

Is the fast fashion industry at an inflection point?

ESG Insight

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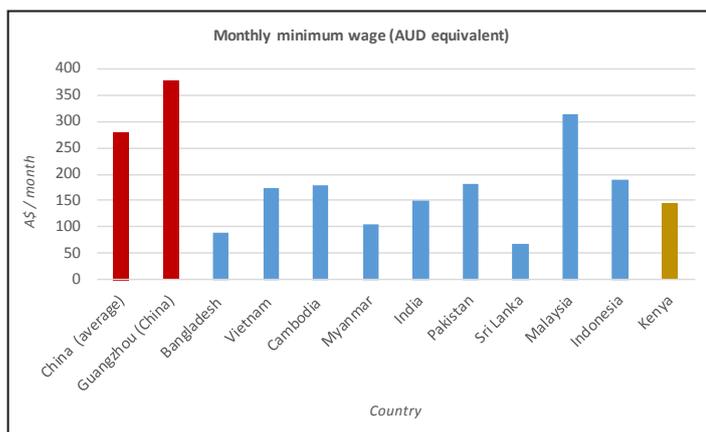
Key messages from Ausbil's field trip to Guangzhou, China

There has been a lot of investor focus on China's headline GDP growth numbers in recent times, however, the quality of this GDP growth is also important. China has long been the manufacturing engine of the world, for example in terms of garment manufacturing, but it's latest 5-year plan makes it very clear that China wants to transition away from low skill manufacturing, where costs are everything, to high-end manufacturing. Combined with new environmental laws, this could have a number of repercussions that investors need to be aware of, and they are not just related to China, but the entire fast fashion industry, as well as Australian-based retailers. Ausbil Investment Management recently travelled to China on a research field trip and this paper outlines our key insights and potential investment implications.

China keeps transitioning away from low tech manufacturing

Garment manufacturing in China has been under structural pressure for a long time because of rising labour costs. This has led to increased sourcing from other countries with lower labour costs. A McKinsey survey of chief procurement officers in 2015 asked the question: "what will be the top three sourcing destinations over the next five years?" Bangladesh topped the list, followed by Vietnam, India and Myanmar, while China came in 6th place.

The minimum wage in Bangladesh is approximately a mere 25% of the average minimum wage in China's garment manufacturing hub Guangzhou, as illustrated in the chart below which highlights the minimum wage rates for various garment producing countries. The national minimum wage differs by province in China; from the equivalent of AUD199 to AUD437 a month, with a national average of AUD279.¹



Minimum wage, however, is not representative of the true labour cost as the take-home pay (including bonuses and overtime pay) in the garment sector in China is typically twice as high as the minimum wage. In China, the legal work week is 40 hours per week at 8 hours per day with compensation premiums for overtime hours of 150-200%.

Wage inflation has slowed in 2016. Earlier this year in Guangdong, which is China's most populous province, its biggest exporter and one of the main destinations for rural job seekers, it was announced that minimum wages would freeze for two years. While the average monthly wage for China's 277 million migrant workers rose by 7.4% in 2015 to the equivalent of AUD612 a month, many economists expect the increase in wages to be less than 7% in 2016.²

Cotton is typically the main cost driver in the garment supply chain. But labour costs, which can be a small percentage of the total costs of goods sold, particularly for basic garments, remain a key cost differentiator in cutting and sewing, where the labour costs are a function of base pay, overtime, bonuses, productivity, automatization, productivity, living expenses and more. Tariff differences between countries are also a key consideration in explaining the differences in the total costs of goods sold.

Chinese garment manufacturers are also diversifying by moving their factories abroad and those recipient countries outside China are gradually building up their skills, expertise and productivity levels in cutting and sewing. This is often done because Chinese factories want a second option and to exploit the relative wage differences. One factory we visited in Guangzhou recently moved some of its production by buying land in Myanmar and building a new factory there. While workers in Guangzhou are earning approximately US\$500 a month, the wages in Myanmar are US\$120-130 a month, which is still higher than the country's minimum wage.



Chinese garment factory in Guangzhou (photo: Måns Carlsson-Sweeny, Ausbil)



Chinese garment factory workers' dormitory in Guangzhou
(photo: Måns Carlsson-Sweeny, Ausbil)

While garment production has partly leaked out of China (and continues to do so) to countries like Bangladesh, Vietnam, Cambodia and more recently, Myanmar, the Chinese garment manufacturing sector has been surprisingly resilient and survived for longer than expected. This is largely thanks to its relatively high labour productivity rates and the fact that China offers relatively high product quality, better infrastructure, better power reliability, shorter lead times and higher flexibility, which is particularly important for, say, small orders from Australian retailers. To combat some of the cost increases in China, some Australian retailers have made their supply chains more efficient via bonded consolidation centres and by asking their supplier factories to do the picking and packing at factory level.

Despite the cost differences between China and other countries and the desire of retailers to have diversified supplier bases, much of Australian retailers' sourcing remains highly China-centric. Nevertheless, the Chinese garment industry is facing some major structural challenges right across the value chain from cotton production up to the final stage of cutting and sewing.

Environmental regulatory change could speed up the transition

Environmental regulatory change could speed up the transition away from the garment industry and may have repercussions for the sustainability of the global fast fashion industry.

Competition in the garment manufacturing industry is fierce among South East Asian countries and it is becoming increasingly difficult for Chinese manufacturers to boost labour productivity. Quite tellingly, the Chinese Government's 'Made in China 2025' plan omits the textiles industry on its list of future economic focus areas.

For the earlier stages of the value chain in the textiles industry, new environmental laws will likely act as major catalysts for change. China faces significant environmental issues and the textiles industry has been a major culprit. The Government has become determined to make changes to avoid social unrest and for strategic reasons.

China has approximately 7% of the world's freshwater reserves, but 20% of the world's population. Its latest 5-year plan aims to reduce total water consumption by 35% come 2020.³ Food production and energy security are important aspects for China's policy developments. China's energy demands are massive and water is a key ingredient in the energy sector. However, many parts of China, including those that account for a significant proportion of China's GDP, are facing increased water stress. China, therefore, needs to decide how the scarce water resources should be used and allocated between energy production, food production and other sectors, such as textiles. Even within sectors, there are choices to be made, for example, meat production is significantly more water intensive than grain production.

With regard to the textiles industry, China is the second largest cotton producer in the world, but cotton production and garment

manufacturing in general are both highly water intensive. According to China Water Risk, the water footprint for one kilo of cotton is above 10,000 litres and according to UNESCO-IHE's Institute for Water Education, a t-shirt's total water footprint is 2,720 litres.⁴ China's textile industry causes significant amounts of waste water, plus the use of chemicals, dyes and pesticides have a major polluting impact on China's precious water resources. As a result, the textiles industry is a prime target for the Chinese Government's objective to clean up waterways and become water smart.

The stakes are high for non-compliance with the Government's 'Water Ten Plan' and this means textiles plants face tough compliance deadlines. Many textiles factories have already begun closing down. Also, the environmental laws have been amended and carry higher criminal charges.



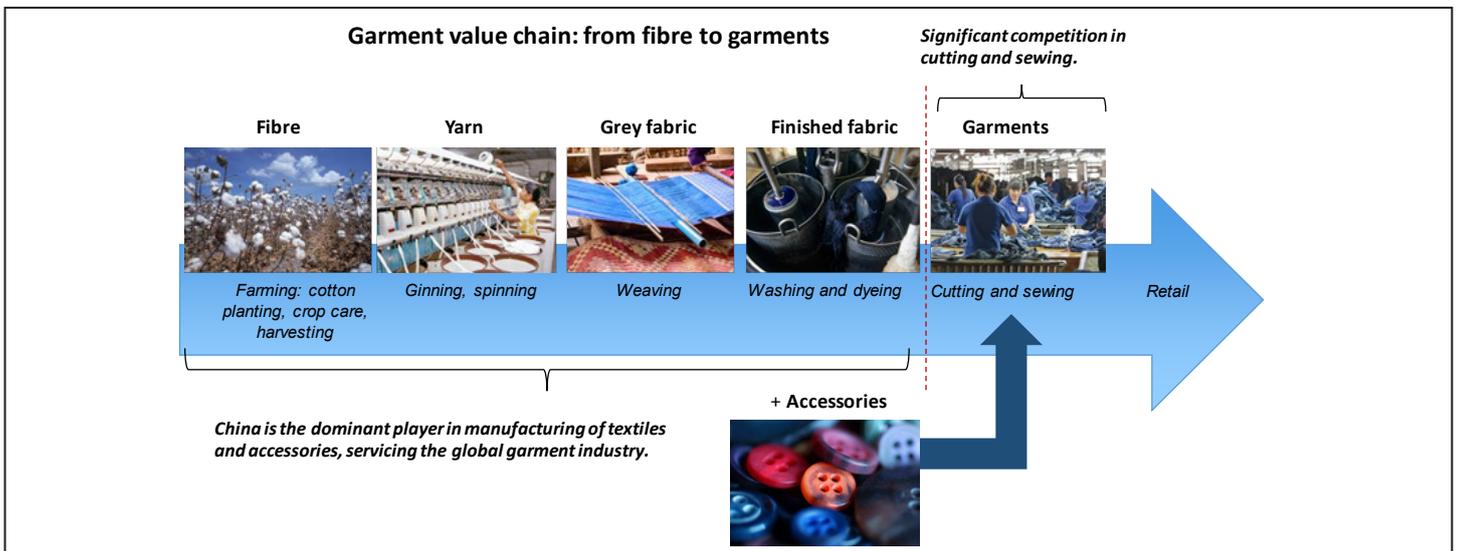
Water treatment at Chinese textiles washing and dyeing facility
(photo: Måns Carlsson-Sweeny, Ausbil)

As a result, the industry will incur higher costs and over time it might have to move elsewhere. But currently there is nowhere else to go. While cutting and sewing is done across a large number of countries, a significant part of the materials needed are imported from China, including the majority of the world's raw silk and chemical fibres and a substantial proportion of the cotton lint, wool and hides, not to mention much of the world's buttons, zippers and other accessories.

Few countries have significant vertical integration from cotton production to cutting and sewing and in countries like Bangladesh, most of the accessories are imported from China. Replicating China's vertically integrated supply chain in textiles manufacturing somewhere else may take time and it may not even be possible given the resources needed (including land, water and labour). As a result, the challenges facing the Chinese textiles industry are an issue for the entire global garment industry, with a high risk of increased costs that would have to be passed on to consumers. This poses a major risk for the global fast fashion industry, particularly among smaller industry players.

The ultimate long-term solution would be a circular economy. There are currently some technology initiatives and efficiency measures being tried out to reduce water consumption in the textiles industry, but these are inadequate. Also, over the long term new technological breakthroughs might help too. However, in the short term, because it is difficult to go anywhere else, the fast fashion industry has a strong incentive to stay in China and work with manufacturers.

Forced factory closures can cause major disruption to brand companies' supply chains. Also, to create sustainable supply chains, the garment industry and the brand companies will need to focus on ways to establish closed loop systems in order to conserve and re-use resources, but that is a difficult task as current technologies are not able to recycle fibres on a large scale and the issue is even more prominent for blended fibres, e.g. synthetics and cotton. While some global brand companies are looking into these issues, few Australian brand companies are currently disclosing strategies for how to develop closed loop systems.



Risk of labour rights issues in China as the balance of power shifts and production heads west

In recent years, overall labour rights issues in China have improved, but the move by brand companies into countries such as Bangladesh, Cambodia and Myanmar, which have significantly worse labour rights issues than China, have ultimately put brands at increased risk of sweatshop issues. This can result in brand damage and supply chain disruption. More recently there have been signs of increased risk in China too.

Manufacturing in China is currently weaker than a few years ago and based on our feedback, the labour shortages seen a few years ago have diminished or evaporated altogether, other than in some high-skilled manufacturing areas. This means a shift in the power balance between employers and workers, which can negatively impact wages and labour rights.

While China has significantly reduced the risk of some of the worst types of labour rights and human rights violations in the garment supply chain in previous years, NGOs on the ground have confirmed our hypothesis about a higher incidence of labour exploitation based on interviews with workers.

The first key issue relates to not paying the minimum wage. Take-home pay is dropping, while costs of living are rising (see below for a discussion on 'living wages'). This is linked to workers being paid piece rates, where a worker gets paid by the piece completed, not an hourly wage as in the electronics industry, and piece rates can be set low.

The second key issue relates to excessive over time, with working weeks above 72 hours still very common. This may be linked to the worker's being paid piece rates and is often because of late order changes and possibly because of production moving to inland China, which adds to the total lead times.

The transition to inland China has effectively been capped by transport costs and lead time considerations in the past, but the government is lending support with ongoing infrastructure development. While the government has increasingly become serious about enforcing the labour laws in coastal areas (another reason for labour costs rising there), it has often turned a blind eye to labour exploitation in the west. While the central government wants to clean up the garment sector, local governments see manufacturing as an important industry for employment purposes. As a result, the move to inland China means brand companies might be exposed to new sweatshop risks.

What can companies do to mitigate risk?

Sweatshop issues can result in brand damage and supply chain disruption. When it comes to reducing the risk of sweatshop issues, we believe in the concept that brand companies need to have a strong K-Y-S, or 'know your supplier' ethos. Brand companies need

to build strong relationships with suppliers. Key risks relate to late changes in orders and too much pressure on turnaround times, which leads to higher risk of exploitation and sub-contracting to unknown suppliers. It's not sufficient for brand companies to audit only their first tier suppliers, they also need to have visibility over sub-suppliers and second tier suppliers and, due to the new environmental laws in China, they need to monitor not only labour rights, but also environmental risk management.

In our view, best practice is for brand companies to work together with suppliers on these issues. Also, leading retailers ensure procurement teams and ethical sourcing teams don't have conflicting demands on suppliers and that they offer grievance mechanisms, including anonymous whistle blowing for workers. Furthermore, industry leaders collaborate with other retailers and NGOs on best practice. Transparency regarding factory names and location is industry best practice.

The two key challenges we see from a sustainability perspective, however, are the lack of freedom of association and living wages. Freedom of association, or the right to unionise, and collective bargaining, remains poor in many garment manufacturing countries in Asia. It is interesting to note that in almost all factory disasters, particularly in Bangladesh, e.g. the Rana Plaza building collapse in 2013 that killed over 1,300 workers and other previous and subsequent factory fires in that country, have occurred in locations where there was no union representation. Freedom of association is also poor in the Chinese garment sector. The lack of unions is also partly linked to the living wages issue cited below.

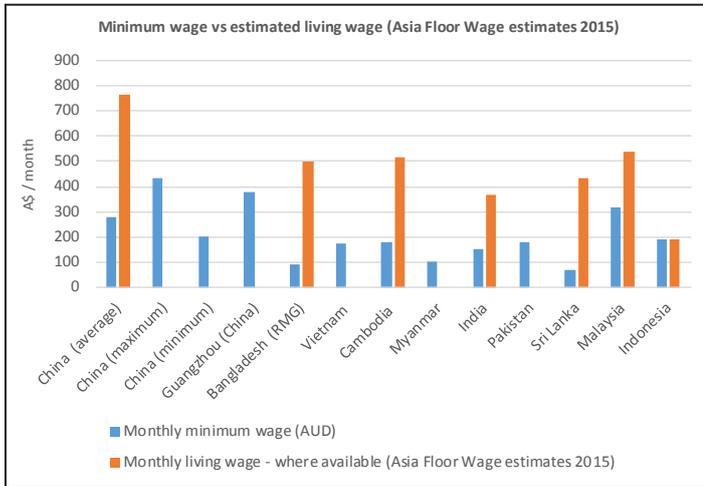
Living wages: key to sustainable supply chains in the long term

The sustainability of wages and wage differentials between countries need to consider the concept of 'living wages', that is wages covering living expenses, such as food and rent, which can differ widely, even within a country. A living wage was effectively stipulated as a human right by the Universal Declaration on Human Rights in 1948.

In China, living expenses are growing faster than wages. According to Impactt Ltd, a consultancy focused on labour rights, the living wage gap in China grew from 6% in 2015 to 11% in 2016 (based on living wage estimates provided by the Asia Floor Wage). This was also confirmed by workers we met as part of a Worker Focus Group in Guangzhou. This puts workers in a weaker bargaining position and while that means lower risk of labour-related disruptions, the risk of worker exploitation is higher. This is exacerbated by the increased pressure on faster turnaround times and price pressure from fast fashion brand companies.

In other countries, the gap is even higher. Notwithstanding the fact that actual take-home pay is typically higher than the minimum wage, sometimes much higher. It is interesting to compare Asia

Floor Wage estimates for living wages in 2015 (where applicable) with minimum wages as per the table below:



Based on this comparison, the gaps are particularly large, especially in Bangladesh, Cambodia and Sri Lanka. In contrast, the minimum wages in Vietnam and Indonesia are actually based on estimated living wages. The gaps identified differ slightly depending on how living wage estimates are estimated (remuneration includes a number of different elements) and which one is being used, for example, the Clean Clothes Campaign, the Asia Floor Wage Index and the Global Living Wage Coalition. But the so-called Anker living wage methodology (cost of food, housing and other essential needs plus a small margin for unforeseen events) is increasingly being accepted as the standard. The message is fairly clear: in most garment manufacturing countries, minimum wages don't cover a living wage. In many cases, the actual take-home pay is also significantly lower than the living wage.

From a practical perspective for companies, one key issue is how to ensure workers actually get any potential extra payments to cover living wages? Also, rather than analyzing how people are being paid at one particular point in time, companies need to know how people are being paid over time and it can be difficult to research conditions in many different locations. Other issues include the complexity of pay (base pay, cash allowances, bonuses, over time and more) and the lack of unions (which means poor enforcement). Furthermore, when minimum wages have been raised, as in Bangladesh a few years ago, subsequent rent increases quickly offset the pay rises.

From an investor perspective, the gap between living wages and actual wages is important in the context of assessing the sustainability of sourcing costs. A wage that does not cover a living wage is hardly sustainable in the long term. Therefore, we expect to see rising sourcing costs on the back of continued food and

rent inflation in many garment manufacturing countries. In addition, large gaps also increase the risks of shock events, such as labour unrest or industrial action, which can cause significant supply chain disruption.

Summary and Conclusions: the fast fashion industry might be at an inflection point:

- China has managed to remain competitive against other countries in garment manufacturing, but the industry does not appear to be considered part of China's economic future.
- China is at very high water risk and many industries compete for this scarce resource, including energy, food production and garments. The garment sector, which is both a highly water intensive industry and a major polluter, is facing tougher rules and higher costs.
- The higher costs, which will impact international retailers buying from China, will need to be passed on to consumers. Over time this could force the textile manufacturing industry out of China. The problem, however, is that no other country has the capacity to replicate China's garment sector.
- China is a major supplier of input material, such as textiles, to other garment producing countries. As a result, the new legislation could have a significant impact on the entire global fast fashion industry. This risk might be particularly high for smaller and highly transactional players.
- Companies need to focus on their efforts to close the loop on water efficiency and the recycling of fibres, but this is difficult with current technologies.
- Poor freedom of association and the gap between actual wages and living wages represent two other key sustainability risks for the garment sector. Wages that do not cover living costs will not be sustainable in the long term.
- While China has come a long way in eradicating some of the worst types of labour rights issues, certain labour rights problems may be on the rise again in China due to a migration of factories towards inland China, fierce competition with other countries, increased pressure from buyers and a general shift in the power balance between employers and employees.
- Companies have a vested interest in minimizing the risk of brand damage and supply chain disruption and there are many ways they can act as positive catalysts for change.

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2. Bloomberg L.P . 2016. China's Great Wage Boom is Starting to Fade . [ONLINE] Available at: <http://www.bloomberg.com/news/articles/2016-03-22/china-s-great-wage-boom-seen-subsiding-with-unemployment-rising>. [Accessed 16 September 2016].
3. King & Wood Mallesons . 2016. China's 13th Five Year Plan: Environment . [ONLINE] Available at: <http://www.kwm.com/en/au/knowledge/insights/china-13th-5-year-plan-environment-sustainability-initiatives-20160414>. [Accessed 16 September 2016].
4. Chapagain , AK, Hoekstra A.Y, Savenije, H.H.G, Gautam R, 2005. The Water Footprint of Cotton Consumption . UNESCO-IHE Institute for Water Education , Research Report Series NO.18, 1-44.

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