

# Written evidence submitted by Bournemouth University (COV0047)

## Executive Summary

- COVID-19 has the potential to create long-term economic and business consequences through an unconscious transgenerational impact.
- The COVID-19 crisis will impact on the levels of innovation in firms.
- Government policy needs to encourage and support business innovation over the long-term.

## The impact of coronavirus on businesses and workers

### 1. Overview

An emerging area of business and management research examines the impact of crisis events on the long-term financial health of organisations. Crisis events like COVID-19 have the potential to severely impact business performance and workforce productivity, not only in the short term, but for many years ahead. In managing the COVID-19 crisis, businesses not only need to manage the short-term situation, but also be mindful that the pandemic can create longer-term 'transgenerational effects' and adaptive responses that have a negative impact on business performance.

### 2. COVID-19 will create a 'Transgenerational' impact on public health

2.1 *Transgenerational Response* is a syndrome well known in medical research and is located specifically within the field of Epigenetics. This condition describes a severe environmental situation that creates an inherited adaptive response in the epigenome of an organism that influences the development and health of future generations.

2.2 Significant research studies into this phenomenon include examining the transgenerational effects of maternal nutrition influencing the development and health of future generations<sup>1</sup>; the consequence of traumatic experiences, such war and the holocaust, where the off-spring of survivors have inherited negative psychological and behavioural characteristics<sup>2</sup>; and emotional disorders<sup>3</sup>.

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<sup>1</sup> Kaati, G., Bygren, L. O., Pembrey, M., and Sjöström, M. (2007). Transgenerational response to nutrition, early life circumstances and longevity. *European Journal of Human Genetics*, 15(7), 784.

<sup>2</sup> Nadler, A., Kav-Venaki, S., and Gleitman, B. (1985). Transgenerational effects of the holocaust: externalization of aggression in second generation of holocaust survivors. *Journal of Consulting and Clinical Psychology*, 53(3), 365.

<sup>3</sup> Champagne, F. A. (2008). Epigenetic mechanisms and the transgenerational effects of maternal care. *Frontiers in Neuroendocrinology*, 29(3), 386-397.

2.3 One of the most illuminating studies into Transgenerational Response was an examination into the effects of post-traumatic stress disorder (PTSD) in babies of mothers exposed to the World Trade Center Attack (2001) during pregnancy<sup>4</sup>. The study concluded that the effects of maternal PTSD, as a result of this catastrophic event, were passed on to their babies as evidenced by a significantly smaller than average birth weight and a permanent vulnerability to depression, stress related illnesses and an increased distress response to current events.

### **3. Transgenerational Response research is now being applied to crisis events in business.**

3.1 An emerging area of business and management research examines the impact of crisis events on the long-term financial health of organisations<sup>5</sup>. Crisis events like COVID-19 have the potential to severely impact business performance and workforce productivity, not only in the short term, but for many years ahead.

3.2 In managing the COVID-19 crisis, businesses need secure existing revenue streams and cash flow in the short-term view, whilst also considering the longer term 'transgenerational effects' and adaptive responses that could have a negative impact on business performance<sup>6</sup>.

3.3 The COVID-19 crisis is likely to act as change agent and shine a light on the resilience of business operations and productivity. Recent research has shown that crisis events can trigger a long-term decline in business performance, evidenced by multiple CEO appointments, cost cutting and a lack of investment for Research & Development. It is possible, therefore, that the COVID-19 crisis will result in surreptitious changes in business attitudes to innovation and risk in a way that affects the development and performance of firms as they become more risk averse and less innovative over the long-term<sup>7</sup>.

### **4. Recommendations.**

4.1 In the face of COVID-19, there will be a natural tendency to think and manage the immediate effects and impact of the crisis as evidenced by the way the Government have responded to the

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<sup>4</sup> Yehuda, R., Engel, S. M., Brand, S. R., Seckl, J., Marcus, S. M., and Berkowitz, G. S. (2005). Transgenerational effects of posttraumatic stress disorder in babies of mothers exposed to the World Trade Center attacks during pregnancy. *The Journal of Clinical Endocrinology & Metabolism*, 90(7), 4115-4118.

<sup>5</sup> Oliver, J. (2017). Is "transgenerational response" a hidden cause of failed corporate turnarounds and chronic underperformance?. *Strategy & Leadership*. VOL. 45, No.3, pp. 23-29

<sup>6</sup> Oliver, J.J. (2020). Corporate turnaround failure: is the proper diagnosis transgenerational response? *Strategy & Leadership*, Vol. 48, No. 3, pp. 3-9.

<sup>7</sup> Oliver, J. J. (2019). Culture also eats innovation for breakfast!. *Strategic Direction*. Vol. 35 No. 12, pp. 1-3.

situation on a number of social and business levels with significant financial support. However, the Government need to be aware, and remain vigilant of, the longer term 'transgenerational impact' that COVID-19 will have on businesses, work force productivity and ultimately the resilience of the wider economy.

4.2 Government policy will need to divert funding away from other areas of public spending in order to encourage and support Research & Development that leads to high levels of business innovation over the long term. This could include further support for funding start-up enterprises, match funded R&D grants for innovation and taking an equity share knowledge based start-up firms.

## Biography

Dr Oliver is a highly experienced academic who has published extensively in business and management journals. His research has made a demonstrable impact on UK Communications policy and regulation decisions relating to Sky Plc and influenced the public policy debate on future internet regulation. His ideas and findings have also created financial benefits for several world class management consultancies which had resulted in direct economic impacts in terms of new jobs and multi-million pound investments made by FTSE 100 firms.

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