

Creating opportunity from crisis

Raising worker productivity during the pandemic



Rwanda's coronavirus "lockdown", which began on Sunday 22nd March 2020, requires that a large number of people suddenly work from home. This has become increasingly common globally: across the EU, around 17% of employees work from outside their employer's physical premises using ICT tools¹; however, working from home (WFH) is a much newer phenomenon among white collar workers in Rwanda. This brief focuses on the productivity impacts of this in light of international research.

Research from China and the US show that working from home (WFH) can increase white-collar productivity in certain circumstances and people tend to work longer hours at home. Bloom et al (2015)² studied the impact of WFH on call centre employees in China with a randomised controlled trial and found that those who chose to work from home for nine months had a 13% performance increase³, 9% of which came from working longer hours. According to the paper, "home workers also reported improved work satisfaction, and their attrition rate halved". Due to the success of this pilot, the company rolled out the programme to the entire company; after the roll-out the benefits from WFH increased: those who worked from home became 22% more productive than those who did not. Bloom said in an interview⁴ that he suspects that the more "robotic" the job, the greater the benefits of working from home, since high level creativity benefits from interpersonal interaction. However, a study by Choudhury et al (2019)⁵ both validated the Bloom result and showed a further 4.4% increase in productivity at the United States Patent and Trademark Office for a Work From Anywhere (WFA) scheme compared to a WFH scheme, that introduced greater geographical flexibility. A less rigorous study by gig economy platform Airtasker (2019) found a similar effect on productivity in the US⁶.

1. Sixth European Working Conditions Survey (2015)

2. Nicholas Bloom, James Liang, John Roberts, Zhichun Jenny Ying, Does Working from Home Work? Evidence from a Chinese Experiment, The Quarterly Journal of Economics, Volume 130, Issue 1, February 2015, Pages 165–218, <https://doi.org/10.1093/qje/qju032>

3. Workers who chose to WFH and did so (after random assignment) were compared to those who chose to WFH but were not randomly assigned to do so. Of the 13%, 9% was from working more minutes per shift (fewer breaks and sick days) and 4% from more calls per minute (attributed to a quieter and more convenient working environment).

4. Nicholas Bloom, To raise productivity let more employees work from home. Harvard Business Review 2014 <https://hbr.org/2014/01/to-raise-productivity-let-more-employees-work-from-home>

5. Choudhury, Prithwiraj, Cirrus Foroughi, and Barbara Larson. "Work-from-anywhere: The Productivity Effects of Geographic Flexibility." Harvard Business School Working Paper, No. 19-054, November 2018. (Revised November 2019.)

6. Airtasker, The Benefits of Working From Home. Airtasker 9th September 2019 <https://www.airtasker.com/blog/the-benefits-of-working-from-home/>

However, sudden full-time WFH due to coronavirus may decrease productivity and require mitigating measures. None of the above-mentioned studies took place in low income countries and, to our knowledge, no similar research has. The impact of sudden, full-time WFH in an African context is very uncertain and there may be context-specific factors that make this more difficult, such as housing quality and office space, access to files on central servers at home, a higher proportion of children, or the large number of civil servants who have a stake in the informal economy who may dedicate more time to this activity at home – or less, during the lockdown.

Moreover, in an interview on 20th March 2020⁷, Nicholas Bloom, the Stanford academic who led the China study, was more pessimistic about any productivity increases during the coronavirus crisis, giving four caveats. First, the people who worked from home in the China study volunteered to do so and “those who didn’t said it was very lonely and isolating”; thus, WFH affects different personalities differently. Second, the workers in the study were speaking to people on the telephone and doing data entry rather than doing creative work or teamwork – so the type of work matters. Third, employees were coming into the office one day per week rather than working away from the office for extended periods of time – whereas the coronavirus crisis necessitates full-time WFH; Bloom suspects that coming to the office two or three days per week enhances connectivity to the office and helps with creativity; this type of flexibility may be better for both productivity and worker welfare than both all-hours presentee-ism and full-time WFH. He predicts that the WFH aspect of the coronavirus crisis will decrease productivity, especially innovation.

Bloom said that lower paid jobs tend to be more manual and interpersonal so will be most badly affected – with the result that the coronavirus crisis may increase income inequality. He also hypothesised that jobs dominated by interpersonal interaction are more likely to be held by women – thus WFH may affect women more than men. In Rwanda, the fact that children are not in school during this crisis may exacerbate the burden on women. Studies show that work-life balance can also be adversely affected by WFH as people tend to work longer hours; they also show that reduced visibility from WFH reduces rates of promotion in spite of higher productivity.

Therefore, the Government and businesses may expect a mixed response of productivity to WFH among white-collar employees. In the view of this author, the above research implies that the Government of Rwanda may expect i) some decrease in productivity both in the public and white-collar private sectors, especially given as time goes on and people feel more disconnected and restless, and given the challenges posed by various local factors; ii) an increase in productivity among a small sub-section of employees who are suited to WFH, who are male, and/or do not have children, as well as among employees who are doing work that is suited WFH; and iii) an uncertain level of “invisible” mental and physical health consequences of isolation – for example depression and loss of physical fitness – if the lockdown is strongly enforced and continues for months rather than weeks. Any decreases could be at least partially mitigated with certain measures which are discussed below. Measures to mitigate the poverty-worsening aspects, gender aspects, and impacts on the informal economy of the coronavirus crisis, which are clearly significant, are outside the scope of this note.

Internet access may limit the effectiveness of WFH for Rwandan employees; thus, the Government of Rwanda should consider subsidising universal internet access for the duration of the lockdown; specific agencies and businesses might consider equipment subsidies for relevant employees. An

7. Rani Molla, “Working from home can make people more productive. Just not during a pandemic” Vox.com 20th March 2020 <https://www.vox.com/2020/3/20/21187469/work-from-home-coronavirus-productivity-mental-health-nicholas-bloom>

important factor in the Rwandan context is that many employees do not have internet available at home or cannot afford it – although research has shown that poor technology is the biggest barrier to effective remote working⁸. According to EICV 3 and EICV 5⁹, urban household internet access rose from 22% in 2011 to 38% in 2017 – but the reality of those with a serviceable connection that may be capable of a conference call at any moment is likely to be much lower. The Government of Rwanda might consider equipment and internet subsidies for relevant employees, so that they can work from home most effectively during the lockdown. There may also be other practical challenges around ICT equipment, working space and software, but the potential gains are substantial¹⁰.

To maintain social contact, professional structure, and colleague relationships, schedule regular video conference calls. Bloom, and many others, recommend regular calls that cover both social and professional aspects. Information that is exchanged without much effort in an office setting may not be exchanged remotely, so it is important to be intentional about regular contact for the sake of mental health, team cohesion, professional trust, and overall productivity.

Given that many employees have children who are not in school, sensitivity and flexibility are required; this issue has a strong gender dimension. Many employees will have children who are not in school due to the lockdown, and may not have access to childcare; thus, allowing them flexibility in the setting of deadlines and call times, is necessary. In the Rwandan context in particular, this is especially important for women.

8. Wiles, Jackie. With Coronavirus in Mind, Is Your Organization Ready for Remote Work? 3 March 2020 <https://www.gartner.com/smarterwithgartner/with-coronavirus-in-mind-are-you-ready-for-remote-work/>

9. National Institute of Statistics Rwanda, (2018), Rwanda Integrated Household Living Conditions Survey 5 (2016/2017) [dataset]. National Institute of Statistics Rwanda, Government of Rwanda, Kigali.

National Institute of Statistics Rwanda, (2015), Rwanda Integrated Household Living Conditions Survey 3 (2010/2011) [dataset]. National Institute of Statistics Rwanda, Government of Rwanda, Kigali.

10. Similarly, facilitating widespread household internet access during the pandemic would create opportunities for children learning and daycare activities.