

Apple making big profits but Chinese workers' wage on the slide



中国劳工观察
CHINA LABOR WATCH

August 24, 2016

Contents

Executive Summary	1
Paystubs and Research Method	4
Summary of Paystub Analysis	5
Paystubs before and after the adjustment.....	8
Main Findings	10
Suggestions	17
The Unfair and Irresponsible Apple.....	17
Conclusion	20

Apple making big profits but Chinese workers' wage on the slide

August 24, 2016

Executive Summary

Apple controls costs associated with purchases and workers' in the supply chain. In manufacturing the iPhone, over 80% of materials are purchased by Apple. In addition, Apple supplies the manufacturing equipment whilst factories only purchase cases, screens, circuit boards, packaging and other materials. In the assembly department, labor costs include workers' costs which are calculated according to the minimum wage standard for the region. in addition to management fees for the factory¹. Since Tim Cook became CEO of Apple, the company has required suppliers to not only increase their productivity but to also decrease costs at a rate between 5% to 10% every year. This has fostered competition between suppliers in decreasing costs².

According to Apple's official report on their earnings in 2015, total revenue amounted to \$233.7 billion USD. Net profit was a total of \$53.4 billion USD, 22.85% of total revenue. In China, Apple received \$58.17 billion USD in revenue, which is 25.12% of total revenue in 2015. From this, Apple earned \$13.4 billion USD in profits, however, the total base wages of the 1.6 million workers amounted to less than \$6.2 billion USD. This is less than half of the profits Apple earns in China.

Pegatron is one of Apple's major suppliers, employing almost one hundred thousand workers³ in Mainland China. Working conditions are terrible, and workers are subject to terrible treatment. Currently, Apple's profits are declining, and the effects of this decline have been passed on to suppliers. To mitigate the impact, Pegatron has taken some covert measures to exploit workers. This report is based on interviews with Pegatron workers and a comparative study of 2015 copies of paystubs collected in 2015 and 2016. Through our investigation, we have found that Pegatron has taken some surreptitious measures to pass Apple's audits. In addition, we discovered that Pegatron's working conditions have worsened in 2016 compared to 2015.

¹ There have been cases where Apple purchases components, and to compete for lower costs, suppliers' may not charge Apple for labor costs associated with assembling the product.

² This is according to a meeting with Apple's suppliers.

³ During off-season, there were around 50,000 workers, whilst during peak season, there were around 100,000 workers.



Dormitory rooms at Pegatron Shanghai

Findings

Through careful examination of all paystubs and the observations of CLW's investigator, we found several critical issues:

1. The average wage in China has been increasing steadily. However, at Pegatron, workers' wages dropped significantly in the past 8 months.
2. The Shanghai Municipal Government raised the minimum wage from \$304 USD to \$330 USD in April 2016, and Pegatron workers indeed received a raise in wages. However, Pegatron managed to control labor costs by cutting welfare and sharing insurance payments with workers. As a result, workers' total income decreased after the raise. Pegatron's attitude toward workers is evident here. In 2015, workers' hourly wage was \$1.85 USD. In 2016, workers' hourly wage increased to \$2.00 USD, and after deductions, this amounts to only \$1.60 USD.
3. Excessive and illegal overtime work is still prevalent in Pegatron. Pegatron claimed that their ID check system could effectively control workers' overtime hours, but this system did not have any effect in the departments where more overtime was needed. It is merely a tool for public relations. Paystub records reveal that the highest amount of overtime hours put in by a worker was recorded in March, which was a worker with 109 overtime hours. The worker was found to have put in a total of 293 hours of work in March.
4. Pegatron has recruited many student interns, who had overtime work amounting to 80 hours per month on average. This is roughly the same amount as full-time employees. However, the Chinese law forbids companies from asking interns to work overtime.
5. The base wage is still too low in Pegatron, and workers have to rely on overtime pay to support themselves and their families. Workers who do not work overtime only earn around \$213 USD after expenses are deducted.

6. In most of the production lines, workers have to arrive at work 10 minutes earlier than the regular schedule, but the 10 minutes are not paid.
7. Workers spend about 60 minutes each day, passing through the security procedures and ID Checks before entering workshop. The ID Check system did not control excessive overtime, however, encroached on workers' rest time⁴.
8. The factory forces workers to work overtime, and those who ask for leave would usually not be approved⁵.
9. Workers are exposed to potential occupational injuries without proper protection. For example, in departments that have noise and the use of lasers, the factory does not provide them with protection equipment⁶.

In February 2016, we published a report based on a paystub study on Pegatron, which revealed Pegatron's violations on issues such as overtime hours. However, since April, Pegatron has stopped listing the categories of overtime pay on paystubs (regular overtime, weekend overtime, and holiday overtime) and only provided the total overtime pay (see the section "Comparison of Paystubs before and after the adjustment"). Because of this change, we could not calculate exactly how many overtime hours were worked during that month. Furthermore, Pegatron claimed that it had implemented an ID Check system, which could effectively prevent excessive overtime. However, after carefully examining the payrolls of Pegatron in March, we found that the highest record of overtime reached 109 hours, three times longer than the legal limit. We collected 382 paystubs from the maintenance department⁷, all of which indicated overtime hours exceeding 36 hours, the legal limit, and 298 of them reported overtime hours of more than 82 hours, which exceeds the 60 hour work week standard as set by Apple.⁸ We shared these findings to Apple in May. Later, in July, Pegatron decided to abandon paper paystubs, and workers could only check their income information through the touch screen monitors on campus. We are not sure whether or not Pegatron made these adjustments because of our report, but these changes happened exactly after we pointed out that the ID check system had not effectively controlled excessive overtime.

Apple has demanded its suppliers to be transparent. However, our experience in investigating Pegatron fails to prove that they are transparent. Pegatron has made every effort to prevent independent organizations like us in examining its working conditions. It is increasingly opaque.

This report utilizes all the 2015 copies of valid paystubs we collected in the past 12 months. Using these paystubs⁹, and through comparing Apple's profits with workers' wages, our investigation reveals that Apple is the real source behind the issues surrounding the mistreatment of Chinese workers.

⁴ According to factory investigations

⁵ According to factory investigations

⁶ According to factory investigations

⁷ The maintenance department is responsible for refurbishing damaged phones for resale, and, if unrepairable, recycle the usable parts. It does not directly participate in the manufacturing process of new Apple products, so its schedule is different from that of others.

⁸ Apple stipulates that workers in its supply chain should have at least one day off each week, and work no more than 60 hours. According to this standard, workers should work no more than 10 hours each day, at most 2-hour regular overtime on weekday, and 10-hour overtime on weekend and holiday. In March, there were 21 regular workdays and 4 weekends. Then, in March, workers' overtime hours should be within 82 hours in order to meet Apple's 60-hour maximum workweek standard.

⁹ Pegatron is located in Shanghai, which is a region with one of the highest wages in China. Through the wages of workers' in Shanghai, we can calculate the wages of Apple workers' in other regions of China. Workers in Pegatron Shanghai are paid the highest.



Clothing hung from ceilings inside dormitories

Paystubs and Research Method

In this report, we have combined descriptive statistics along with observations and interviews from CLW's investigator, to present Pegatron workers' working conditions. Data is mainly from the 2015 copies of paystubs, with official statistics being occasionally cited. The paystubs were collected by CLW's investigator in Pegatron Shanghai where they worked as a regular employee on the production line in 2015 and 2016. These pay stubs cover the months of May to October in 2015, and March to May in 2016. Basic information about these paystubs is summarized in Table 1.

On the paystubs, key information includes base wage, overtime pay, different types of compensation and rewards, and individual payment of social insurance.¹⁰ To make the analysis simpler, we have added up all the different types of compensation and rewards and grouped them under the same category- "Compensation and Rewards". The amount and composition of workers' pay (base wage, compensation and rewards, and overtime pay) can directly tell us how workers have been treated, and whether or not they have been treated fairly. By comparing workers' wage structure before and after the wage raise, we can also examine if the company has actually raised workers' wages. The "overtime pay" on paystubs indicated when the overtime was worked, such as "weekend overtime pay" and "holiday overtime pay". Thus, we can calculate workers' overtime hours. (As explained above, this is only possible before April 2016.) Paystubs provide us with objective and undeniable evidence about overtime and income, whilst our investigator's observations and interviews with Pegatron workers sheds light on occupational safety, living conditions, meal and rest times, and management style.

¹⁰ Compensation includes: food subsidy, skills allowance, special allowance, and midnight shift compensation. Rewards include performance bonus, seniority pay, production bonus, recommendation rewards, and incentive bonus.

Pegatron's departments can be divided into two parts, assembly and maintenance. Most departments work in conjunction with each other to assemble mobile phones for Apple. Both their working schedule and workload are not significantly different from one another. Interdepartmental difference is negligible. Within the department, workers have little discretion in choosing whether or not to work overtime. Therefore, workers' income and overtime hours are also similar to that of others in the same department. The maintenance department has a different schedule to other departments. We take the paystubs of the maintenance department apart from the rest of the sample and analyze working conditions and workers' treatment in this department separately. Therefore, for the above reasons, although our paystubs are not randomly sampled, we believe they can still represent Pegatron's labor conditions.

Table 1: Paystub Information Summary (Unit: USD)

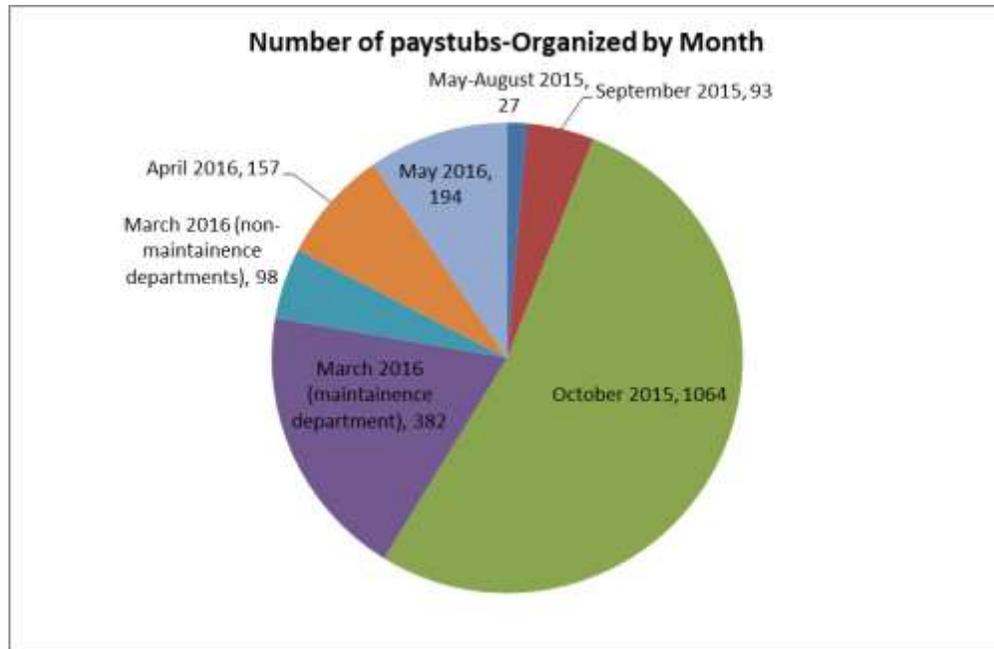
	Number of paystubs	Real income	Base wage	Overtime pay	Compensation and rewards	Insurance (individual payment)
May 2015	6	627.40(110.85)	304.41(0)	267.24(14.16)	111.89(32.73)	--
June 2015	4	575.31(129.95)	304.41(0)	160.15(63.4)	135.32(17.27)	--
July 2015	6	638.5(31.24)	304.41(0)	155.41(52.46)	121.02(21.54)	--
August 2015	11	641.05(43.34)	304.41(0)	270.58(29.82)	125.12(24.37)	--
September 2015	93	601.77(104.94)	309.25(17.87)	248.53(50.75)	154.09(53.17)	--
October 2015	1064	635.23(75.88)	305.39(7.11)	312.24(54.72)	122.8(47.32)	--
March 2016 (maintenance department)	382	615.5(50.56)	304.98(7.4)	273.56(31.5)	104.44(28.17)	--
March 2016 (non-maintenance departments)	98	390.32(73.02)	308.16(16.95)	42.79(52.38)	104.31(31.5)	--
April 2016	157	486.68(51.97)	344.16(15.25)	201.84(37.61)	63.78(29.29)	59.18(17.64)
May 2016	194	474.08(55.83)	351.98(10.75)	186.64(48.76)	46.99(31.69)	49.76(26.75)
Total	2015	590.84(100.8)	313.13(19.03)	194.99(82.6)	107.97(49.09)	--

Note: numbers inside the parentheses are standard deviations; numbers outside parentheses are averages. All amounts are in USD according to the exchange rate on August 15th 2016 unless otherwise indicated. The table above does not contain all amounts and categories in the paystubs.

Summary of Paystub Analysis

1. Paystubs

In 2015 and 2016, we collected a total of 2015 paystubs. A few dozen are from the months of May 2015 to August 2015, and 1064 of them are from October 2015. In addition, 480 paystubs are from March 2016, and around 100 to 200 are from April and May 2016. Please see the graph below for the distribution of paystubs by month.

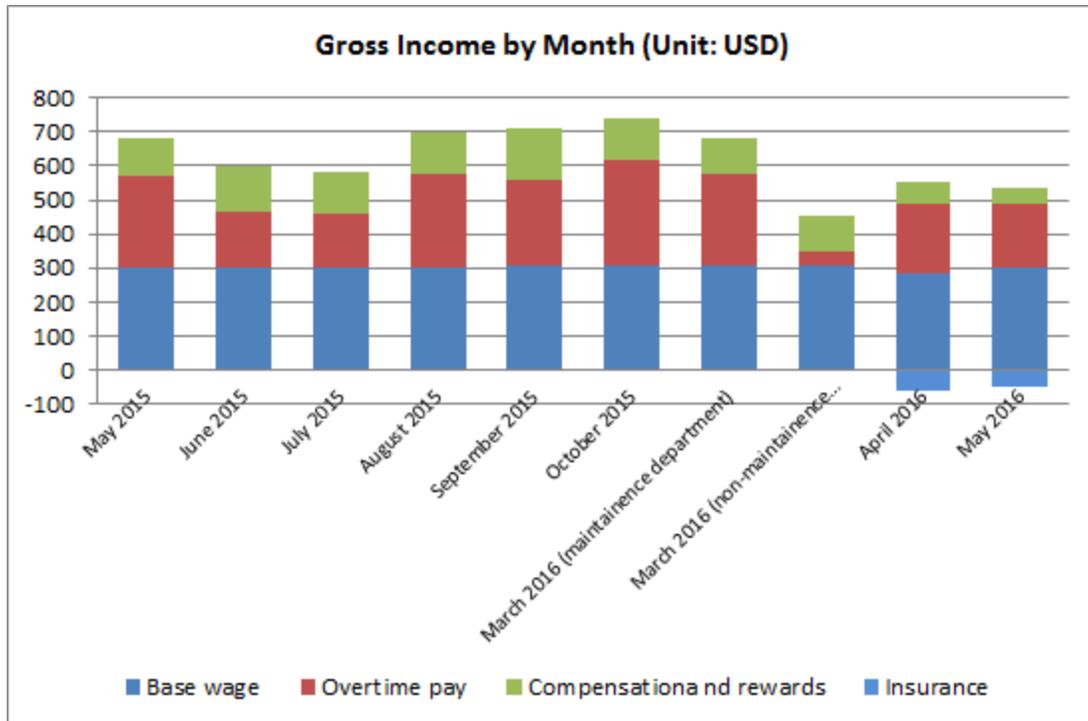


2. Base wage and wage structure

In our sample, the base wages of most workers (96.1%) were equal to the legal minimum wage, which was \$304 USD before April 2016, \$341 USD in April 2016, and \$350 USD beginning in May. (Pegatron raised the base wage to \$350 USD beginning April 1st according to Shanghai municipal government's new regulation. Pegatron's pay period does not begin on the 1st. Instead, the pay period begins on the 26th of the previous month till the 25th of the current month. Thus, the wage in April was not \$350 USD, but \$341 USD).

Those who had a base wage equal to the legal minimum wages were base workers on the production line. A few paystubs in our sample had base wages higher than the minimum wage. The paystubs were those of instructors, senior instructors, line leaders, and engineers. Nonetheless, they also worked on the production line, and their wages were no higher than \$471 USD. Our sample is composed solely of production line employees and not managing officers.

Based on these paystubs, we calculated the average income by month and by category, as shown in the graph below.



(Gross income=base wage + overtime pay + compensation and bonus - insurance. Income tax, accommodation fee, and leave charges are not deducted from gross income, as such, it is higher than real income)

3. Overtime hours

Overtime hour calculation. Before April 2016, Pegatron listed overtime pays by categories on paystubs. Hourly wage was also given, as this is base wage divided by 174, as stipulated by Chinese law. Combining these with the overtime rate as set by law (regular overtime: 1.5 * hourly wage; weekend overtime: 2* hourly wage; holiday overtime: 3*hourly wage), we calculated overtime hours by using the following formula:

$$\text{Overtime hours} = \text{regular overtime pay} / (1.5 * \text{hourly wage}) + \text{weekend overtime pay} / (2 * \text{hourly wage}) + \text{holiday overtime pay} / (3 * \text{hourly wage})$$

Since April, Pegatron has stopped providing detailed overtime information except the total amount of overtime pay. According to our statistics on overtime hours in March, 74 workers had fewer than 23 regular overtime hours, with most workers (71 of the 74) having no weekend overtime. Furthermore, 401 workers had regular overtime over 23 hours, and most workers (394 of the 401) also had weekend overtime. We assume that this pattern similar in April and May. That is, for overtime that was below 23 hours, we assume it was all regular overtime. Additionally, we found that in March, for those who had weekend overtime, the ratio between regular overtime and weekend overtime was 1.04: 1, with the average overtime pay being 1.75* hourly wage¹¹. In calculating the overtime hours in April and May, we

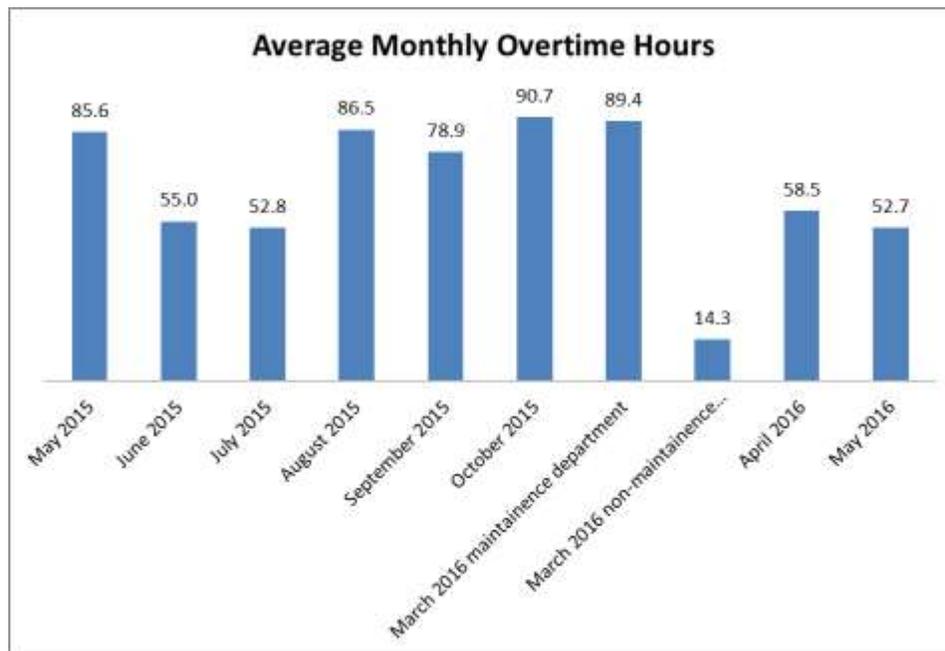
¹¹ Regular overtime is 1.5 times the hourly wage, weekend overtime is 2.0 times the hourly wage, whilst the weekend overtime to regular overtime ratio is 1:1.04. as such, the average overtime rate is 1.75 the hourly wage. As the paystub did not list the amounts for regular overtime, weekend overtime and holiday overtime pay, we can only use an average overtime rate to

first compared workers' total overtime pay with overtime pay for 23 overtime hours. We were then able to determine whether there were more than 23 overtime hours¹². On the basis of this, we use two different scenarios to calculate overtime hours from April onwards:

A. When overtime pay $\leq 23 \times \text{hourly wage} \times 1.5$, overtime hours = overtime pay / (1.5 * hourly wage)

B. When overtime pay $> 23 \times \text{hourly wage} \times 1.5$, overtime hours = overtime pay / (1.75 * hourly wage)

Using this formula, we calculated the average overtime hours of Pegatron workers in different months and graphed the bar chart below.



It should be noted that the overtime in May and April is just an estimate, which has errors.

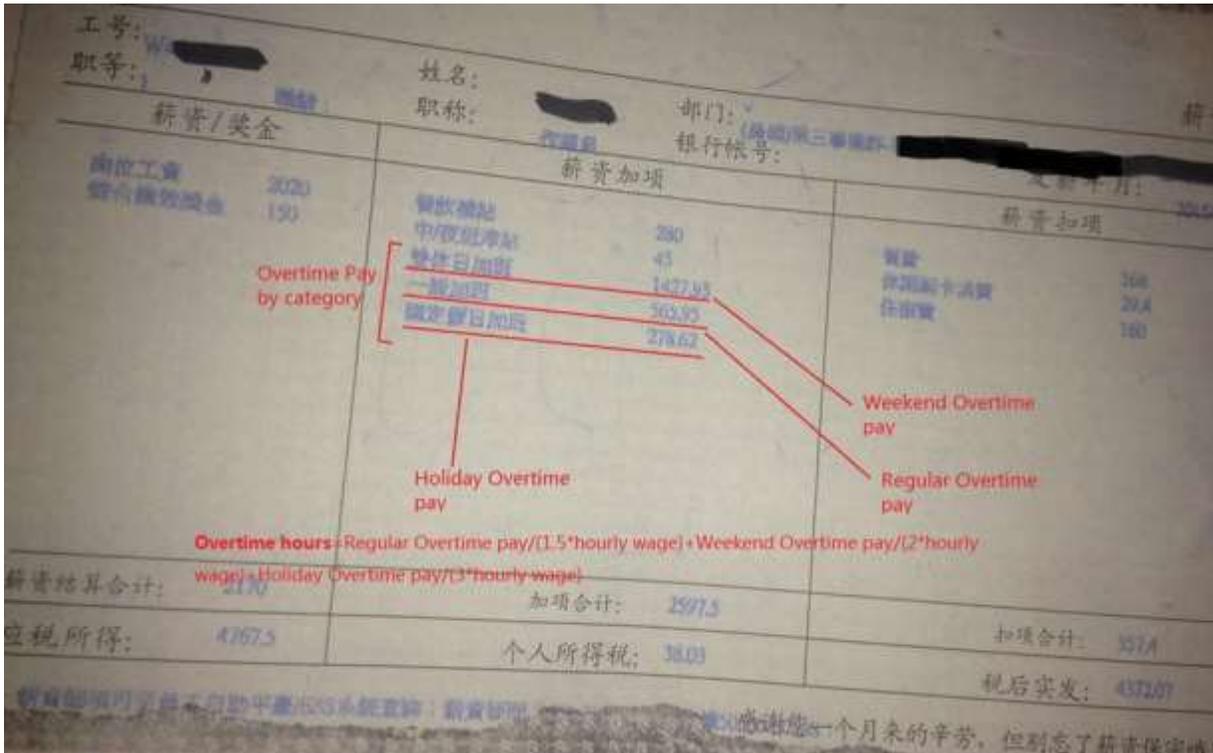
Paystubs Before and After the Adjustment

In April 2016, Pegatron adjusted the content of paystubs and no longer listed overtime pays by categories. The categories of regular overtime, weekend overtime and holiday overtime have different rates. Before the adjustment, we could accurately calculate the overtime hours of individual workers. After the adjustment, only an estimate can be provided as we only knew the total overtime pay.

calculate. Furthermore, in March, there was no holiday overtime, and both April and May only had one day of holiday overtime. As such, we ignored this as it could not be calculated.

¹² 23 hours of overtime pay = $23 \times 1.5 \times \text{hourly wage}$, if a worker has overtime pay which was greater than this amount, then they had greater than 23 overtime hours. If a worker has overtime pay which is less than this amount, then they had less than 23 overtime hours.

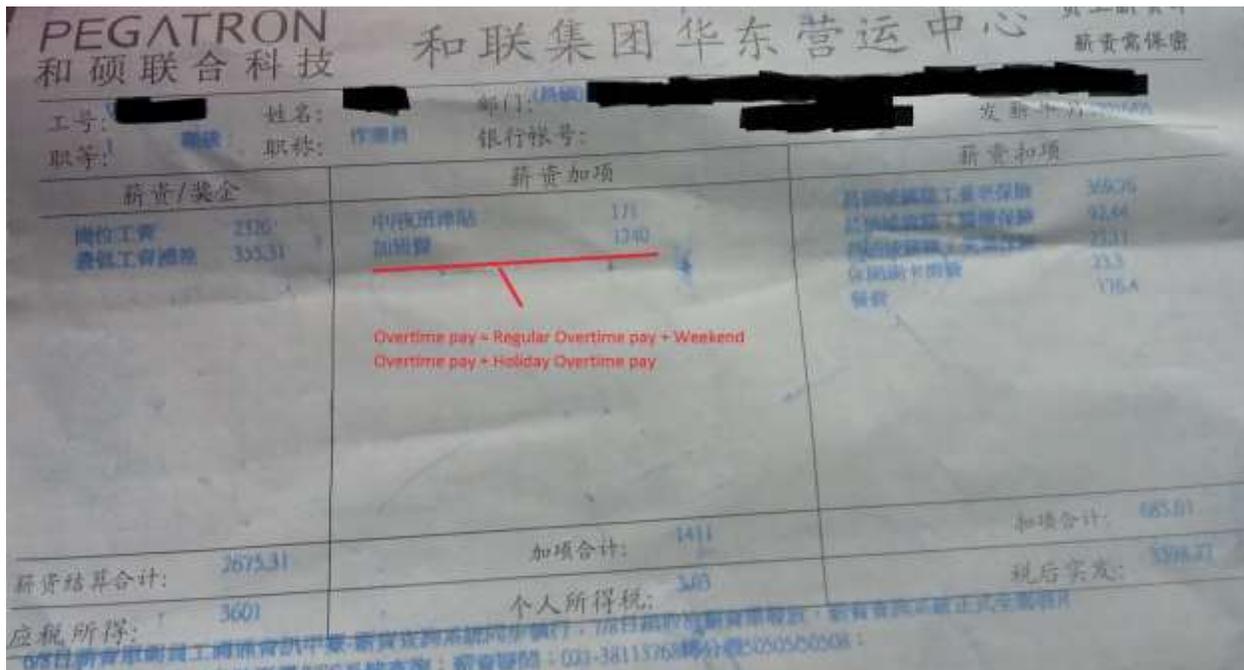
The paystub before adjustment, containing overtime pays of different categories:



工号: [redacted] 姓名: [redacted] 部门: [redacted]
 职等: [redacted] 职称: [redacted] 银行帐号: [redacted]

薪资/奖金	薪资加项	薪资扣项
岗位工资 2020 绩效工资奖金 150	餐补补贴 280 中夜班津贴 45 特殊日加班 1427.93 一餐加班 563.93 法定假日加班 278.62	五险一金 368 房租补贴 29.4 住宿费 180
	Overtime Pay by category	Weekend Overtime pay
	Holiday Overtime pay	Regular Overtime pay
	Overtime hours = Regular Overtime pay / (1.5 * hourly wage) + Weekend Overtime pay / (2 * hourly wage) + Holiday Overtime pay / (3 * hourly wage)	
薪资结算合计: 2170	加项合计: 2597.5	扣项合计: 577.4
应税所得: 4767.5	个人所得税: 38.03	税后实发: 4320.07

The paystub after the adjustment, only provided the total amount of overtime pay; this cannot be used to calculate overtime hours



PEGATRON 和硕联合科技 和联集团华东营运中心 薪资需保密

工号: [redacted] 姓名: [redacted] 部门: [redacted] 发薪日期: [redacted]
 职等: [redacted] 职称: [redacted] 银行帐号: [redacted]

薪资/奖金	薪资加项	薪资扣项
岗位工资 2326 绩效工资奖金 353.31	中夜班津贴 171 加班费 1240	五险一金 368.76 房租补贴 92.64 住宿费 23.3 住房公积金 23.3 餐费 176.4
	Overtime pay = Regular Overtime pay + Weekend Overtime pay + Holiday Overtime pay	
薪资结算合计: 2679.31	加项合计: 1411	扣项合计: 685.01
应税所得: 3601	个人所得税: 348	税后实发: 3253.27

Note: According to Chinese law, deductions related to workers' pension cannot be greater than 8% of workers' base wage. This has been violated in the above paystub. Please see:

http://www.12333sh.gov.cn/wsbs/wsbg/2007sbxx/201604/t20160412_1243853.shtml

Main Findings

1. Low wages remain in Pegatron

In 2015, the average wage was \$895 USD per month in Shanghai.¹³ In comparison, Pegatron workers, who had put in as many as 90 overtime hours during peak production season, only received about \$633 USD each month. What's worse, during the off-season months, they could only make between \$301 to \$452 USD. Their pay was far below the average. These workers are working to produce the most advanced electronic devices in the world, but their income is the same as wages ten years ago.¹⁴



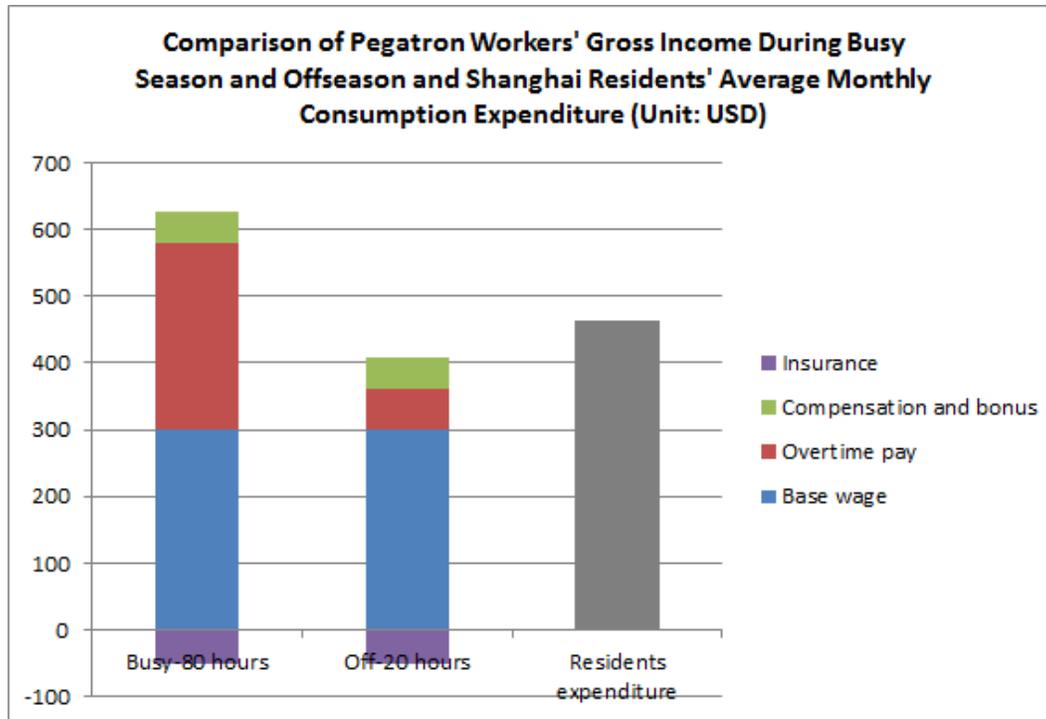
(Workers' income is composed of three parts, which are base wage, overtime pay, compensation and bonus. For the pays of 2015 and 2016 in this graph, base wages and compensation and bonus are taken from the average value of those in October 2015 and May 2016. We also use 20-hour overtime and 80-hour overtime to represent off-season and busy season respectively.)

Moreover, to evaluate workers' income, it is also important to consider the living cost in Shanghai. According to official statistics, in 2015, the average consumption expenditure of urban residents in Shanghai was \$5568 USD, or \$464 USD each month.¹⁵ However, during off-season, Pegatron workers only received about \$407 USD. Workers are not guaranteed an average life in Shanghai with this amount. (Please see the graph below) Although the average consumption expenditure of Shanghai urban residents cannot represent the spending of Pegatron workers, it provides us with an insight into the lifestyle that workers can have with a wage of \$350 USD. Also, we must also take into account that workers need to support not only themselves, but also most likely their parents and children at home.

¹³ Shanghai Residents' Average Monthly Wage Increased to \$895 USD in 2015; Jiefang Daily, April 4th, 2016; http://www.sh.xinhuanet.com/2016-04/04/c_135248467.htm

¹⁴ In 2006, employees' average wage was \$371 USD, which was \$436 USD in 2007. Pegatron workers' real income during off season in 2015 was about \$392 USD. Source: Shanghai employees' average wage http://www.sh.xinhuanet.com/2016-04/04/c_135248467.htm; Pegatron workers' income, paystubs collected by CLW

¹⁵ Statistical Communiqué of Shanghai on the 2015 Economic and Social Development; <http://www.shanghai.gov.cn/nw2/nw2314/nw2318/nw26434/u21aw1109178.html>



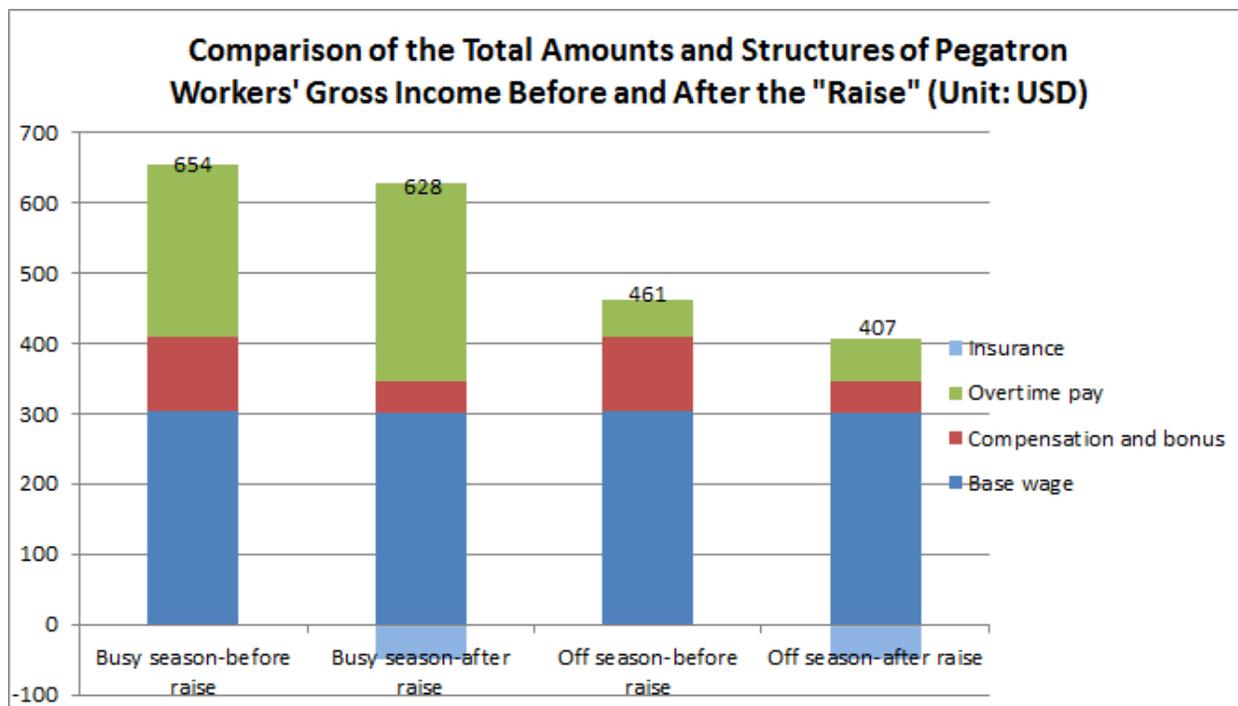
(The same as the graph above, for base wages, insurance payment, and compensation and bonus, we take the average values of those in May 2016.)

2. The truth about Pegatron Workers' "Wage Raise"

In April, 2015, the municipal government of Shanghai raised the minimum wage from \$304 USD to \$330 USD (deducting social insurance payment). Subsequently, we saw that Pegatron raised its base wage from \$304 USD to \$350. However, despite the wage raise of \$45 USD, Pegatron workers' real income, in fact, decreased significantly afterwards. Before the raise, workers' average income in March was \$570 USD, whilst in May, when wages were raised, workers' income on average was only \$487 USD. Pegatron might argue that this decline is a result of decreased overtime work. Nevertheless, even workers who had the same amount of overtime work in May as they had in March received less income than before. For example, workers who worked about 80 overtime hours in March received \$580 USD on average. However, in May, workers who put in 80 overtime hours only received \$563 USD, even though their wage was \$45 USD higher than that in March. How did Pegatron manage to meet Shanghai's new minimum wage standard, whilst at the same time decrease their labor costs?

The answer lies in the wage structure. As mentioned above, workers' income has three major components, base wage, overtime pay, and compensation and bonus. Before wages were raised, workers on average received about \$105 USD of compensation and bonus. However, after the rise in wages, they only received around \$45 USD. In addition, before April, Pegatron said would make full payments of social insurance for workers, but now, they require workers to pay for their own part¹⁶. On average, the individual payment of social insurance is \$50 USD, which, along with the decrease in compensation and bonus, contributes to a \$110 USD decrease in real wage, despite the wage raise. For this reason, many workers felt they were cheated.

¹⁶ However, in our investigation, we are unsure whether Pegatron actually made full payments of social insurance.



(Income tax, recommendation fee, leave deductions are not deducted here, so these numbers are higher than real income.)

Table 2: Grass-roots Workers' Income Before and After the "Wage Raise" (Unit: USD)

	Busy season: assuming he or she has 40 regular overtime hours and 40 weekend overtime hours		Offseason: assuming no overtime	
	Before the wage raise	After	Before the wage raise	After
Base wage	304.3	349.5	304.3	349.5
Overtime pay	244.9	281.2	0.0	0.0
Food subsidy	42.2	0.0	42.2	0.0
Performance bonus	7.5	0.0	7.5	0.0
Seniority pay	45.2	45.2	45.2	45.2
Skill allowance	22.6	22.6	22.6	22.6
Meals	-60.3	-60.3	-60.3	-60.3
Accommodation fee	-24.1	-24.1	-24.1	-24.1
Insurance	0.0	-56.4	0.0	-56.4
Total	582.3	557.8	337.5	276.6
Changes after the raise	0.0	-24.5	0.0	-60.9

Furthermore, along with changes in the amount of total income, workers' attitudes toward overtime work is also shifting. Contrary to the situation in the US where people want to spend more time with families, Pegatron workers actually want to have more overtime work. They may become so desperate that they quit their jobs if they have no overtime for a month or longer. As workers' wages are too low, they must rely on overtime work to support themselves and their families. Now, Pegatron has cut both the compensation and bonus amounts. We can imagine how tough a workers' life will be.

This was the method Pegatron used to decrease workers' wages. Pegatron raised the base wage to \$350 USD, which appears to be higher than the minimum wage of \$330 USD in Shanghai. However workers' wages were still below Shanghai's requirement after social insurance was deducted. In reality, 42.3% of workers' base wage was below Shanghai's legal minimum, and Pegatron has to provide an average makeup pay of \$19 USD to meet Shanghai city's minimum wage standard. From these practices, we can clearly understand Pegatron's attitudes toward workers.

3. Overtime hours

There is a seasonal variation with regards to workers' overtime hours. In the months before Apple releases its new product, excessive overtime is prevalent, while in other months, workers might have little overtime. In our February report, we revealed that in October 2015, 71.1% of Pegatron workers had average workweeks beyond Apple 60-hour maximum limit, and 64% of them worked over 90 hours of overtime in that single month. In response, Pegatron invited a Bloomberg journalist to visit its Shanghai factory in March 2016 and showed the latter its ID Check system, which Pegatron claimed could prevent workers who had close to 60 overtime hours, from entering workshops.¹⁷

However, the journalist was only able to visit the areas that Pegatron wanted people to see. Also in March, we collected an additional 381 pay stubs from the maintenance department which revealed that excessive overtime persists. In the

maintenance department, which accounted for around 40% of Pegatron Shanghai's workforce, workers all had overtime hours that significantly exceeded the 36-hour limit set by Chinese law, and 63.3% of them worked more than 90 overtime hours in a month.

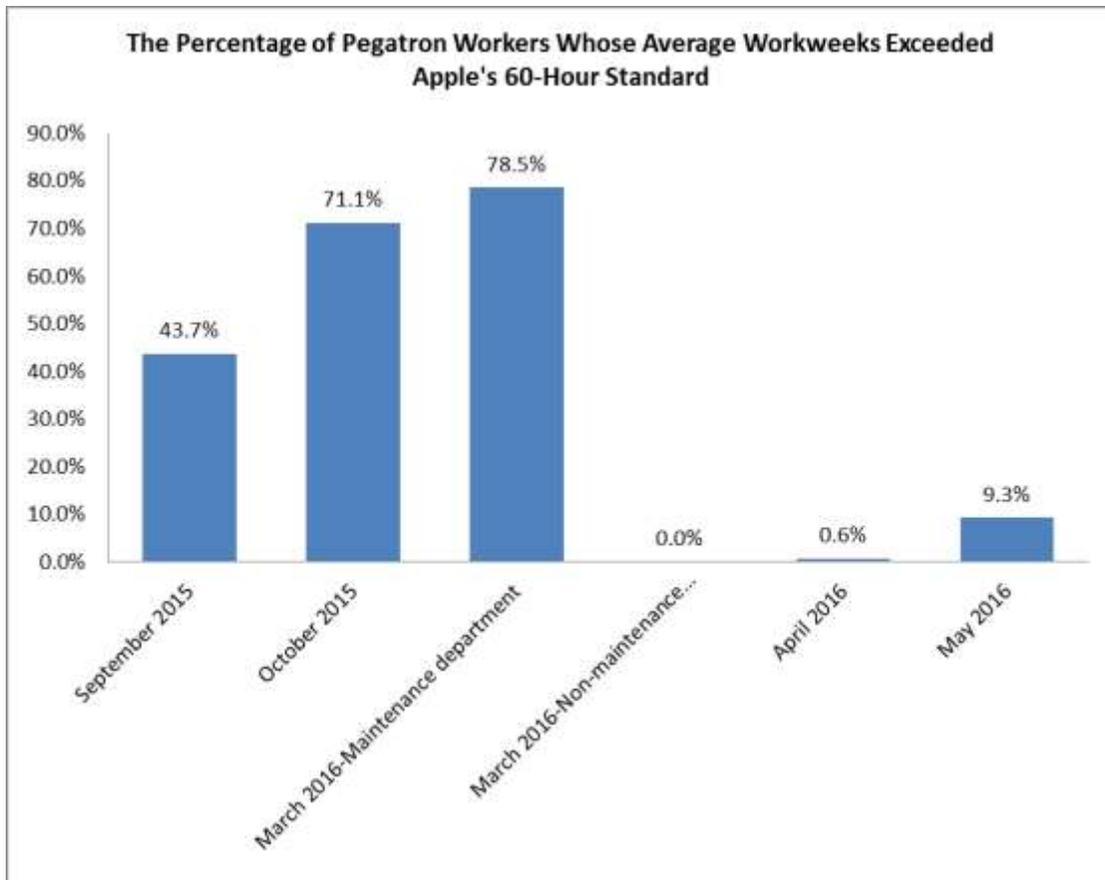
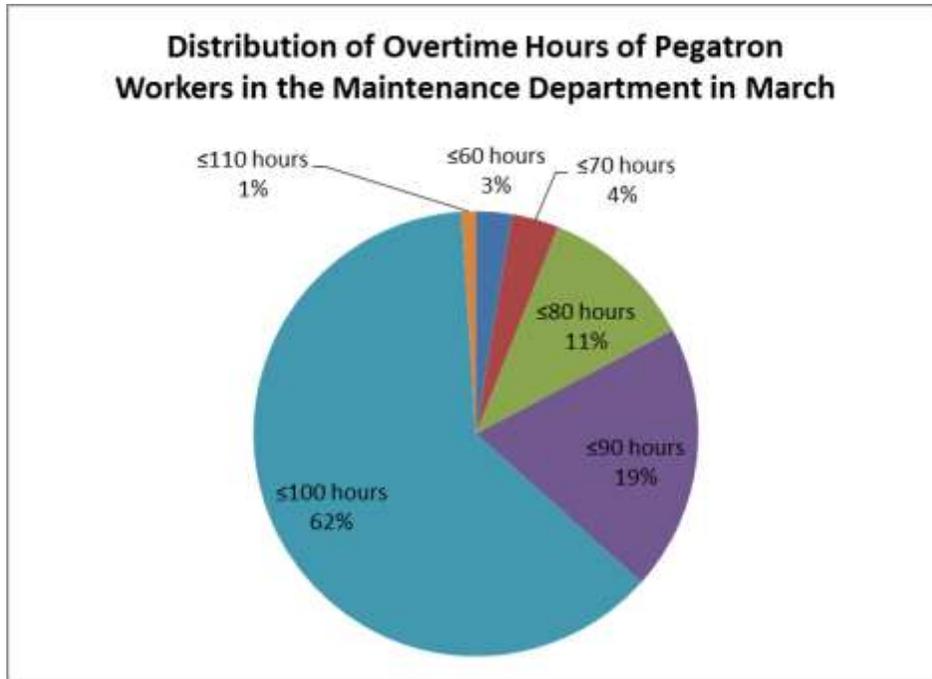
Apple does not publicly disclose how it calculates overtime hours, but it stipulates that workers in its supply chain should have at least one day off each week, and work no more than 60 hours. According to this standard, workers should work no more than 10 hours each day, at most 2-hour regular overtime on weekday, and 10-hours overtime on weekends and holidays. As such, in March, workers' overtime hours should be within 82 hours. However, in the maintenance department, workers' overtime hours on average were as high as 89.4, and 78.5% of them worked more than 82 overtime hours.¹⁸ In July, 2016, Apple replied to our findings and admitted that in some production departments of Pegatron, excessive overtime did exist, but the percentage of overtime violation was lower than our statistics. However, Apple did not provide details about their sample size and how they calculated overtime hours.



Dormitory Bathrooms

¹⁷ According to the Bloomberg report, "The men and women stare into face scanners and swipe badges at security turnstiles to clock in. The strict ID checks are there to make sure they don't work excessive overtime." Shai Oster; Inside One of the World's Most Secretive iPhone Factories; April 24, 2016; Bloomberg; <http://www.bloomberg.com/news/features/2016-04-24/inside-one-of-the-world-s-most-secretive-iphone-factories>

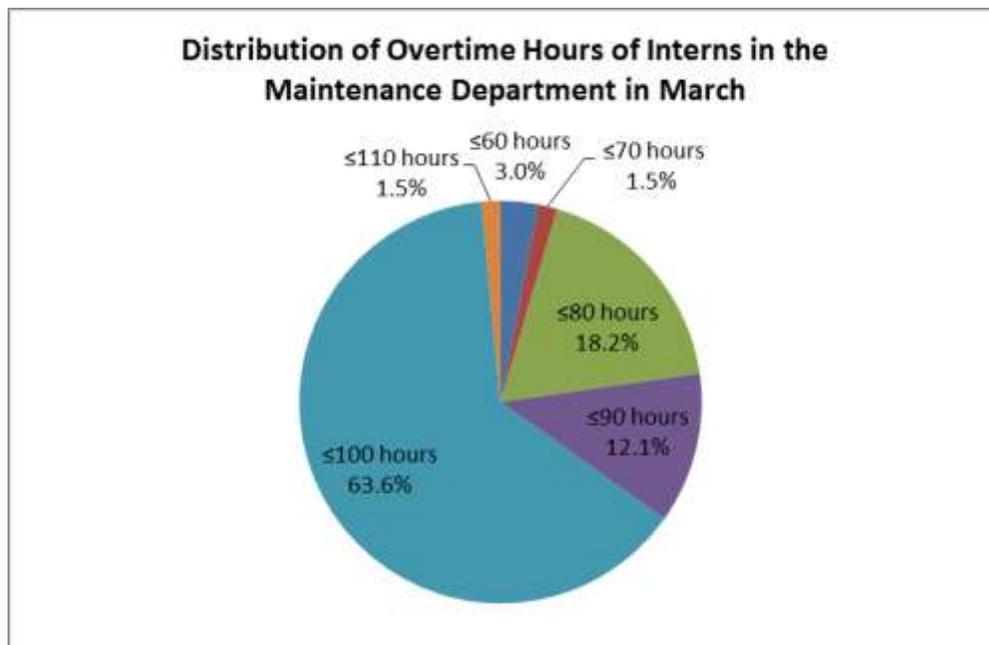
¹⁸ The 82-hour overtime standard in March is calculated by CLW according to Apple's rules and the situation in March. In the financial month-March 2016 (February 26th-March 25th), there were 21 regular weekdays and 4 weekends, so the total overtime hours $\leq 21*2+4*10=82$ hours. This calculation has been made according to the paystubs CLW collected.



Note: the calculation method of permitted overtime hours in October 2015 is the same as mentioned before. In October there were 19 regular weekdays, and 5 weekend/holidays for overtime work. Therefore the overtime hours should be within 88 hours (19*2+5*10) in order to meet Apple's standard. According to our statistics, 763 of the 1064 paystubs pointed to excessive overtime.

4. Pegatron failed to protect interns as stipulated by Chinese law.

According to stipulations by the Chinese government, employers cannot ask interns to work overtime.¹⁹ However, in Pegatron, interns not only worked overtime, they also worked more overtime hours than full-time employees. In March, all interns had overtime hours, and 49 out of a total of 66 interns had worked more than 82 overtime hours. According to our calculation, 74.2% of workers worked on average more than 60 hours per week.



5. Unpaid Work Time and Shortened Rest Time

According to our investigator's interviews with about a hundred workers, in most of the production lines, management required workers to be at their posts 10 minutes before starting work; otherwise, they would not be able to punch in. Also, the 10 minutes are not paid. For example, if the regular working schedule starts at 9:00 am, workers must stand by their posts by 8:50am.

If we assume all workers have unpaid work, then each worker has 39 unpaid work hours, which amounts to \$3,410,000 USD of unpaid wages to all 50,000 workers in Pegatron.

Furthermore, the security and ID check system increased workers' work hours and decreased their rest time. Workers in different departments all spent a different amount of time, depending on the number of workers in the department, to pass the security and ID check system to enter their workshops. For instance, in a production line that has 200 workers, they are expected to spend 5 minutes passing through

¹⁹ Article Five, Management Practices Student Internship of Secondary Vocational School; Ministry of Education, Ministry of Finance; http://www.mof.gov.cn/pub/gp/jiaokewensi/200806/t20080624_50177.html

the security procedures and ID checks. In a department with more than 400 workers, the time spent on these procedures is estimated to be 10 minutes or longer during busy season. Each worker enters and leaves the workshop six times each day (going to work in the morning, having lunch, going back to work after lunch, having dinner, back to work after dinner, and getting off work at night), with the time spent on the security and ID Check system amounting to one hour during the busy season. The one hour is not paid. The ID Check system did not control excessive overtime, but contributed to compressing workers' rest time.

6. Forced overtime

When joining the factory, workers are informed that they did not have to work overtime, but in reality, there were serious problems in daily management. In order to examine whether or not there was the presence of forced overtime work, CLW's undercover investigator and other worker volunteers applied to not work overtime. They applied ten times but were only approved twice. On many occasions, when proposing their applications to their team leaders, they were asked to apply to senior team leaders. Then, senior leaders asked them to apply to the department head, who, told them to speak with the manager. In the end, they did not receive approval. They subsequently filed a complaint to the workers' service center, which was rejected. Workers were told to cooperate with the factory's arrangement.

7. Lack of labor protection

In the pre-job training, workers were told that they would receive protection equipment. However, through our investigation, we found that the factory did not provide protection equipment to workers who were working in an environment with noise and laser. Most workers in the factory were exposed to noise and lasers and might be injured.



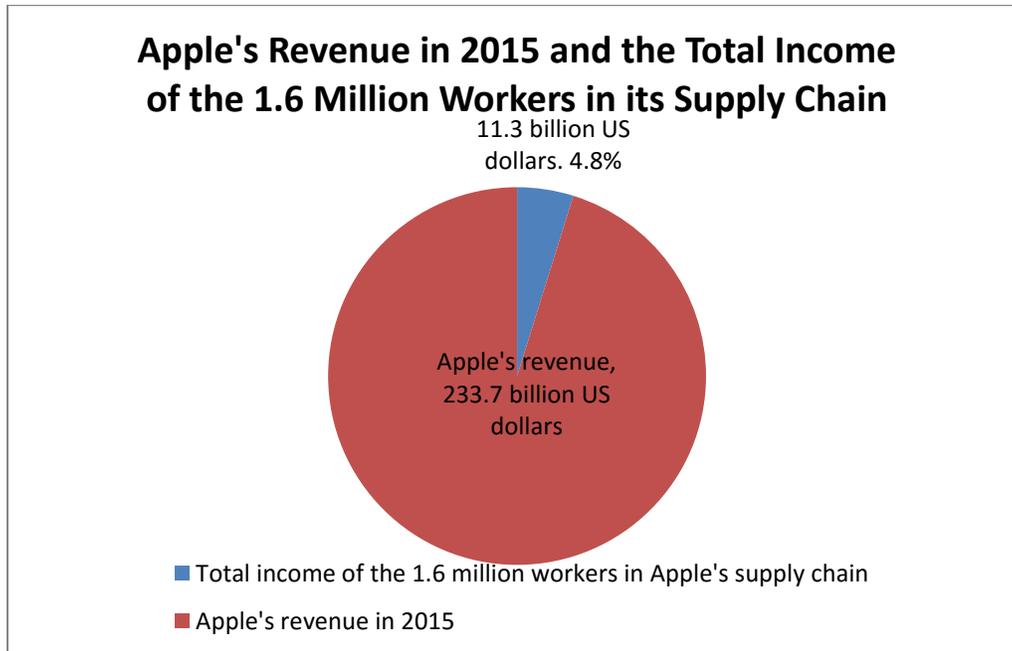
Dormitory Room

Suggestions

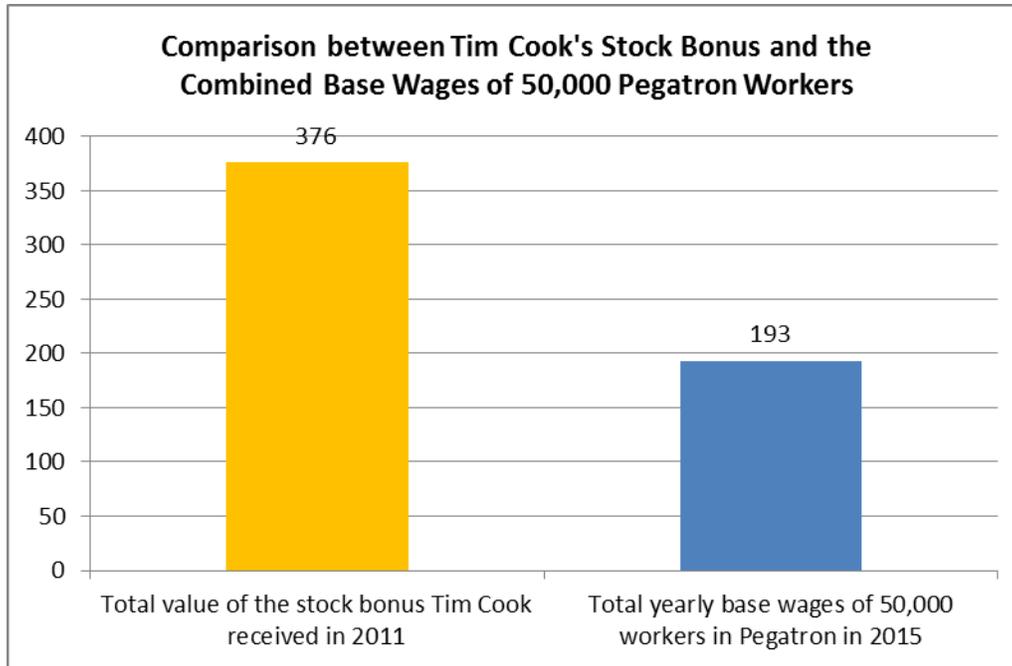
Working conditions cannot be improved by relying solely on audits. We find that all the changes Pegatron has made, adjusting wages, cutting welfare and subsidy, asking workers to share insurance payment, and forcing them to work overtime, are the unilateral decisions of Pegatron, who has never sought workers' consent beforehand. The best way to protect workers is to let them elect a union that can represent and voice their interests, in addition to monitoring the working and living conditions.

The Unfair and Irresponsible Apple

In 2015, wages accounted for around 44% of the United States' gross domestic production. However, the total income of 1.6 million workers in Apple's supply chain only accounts for 4.3% of Apple's revenue. This is not because Apple has a very small profit margin that it has to control its labor cost. Apple does have sufficient profits, but most of the profits are taken by its senior executives and large shareholders. For example, Tim Cook received one million shares of Apple's stock in 2011, which was worth 376 million dollars at that time, almost two times higher than the total base wages of 50,000 Pegatron workers in a year.

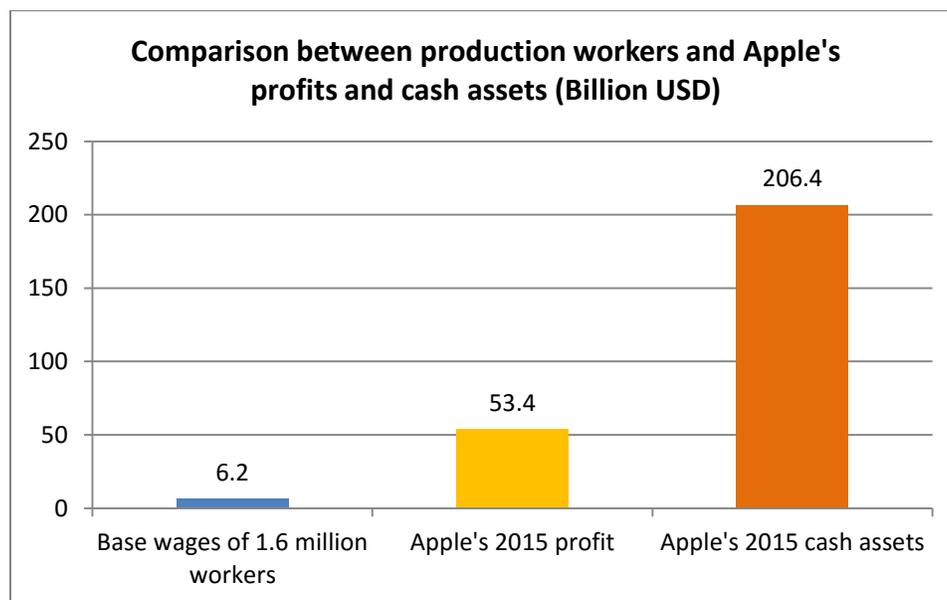


Note: we assume that all workers in Apple's supply chain are paid the same wage (including overtime pay and others) as Pegatron workers. Then, we assume that in a year, there are six months in the busy season and six months in the off season. We use the average wage in October 2015 to represent the wage during peak season, and the average in May 2016 to represent off-season wage. Based on that, Pegatron workers earn 44,160 RMB each year, or USD 7,032 according to the average exchange rate in 2015. In total, 1.6 million workers can make 11.3 billion US dollars. Apple's revenue in 2015 is from its 2015 financial report. Exchange rate data is from FSForex: <http://www.usforex.com/forex-tools/historical-rate-tools/yearly-average-rates>.



Note: In March, Pegatron had around 50,000 workers, and the base wages for that year amounted to a total of 193 million USD. Data related to the number of workers came from an interview by a Bloomberg journalist at Pegatron: <http://www.bloomberg.com/news/features/2016-04-24/inside-one-of-the-world-s-most-secretive-iphone-factories>

Apple has the ability to improve working conditions. In 2015, Apple's profit was as high as 53.4 billion US dollars, and its cash asset reached up to 206.4 billion, an increase from 155.3 billion in 2014. Its cash reserve is enough to hire 1.6 million workers to work 33 years. However, Apple would rather keep money in its hands and do nothing, than allocate a small part of it to improve working conditions.



Note: Workers' wages has been calculated according to Pegatron workers' base wages. The exchange rate was taken as the average rate in 2015. Data on Apple's profits and cash assets are from its 2015 financial report.

Conclusion

Pegatron workers are not treated fairly, and Pegatron has never shown sincerity in treating its workers well. According to the statistics, in the past year, workers at Pegatron on average worked 80 overtime hours each month, but their income including overtime pay was only \$591 USD, which is \$301 USD lower than the average wage income of Shanghai employees. Their base wages have been the same as the local legal minimum wage. What's worse, when Shanghai raised the minimum wage, Pegatron managed to cut workers' total income through a series of deliberate maneuvers. Therefore, we argue that Pegatron has set a bad example with regards to fair treatment of employees and corporate social responsibility.

Fair treatment of workers is not only Pegatron's business but also Apple's responsibility. Apple has already subcontracted its production to suppliers such as Pegatron, however, these workers are making Apple products. Moreover, through outsourcing, Apple lowers its production cost, but this is only possible by exploiting workers. Apple is the real reason working conditions are deteriorating.

Improving working conditions will require companies to invest in money. Apple has the economic resources to do this since its cash assets have amounted to a total of 233 billion US dollars. However, Apple is, in fact, hindering the improvement of working conditions in the smartphone industry. In 2015, Apple alone claimed more than 90% of the smartphone industry's aggregate profits, while a majority of other firms were operating at a loss.²⁰ If Apple does not take on responsibility commensurate with its status, other companies will not have the ability to make improvements either.

Since 2013, China Labor Watch has published reports every year to reveal Pegatron's terrible working conditions. Media including Wall Street Journal, BBC, and Reuters also reported on relevant issues. However, many problems have never really been resolved. Pegatron's case demonstrates that Apple has never seriously fulfilled their commitments to the public and workers.

Apple's senior operating vice president Jeff Williams said, "We know of no other company doing as much as Apple does to ensure fair and safe working conditions, to discover and investigate problems, to fix and follow through when issues arise, and to provide transparency into the operations of our suppliers."²¹

Apple CEO, Tim Cook also said: "We care about every worker in our worldwide supply chain."

In response to our report in 2013, Apple claimed that "We are proud of the work we do with our suppliers to improve conditions for workers. Our program goes far beyond monitoring by ensuring corrective actions where they are needed and aggressively enforcing our supplier code of conduct wherever Apple products are made. We believe in transparency and accountability, both for our suppliers and ourselves."²²

²⁰ Chuck Johns; Apple's iPhone: Why Care About Units When It Captures All The Profits; Forbes; November 16, 2015; <http://www.forbes.com/sites/chuckjones/2015/11/16/apples-iphone-why-care-about-units-when-it-captures-all-the-profits/#31b871d323f2>

²¹ Apple 'deeply offended' by BBC investigation; BBC; December 19, 2014; <http://www.bbc.com/news/technology-30548468>

²² Ben Lovejoy; Alleged Apple Supplier Jabil Circuit accused of numerous labor law violations; 9to5mac; September 5th, 2013; <https://9to5mac.com/2013/09/05/china-labor-watch-levels-numerous-labor-law-violations-at-alleged-apple-supplier-jabil-circuit/>