Impact case study (REF3)



Institution: University of Cumbria

Unit of Assessment: UOA17: Business and Management Studies

Title of case study: Currency innovation research shapes global policy and local enterprise

Period when the underpinning research was undertaken: 2015 – 2017

Details of staff conducting the underpinning research from the submitting unit:

Name(s):

Period(s) employed by submitting HEI:

Professor of Sustainability
Leadership

Period(s) employed by submitting HEI:

2012-Present

Period when the claimed impact occurred: 2017 – 2020

Is this case study continued from a case study submitted in 2014? N

1. Summary of the impact (indicative maximum 100 words)

Our research is informing both the development and the regulation of new currencies to alleviate social and environmental challenges. At the local level, it supported the non-governmental organisation Grassroots Economics to improve the lives of thousands of the poorest people in Kenya by expanding new currencies that facilitate their livelihoods. This included launching currencies in 44 other poor communities, further reducing poverty. At the global level, the research has explained the promise and limitations of currency innovation, influencing a United Nations (UN) agency to adopt the topic within its regulatory guidance to help countries to write their laws. This included exploring policy options with UN member states at the World Investment Forum, the largest gathering of trade officials in the world.

2. Underpinning research (indicative maximum 500 words)

During the assessment period, the topic and practice of currency innovation has generated increased interest from the public as well as tech innovators; initially as a marginal economic tool to something more widely discussed, particularly with the fame of bitcoin. Within this context, the research outlined here drew attention to potential public benefits rather than private gains, in particular the pursuit of sustainable development.

Having collaborated with the founder of Grassroots Economics in the past, Bendell was invited to participate more actively and provide an academic grounding to their work in Kenya. This included an evaluation (R1) of a Kenyan-based complementary currency system (Bangla-Pesa) that allows Kenyans in informal settlements to trade goods and services and meet sustainable development objectives. Key findings demonstrated that the Bangla-Pesa is shown to have facilitated, upon its launch, exchanges of roughly 50 Euros in value per day among 109 businesses, and after only a week of circulation, represented an estimated 22% total trade among community members.

This was explored further in R2 as part of a report for the UN Research Institute for Sustainable Development, where we demonstrated how currency innovations such as the Bangla-Pesa encounter challenges in infrastructure investment due to a lack of understanding amongst development professionals. This led to engagement with the UN system. R3 also utilised the Kenyan example more broadly in the context of management studies and corporate social responsibility, using the Bangla-Pesa as a case study to illustrate wider implications for adoption of currency innovations.



Overall, this body of research demonstrated that:

- Currency innovators claim economic, social and environmental impacts, yet these impacts are variable, so more involvement and engagement from donors and policy makers would be helpful (R3, R2)
- Certain forms of currency innovation that provide new liquidity for poor people by monetising their spare assets and time have proved successful in reducing poverty in certain cases. To raise awareness with development donors, there is a need for more evaluation, financial aid, and conducive policy innovation (R1, R2, R3)
- The fields of currency innovation and blockchain technologies are hampered by confusion amongst scholars, regulators, lawyers and innovators, about what money and currency are, how the current system works and the reasons for its limitations. More guidance to and from policy makers was recommended (R2).
- The main types of currency innovation and uses of blockchain technology, and their potential benefits, are becoming more widely recognised (R2), with the example for sustainable development (Bangla-Pesa) in Kenya outlined in both an international journal article (R1, R2) and a peer-reviewed publication from the UN (R3).

3. References to the research (indicative maximum of six references)

The research for this project was interdisciplinary, combining management studies with international development studies. One of the key outputs (R3) was a paper published by the UN's dedicated research agency on development issues, which demonstrates the credibility, significance and international applicability of the findings. These UN papers are circulated to regulators, policy makers, intergovernmental agencies and academics worldwide. R1 and R2 feature in peer reviewed journals.

- R1. Ruddick, W., Richards, M. and Bendell, J. (2015). Complementary Currencies for Sustainable Development in Kenya: The Case of the Bangla-Pesa, *International Journal of Community Currency Research*, *Volume 19*, *Section D 18-30*. http://dx.doi.org/10.15133/j.ijccr.2015.003
- R2. Bendell, J. (2017). Currency Innovation for Sustainable Financing of SMEs: Context, Case Study and Scalability. *The Journal of Corporate Citizenship*, (67), 39-62. https://www.jstor.org/stable/26629178. DOI: [10.9774/T&F.4700.2017.se.00004].
- R3. Bendell, J., W. Ruddick and M. Slater (2015). Re-imagining Money to Broaden the Future of Development Finance: What Kenyan Community Currencies Reveal is Possible for Financing Development. (Working Paper 2015-10). *United Nations Research Institute for Social Development* (UNRISD), Geneva. https://www.unrisd.org/80256B3C005BCCF9/%28httpAuxPages%29/99FCA15CAF8S24F4C1257S7E00501101/\$file/Bendell%20et%20al.pdf

4. Details of the impact (indicative maximum 750 words)

Impact 1: Anti-poverty Local Currencies in Africa are Legitimised by Research to Enable Large Rollout

Research on one type of currency innovation, that provides new means of exchange to poor people in Kenya (R1), was influential in two main ways. First, by being the first study to document the positive impact of the projects in Kenya, the research raised the confidence of staff, stakeholders and regulators, which enabled their further expansion and replication in other poor areas of Kenya and now also in South Africa (S8). At the time of the research, there were around 200 people involved, with transaction volumes equivalent to a few dollars a day. Yet from September 2018 to May 2020 there were nearly half a million dollars of trades by nearly 20,000 registered users who live below or near the poverty line (S9), equivalent to around \$900 dollars/day.



Since Covid-19, there has been a huge increase in usage. Grassroots Economics started working with the Red Cross in a new part of Kenya on April 6th 2020, and in one month, \$95,600 USD of transactions had been generated representing 2,588 new users living near or below the poverty line (S9).

Second, Bendell took this research to a UN agency that informs development assistance and policy (UN Research Institute for Sustainable Development), to help them understand this topic, which had not previously been considered in development assistance. They released a peer-reviewed UN paper on the topic (R3) and subsequently organised follow up events to promote understanding within the international community. Since then, the Red Cross has supported the organisation that operates these currencies, Grassroots Economics (GE), to scale them further. The Founder of GE notes that this research being published at such a high level helped them significantly, especially in the early days when there was limited Government understanding of this topic. The research has also helped development organisations like the Red Cross to engage in the aims of GE, the Founder (S2) stating how the research was "instrumental in developing wider awareness of our currency innovation projects at a time when aid and intergovernmental agencies and blockchain investors were not engaging us". As a result, GE have already implemented new currencies in 44 locations across Kenya and assisted with 2 in South Africa, to help more than 40,000 small businesses, schools and other organisations take an active role in their own development.

Impact 2: Research helps UN agency see Currency Innovation as a Sustainable Development tool, to offer Guidance on, and giving basis for major Philanthropic Donations

The UN is recognised by international relations theorists as doing more to regulate and influence the lives of people than through its direct influence over governments. When it works on an issue, there are a myriad of influences, globally, on the private sector and civil society, and in relation to economics and society. Knowing this, Bendell used his conceptual review (R2) to influence and advise officials at the UN's primary economics agency, the United Nations Conference on Trade and Development (UNCTAD), to put this field of innovation on its agenda. Together they organised UNCTAD's first ever event on the topic, with a special session (called Blockchain for Sustainable Development [B4SD.net]) of the 2018 World Investment Forum (WIF). The WIF is the world's highest-level meeting of investment regulators and the session was attended by around 700 people, mostly officials from international agencies and country missions. Bendell's opening keynote (S10) discussed the benefits of blockchain for humanity, for achieving the Sustainable Development Goals, and addressing the climate emergency, utilising examples from his work in Kenya (Impact 1).

A follow on video published by B4SD.net (S4), included comments from the CEO of cryptocurrency trading firm, Binance: "This is the first time blockchain appeared in the United Nations. I think this is a very significant milestone that block chains [are] no longer a small thing...It is now accepted and recognised internationally and it's no longer avoided... it is at a size where we can discuss about the impacts at the UN. It's important enough for this kind of topic to appear here...that's historical." A further contributor, the Director of Investment and Enterprise, UNCTAD, stated "the important thing is that blockchain is a new phenomena, and with new phenomena, policy makers worldwide should be open minded, they should analyse and try to embrace the new phenomena to seize advantage of that."

The key beneficiary of this initial activity was the UN system itself, as they established their future work on this matter. A UN official stated that Bendell's "research in the area of currency innovation and blockchain has informed our work as we sought to establish blockchain technology as an important issue for UNCTAD and our stakeholders to engage with" (S1). The government delegates are one beneficiary of the UN's work. In a survey of attendees, issued 18 months after the WIF B4SD event, 67% of respondents confirmed that the event, or resulting interactions, influenced their organisation's work. 60% of the respondents indicated they had been influenced by the research of Bendell (S5).

Impact case study (REF3)



Bendell helped the cryptocurrency trading firm Binance and their African development charity (www.binance.charity) to engage with UNCTAD, and at the B4SD WIF event they launched their donation platform, which has since generated over 12 million USD. This has enabled over 100,000 people in Africa to receive charitable and humanitarian support. This includes humanitarian relief in the form of aid parcels to people surviving natural disasters. Our research enabled the launch to take place within a more strategic context (at the B4SD WIF event). This meant that the scale of its subsequent success had a greater impact on individuals. The research, and engagement (via Bendell) with the WIF catalysed and expedited this process; bringing humanitarian aid and benefits more rapidly to those people needing them (S3).

Impact 3: Research provides intellectual basis for free online course which enables innovators around the world to start projects

In 2014 the University of Cumbria made headlines as the first public university in the world to accept bitcoin for payment of tuition fees. This institutional commitment to this topic, in addition to the research on the general field of currency innovation (R2) was the main source for the knowledge in a free online course, the Money and Society MOOC. The course was completed by over 500 people between 2015 and 2020. The software and content of the MOOC was developed jointly by Bendell and the Community Forge co-founder, with the two also serving as tutors. The pair created the MOOC because the fields of currency innovation, and especially blockchain, were hampered by confusion amongst scholars, regulators, lawyers and innovators about the nature of money and the politics of power around it (S6). To inform the course, Bendell drew on his research into these matters, including R1 and R2.

The Community Forge review (S7) of the MOOC reported how many organisations and initiatives have used the knowledge from the course to launch or improve new currency projects. The review includes feedback from participants (S7), who were asked how learning from the MOOC has been used in practice:

- Partitur Xpress (Germany) "The Money and Society MOOC changed my mind how I think about money, so every decision in my life, that has to do with money, was somehow influenced by what I learned."
- Warsaw School of Economics (Poland) "I developed two lectures (Alternative money and Virtual Currencies), and launched postgraduate studies on Blockchain at my university."
- Fair.Coop (Spain) "I applied the knowledge I learned in the MOOC within Fair.Coop".
- Manly Local Exchange Trading System (Australia) "The historical information in the development & uses of money, currencies and policies was very informative & personally useful in building up my knowledge base."
- Lowimpact.org (UK) "We've joined with open.coop to try to build a UK mutual credit network (the open credit network)"
- Happonomy (Belgium) "I used it to develop an alternative monetary system named Sustainable Money System or SuMSy"
- Boodaville (Spain) "Our permaculture education project teaches about ethical design in all aspects of life. One of the three key ethics is 'Fair Share' relating to gift economy, consumption and thanks to the MOOC I can confidently deliver sections on a more ethical approach to Economics."
- New Forest Cohousing Limited (UK) "We attempted to launch a Grand Union local currency in Hertfordshire but the difficulties of getting four District Councils to agree proved very difficult. I used some course knowledge in setting up a community land trust for a community farm."
- Synpraxis Mesogaias (Greece) "We plan to start a community project in the town where our social enterprise is active."

These are diverse projects in different parts of the world, seeking to be economically viable ways of making positive impacts in society. The beneficiaries are therefore the social entrepreneurs themselves, as evidenced by the above, with the MOOC directly changing individuals approach to finance, prompting new educational and community programmes and currencies.



5. Sources to corroborate the impact (indicative maximum of 10 references)

- S1. Testimonial by official at the UN Conference on Trade and Development (UNCTAD), provided a written commendation of the impact of Prof Bendell's research in helping UNCTAD focus on currency innovation, blockchain and sustainable development. [Corroborator 1].
- S2. Testimonial from the founder of the organisation Grassroots Economics who provided a written commendation of the impact of the research on his organisation's efforts in scaling local currencies in Africa. [Corroborator 2].
- S3. Testimonial by the Head of the Binance Charity Foundation, on the impact of Prof Bendell's research on their establishing of their donation platform which has generated over 5 million USD. [Corroborator 3].
- S4. Video review of the UN event that Professor Bendell conceived, co-curated, chaired, and keynoted at, based on his research, provides a variety of high-level endorsements of the activity. For instance, Changpeng Chao, CEO Binance (at 21mins) and James Zhan, Director of Investment and Enterprise, UNCTAD (21.51mins). Blockchains for Sustainable Development (B4SD) (4 January 2019). 2018 UNCTAD World Investment Forum [video]. YouTube. https://www.youtube.com/watch?v=alAVNAOYCrg.
- S5. Article from the B4SD website of the special session of UNCTAD WIF details the impact of the event and the importance of Prof Bendell's research. B4SD (May 2020). *Blockchains for Sustainable Development delegates see climate risks to finance and banks*. https://www.b4sd.net/survey/. Accessed 11.12.2020.
- S6. To support claims related to the MOOC, to the MOOC review and survey responses in S7, further details available from Community Forge Co-Founder. [Corroborator 4].
- S7. Community Forge (February 13 2020) Money & Society MOOC https://communityforge.net/en/mooc-review. Accessed 11.12.2020. Review includes link to publically available responses to Community Forge survey on impacts of the Money & Society MOOC on attendees. https://docs.google.com/spreadsheets/d/1KSVwPOV8anSbvAG8To8A2hBMvApsLOMoiiZJbAkRCo/edit#qid=1458818655. Accessed 11.12.2020.
- S8. Article on the collaboration of Grassroots Economics with the Red Cross to scale the local currencies. Goering, L. (26 November 2019). *Red Cross boosts disaster-prone communities with blockchain 'cash'*. Thomson Reuters Foundation. Provided as PDF.
- S9. Article on May 2020 statistics of the growth of impact by Grassroots Economics. Ruddick, W. (12 May 2020). COVID-19 Blockchain Crisis Response CICs at 500% Growth. Grassroots Economics. https://www.grassrootseconomics.org/post/covid-19-cic-response-500x. Accessed 11.12.2020. Provided as PDF.
- S10. Keynote from Professor Bendell at the UNCTAD 2018 World Investment Forum. Blockchains for Sustainable Development (B4SD) (4 November 2018). *Prof Dr. Jem Bendell Keynote Speech UNCTAD World Investment Forum 2018.* [Video]. YouTube. https://www.youtube.com/watch?app=desktop&v=Tjfolq1oLkQ