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A COMMENTARY ON THE UK'S LEADING FOOD RETAILERS RESILIENCE PLANS IN THE FACE OF CLIMATE CHANGE

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Abstract

In September 2019, the UK House of Commons Environmental Audit Committee warned that the UK's food supply was vulnerable to climate change. Within the UK food retailing is highly concentrated with the four leading food retailers accounting for almost 70% of all food sales. In the face of the threat of climate change to food supplies, a focus on resilience might be seen to have much to offer retailers. However, little work has been published in the academic literature on if, and how, retailers are employing the concept of resilience in their business plans. With these thoughts in mind, this commentary paper provides an exploratory review of how, the UK's four leading food retailers, namely Tesco, Sainsbury's, Asda and Morrisons, have publicly acknowledged the importance of resilience in the face of climate change. The paper outlines definitions of resilience and retail resilience, draws out four general themes within the UK food retailers' resilience plans and offers some wider reflections on the retailers' resilience plans in the face of climate change.

Keywords: Resilience, Food Retailers, Climate Change, Supply Chain Security, UK

Introduction

In September 2019, the UK House of Commons Environmental Audit Committee warned that the UK's food supply was vulnerable to climate change. This warning currently stands in marked contrast to the Government's *'UK Climate Change Risk Assessment'* (HM Government 2017). The Government recognised *'climate change will present significant risks to the availability and supply of food in the* UK', it argued that *'the resilience of food supply chains is regularly tested by severe weather and other events and consistently performs* well', but it took an *'optimistic view of the levels of resilience that are achieved through functioning markets and diverse sources of supply.'* However, the House of Commons Environment Audit Committee (2019) expressed concern *'that the Government is complacent about the risks to food security posed by climate breakdown.'* Rather the Environmental Audit Committee (2019) reported *'environmental change is projected to have increasingly major impacts on global food systems which would affect the UK's food security and ability to deliver healthy, sustainably produced diets.'* With these thoughts in mind, this commentary paper provides an exploratory review of how, the UK's four leading food retailers, namely Tesco, Sainsbury's, Asda and Morrisons, who collectively account for almost 70% of all food sales in the UK, have publicly acknowledged the importance of resilience in the face of climate change. The paper outlines definitions of resilience and retail resilience, draws out four general themes within the UK food retailers' resilience plans and concludes with some wider reflections on the food retailers' pursuit of resilience plans in the face of climate change.

Retail Resilience

The concept of resilience defined as the*, 'the capacity to cope with change and uncertainty'* (Weichselgartner and Kelman 2015) is attracting increasing attention from a wide range of companies and organisations (Jones and Comfort 2018). Within the corporate world there is certainly growing recognition of the importance of resilience and PricewaterhouseCoopers (2017a), for example, emphasised their belief that *'enterprise resilience is the most important capability in business today.'* Here enterprise resilience is defined as *'an organisation's capacity to anticipate and react to change, not only to survive, but also to evolve'* (PricewaterhouseCoopers 2017b).

Large retailers, particularly large food retailers, have extensive and complex international supply chains, and as such are potentially vulnerable to global climatic changes and extreme weather events. As such, a focus on resilience might be seen to be important in exploring how retailers look to adapt to, and mitigate, change. However, Dolega and Celinska-Janowicz (2015) suggested that its application in the retail sector *'is rather scarce.'* Indeed, the majority of definitions of retail resilience within the academic literature have been couched in terms of its role in wider economic and urban structures, rather than on its corporate dimensions.

The emphasis here lies in in town planning, urban regeneration, town centre management and geography and the focus is on *'the ways and means retail systems contribute to cities' sustainability and resilience'* (Barata-Salgueiro and Erkip 2014). Dolega and Celinska-Janowicz (2015), for example, looked to define *'retail resilience'* specifically in terms of *'the resilience of an urban retail system'* as the *'ability of different types of retailing to adapt to changes, crises or shocks that challenge the system's equilibrium without failing to perform its functions in a sustainable way.'* Singleton et al. (2016) developed the concept of *'e-resilience'* to define *'the vulnerability of retail centres to the effects of rapidly growing internet sales.'* That said, Fernandes & Chamusca (2012), defined retail resilience as '*the ability of different types of retailing at different scales to adapt to changes, crises or shocks that challenge the system's equilibrium, without failing to perform its functions in a sustainable way*.'

Food Retailers' Resilience Plans

Within the UK, food retailing is highly concentrated and in May 2019 the four leading retailers, Tesco, Sainsbury's, Asda and Morrisons accounted for 68.1% of all food sales (Statista 2019). Tesco, founded in 1919, is the UK's largest retailer, with some 3,400 stores and over 310,000 employees and it trades from hypermarket, superstore, and convenience store formats and increasingly online. Sainsbury's, founded in 1869, trades from over 600 supermarkets and some 800 convenience stores. Asda, (part of Walmart, the world's largest retailer) was founded in Yorkshire in 1965 and though originally based in the North of England, the company began to expand its retail operations into the South of England during the 1970s and 1980s and it currently trades from over 600 locations throughout the UK. Morrisons, founded in 1899 in Bradford, Yorkshire, trades from some 500 stores. The company's operations were concentrated in the Midlands and North of England up to 2004 but since then it has developed a growing presence in the South of England.

To explore how the four retailers publicly acknowledged addressing resilience, an Internet search was conducted in July and August 2019 using two key words, namely 'resilience' and the name of each of the retailers. The nature of the subsequent navigation process varied from one retailer to another as the authors pursued the most promising lines of enquiry to reveal the retailer's approach to resilience. The information and quotations employed in the paper were taken from the retailers' corporate websites and the authors took the considered view that they did not need to contact the retailers to obtain formal permission to use this information.

The four food retailers articulated their commitment to the concept of resilience in the face of climate change and extreme weather events in a variety of ways. Rather than describing each of these commitments in detail, the aim here is draw out a number of general themes. Firstly, the retailers explicitly acknowledged importance of climate change and the threat it posed for their business operations. Tesco (2019a), for example, recognised *'climate change is the biggest environmental threat the world faces.'* Sainsbury's (undated) reported *'climate change and increasing resource scarcity are complex, global challenges which will affect every part of our business. To grow our business sustainably we must use our planet's resources wisely and do our bit to tackle climate change.'* Asda (2014), argued *'no longer is climate change a subject just for environmentalists, it is already having an impact on businesses around the world and across all sectors.'* Morrisons (2019) reported *'we are already seeing the effects of climate change in every country. Oceans are warming, snow and ice have diminished and sea levels are rising.'*

Secondly, the importance of resilience plans in responding to the threats posed by climate change was recognised. In addressing *'the challenge of a changing* climate', Asda (2014), for example, reported *'we have recognised the potential impacts from a changing climate and have already started work on our resilience strategy.'* Further Asda (2014) reported *'our programme aims to bolster Asda's resilience to the risks of climate change'* and emphasised *'the role of responsible business is to adapt to change, help others to do so and to work with suppliers and customers to make sure we cut carbon emissions and deliver a more stable climate future for our children.'* Tesco (2019a) has publicly disclosed its climate related financial risks, describing this initiative as *'an important step in demonstrating our understanding of these risks and our efforts to mitigate them.'* Here Tesco (2019a) argued that their approach would not only be important in *'enhancing business resilience'* but that *'it also enables us to take advantage of any opportunities it may offer.'* More specifically Tesco (2019a) suggested that climate change is one of the foundations of its *'Little Helps Plan'* launched in 2017. This plan, which is updated annually, sets out the company's commitments to, and its progress towards, mitigating the climate change impacts of its own operations and of its supply chain

Thirdly, and more specifically, the security of supply chains is a major issue. Asda (2014), for example, reported carrying out a wide-ranging analysis of long term climate trends and the implications for its supply chain. The company examined the drivers that underpin its supply chain, namely the things that affect the price, availability and quality of its products, and how climate change might affect them. Further Asda reported that there are threats to food sourcing, processing, storage and transportation and the company's

analysis suggested that a massive 95% of its fresh produce will be affected by changes in climate. Tesco has assessed the challenges climate risks, including rising temperatures, shifts in rainfall patterns and extreme weather events, poses for its agricultural supply chains on a country by country basis, and the results are being used to inform long term strategic planning. The company are also assessing any risks and opportunities arising from a transition to a low carbon world aligned with the Paris Climate Agreement. The focus here is on the material risks for the company arising from market and policy shifts in energy and agriculture.

In a similar vein, Tesco also recognises the challenges climate change pose for its supply chains. The company has invested over £700 million in energy and refrigeration efficiency in its stores and distribution centres and adopted several climate change targets. These targets include reducing carbon emissions from the company's operations by 60% by 2025 and by 100% by 2050, and sourcing 100% of its electricity from renewable sources by 2030. Tesco is also working with its agricultural and manufacturing suppliers to reduce carbon emissions but here, the targets are more modest, and are currently set at a reduction of 35% by 2030. In looking to emphasise their commitment to British farming, Morrisons (undated a) have contributed to the *'Princes' Farm Resilience Programme'*, which looks to *'support and develop vulnerable farm businesses through a series of business skills workshops, competitor benchmarking as well as one-to-one support and resource'* (Morrisons undated b). On the international scene, Morrisons have also explored the risks and opportunities in sourcing bananas from independent growers in Latin America and West Africa. More generally, and looking to the future, Morrisons reported looking to increase resilience in its manufacturing and logistics operations.

Fourthly, the food retailers have looked to strengthen the resilience of the communities in their supply chains. Under the banner *'Empowering our Farmers'*, Sainsbury's (2017) observed *'across large swathes of the global south, extreme weather events bearing all the hallmarks of climate change are becoming increasingly common. Seasonal rains on which farmers have depended for countless generations are failing – or arriving at the wrong time; or it is raining too much or too little.'* Indeed, the company reported *'many of the key crops and ingredients that make up the most popular products on our shelves - from tea and coffee to bananas and prawns – come from these regions. We're in close touch with them, and as a result we've been hearing at first hand how these challenges are making the simple business of bringing in harvests and earning a living for their families increasingly hard work.'*

More positively, Sainsbury's reported *'we are building strong and resilient supply chains'*, particularly in developing countries. Here the focus is on *'long term planning and working with our farmers to help them become stronger and more resilient'* (Sainsbury's 2017). At the same time, the company outlined how an *'unpredictable mix of draughts and floods, of soil depletion and loss of vital nutrients'* and *'new pests and diseases'*, was bringing daunting new challenges for farmers (Sainsbury's 2017). Further, Sainsbury's (2017) reported launching an ambitious programme to support its farmers in meeting these challenges, which aims to build resilient businesses and improve the quality of life for farming communities, while also *'helping to secure the future of some of our best loved products.'* In practical terms, support *'could include everything from soil conservation and*

pest management to finding ways to reduce costs – whether on inputs, energy, storage or transportation; and improving the health of farmers and their families through initiatives like nutrition gardens and domestic livestock rearing' (Sainsbury's 2017).

Sainsbury's (2017) claimed that its *'Sustainability Standards'*, a management framework, *'specially designed with farmers in mind'* were at the heart of these initiatives. The focus here is on working with farmers to help identify their strengths and weaknesses via a robust system of data collection covering a wide range of environmental, economic and social metrics. Farmers will not only have access to the data they collect themselves but also to other sources of information on the crops they grow. The company emphasised that in pursuing such initiatives, it is on an ambitious learning programme in that *'we are realistic about the size of the task we've set ourselves… in essence it's about making our supply chain fit for the future'* (Sainsbury's 2017).

In a similar vein, Tesco (2019b), reported *'building community resilience'* to help *'smallholder farmers (producing coffee in Latin America, Asia and Africa) who face challenges such as poverty, commodity price fluctuations and increasingly erratic weather patterns caused by climate change.'* More specifically, the company reported that from 2019 the Rainforest Alliance accredits all its instant coffee. This certification scheme, first launched in 1996, looks to drive positive social, environmental and economic change to improve agricultural and farm management, to boost yields and to provide resilience to climate change.

Concluding Reflections

The UK's leading four food retailers are pursuing resilience plans designed to adapt to, and mitigate, the impacts of climate change. That said five wider sets of issues merit attention. Firstly, in publicly acknowledge the existence of changes in the climate, the retailers are contributing to the increasing corporate recognition of climate change. This is to be commended, in that more generally, concerns have been expressed about the sincerity and depth of corporate commitments to sustainability and resilience in the face of climate change. Gulati (2009), for example, identified a spectrum of organisational commitment to resilience. At one end of the spectrum organisations emphasise their commitment to resilience but view the marketplace entirely through the lens of their goods and services, while at the other end, they adopt resilience as part of their formal strategy. It is too early to make any definitive evaluation of the leading food retailers' commitments to resilience, or of where they sit on this spectrum. However, to emphasise such commitments, retailers arguably could do more to provide information on climate change, and on their resilience plans designed to adapt to, and mitigate, its impacts, at the point of sale.

Secondly, in pursuing resilience plans retailers face challenges relating to measurement and the availability of data. Kativhu et al. (2018), for example, suggested that developing measures of retail resilience was a complex issue in that it required *'a clear understanding of the multifaceted connections of a business and its immediate environment',* and *'a detailed understanding of the inherent attributes of the enterprise, which contribute to its resilience process.'* Arguably, equally importantly, if measurements

are not externally verified, then this calls into question the voracity of any claims about the effectiveness of a retailer's resilience strategy. At the same time, some retailers have argued valuable data is not always made available by relief agencies, and that this can reduce the efficiency and effectiveness of their relief efforts. Walmart (2019), for example, in arguing that *'fragmentation'* was a *'challenge to building preparedness'* for extreme weather events, reported that despite many organisations working in disaster response, *'there is a lack of co-ordination'* and *'as a result, useful data to enhance resilience is not shared.'*

Thirdly, there are issues about scale and corporate management. Climate change is a global process, but at the local level, increasing temperatures and the threats of flooding may, for example, prompt food retailers to install air conditioning systems and flood alleviation measures in and around their stores and distribution centres. However, at the international level, the impacts of climate change, particularly on supply chains may be unpredictable, long term and irreversible. It may prove difficult to adapt to, and mitigate, such impacts and they certainly defy the corporate management control that large retailers have traditionally exerted over their supply chains. As such climate change could threaten large food retailers' current business models and signal the relative decline of large scale retailing and the growth in importance of small retailers who may come to rely on local, rather than international, supply chains.

Fourthly, there are issues around distributional equity and power, which resonate within the retail sector of the economy. Matin et al. (2018), for example, suggested that *'the apparent failure of resilience to attend to the distributive and power dimensions of environmental and development problems is a serious limitation of the concept for analysis and practice.'* Here there are questions about the resilience of what, and resilience for whom, and about who makes the decisions about whose resilience is included and whose resilience omitted, in resilience plans. While the UK's leading food retailers reported on their commitment to the resilience of the communities within their supply chains, the authors would argue that the fundamental drivers underpinning these commitments are more about business continuity and continuing business growth, than a wider concern for maintaining and enhancing natural and social capital.

Finally, there are issues about resilience and economic growth and the continuing demands such growth makes on the planet's finite natural resources. On the one hand, despite the complex uncertainties associated with climate change, the food retailers are firmly committed to continuing business growth.*'* On the other hand, and more radically, Amsler (2019) argued that *'there is a blind spot in analyses that uphold the sustainability of globalized capitalism'* and that mainstream thinking, learning and policy effectively help societies to *'become resilient within harmful environments that are conceived as inevitable'* rather than to *'generate possibilities for fundamentally other ways of organizing life.'* This reinforces Amsler's (2009) earlier invitation *'to explore the complex processes through which competing visions of just futures are produced, resisted and realized.'* Such thinking can be seen to reflect MacKinnon and Derickson's (2013*)* belief that *'resilience thinking has become implicated within the hegemonic modes of thought that support global capitalism',* but such approaches are unlikely to find any favour within the corporate retail world.

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