average ratio belonging to high-tech interns and the maximum average ratio to engineers. Similar to our preceding conclusion, it shows that overtime pay's impact on workers' total income is substantial, and even decisive.

2.2 Overtime Hour Statistics of Pegatron Workers Whose Base Wages are 2,020 RMB in September and October

As discussed in the previous section (1.1.3), because the pay stubs with base wages equal to the Shanghai minimum wage of 2,020 RMB in September and October make up the vast majority of all complete pay stubs (1,122 stubs, 94.5% of total), for the sake of calculation accuracy, the following statistics on overtime hours are based on those pay stubs with the minimum wage as a base wage. These calculations do not include the 1.5 hours of weekly unpaid overtime which all workers told CLW they had to do during September and October.

2.2.1 Monthly overtime hours: 40% of workers do 90-100 hours of monthly overtime, almost one-fourth of the workers do overtime of more than 100 hours each month

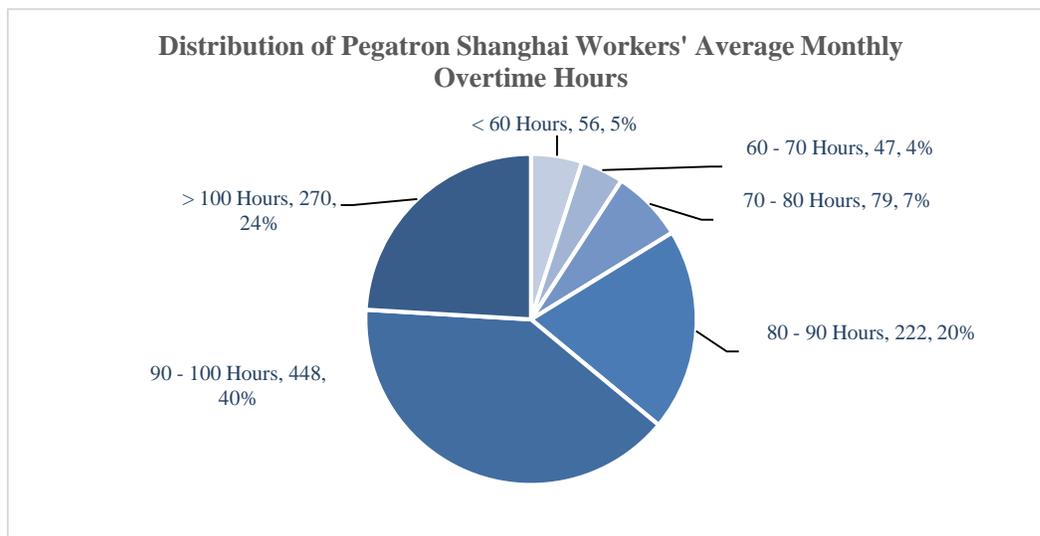
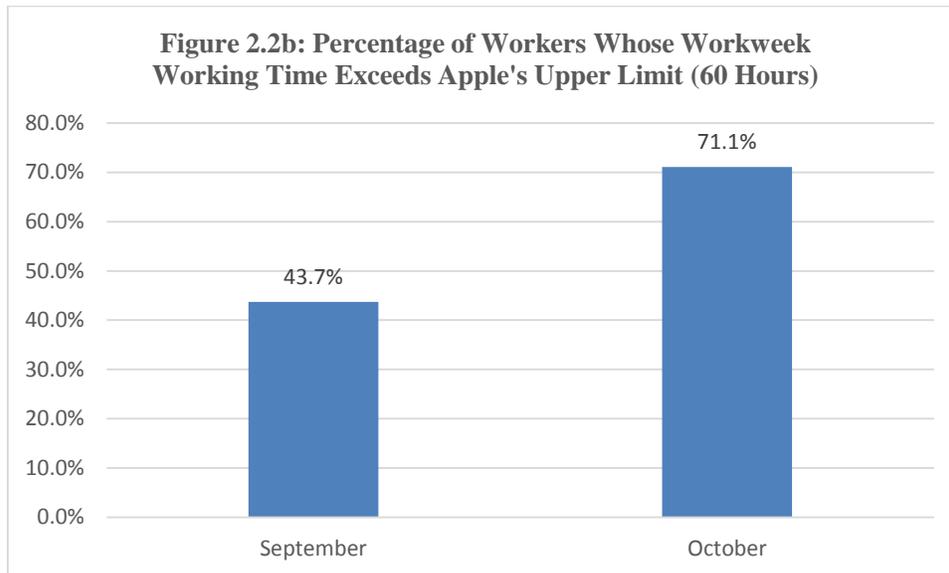


Figure 2.2a shows the monthly overtime hour distribution of Pegatron Shanghai workers whose base wages are 2,020 RMB in September and October. As the figure shows, the overwhelming majority's average monthly overtime hours surpass 60 hours, and only a small fraction are below 60 hours (5%). In the statistics, the largest share of the pie chart is "90 – 100 hours", indicating that almost 40% of workers' overtime hours are between 90 and 100 hours. In addition, there are another 24.1% workers whose overtime hours reach a striking level of more than 100 hours in a month. In total, almost two-thirds of workers' monthly overtime hours are beyond 90 hours.

2.2.2 Weekly Working Hours: in September and October, it is very common for workers work more than 60 hours each week⁴

From the figure below (2.2b) we can see it is very common that workers work more than 60 hours each week in September and October. In September, 43.7% workers surpassed the 60-hour upper limit set out by Apple's code of conduct; the number in October is even higher, reaching 71.1%. Of course, Apple's code is much higher than the Chinese legal limit of 36 overtime hours per month. It is also worth noting that these figures are conservative because they only include working hours listed on official pay stubs, not unrecorded overtime, like the 1.5 hours per week of unpaid meetings which all workers who talked to CLW said they were required to participate in.⁵



The above research results are very different from Apple's 2015 official report, "Supplier Responsibility 2015 Progress Report", which claims that in 2014, 92 percent of all workweeks were compliant with its 60-hour workweek standard. Although no official figures have been released by Apple for 2015, it is clear from the chart on its official website that Apple claims that in September and October 2015, compliance with the 60-hour workweek in its supply chain was well over 90% (please see Figure 2.2c).⁶

"When it is busy, we have to work very long hours and take only one or two days off each month. Sometimes we cannot stand it and ask for leave, but it's not granted," said a male worker surnamed Zhou.

⁴ According to Apple's "Suppliers' Code of Conduct", the upper limit of weekly working hours including overtime work is 60 hour. https://www.apple.com/supplier-responsibility/pdf/Apple_Supplier_Code_of_Conduct.pdf

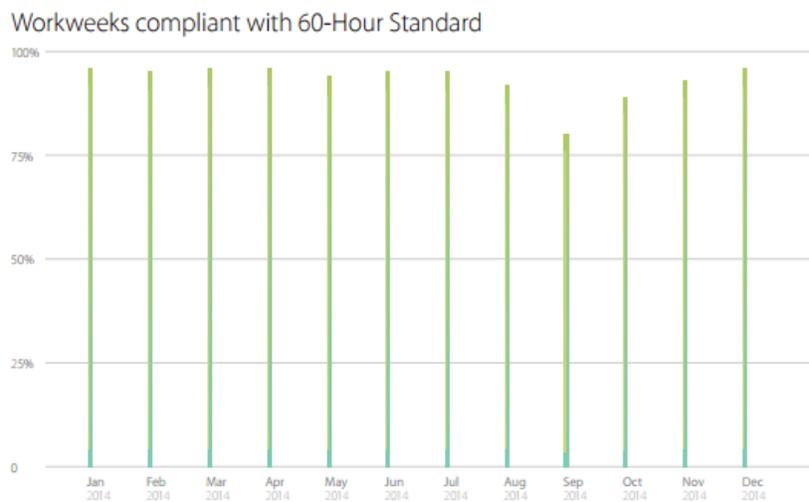
⁵ We argue that Pegatron Shanghai's working hour numbers are conservative estimates because according to CLW investigators' interview, workers' meeting times in the morning are about 15 minutes, which are not included in their working time. Thus, Pegatron Shanghai workers' actual weekly working time is 90 minutes (1.5 hours) longer than the time on par stubs.

⁶ In the 2015 "Supplier Responsibility 2015 Progress Report", Apple claims that in 2014 92 percent of all workweeks were compliant with its 60-hour Maximum Standard. Figure 2.2c is from this report, page 15.

Figure 2.2c: Compliance Statistics for Apple's 60-hour Workweek Standard

Apple: “In 2014, we tracked over 1.1 million workers on average per week — adding 57 new facilities to the tracking program — and 92 percent of all workweeks were compliant with our 60-hour maximum standard. Specifically, the average hours worked per week was under 49. Employees who worked more than 40 hours each week worked an average of 55 hours per week. And 94 percent of all workweeks met our requirement of at least one day of rest every seven days.”

On the “Labor & Human Rights” segment of Apple’s website, Apple has posted a record of working hours in its supply chain during 2015. While specific percentages are not provided, it is clear that Apple claims that well over 90% of workweeks complied with the 60-hour workweek during September and October 2015.



The distinct difference between these two investigations implies two possibilities, neither of which is positive:

- 1) If Apple’s official investigation is accurate, Pegatron Shanghai (as one of Apple’s largest suppliers in China and in the world) must be among the worst 8% that do not meet the labor standards. Despite that, it is still one of Apple’s most important suppliers and the second largest iPhone final product assembly plant.⁷
- 2) Apple’s official data have systematic errors, or the suppliers concealed the true situation when Apple conducted its inspection, resulting in the inaccuracy of Apple’s report.

⁷ Apple Inc., “Supplier Responsibility – Our Suppliers”, <http://www.apple.com/uk/supplier-responsibility/our-suppliers/>.

2.3 Wage/Overtime of Workers: Excessive Overtime and Low Wage Were Very Common in 2015

During the investigation, China Labor Watch's investigators obtained a number of worker's pay stubs for consecutive months. There were five such cases in our sample. To protect workers' privacy, we use letters A – E to represent the original document number, worker ID, and name. We studied the monthly pre-tax income and overtime hours of these five workers over several months of 2015.

Chart 2.3: Wage/Overtime Statistics of Single Workers Over Different Months of 2015 (5 cases)

Month	May 2015		June 2015		July 2015		August 2015		September 2015	
	Monthly Wage	OT Hours	Monthly Wage	OT Hours						
A	4015.78	84.6	3585.34		3094.55	49.0	3502.7	66.6	3665.88	78.1
B	4664.51	88.1	3405.39	48.5	4000.32	61.5			3917.24	62.1
C			4059.43	77.1	4195.91	79.1	4484.29	92.1	4351.92	94.1
D	4710.17	80.1	4171.08	61.5	3953.68	52.5			4207.46	64.1
E					2522.94	37.5	4027.52	93.1	3624.75	70.1

It can be seen from this chart that excessive overtime work does not only exist in September and October, but in every month of 2015. Among the five cases that CLW studied, individual workers' overtime hours each month are mostly above 60 hours, and the highest is 94.1 hours (worker C, September). The only exceptions are worker D and E, whose overtime hours in July are below 60 hours. Workers' net incomes are low. The highest is 4,710.17 RMB (worker D, May), and the lowest is only 2,522.94 RMB (worker E, July). It is important to note that workers' relatively higher wages are reliant on heavy overtime. Without overtime in excess of Chinese law (36 hours/month), a worker earns less than 3,000 RMB, which is far from a living wage.

A female worker surnamed Zhang told CLW about her reliance on overtime to earn a reasonable wage: "I wish to work overtime. Wages aren't enough to live without overtime pay. I will quit if monthly wages drop below 4,000 RMB."

2.4 The Comparison Between Apple 2015 Fiscal Revenue⁸, Executive Officers' Compensation⁹ and Pegatron Shanghai Workers' Gross Wages

2.4.1a Apple 2015 Financial Data

Apple's total sales in fiscal year 2015	\$	233,716,000,000
Apple's total profit in fiscal year 2015 ¹⁰	\$	53,394,000,000
CEO Tim Cook 2015 compensation (excl benefits/dividends) ¹¹	\$	2,000,000
CEO Tim Cook 2015 compensation (incl benefits/dividends)	\$	10,281,327
Sr. executives 2015 compensation (excl benefits/dividends)	\$	7,000,000
Sr. executives 2015 compensation (incl benefits/dividends)	\$	136,486,026

2.4.1b Apple Senior Executives' Compensation from 2013 to 2015

Executive Compensation Tables

Summary Compensation Table—2015, 2014, and 2013

The following table shows information regarding compensation of each named executive officer for 2015, 2014 and 2013, except in the cases of Ms. Ahrendts and Mr. Maestri, who were not named executive officers in 2013, and Mr. Sewell, who was not a named executive officer in 2013 or 2014.

Name and Principal Position (a)	Year (b)	Salary (\$)(c)	Bonus (\$)(d)	Stock Awards (1) (\$)(e)	Non-Equity Incentive Plan Compensation (2) (\$)(f)	All Other Compensation (\$)(g)	Total (\$)(h)
Tim Cook Chief Executive Officer	2015	2,000,000	—	—	8,000,000	281,327 ⁽³⁾	10,281,327
	2014	1,748,462	—	—	6,700,000	774,176	9,222,638
	2013	1,400,006	—	—	2,800,000	52,721	4,252,727
Luca Maestri Senior Vice President, Chief Financial Officer	2015	1,000,000	—	20,000,105	4,000,000	337,872 ⁽⁴⁾	25,337,977
	2014	717,211	—	11,335,043	1,608,255	342,292	14,002,801
Angela Ahrendts Senior Vice President, Retail and Online Stores	2015	1,000,000	—	20,000,105	4,000,000	779,124 ⁽⁵⁾	25,779,229
	2014	411,538	500,000	70,001,196	1,648,352	790,038	73,351,124
Eddy Cue Senior Vice President, Internet Software and Services	2015	1,000,000	—	20,000,105	4,000,000	52,136 ⁽⁶⁾	25,052,241
	2014	947,596	—	20,000,900	3,437,500	59,743	24,445,739
	2013	866,061	—	—	1,750,000	31,044	2,647,105
Dan Riccio Senior Vice President, Hardware Engineering	2015	1,000,000	—	20,000,105	4,000,000	17,521 ⁽⁷⁾	25,017,626
	2014	947,596	—	20,000,900	3,437,500	17,239	24,403,235
	2013	866,061	—	—	1,750,000	16,791	2,632,852
Bruce Sewell Senior Vice President, General Counsel and Secretary	2015	1,000,000	—	20,000,105	4,000,000	17,521 ⁽⁸⁾	25,017,626

⁸ Apple's newly released revenue data comes from Apple 2015 fiscal fourth quarter (Jun 28th 2015 – Sep 26th 2015) http://www.iphonejd.com/iphone_jd/2015/10/apple-2015-fiscal-fourth-quarter-the-iphone-and-ipad-angle.html, Thus we affirm that the comparison between Apple's data and vast majority Pegatron Shanghai worker's sample wages from Sep 2015 to Oct 2015 is relatively reasonable.

⁹ Apple recently released executive officers' 2015 fiscal compensation, the complete data can be seen in http://investor.apple.com/secfiling.cfm?filingID=1193125-16-422528&CIK=320193#D79474DDEF14A_HTM_TOC79474_19, "Executive Compensation Tables" page.

¹⁰ Apple Inc., "Form 10-K For the Fiscal Year Ended September 26, 2015," http://investor.apple.com/secfiling.cfm?filingid=1193125-15-356351&cik=320193#D17062D10K_HTM_TOC17062_10

¹¹ The following numbers are from footnotes [10], or can be referred to table 2.4.1 b.

2.4.2 Wage Estimation of Pegatron Shanghai Workers (and all Workers in Apple's Supply Chain)

Estimated Number of Pegatron Shanghai workers ¹²		70,000
Total number of employees working in Apple's supply chain		1,600,000
Pegatron worker ave. gross monthly wage (Sept/Oct 2015)	¥	4,823.6
Yuan to dollar exchange rate (2015.9.26) ¹³		1 CNY = 0.1569 USD
Pegatron workers avg. gross wage (Converted to US dollar)	\$	756.8
Pegatron workers 2015 avg. gross annual wage ¹⁴	\$	9,081.9
Pegatron workers 2015 avg. annual base wage ¹⁵	\$	3,803.3
Estimated unpaid wages to Pegatron workers for OT in 2015 ¹⁶	\$	11,848,460
Pegatron workers' 2015 combined gross wages	\$	635,729,765.4

Comparison between Worker's Wage and Apple's Revenue/Senior Executives' Total Income¹⁷

	Percentage	Multiple
Pegatron workers' combined gross wages vs. Apple total revenue in 2015	0.24%	422
Pegatron workers' combined gross wages vs. Apple net profit in 2015	1.04%	96
Apple supply chain workers' combined annual base wages	2.60%	38
Pegatron worker avg. annual base wages vs. CEO Tim Cook's compensation	0.037%	2703
Pegatron worker avg. annual gross wages vs. CEO Tim Cook's compensation	0.088%	1132
Pegatron workers' unpaid OT wages vs. CEO Tim Cook compensation in	115.24%	N/A
Pegatron worker avg. annual base wage vs. Apple 6 sr. officers'	0.003%	35,887
Pegatron worker avg. annual gross wage vs. Apple 6 sr. officers'	0.007%	15,028

¹² The "total number of employed workers" is estimated based on the number of workers that Apple official audits covered (1.6 million). Please see Apple Inc., "Supplier Responsibility 2015 Progress Report", p.6.

¹³ We use the last day (2015.9.26) of Apple 2015 fiscal fourth quarter's exchange rate to convert to Chinese workers' wages. The exchange source is from: http://www.exchangerates.org.uk/CNY-USD-26_09_2015-exchange-rate-history.html.

¹⁴ The total pre-tax annual income is an estimate according to Pegatron Shanghai workers' average income in September and October 2015. In fact, September and October are the peak production season. In other months, the income of workers are probably lower than that of these two months. Thus, China Labor Watch's estimate is a conservative estimate, which assumes that workers' incomes in other months can maintain at the same level as in peak production season.

¹⁵ Pegatron Shanghai workers' monthly base wage is 2020 RMB, with a monthly working hours of 174 hours, and hourly wage of 11.6 RMB, equivalent to 1.82 USD/Hour according to the exchange rate on September 26th, 2015 (the last day of Apple's fiscal year 2015)

¹⁶ According to China Labor Watch investigators' interview, Pegatron Shanghai workers' average meeting time in the morning and evening in September and October is about 15 minutes, which is not included in their working time. Thus, workers' actual weekly working time is 90 minutes (1.5 hours) longer than that on their pay stubs. In Apple fiscal year 2015 (Sep. 27th 2014 to Sep. 26th 2015), there are 248 statutory working days. Taking the 15 minutes daily meeting time into consideration, each worker has 62 hours of covert overtime work with an overtime wage of 17.4 RMB per hour, or 1078.8 RMB overtime wage per person for the whole year. Pegatron Shanghai has an estimate of 70,000 workers, 95% of them are not paid for the meetings in morning and evening, whose total covert overtime wage are 75,516,000 RMB. According to the RMB to USD currency on Sep. 26th 2015, they are underpaid for 11,848,460 dollars. In addition, since the investigation on covert overtime work is conducted for September and October only, errors exist in the calculation of the annual covert overtime hours and wages.

¹⁷ The last two columns of the table present the ratios in two ways. "Percentage" represents the proportion that the former accounts for the latter; "Multiple" represents the proportion that the latter accounts for the former.

The results of the comparisons in Chart 2.4.3 can be summarized as below:

- 1) Apple's total revenue in fiscal year 2015 (September 27, 2014 – September 26, 2015) is 422 times higher than the combined gross wages of the 70,000 workers at Pegatron Shanghai; Apple's net profit in the same period is 96 times higher than Pegatron Shanghai workers combined gross wages.
- 2) If we assume that in Apple's supply chain there are 1.6 million workers (a figure based on Apple's official report), and all workers' wage level is the same as a worker at Pegatron Shanghai's, then the combined base wages of all workers in the supply chain only accounts for 2.6% of Apple's revenue in fiscal year 2015.
- 3) Tim Cook's compensation in 2015 (including stock dividends and benefits) was US\$10,281,327, 2,703 times higher than a Pegatron Shanghai worker's annual base wage (\$3,803) in the same year. Even in terms of gross wages, Tim Cook's annual compensation still 1,132 times as much as a Pegatron Shanghai worker's annual wages. In other words, a worker must work consecutively for 1,132 years to earn the same amount of money that Mr. Cook earns in one year.
- 4) The total wages that Pegatron Shanghai workers are owed for hidden overtime work is \$11.85 million in 2015, more than Tim Cook's compensation for the entire year.
- 5) In 2015, total compensation of Apple's six senior executives was \$136,486,026, which is 35,887 times greater than the annual base wage of a Pegatron Shanghai worker (\$3,803.3 USD). Even after calculating for workers' gross wages, the six senior executives' compensation in 2015 was 15,028 times greater than a worker's wages. In other words, it takes 15,028 workers a year of hard work to cover the compensation of six people.

3 Summary

3.1 Base wages are too low. The base wages of the great majority of Pegatron Shanghai workers is still the local minimum wage level (2,020 RMB), which is much lower than the average income of Shanghai urban residents and far from what could be considered a living wage.

3.2 Overtime hours are still excessive:

3.2.1 40 percent of workers work 90-100 hours of overtime per month, and another one-fourth of workers work more than 100 hours of overtime per month. In total, around two-thirds of Pegatron workers are doing more than 90 hours of overtime in a month.

3.2.2 A workweek greater than 60 hours (the upper limit set in Apple's code of conduct) is common in September and October 2015, at rates of 43.7% and 71.1%, respectively. This is far beyond Apple's official statistics in 2014, which claims that "92% of the suppliers have met Apple's 60-hour maximum standard". The difference between Apple's statistics and China Labor Watch's finding implies two possibilities: 1) The official statistics of Apple are inaccurate, and Pegatron Shanghai is one special case among the worst 8%, which is highly unlikely; 2) Apple's official statistics are systematically inaccurate, and/or suppliers have concealed the truth of working hours in Apple's inspections.

3.3 Excessive overtime work and low wage problems exist not only September and October 2015, but throughout the year.

3.4 The massive revenue of Apple in 2015 and high compensation of its senior executives is not commensurate with the wages of ordinary workers in Apple's supply chain. Using Pegatron Shanghai workers' wages as the standard, one worker needs to work 1,132 consecutive years to reach the compensation as Apple's CEO Tim Cook. Similarly, it takes 15,028 workers (almost a quarter of the Pegatron Shanghai workforce) a year of work, including overtime, to cover the compensation of Apple's six senior executives.

3.5 The above conclusions contrast severely with Apple's official report - "Supplier Responsibility 2015 Progress Report". Such a contrast indicates that Apple's monitoring and reforms in its supply chain are ineffective, and the rosy picture painted about suppliers' conduct and workers' working conditions is inaccurate.

4 Selected Worker Quotes Not Included in the Text Above

Li (male): "I'm a dispatch worker. I came here through a dispatch labor company with a few hundred other workers. We still don't know whether they have paid social insurance for our dispatch workers. We don't know how to check, and the factory just tells us to ask the dispatch labor company."

Chen (female): "I hope to do overtime because overtime pay is higher. I will look for other factories if the overtime hours are low. I need to make more money while I'm still young."

Wang (female): "I cannot eat well or sleep well. Our dormitory is too far from the factory. It takes 40 minutes to get there."

Sun (male): "In our factory, workers in our production line eat last. Many times when we go to eat, there is not much left, and each of us can only get a very small amount of food. Sometimes the food is already cold."

Wang (female): "Work is super exhausting, and the factories there are all about the same."

Zhang (female): "We have a meeting every morning. Our boss will lecture us and arrange our daily work. We are already used to that."

5 Attachment: Attachment-2015 Pegatron Shanghai Paystubs Raw Data