

COLLABORATIVE ECONOMY – KEY CONSIDERATIONS BACKGROUND PAPER

Consumer, Competition and Regulatory Policy, Scottish Government
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Introduction

As well as changing the way we work, digital technologies are impacting the wider economy through disrupting traditional markets. An example of this is the rapid growth of the collaborative economy which connects individuals or communities via online platforms, thereby enabling the sharing or provision of goods and services, assets and resources without the need for ownership. As Figure 1 shows, disruptive technologies have already had a significant impact across sectors and are likely to continue to do so.

Figure 1: Examples of Disruptive Technologies

Source: IBM

Uber:	The world's largest taxi company owns no taxis
Airbnb:	The largest accommodation provider owns no real estate
Skype:	The largest phone company owns no telecoms infrastructure
Facebook:	The most popular media owner creates no content
Netflix:	The world's largest movie house owns no cinemas
Apple & Google:	The largest software vendors do not write the apps

Disruptive technologies bring significant benefits to consumers, competition and the economy through lower prices, greater choice and better service. Disruptive technologies also encourage a more efficient use of underused resources by allowing people to share their resources through online platforms. This allows individuals to benefit from more flexible working arrangements as well as new ways of supplementing their incomes¹. A key characteristic of disruptive technologies is the speed with which they transform markets. This is particularly important when compared with the speed of legislation and changes to regulations. This means that governments and regulators need to be agile in their response to changes to markets.

As outlined, “*Ensuring that Markets Work Well for Businesses and Consumers – A Strategic Assessment of Markets in Scotland*”², these benefits must be balanced with the need for regulation and for these new businesses and traditional operators to be treated fairly with no unfair competitive advantage. Initial research by Scottish Government has found there are a number of Scottish businesses which are part of the collaborative economy; two of which - Skyscanner and FanDuel are considered

¹ Institute of Economic Affairs, [Regulatory Approaches to the Sharing Economy](#), 2016

² [Ensuring that Markets Work Well for Businesses and Consumers – A Strategic Assessment of Markets in Scotland](#), June 2016

to be ‘unicorns’³. Scotland is also home to at least two incubators – CodeBase & TechCube - which help drive investment in to tech start-ups, many of which could become part of the collaborative economy, as well as a digital skills academy (CodeClan).

There is a lack of publically available data about collaborative economy platforms operating in Scotland however some is available from the larger platforms;

- **Airbnb**⁴ (2009) between 1 March 2016 – 1 March 2017 had 12,600 Scottish hosts for an average of 40 nights, earning approximately £3,600. During this period 802,000 inbound guests used Airbnbs and generated £361m of economic activity by both hosts and guests. 87 per cent of guests use Airbnb when visiting Scotland for vacation and leisure with 30 per cent stating that they would not have come or not stayed as long without Airbnb.
- **Kickstarter**⁵ (2012) during their first six months they had 47 projects, 32 of which were successful in raising £697,592;
- **Uber** (2015) was introduced first in Glasgow and then Edinburgh and is now available in Midlothian, Livingston and Bathgate. Uber's range of services currently available in Scotland are limited to UberX, UberXL and UberExec;
- There are a number of online food delivery platforms such as **Just Eat, Hungryhouse & Deliveroo (2015)** and most recently **UberEATS (2017)**.

The purpose of this background paper is to provide an overview of the growth of the collaborative economy and outline a number of key issues that the Scottish Expert Advisory Panel for the Collaborative Economy may wish to consider.

Overview of collaborative economy

The collaborative economy is growing rapidly, gaining important market shares in some sectors. PricewaterhouseCoopers estimate that the five key collaborative economy sectors⁶ generated revenues of circa €4 billion and facilitated €28 billion of transactions within Europe in 2015⁷. The pace of growth in these key sectors has accelerated significantly since 2013, with the platforms having been estimated to have doubled their revenues in Europe. Although the majority of collaborative economy companies have originated in the U.S., according to research from 2016, over 275 organisations have been founded across nine major European nations, with France and the UK having produced over 50 collaborative organisations each⁸. By construction, this estimate is likely to be an underestimate as the scope does not cover the wide breadth of collaborative economy activities. The UK sector has been growing rapidly, particularly during the past few years, as evidenced by the formation

³ A unicorn is a start-up company valued at over \$1 billion

⁴ Airbnb, Overview of the Airbnb Community on Scotland, March 2017

⁵ Twintangibles, [Kickstarter – first six months in Scotland](#), May 2013

⁶ Peer-to-peer accommodation, Peer-to-peer transportation, On-demand household services, On-demand professional services, and Collaborative finance

⁷ Robert Vaughn and Raphael Daverio, PwC UK, "[Assessing the size and presence of the collaborative economy in Europe](#)", Impulse paper to the European Commission (DG GROW), April 2016

⁸ *ibid*

of the Sharing Economy UK (SEUK) in 2015⁹ – a nationwide trade body which representing a number of the UK’s collaborative economy organisations that aims to represent and champion the sector and ensure good business practice in the collaborative economy. The valuation of some of the larger, well-known companies can reflect the expectations of future earnings potential in the collaborative economy. Airbnb is currently valued at £23bn – up from £8bn in 2014 – and Uber is now valued at £52bn.¹⁰ UK based Deliveroo is expected to earn £130m in 2016, utilising more than 3,000 riders on their platform.¹¹

Much of the growth in participation is down to the impact of digital innovation on the search and transaction costs involved in matching the supply and demand for specialised products. Increasing internet speed and mobile access has expanded the number of potential participants¹², creating markets that would otherwise be unviable. UK citizens are particularly active in the collaborative economy. UK consumers are the most likely in the EU to make online purchases and are relatively computer-literate.¹³ A 2016 Eurobarometer opinion poll found that 52 per cent of EU citizens are aware of the services offered by the collaborative economy and 17 per cent have used such services at least once. Although the information about who is participating in the collaborative economy is limited, Nesta estimated in a 2014 survey that 25 per cent of the UK adult population are taking part in the online collaborative economy. It was noted that people between the ages of 25-55, in full or part-time skilled employment, with internet access, and those with children were all significantly more likely to take part in the collaborative economy than others.¹⁴ Results from a 2014 Vision Critical survey reported that there were 23 million ‘sharers’ in the UK and outlined their participation (and intention to participate) in a selection of collaborative activities. Professor Diane Coyle estimated, based on a survey of SEUK members, that it is likely that more than a million people are participating as providers in the collaborative economy – equivalent to three per cent of the UK workforce.¹⁵

Scottish consumers experiences and views about the collaborative economy

Whilst there are a range of statistics available on the usage of the collaborative economy at a UK, EU & global level, there is limited data available for Scotland. In February 2017, the Scottish Government commissioned YouGov to find out more about Scottish consumers experiences and views about the collaborative economy¹⁶.

⁹ The SEUK was created following a recommendation made in the independent [Wosskow Review of the sharing economy](#).

¹⁰ Matt Rosoff, [“Airbnb is now worth \\$30 billion”](#), *Business Insider UK*, 6th August 2016

¹¹ Homa Khaleeli, “The truth about working for Deliveroo, Uber and the on-demand economy”, *The Guardian*, 15th June 2016

¹² Ofcom, [“Communications Market Report”](#), August 2015 and Ofcom, [“Adults’ media use and attitudes”](#), April 2016

¹³ Eurostat, [“E-commerce statistics for individuals”](#), December 2016

¹⁴ Kathleen Stokes, Emma Clarence, Lauren Anderson, April Rinne [“Making sense of the UK collaborative economy”](#), *Nesta*, September 2014

¹⁵ Diane Coyle, [“The Sharing Economy in the UK”](#), *Sharing Economy UK*, January 2016

¹⁶ All figures, unless otherwise stated, are from YouGov plc. Total sample size was 1,007 adults. Fieldwork was undertaken between 28th February and 2nd March 2017. The survey was carried out online. The figures have been weighted and are representative of all Scottish adults (aged 18+).

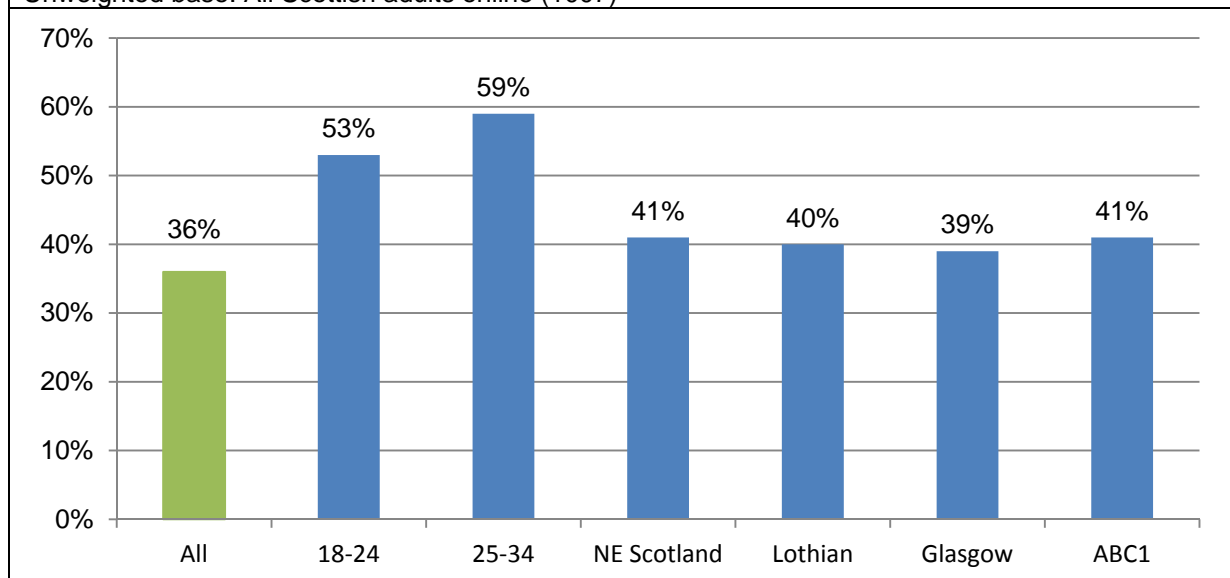
The survey found that 35 per cent of Scottish adults had used a collaborative economy platform. Figure 2 highlights key statistics across a number of areas of potential interest.

- Usage was highest amongst younger adults, with over half of those aged between 18 and 34 having used a platform compared with just 20 per cent of those aged over 55.
- There was a degree of regional variation with usage highest in North East Scotland (41 per cent of adults), Lothian (40 per cent) and Glasgow (39 per cent).
- 41 per cent of adults in ABC1 social grade had used the collaborative economy compared with 31 per cent of those in C2DE.

Figure 2: Collaborative economy use in Scotland

Question: VSC_Q1a. Which, if any, of the following reasons have you used a 'collaborative economy' online platform (e.g. app, website, etc.) for? (Please select all that apply. If you have never used a 'collaborative economy' online platform, please select the 'Not applicable' option)

Unweighted base: All Scottish adults online (1007)



This is similar to the findings from other surveys which suggest that awareness and use of the collaborative economy is growing. For example:

- A Nesta 2014 survey found that 25 per cent of the UK adult population are taking part in the online collaborative economy¹⁷.
- A report published by PwC in 2015 found that over half of US consumers were aware of the trend and one in five engaged in a collaborative economy transaction.¹⁸
- ING's July 2015 study found that around one third of European consumers have heard of the collaborative economy; Around 5% of European consumers have declared having participated in the collaborative economy in the past year.¹⁹

¹⁷ https://www.nesta.org.uk/sites/default/files/making_sense_of_the_uk_collaborative_economy_14.pdf

¹⁸ <https://www.pwc.com/us/en/technology/publications/assets/pwc-consumer-intelligence-series-the-sharing-economy.pdf>

¹⁹ <http://www.ing.com/Newsroom/All-news/European-sharing-economy-to-grow-by-a-third-in-the-next-12-months.htm>.

- A 2016 Eurobarometer opinion poll found that 52 per cent of EU citizens are aware of the services offered by the collaborative economy and 17 per cent have used such services at least once²⁰.

The most common reasons for using collaborative economy platforms amongst Scottish users are (Figure 3):

- To purchase used/second hand goods online (e.g. eBay) (46 per cent of Scottish adults);
- To contribute to an online fundraising project (e.g. Kickstarter) (38 per cent);
- To receive same day/expedited delivery (e.g. Nimber) (24 per cent); and
- A ride-hailing app (e.g. Uber) (21 per cent).

Figure 3: Reasons for using collaborative economy

Question: VSC_Q1a. Which, if any, of the following reasons have you used a 'collaborative economy' online platform (e.g. app, website, etc.) for? (Please select all that apply. If you have never used a 'collaborative economy' online platform, please select the 'Not applicable' option)

Unweighted base: All Scottish adults that have used a collaborative economy platform (359)

To purchase used/ second hand goods online	46%
To contribute to an online fundraising project	38%
To receive same day/ expedited delivery	24%
A "ride-hailing" app	21%
An online home sharing service	21%
To hire someone online for work/ to fix an error	6%
A "car club" service	5%
A shared office space service	3%
To rent clothing/ products	3%
Other	4%

For those already using collaborative economy platforms, we are keen to understand more about their experiences. We know that the collaborative economy brings significant benefits to the economy including lower prices, greater choice, the use of underused resources and better services; however, we wanted to find out more about what Scottish consumers felt were the benefits of using collaborative platforms.

Figure 4 shows that lower prices is the top benefit identified by Scottish users of collaborative platforms (30 per cent), closed followed by ability to make additional money (25 per cent), convenience (23 per cent) and using underused resources (23 per cent).

²⁰ <http://ec.europa.eu/COMMFrontOffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/FLASH/surveyKy/2112>

Figure 4: Benefits of using collaborative platforms

Question: VSC_Q5a. Still thinking about ALL of the 'collaborative economy' online platforms (e.g. app, website, etc.) that you currently use... Which, if any, of the following do you believe are benefits of using 'collaborative economy' online platforms? (Please select all that apply. If you think there are no benefits in particular, please select the 'Not applicable' option)

Unweighted base: All Scottish adults online (1007)

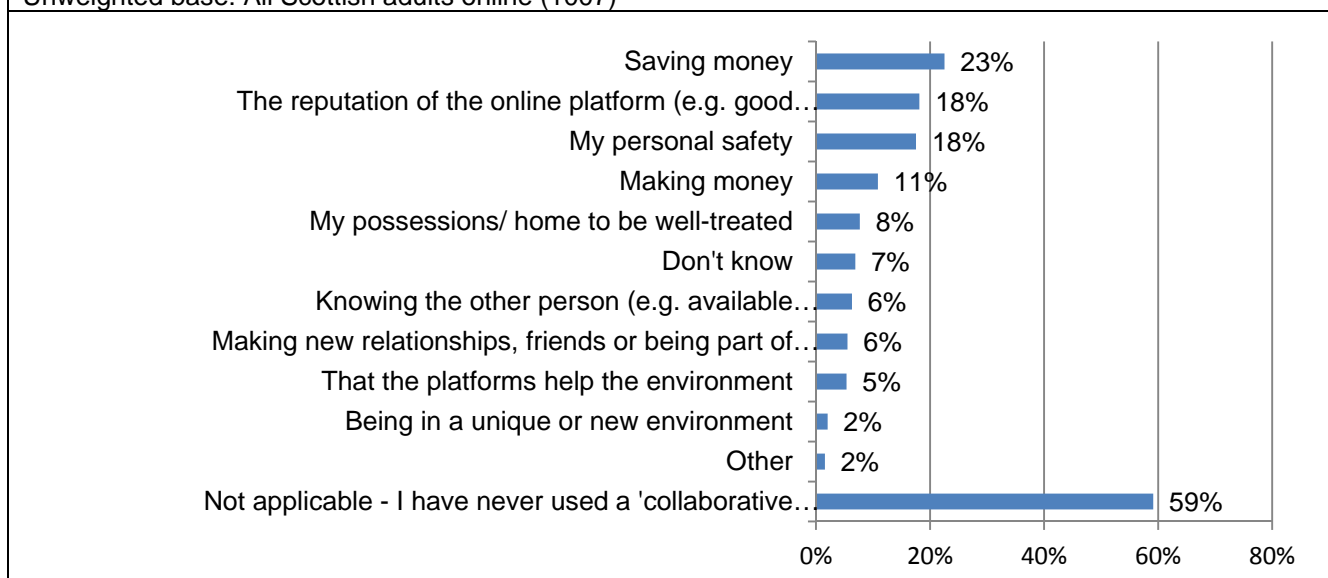
They are affordable/cheaper than alternatives	30%
They are simple to use/convenient	23%
They allow people/me to make the most of underused assets (e.g. property, possessions, etc.)	23%
They are environmentally friendly	12%
They provide a "community spirit"	13%
They are innovative	18%
They allow people/me to only make online payments (i.e. no 'cash-in-hand')	15%
They offer an extra source of income	25%
Other	1%
Don't know	23%
Not applicable - there are no benefits in particular	23%

We also asked Scottish consumers what they felt were the important features of the collaborative economy. Similar to other surveys of UK and US consumers²¹, saving money (23 per cent of Scottish adults) was the most cited feature (Figure 5). Reputation of the platform (18 per cent) and personal safety (18 per cent) were also amongst the top most important features.

Figure 5: Important features of collaborative platforms

Question: VSC_Q4a. For the following question, please think about ALL of the 'collaborative economy' online platforms (e.g. app, website, etc.) that you currently use... Which, if any, of the following features are important to you? (Please select all that apply)

Unweighted base: All Scottish adults online (1007)



²¹ https://www.veridu.com/pdf/Sharing_Economy_Consumer_Views_Survey.pdf

As the prominence of collaborative economy platforms grow, it is important to gain an understanding of whether users are satisfied when using these platforms and their understanding of how to complain if things go wrong.

Our survey found that most Scottish consumers have had good experiences when using collaborative economy platforms with 64 per cent of those using the collaborative economy reporting the level of service received as good or very good. However, our survey also found that if Scottish users of these platforms were to have an issue with poor service, just 43 per cent would know how to make an official complaint.

A 2016 Eurobarometer survey found at least four in ten (41 per cent) respondents who have heard of or visited collaborative platforms say that one of the main drawbacks of this type of platform is not knowing who is responsible if a problem arises²². When asked who they felt was responsible for resolving complaints when using collaborative economy platforms, the majority of Scottish consumers (18 per cent) cited the provider as being responsible (Figure 6).

Figure 6: Responsibility for complaint handling when using collaborative platforms

Question: VSC_Q8. In general, who do you think is MAINLY responsible when an issue/ problem arises on a 'collaborative economy' online platform, as a result of poor service?

Unweighted base: All Scottish adults that have used a collaborative economy platform (359)

The provider (i.e. the host/ supplier)	49%
The platform (i.e. the website/ app)	23%
The user (i.e. the consumer/ customer)	6%
Other	1%
Don't know	21%

It is clear that the importance and scale of the collaborative economy is growing and will continue to grow. However, a significant proportion of Scottish adults (59 per cent) have not used a collaborative economy platform.

As Figure 7 shows, the top three reasons for not using the collaborative economy are:

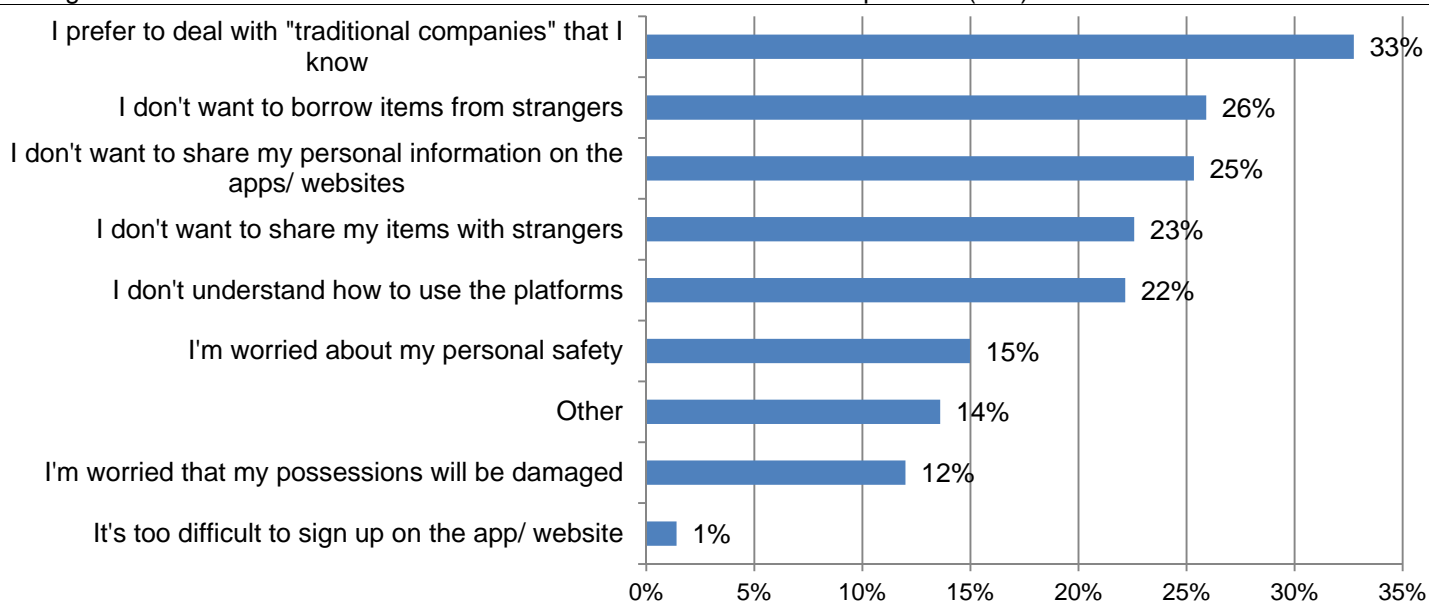
- Preference for dealing with traditional companies (33 per cent);
- Not wanting to borrow items from strangers (26 per cent); and
- Not wanting to share personal information online/via an app (25 per cent).

²² <http://ec.europa.eu/COMMFrontOffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/FLASH/surveyKy/2112>

Figure 7: Reasons for not using collaborative economy platforms

Question VSC_Q3a: Previously you said that you had never used a 'collaborative economy' online platform (e.g. app, website, etc.)... Which, if any, of the following are reasons for this? (Please select all that apply)

Unweighted base: All Scottish adults online that haven't used a CE online platform (617)

**Disruption**

The potential competition with incumbent businesses, such as hotel groups and taxis, and their fear of potential loss of business has dominated discussion of the collaborative economy. The disruptive businesses have established, through the use of internet, smartphone and software technologies, online marketplaces that participants can access through various internet-connected digital communications devices. These platforms have minimised transaction costs by directly matching dispersed consumers and providers. They have enabled groups of individuals or small entities to transact with each other effectively and efficiently, being able to sell the unused potential of an owned asset or service to another – either by renting out an asset or providing a service using an asset. Platforms can provide pricing strategies by the use of Big Data and Machine Learning that ensure more economically efficient price levels, creating a significant advantage over traditional approaches to pricing. For example, Airbnb use 'Price Tips', a predictive analytics service which combines billions of data points, providing a constantly updated guide to hosts on how likely they are to get a booking at different price levels. Uber employ a 'dynamic' pricing model which raises prices (as a multiple of the base fare) during periods of high demand as a means of incentivising drivers to supply more rides. These platforms have enabled transactions for which there previously was no market, or they have entered existing markets in innovative ways by either meeting unmet demand or by capturing sales of incumbent businesses.

The incumbents' response in many cases has been to call for increased regulations on the new disruptive entrants so as to prevent their market from being disrupted. Incumbent businesses argue that these disruptive entrants have gained an unfair competitive advantage as they have been operating in a regulatory "grey" zone – they have been able to bypass or navigate existing regulatory requirements which

apply to incumbents, i.e. regulatory arbitrage. As an example, Uber classifies itself as a ‘digital’ information service rather than a ‘transportation’ service meaning that the rules and regulations applicable to transportation services and employers are not applicable. It should be noted that the European Court of Justice is currently considering which of the two classification categories Uber falls under.²³ Although dependent on place and business type, these disruptive products or services may not be directly substitutable with existing ones. For example, Airbnb describes itself as a global online travel marketplace and has denied that it is a disrupter as it was not disrupting existing models, but instead creating competition and a new kind of experience for the tourist; the ability to stay in someone’s home is not the same as staying in a hotel.²⁴

This disruptive innovation is a natural occurrence in the capitalist system and the transformation of a market can provide significant consumer welfare gains. Netflix drove out the rental market, and services such as iTunes and Spotify have changed the pattern of consumer consumption in that market. Regulations or protectionist measures in response to disruption within an industry are likely to prevent consumers from realising the potential benefits associated with disruptive innovation – a pertinent example is if regulators had banned the automobile because it was disruptive to the horse and carriage industry. Also, given the accelerating pace of technological change, current disruptive technologies can themselves be disrupted from future competitors, and as such, measures used to try and establish a level playing field with the incumbent can inhibit innovation and undermine the sector’s future competitiveness and wealth-creation capacity. Progress can be painful and regulators are faced with the difficult task of balancing the potential benefits of disruptive innovation and the potential need to tailor regulation so as to ensure fairness in the market and to meet public goals.

The supply of sharing goods and services may not be large enough to fulfil all demand. Some of the evidence indeed points to a small effect. Although increasing, recent research from Phocuswright showed that the incidence of shared space rentals makes up nine per cent of travellers in the UK during 2015²⁵; Uber rides in New York make up only 15 per cent of all rides²⁶; and peer-to-peer lenders have lent over £1.7bn to SMEs in the UK, but this makes up only 2.4 per cent of all bank lending.²⁷

Economic activity generated through collaborative platforms can supplement existing activity, extending the scope of the market and potentially increasing consumer demand. Whether this is enough to benefit incumbents too, or whether instead there is substitution of demand away from existing suppliers, is an empirical question. A U.S. study in 2015 showed that where Airbnb activity is high, the negative impact on incumbent hotels’ revenue is around eight to ten per cent, but this was not evenly distributed as Airbnb tends to substitute the end of the market that is undifferentiated

²³ Erica de la Harpe, [“Regulating the Sharing Economy”](#), *World Finance*, 7th December 2016

²⁴ [“The Digital Economy”](#), BIS, House of Commons, July 2016

²⁵ Douglas Quinby, [“Sleep With Me: The Surprising Rise of Renting Shared Space”](#), *Phocuswright*, August 2015

²⁶ Todd Schneider, [“Analyzing 1.1 Billion NYC Taxi and Uber Trips, with a Vengeance”](#), *toddwschneider.com*, September 2016

²⁷ KPMG, [“The changing world of money”](#), January 2015

and does not add a lot of value: one to three star hotels. Luxury hoteliers have the firewall of customer service, which Airbnb does not major in²⁸. Recent research suggests there can be positive effects for both product manufacturers and consumers from peer-to-peer product sharing.²⁹ Firms that strategically adjust their prices and quality in response to the collaborative market can offset the effect of fewer products bought due to sharing activities. Due to the market expansion effect from more price-sensitive consumers now placing more value on the product (as they can use it in the collaborative market to generate money), firms can earn higher levels of profits. This is especially the case for high value assets such as cars alongside collaborative platforms like Zipcar and GoGet. Some firms have already realised the benefit of product sharing, and are actively embracing the new economic system, such as B&Q's skill and tool-sharing platform Streetclub³⁰ and BMW's car-sharing service DriveNow.³¹ These firms are aware of the profit potential and inevitability of the collaborative economy and do not want to be left behind.

Small businesses account for 98 per cent of all businesses in Scotland and in his report Dr Jim Hamill emphasises that no sector should consider itself immune from the threat of digital disruption³². To minimise this threat he highlights the need for Scotland's business base to digitally transform and look to new business models. Opportunities may be found through partnership working with collaborative platforms or sharing resources with other businesses. Such resource sharing can enable a more streamlined or efficient service and offers the possibility for businesses to expand their market share by offering goods or services which they previously couldn't provide.

Skills

The Scottish Government's economic goal is to see Scotland ranked in the first quartile of countries in the world on productivity, wellbeing, equality and sustainability. To help achieve this the Scottish Government committed³³ that Scotland would be at the forefront of the digital economy. Part of this included the launch of a "Business Excellence Partnership" which invested £7m in initiatives promoting the digital maturity of Scotland's businesses. These included;

- DigitalBoost, a national programme of workshops, one-to-one support and online advice, designed to show how digital approaches and capability can help businesses improve and grow, a Digital Vouchers scheme that has helped over 500 companies meet costs of investing in digital technology and

²⁸ Georgios Zervas, Davide Proserpio and John W. Byers, "[The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry](#)", Boston University School of Management Research Paper No. 2013-16, November 2016

²⁹ Baojun Jiang and Lin Tian, "[Collaborative Consumption: Strategic and Economic Implications of Product Sharing](#)", Management Science 2016, August 2016

³⁰ Guest Blogger, "[Green game-changers: Streetclub and the sharing economy](#)", *WWF UK Blog*, 30th January 2013

³¹ Connie Loizos, "[BMW just jumped into the U.S. car-sharing biz, with the help of YC alum Ridecell](#)", *Techcrunch*, 8th April 2016

³² Dr Jim Hamill, "[Digital Disruption and Small Business in Scotland](#)", November 2015

³³ Scottish Government, *Realising Scotland's full potential in a digital world: a digital strategy for Scotland*, March 2017.

- #hellodigital,⁵ a state-of-the-art centre in Inverness, showcasing digital technology to SMEs.

£8.5m was made available through the Partnership to support a programme, managed by Skills Development Scotland, to tackle shortages in digital skills across Scotland which supported;

- the launch of CodeClan, Scotland's accredited and industry-led digital skills academy;
- Digital World,⁷ a marketing campaign designed to promote careers in the technology sector; and
- Digital Xtra which has so far invested £400,000, through two rounds of funding, to fund digital technology-related extra-curricular activities in Scotland's schools.

There has been an increase in the number of students undertaking computing and digital technology related qualifications, however a significant gender gap remains at all levels of qualification³⁴. 26 per cent of businesses in Scotland currently undertake activities to develop employees' digital skills, with a further 18 per cent planning to do so in the future³⁵. There is a demographic divide in digital skills, with those in social housing, those with incomes between £10,000 and £20,000, and those over 60 consistently being less confident in performing a variety of online activities³⁶.

Regulation of Collaborative Economy

Trust and Self-regulation

Trust has been described as the cornerstone of the collaborative economy³⁷ and facilitating trust is critical to its operation. Trust challenges underpin many exchanges in the collaborative economy as credible knowledge about goods or services is limited in almost all forms of peer-to-peer market transactions. In other words, one party to an economic transaction has more information or knowledge than the other party, which can cause the transaction to go awry or to not take place. Typically this is manifested where the supplier of a good or service has greater knowledge about that particular product or service than the buyer. For example, hosts on Airbnb know more about the quality of their accommodation than a potential guest does, and similarly, guests know more about their own reliability. A passenger may worry about trusting a stranger to drive them as they do not know the qualifications of the driver. Establishing trust between buyer and seller will help ensure that these transactions take place.

Where one might expect these information issues and the lack of traditional institutions to impede the collaborative economy's growth, the collaborative economy has continued to grow. Platforms have a natural commercial incentive to correct these transaction-detering information failures as they are also stakeholders in

³⁴ [SQA Annual Statistical Reports Higher](#), Skills Development Scotland 2016. /

³⁵ Scottish Government, [Digital Economy Business Survey](#), 2014.

³⁶ Scottish Household Survey, 2015.

³⁷ Rachel Botsman, ["The currency of the new economy is trust"](#), TED Talks, June 2015

transactions on the platform (usually receiving a percentage of the transaction). They ensure that these transactions take place by establishing trust through reputation management including the use of digital technologies such as: images of products or sellers, product descriptions and technical specifications, online communication channels between parties and platform, and secure payment systems.

Many have observed that these mechanisms are a type of self-regulation. The concept of self-regulation should not be considered as deregulation or no regulation, but rather a reallocation of regulatory responsibility to parties other than the government.³⁸ Proponents of the collaborative economy have claimed that the collaborative economy possesses the capacity to self-regulate and address market failures more efficiently than traditional top-down regulations.³⁹ The mechanisms adopted by collaborative categories: reputational review and rating systems and direct intervention. The information efficiencies as a result from the use of the Internet and other information technology have been argued to alleviate the need for government intervention in most (consumer protection) regulations⁴⁰.

a. Reputational Review and Rating Systems

Review and rating systems are the most common mechanism that the collaborative economy has incorporated to build reputation – near universally amongst platforms. These evaluative peer reviews are designed to facilitate trust by providing feedback on the quality of goods and services offered on the platform and/or feedback on past performance of platform participants. Negative customer feedback means that bad users are pushed out of the market and vice versa. The reputation systems implemented by platforms vary greatly in terms of design, content, and effect, but in general they ask buyers to review their experience with the seller (sometimes both parties are reviewed bilaterally). Typically some type of rating-based system, determined by the platform, is used which grants users simple ratings such as positive, negative or neutral, or a rating based on a scale, such as a five-star or ten-star scale. Normally individual reviews are factored into an aggregated average score and published on the platform for participants to observe. Some platforms allow free-form written comments that user can write that provide a detailed explanation of the quality of the overall experience for participants to read.

Although reputational rating systems have been found to reduce information asymmetry problems in online markets⁴¹ and provide platforms with the information on the identify of low-quality users so as to deter or eliminate them from the platform⁴², working well enough so as to facilitate the immense growth seen in the

³⁸ Molly Cohen and Arun Sundararajan, "[Self-regulation and Innovation in the Peer-to-Peer Sharing Economy](#)", The University of Chicago Law Review, 2015

³⁹ Benjamin G. Edelman and Damien Geradin, "[Efficiencies and regulatory shortcuts: how should we regulate companies like Airbnb and Uber?](#)", Stanford Technology Law Review, Vol. 19:293, November 2015

⁴⁰ Christopher Koopman, Matthew Mitchell and Adam Thierer, "[The Sharing Economy and Consumer Protection Regulation: The Case for Policy Change](#)", *The Journal of Business, Entrepreneurship & the Law*, Vol. 8 Article 4, 2015

⁴¹ Chrysanthos Dellarocas, "[The Digitization of Word-of-Mouth: Promise and Challenges of Online Reputation Mechanisms](#)", 49 MGMT. SCI. 1407, October 2003

⁴² Ginger Zhe Jin and Andrew Kato, "[Price, Quality, and Reputation: Evidence from an Online Field Experiment](#)", 37 RAND J. ECON. 983, November 2005

collaborative economy, there is good evidence that existing reputation systems do not function optimally and that some degree of caution is necessary when analysing its effectiveness as a self-governing mechanism.

Many have challenged that rating systems implemented by online platforms are inherently flawed as they can be susceptible to rating biases – typically upwards. Critics suggest that peer-to-peer ratings are insincere as the majority of customers give the maximum rating across the board, and reserve one star ratings for only the most egregious experiences – there is hardly any middle ground⁴³. Analysis on Airbnb ratings⁴⁴ backs this up as it was found that 95 per cent of properties listed on Airbnb received an average user-generated rating of between 4.5 and five stars (the maximum), with almost no properties receiving a rating below 3.5. High ratings were also found on Uber where 2014 data showed that only five per cent of all trips were rated as three stars or lower⁴⁵.

One reason for these upward biased ratings is that since leaving an accurate review is akin to a public good – it is likely to be under-provided. Indeed many users who have had a bad experience will often not leave any feedback whatsoever instead of a negative review⁴⁶. Another possibility is that since users on the collaborative economy are transacting with actual people instead of a conventional corporation, they may feel a pressure to withhold their subjective opinion of the service as they feel guilty with giving a user a rating that is less than maximum. This guilt is even more pronounced with the knowledge that Uber drivers are at risk of being deactivated from the platform if their aggregate rating falls below 4.6⁴⁷ – a rating of four or below can cost an Uber driver their livelihood. Additionally, bilateral rating systems are susceptible to the practice of “reciprocal reviews”. This is where fear of retaliation encourages overly-positive reviews from both parties as they wish to protect their own reputations. The reciprocity fear argument can be observed from research into the eBay’s (previous) reputation system⁴⁸ and from the fact that ratings of Airbnb listings were found to be much higher than their counterparts on TripAdvisor – which does not allow for reciprocal reviews⁴⁹.

Disregarding users’ subjectivity in what they consider to be a five star experience, the aforementioned explanations have led to the situation where even the mediocre are pushed towards the maximum rating – five stars is now the new average. In this situation the rating mechanism may be deemed flawed or potentially worthless as the lack of ratings differentiation and accuracy misleads buyers since it does not accurately represent the outcome of users’ previous transactions. Since the value of

⁴³ Kat Kane, [“The Big Hidden Problem With Uber? Insincere 5-Star Ratings”](#), *Wired*, 19th March 2015

⁴⁴ Georgios Zervas, Davide Proserpio and John W. Byers, [“A First Look at Online Reputation on Airbnb, Where Every Stay is Above Average”](#), Boston University, January 2015

⁴⁵ James Cook, [“Uber’s internal charts show how its driver-rating system actually works”](#), *Business Insider*, 11th February 2015

⁴⁶ Chris Nosko and Steven Tadelis, [“The Limits of Reputation in Platform Markets: An Empirical Analysis and Field Experiment”](#), NBER Working Paper No. 20830, January 2015

⁴⁷ James Cook, [“Uber’s internal charts show how its driver-rating system actually works”](#), *Business Insider*, 11th February 2015

⁴⁸ Gary Bolton, Ben Greiner and Axel Ockenfels, [“Engineering Trust: Reciprocity in the Production of Reputation Information”](#), *Management Science* 201359:2, 265-285, December 2012

⁴⁹ Aimee Millwood, [“The risk of reviewing the reviewer”](#), *Techcrunch*, 11th April 2015

ratings is distorted, they do not allow buyers to meaningfully discriminate amongst users in order to distinguish between exceptional and marginally acceptable service.

New users to a platform may have difficulty being chosen by buyers as they do not have a reputation to put forward so as to gain trust in the platform or they are unable to transfer their existing reputation from other platforms so as to demonstrate their trustworthiness. This is known as the “cold start” problem. Reputation systems alone are unlikely to solve this problem for new users as they only identify between high and low quality users after an individual user has engaged in a notable number of transactions. This issue may act as a strong lock-in mechanism for users who have devoted significant time and resources on building a reputation on a platform since the cost of starting over from scratch on a competing platform can be considerably high, even if the competing platform offers significant benefits to the user. The “cold start” problem can lead to a fragmentation in users’ reputations across platforms which can harm consumers as they lose out on crucial information when making transaction decisions and it limits the potential selection of goods and services offered to them. The growth in the collaborative economy has brought out new complementary sectors and business models that seek to address issues present in collaborative economy models such as the “cold start” problem. For instance, Traity have emerged to alleviate this issue by creating a general-purpose reputation platform. Traity creates a reputation passport where people can show their (and search for others’) digital identities, transparency, what type of people they are, and the success of their economic transactions on collaborative economy platforms as a way to trust one another. Traity also offer the ReputationAPI for collaborative economy organisations so that users can benefit aggregating reputation in one place and being able to use it on their other profiles and other markets⁵⁰.

High-quality sellers may take advantage of their established high reputation position on a platform by instead offering a lower quality good or service – especially the case when a seller plans on leaving the platform entirely as they have no interest in maintaining their reputation for the remainder of their time on the platform. As reputation systems are often slow to adjust to a seller’s change from a high-quality to a low-quality user, customers may come away from a transaction dissatisfied as they had perceived the changed seller to be that of high-quality. This often referred to as the “reputational milking” problem (or “final period” in the case of a seller planning on leaving the platform).

b. *Direct Intervention*

In addition to facilitating trust amongst users through good and reliable rating systems, platforms need to ensure that users trust them. Platforms directly intervene – usually independently of any regulatory requirements – to deal with consumer protection concerns and to promote confidence in transaction on the platform. Interventions by platforms aim to shift some of the transaction risk from users to the platform itself. These mechanisms complement the existing reputation rating mechanisms and help solve some of the issues that plague them. These mechanisms work well because the platform is also a stakeholder in the transaction (usually because they receive a percentage of the transaction) and therefore have

⁵⁰ See: <https://traity.com/our-mission>

aligned interests to root out any issues that would hinder trust in transacting on the platform such as fraud or abuse.

One of the most used interventions by platforms is that of curating access of users by undertaking some form of pre-screening. These range from requiring users to provide valid credit/debit card information or through more thorough background checks. Lyft, for example, require drivers to submit their Social Security number and also conduct criminal background checks and driving history checks.⁵¹ Airbnb digitally verify a host's offline Government ID (e.g. driver's license or passport) with their online profile.⁵² Many platforms also verify identification by encouraging (and sometimes requiring) users to integrate their platform profile with social-network profiles such as Facebook, Google or LinkedIn. This intervention signals to users that the platform has undertaken some level of due diligence on its users, establishing a minimum level of quality to be expected by its users. By curating entry, the platform is substituting its own reputation for the reputation of individual users transacting on the platform. This can help alleviate the "cold start" problem as if a platform has a good reputation when it comes to screening potential users, then buyers need not rely as heavily on a sellers' individual reputation when deciding on whether to transact.

Another form of intervention is for platforms to offer guarantees. These guarantees essentially act as a form of platform provided-insurance in the event of a user being dissatisfied with a transaction on the platform, assuring users that they are protected on the platform. Guarantees come in different forms: platforms may reimburse dissatisfied users; platforms may hold payment in escrow as a third party until after the transaction is complete (for example Airbnb's payment processing system allows it to deny payment to a host if an accommodation is not as it was described); or it may be an insurance product (such as Airbnb's host insurance which offers up to £600,000 in damages to the property⁵³, and Lyfts' insurance coverage⁵⁴ which varies depending upon whether the driver is in active duty or not). As platform guarantees can help reduce the potential harm caused to dissatisfied users, they be a better tool in mitigating the "cold start" and "final period" problems than rating systems as they enhance user trust from day one.

Consumers in the collaborative economy are generally more exposed in instances of consumer detriment (e.g. flawed products or inadequate services, unfair pricing, or injury) than in 'traditional' markets, and due to its peer-to-peer nature and the fact that the majority of transactions involve the selling of services, the collaborative economy generates more varied and complex disputes amongst users. The issue is that in many cases it is unclear of the responsibility allocation between the provider and the platform in the instance of an unsatisfactory transaction – if an apartment rented on Airbnb doesn't fit the description, is the consumer's claim against the home owner or against Airbnb – as platforms typically function as intermediaries to match users instead of a direct product or service provider, thereby offloading liability from any claim relating to a substantive transaction. Due to its natural incentive to ensure that transactions take place, platforms, such as eBay and Airbnb, provide

⁵¹ See <http://www.lyft.com/safety>

⁵² See <http://www.airbnb.com/trust>

⁵³ See <https://www.airbnb.co.uk/guarantee>

⁵⁴ See https://www.ftc.gov/system/files/documents/public_comments/2015/05/01715-96144.pdf

some form of dispute resolution process^{55,56}. Providing a dispute resolution mechanism can help meet consumer protection objectives and is crucial in building trust and reducing risk, thus ensuring users are confident in transacting on the platform.

In an effort to more adequately self-regulate the industry, SEUK launched the “TrustSeal” in 2016 – a kitemark for the collaborative economy that is designed to increase trust amongst consumers and businesses by monitoring the standards of collaborative economy platforms. It follows the UK Government’s recommendation for the creation of a kitemark to ensure minimum standards in the collaborative economy⁵⁷. The TrustSeal designation is awarded by an advisory panel to collaborative economy platforms that successfully comply with a list of “Good Practice Principles” relating to direct interventions such as identity verification, product transparency and customer service⁵⁸. The kitemark aims to encourage platforms to understand and adhere to the highest standards within the collaborative economy, showcasing that it is trusted and safe for users by self-declaring their compliance. Lower profile sites will likely gain more from the kitemark as it is likely that they will face concerns from consumers as to their validity or standards. Four small collaborative platforms were involved in initial pilot trails as a means to test the application of the principles and processes to make sure they are fit for purpose before implementing the initiative to the other SEUK members. All four were recently awarded the accreditation⁵⁹.

However, like reputational rating mechanisms, platform interventions pose some issues. Platform interventions really only serve to ameliorate dissatisfied users after a problem has occurred, and do not fully prevent consumer harm from occurring. For example, holding payment escrow or screening new users does not prevent consumers from being deceived in a transaction. With substituting platform reputation for user reputation, platforms require that users trust them instead of users in order to effectively reduce information asymmetries. Whether this substitution reduces information asymmetries depends heavily upon the quality of a platform’s reputation. Trusting a platform more than the individual users will prove difficult for new entrants as the platform’s existence in the evolving nature of the collaborative economy can be highly uncertain. Similar to insurance markets, guarantees have the potential to incentivise users to display behaviour that is riskier than otherwise would have been. For example, since they are insured by the platform, users may be less attentive in checking out the rating system. This can provide an incentive for low-quality sellers to enter the platform, which could undermine the value of the provided guarantee.⁶⁰ Dispute resolution and redress systems can be viewed as a hindrance and of low priority for newly established platforms as these systems may require the investment of significant resources that may be needed elsewhere.

⁵⁵ See <http://pages.ebay.co.uk/help/tp/problems-dispute-resolution.html>

⁵⁶ See <https://www.airbnb.co.uk/help/article/767/what-is-the-resolution-center>

⁵⁷ UK Government, “[Independent review of the sharing economy: Government response](#)”, BIS, March 2015

⁵⁸ See: <https://sharingeconomytrustseal.com/about/>

⁵⁹ Lex Barber, “[Liftshare becomes world’s first car sharing company to be awarded the sharing economy TrustSeal](#)”, *Liftshare Blog*, 28th September 2016

⁶⁰ This problem is known as moral hazard.

Regulatory Responses

Governments have found it increasingly difficult to regulate the collaborative economy as it presents trade-offs in objectives such as protecting consumers and the broader public interest, the need for innovation and economic growth, soaring consumer demand, and fairness for incumbents⁶¹. Traditional regulations are designed to protect consumers by providing assurance and alleviating uncertainties in transactions, and to protect the broader public against negative externalities. However, in the collaborative economy both consumer and provider may be in need of protection. Uber drivers may be in need of protection against abusive customers or guests may need protection to ensure that the property has adequate fire safety. The collaborative economy may lead to negative externalities such as increased congestion and pollution from peer to peer transportation, or noisy Airbnb guests may disturb neighbouring residents in a typically quiet neighbourhood. Existing regulations are seen as outdated as they do not reflect these new collaborative economy business models. They are often rigid and prescriptive, making them slow at responding to advancements in technology and disruptive innovations, like those seen in the collaborative economy, in order to protect the public and incumbent businesses. It has also been difficult for governments to categorise collaborative economy organisations as they are not standard new entrants into an existing marketplace. Are TaskRabbit and Uber a temporary employment agency and a taxi company or a technology company that matches independent contractors with consumers? It is therefore unclear if providers on collaborative platforms competing with regulated providers of the same sector should be subject to the same regulations.

Regulators have been confronted by incumbents contending that new entrants compete unfairly by avoiding regulatory requirements necessary to protect consumers and the public, and by platforms arguing that differences in their legal classification and features justify different regulatory treatment. Governments face the risk that dealing with these challenges may do more harm than good for overall consumer welfare. Due to their precautionary nature, the common regulatory response to the collaborative economy has been to apply traditional regulations as an issue arises. These reactive interventions that seek to “level the playing field” run the risk of reducing competition and innovation, stifling the benefits produced by the collaborative economy, leading to an overall negative impact on consumer welfare. Regardless, governments have applied varying regulatory approaches to the collaborative economy in an attempt to balance the benefits of allowing competition and disruptive innovation, and the necessary regulatory intervention to promote consumer protection and other public interests.

a. Heavy regulation

Some of the strictest regulatory response to the collaborative economy has been the instance of outright banning or the application of existing/increased sector specific regulations to collaborative platforms. Typically this swift protectionist approach has come at the behest of the incumbent actors as they are concerned that their highly-regulated industry co-exists with unregulated competitors, with the uneven regulatory

⁶¹ Salman Dostmohammad and Jude Long, “[Regulating the Sharing Economy: Applying the Process for Creative Destruction](#)”, Dalhousie University, December 2015

landscape creating a strong risk for a state of unfair competition and regulatory arbitrage. At the same time, public interest concerns have been raised by local governments and communities arguing that the regulatory grey zones are being exploited to circumvent rules designed to preserve public goals.

The most particular case of this regulatory response has been to peer-to-peer transportation services such as Uber and Blablacar. The incumbent taxicab and private hire industries have been pressuring authorities to ban the ride sharing service Uber (mainly UberPOP, the app's most basic offering aimed at non-professional drivers) as they have argued that the service has been able to enter the marketplace without obtaining the requisite regulatory clearances that taxi operators must obtain, and have been able to operate in such a unfair competitive fashion so as to have established a significant user base prior to regulatory intervention. Uber have not introduced the UberPOP service to the UK and they have suspended the controversial service in Germany, France, Italy, Spain, Belgium, and Sweden⁶². In 2015, the Bus Transport Spanish Confederation (Confibus) sued Blablacar citing 'unfair competition' and that their drivers should be considered as commercial enterprises. Confibus called for a precautionary ban on the company to take effect during the duration of the trial. Blablacar argued that they are a social community and their drivers don't make a profit – passengers only pay for the cost of the journey. The company has so far avoided the ban in Spain, but the court case is still far from resolved and the platform has faced fines from Madrid authorities claiming that they overcharged customers⁶³. This strict protectionist measure has been described by proponents of the collaborative economy as an example of regulatory capture by the incumbents⁶⁴.

In the accommodation sector, generally speaking, the options of 'shared or private rooms', where a guest rents a bedroom in a premise that is occupied by the owner, and 'un-hosted rental', where hosts rent out their entire primary residence⁶⁵, are considered to be part of the true collaborative economy – where hosts are using their accommodation as a way of supplementing their income. The third type is that of un-hosted rentals in vacant properties that are not primary residences or properties that are rented out for longer than the annual rental limit, managed either by the owner or by a third-party professional management company. These rentals can be defined as an unregulated commercially orientated activity and are the cause of concern, both for incumbents who argue of unfair competition from these commercial properties and from local authorities that have argued these added pressure to housing availability and affordability. Berlin and Catalonia have applied strict land use-based regulations, issuing complete bans for unlicensed short-term rentals. Short-term rentals must be registered if they are to be allowed on intermediary platforms like Airbnb or HomeAway.

⁶² Reuters, "[Uber Will Suspend UberPOP Service in Sweden](#)", *Fortune*, 11th May 2016

⁶³ Unknown author, "[BlaBlaCar to take Madrid fine threat to EU Commission](#)"

⁶⁴ Christopher Koopman, Matthew Mitchell and Adam Thierer, "[The Sharing Economy and Consumer Protection Regulation: The Case for Policy Change](#)", *The Journal of Business, Entrepreneurship & the Law*, Vol. 8 Article 4, 2015

⁶⁵ Because the property is a primary residence, it is only available to be let in an un-hosted capacity for a limited number of days each calendar year.

In other cases regulators have chosen not to differentiate between the traditional incumbent actors and collaborative economy platforms by applying the common existing regulation framework on the latter.

Food-sharing platforms such as Shareyourmeal and MenuNextDoor have experienced rigid applications of existing regulations. For example, the restaurateur's union in France has urged the government to ban these platforms, pointing out potential hygiene and health issues as well as the absence of licenses to serve alcohol for such platforms. Belgium has required that home cooks comply with the hygiene standards of traditional commercial enterprises. This has restricted the platform development in Belgium as many home caterers were not able to comply with the regulations without incurring significant costs.⁶⁶

Other forms of Uber that are different to UberPOP (e.g. UberX and UberTAXI) are allowed to operate in most European countries, but are required to abide by the rules and regulations applicable to the incumbent taxi industry (e.g. licensing, liability and fiscal rules). In the UK, UberX is regulated as a private hire vehicle operator (known as minicabs), which are regulated differently than taxi operators. In September 2015, Transport for London (TfL) proposed to impose harsher regulations on private hire operators⁶⁷ – they applied to all minicab operators, but the proposals were seen as a response to Uber's growth in capital. The proposals were dropped in January 2016 due to TfL not receiving enough support, although it was considering charging higher minicab license fees.

In the collaborative financing sector, peer-to-peer lending in Germany has been subject to equity crowdfunding regulations where loans are capped to a maximum of 100,000 euros. Although it is working with the regulator to clarify the difference between its debt-based model and equity crowdfunding models, such regulations have been argued by the platforms of being excessive and too strict, hindering their growth potential⁶⁸.

Enforcement of the regulatory requirements has been strict in the accommodation sector for cities like Berlin, Barcelona and Paris. Infringements to the requirements are subject to fines of up to €100,000 and €25,000 in the case of Berlin and Paris respectively – with Paris city wanting the government to raise fines to the same levels seen in Berlin⁶⁹. Additionally, Berlin locals have been encouraged to report possible lawbreakers via an anonymous website. As a result of the implementation of the legislation, 6,300 apartments have been registered, with around 1,200 possible violations being identified. Airbnb listings have dropped by 40 per cent in the city leading up to the laws introduction.⁷⁰ Paris employ a number of enforcement officers who actively investigate potential illegal properties.

⁶⁶ European Commission, "European agenda for the collaborative economy - supporting analysis", *A European agenda for the collaborative economy*, p.24-25, 2nd June 2016

⁶⁷ James Titcomb, "[Uber wins victory in London as TfL drops proposals to crack down on app](#)", *The Telegraph*, 20th January 2016

⁶⁸ Robert Vaughan and Raphael Daverio, "[Assessing the size and scale of the collaborative economy in Europe](#)", PWC, April 2016

⁶⁹ Christine Henry, "[New taxes on second homes and vacant units in Paris](#)", *Le Parisian*, 13th June 2016

⁷⁰ Soo Kim, "[Berlin bans thousands of Airbnb properties](#)", *The Guardian*, 3rd May 2016

Public authorities have also used fines as method of regulation. Uber was fined by a French court for having run an illegal transport service with non-professional drivers⁷¹ and the Catalonian government have fined the “repeated offending” letting sites Airbnb and HomeAway €600,000 each for advertising illegal rooms and unlicensed properties in the city⁷².

Implementing this type of top-down enforcement can prove costly and difficult to enforce for local governments. It can sometimes prove ineffective as the possible fragmentation of rules has the potential to create confusion for users surrounding the legalities of the service – they may not adhere to the law due to purposeful neglect or genuine unawareness.

c. Light and updated regulation

To date the UK has, in general, taken a hands-off approach to regulation, wanting instead to enable and encourage it. Regulating collaborative business models in a way that allows for their disruptive entry and adapts to issues post hoc. The UK government’s efforts to stimulate growth included the ‘Rent a Room Scheme’⁷³ which allows residents earn up to a threshold of £7,500 per year tax-free from letting out furnished accommodation in their home. It only applies when a person is renting rooms in their main residence. Included in the May 2016 Budget was the two tax-free allowances of £1,000 each. Both tax breaks apply twice; once for property related income and once for online trading. UK users can therefore earn £2,000 tax free in total from two types of ‘micro-entrepreneurial’ activity⁷⁴. However, in the Spring Budget 2017, the UK Government stated that it will consult on the rent-a-room relief to ensure it is better targeted to support longer term lettings – to align the relief more closely with its intended purpose to increase supply of affordable long term lettings (GOV.UK, 2017a). France is currently discussing implementing a similar system of tax exemption to activities related to the collaborative economy.⁷⁵

Some regulations have been explicitly adjusted to allow small-scale activity without excessive additional regulation. In the accommodation sector, regulators have utilised a range of building and land use-based regulations when permitting hosts to let out their properties for short-term rental in an attempt to bring transactions of home sharing in line with the humble ‘sharing’ aspect of the collaborative economy. These regulations establish clear distinctions between the varying uses of residential property for short-term rental purposes, imposing requirements on operational aspects of the property which restrict the intensity and level of commercialisation of tourist use. These include:

⁷¹ Telegraph Reporters, “[Uber fined £625,000 in France over illegal cab service](#)”, *The Telegraph*, 9th June 2016

⁷² James Badcock, “[Barcelona to fine Airbnb and HomeAway €600,000 each for offering ‘illegal’ accommodation](#)”, *The Guardian*, 24th November 2016

⁷³ See <https://www.gov.uk/rent-room-in-your-home/the-rent-a-room-scheme>

⁷⁴ Natasha Lomas, “[UK offers tax breaks to boost sharing economy](#)”, *Techcrunch*, 17th March 2016

⁷⁵ Anastasia Gnezditskaia, “[France to vote on taxing sharing economy, classifieds](#)”, *Aimgroup*, 2nd December 2016

- Limitation on the length of time that the property can be rented out for. For example, residents in Amsterdam and London may rent out their whole property for up to 60 and 90 days per year respectively⁷⁶;
- Whether the residential property is a primary or secondary residence. Most authorities permit the use of primary residence for short-term rentals, but ban the unregistered use of secondary residences. This is clearly in an attempt to prevent the use of residential units as commercial entities by single hosts with multiple properties;
- The intensity of use of the property for short-term rental, e.g. restricting the number of rooms or people that the host can accept for a reservation; and
- Meet appropriate fire and safety regulations.

Airbnb have also entered co-operation agreements with several cities (such as Paris, Amsterdam, Lisbon and London) in an effort to apply more bottom-up approaches to enforcement by promoting responsible home sharing by providing hosts with clearer and more accessible information on local home sharing rules, and working together with authorities to tackle illegal hotels. In Paris for example, Airbnb will send out communication to hosts that are likely to be renting their primary residency for over the allowed limit or to hosts that are renting out secondary residences informing them of their responsibilities⁷⁷. In a deal with London and Amsterdam, Airbnb have agreed to take on the responsibility of policing the local limits for short-term rentals through its system, unless the hosts have the proper relevant licenses⁷⁸. Although a step forward, critics have expressed scepticism in the trust of these companies to comply with these self-policing types of agreements, stating that it is like “having the fox watch the chicken coop”⁷⁹.

The Financial Conduct Authority (FCA) in the UK proactively moved to formalise the regulatory environment for collaborative finance platforms, such as Kickstarter (crowdfunding) and Zopa (peer-to-peer lending), in April 2014. Collaborative finance platforms must presently comply with core elements of the FCA Handbook, including the FCA Principles and relevant conduct of business rules. However, the current regulatory obligations upon platforms are by design less stringent than those affecting other financial services firms. This 'light touch' approach was appropriate for the first generation of platforms in this sector, which were essentially matchmakers between lenders and borrowers, and according to a Nesta survey in 2015, 91 per cent of peer-to-peer lending platforms regarded the current regulations were 'adequate and appropriate'⁸⁰. However, in December of 2016 the regulator had found that some platforms' business models had started to resemble the operations of those seen in traditional financial institutions – pooling of credit risk, cross-investment and maturity mismatches – but not subject to the same regulatory

⁷⁶ Nicky Woolf, “[Airbnb regulation deal with London and Amsterdam marks dramatic policy shift](#)”, *The Guardian*, 3rd December 2016

⁷⁷ Airbnb Citizen, “[Paris and Airbnb Pilot New Measures to Promote Responsible Home Sharing](#)”, 31st March 2016

⁷⁸ Nicky Woolf, “[Airbnb regulation deal with London and Amsterdam marks dramatic policy shift](#)”, *The Guardian*, 3rd December 2016

⁷⁹ Nicky Woolf, “[Airbnb regulation deal with London and Amsterdam marks dramatic policy shift](#)”, *The Guardian*, 3rd December 2016

⁸⁰ Bryan Zhang, Peter Baeck, Tania Ziegler, Jonathan Bone and Kieran Garvey, “[PUSHING BOUNDARIES: THE 2015 UK ALTERNATIVE FINANCE INDUSTRY REPORT](#)”, *Nesta*, February 2016

requirements. Thereby creating a risk of regulatory arbitrage⁸¹. The regulator has identified that there is sufficient potential for consumer detriment in this sector and therefore warrants possible adjustments to the rules and regulations by summer 2017⁸². Despite facing increased regulations, this situation shows that the regulator is flexible in its approach to regulating the dynamic nature of the collaborative finance sector in such a way that realises the positive gains and address instances of consumer harm.

d. Sharing Cities

Cities such as Amsterdam and Seoul have successfully established themselves as “sharing cities” by driving through dedicated strategies for the collaborative economy. The approach adopted by these cities is that of an open and supportive approach towards the collaborative economy, embracing it as a positive disruption, a social innovation, and an opportunity to facilitate both entrepreneurship and sustainability. These cities recognise that ensuring regulation of the collaborative economy is up-to-date and flexible and not only help contain the collaborative economy’s more harmful aspects by responding and adapting to it post hoc, but it will impact the extent that their municipality benefits from the innovation and positive impacts of these new disruptive entrants.

Both cities aim to stimulate the collaborative economy by supporting and promoting both the creation of new collaborative businesses and the growth of existing ones. For example, the Seoul city government has provided financial and organisational support to collaborative organisations or businesses. These include platforms that facilitate parking space sharing, goods sharing, Airbnb-style home sharing, and children’s clothing exchange. Many of such platforms have experienced significant growth since the start of the initiative. Additionally, both cities have actively lead by example by launching their own projects which enable citizens and businesses access to dormant city-owned assets such as office space, cars and tools. For example, Seoul helped incubate new ventures by opening up 800 city-owned spaces for creative and productive purposes.

Whilst stimulating the collaborative economy, both cities are attentive to monitoring and regulating it appropriately so as to minimise/prevent its adverse consequences. The complex and diverse ecosystem of these platforms means that taking a binary approach of either deregulation or more regulation may not lead to the best outcome. They have instead aimed to create a flexible regulatory framework that that puts the public interest first whilst at the same time not punishing the new innovative companies that do not fit into existing rules and regulations. They have sought to remove barriers and impediments to collaborative businesses created by out-dated regulations by instead adjusting them. For example, Seoul examined areas where they could improve on the existing regulations, as seen in Figure 8.

⁸¹ Matthew Wood, [“Peer review: FCA signals tighter regulations for P2P lending platforms”](#), *RPC Blog*, 3rd January 2017

⁸² *Ibid*

Figure 8: Regulation improvements by Seoul Sharing City InitiativeSource: [Seoul Draws a City Through Sharing](#), p. 43

Area	Needed improvements	Related regulations
Transportation	Easing regulations on the ban on commercial transport services by private cars	Article 81 of Passenger Transport Service Act
Tourism	Easing registration requirements for urban private room rental business e.g. size of the accommodation (230m ²)	Article 6 of the Enforcement Decree of the Tourism Promotion Act
	Easing qualifications for tour guides for foreign tourists	Article 38 of the Enforcement Decree of the Tourism Promotion Act
Taxation	Exempting taxes on religious facilities when they share space to the public	Article 50 of the Restriction of Special Local Taxation Act
Parking lots	Exempting taxes on on-road parking lots when they share space to the public	Article 10 of Parking Lot Act; SMG Ordinance on the Installation and Management of Parking Lots
Food industry	Easing regulations on restaurants when they share space to the public	Article 37 of the Food Sanitation Act
Insurance	Developing an insurance plan to offer safety guarantee to users	New insurance plans needed
Construction	Promoting sharing practices in architectural design	New regulations needed

The most noticeable example of this flexible regulatory response is reflected in Amsterdam's co-operation agreement with Airbnb. The city created the Private Holiday Rental policy which permitted homeowners to rent out their property without a permit, but for only up to 60 days a year, along with other conditions. The city worked with Airbnb on more bottom-up approaches to enforcement by requiring them to promote responsible home sharing by providing hosts with clearer and more accessible information on their obligations to local home sharing rules, helping to identify illegal hotels, and simplifying tax processes by collecting and remit tourist taxes on behalf of hosts. This flexible regulatory response helps distinguish between those that want to supplement their income by sharing their property – consistent with the 'sharing' aspect of the collaborative economy – and commercial operations. It also ensures that public interest concerns regarding housing availability and gentrification (explored in more detail later) are addressed, and attempts to make a more equitable regulatory landscape that ensures fair competition with the incumbent actors. Both cities are also working out issues of liability and insurance alongside insurance providers and the platforms.

Employment in the Collaborative Economy

It is not only businesses who participate in the collaborative economy; large numbers of individuals also participate for a variety of reasons, including supplementing their existing incomes. The fall in search and transaction costs mean that individuals no longer need a business to act as intermediary to match their supplies to demands, leading to more person-to-person transactions. The long term trend in the UK labour market towards flexible work and self-employment may give an indication of the

growth of labour supply in the collaborative economy – self-employment figures have grown around 70 per cent since 2000 to around 15 per cent of the UK workforce^{83,84}. A key element of the collaborative economy is the flexibility opportunities that it provides to people to earn extra income and work flexible working patterns. Contrary to the traditional model of work, with a single occupation and income stream, it is now possible to monetise spare time or spare assets through these platforms. The reduced search and matching costs offered by these online marketplaces provides greater flexibility to those demanding and supplying labour such as TaskRabbit, Handy and Airbnb. A 2013 study by Airbnb showed that 80 per cent of Airbnb hosts in the UK only rent out the home that they live in, earning an average topping up income of £2,822 per year from renting out 33 nights per year.⁸⁵ Cleaners on Handy could earn £8.50 an hour and Deliveroo riders receive £7 an hour, and then £1 per delivery.⁸⁶ Some people may even choose to switch from a full-time occupation to operating a rolling set of individual tasks or contracts. This phenomenon is often referred to as the ‘gig economy’.

However, a growing concern from this alternative job model has been in relation to the employment status and rights of those working within the collaborative economy. Many of the workers of these platforms are classed as self-employed under UK employment law and, as such, basic employment rights that workers and employees enjoy such as holiday pay, sick pay and the right to the national minimum wage do not apply. A number of recent high-profile cases⁸⁷ challenge this working model adopted by platforms, arguing that the individuals engaged should be treated as employees or workers, with the range of employment rights which either status confers. Many of the arguments attempt to highlight that despite being classified as self-employed, many of the workers are given strict guidelines to work within. The platform is argued to be acting as more of an employer than a partner. For example, some platforms dictate the routes, fares and shifts of workers. Sometimes workers are required to wear a company uniform. Workers from Deliveroo and Uber have to accept a job before they can see where they will be driving. If drivers accept a job and then decide that it is too far for them, it will be marked against them, which can lead to them losing their job. These arguments weaken the claim of flexibility offered to workers from these contracts and that workers are independently finding work as providers, rather than being employed by the companies.

Although relatively small, it is a growing workforce. A report by the ONS in 2016⁸⁸ has shown that there has been a sharp 46.6 per cent rise in part-time self-employment since the economic downturn in 2008. This type of employment tends to reflect most gig economy workers. It was noted in the Airbnb UK study that 42 per cent of UK hosts were self-employed, freelancers or part-time workers. Whilst some people are taking on this work as a supplement for their main job, many part-time self-employed workers (particularly young men) display a greater degree of

⁸³ Julie Deane, “[Self-employment Review](#)”, February 2016

⁸⁴ Flip Chart Rick, “[The Incredible Shrinking Gig Economy](#)”, *Flip Chart Fairy Tales*, 17th November 2015

⁸⁵ Airbnb, “[Economic Impact Study UK](#)”, January 2014

⁸⁶ Homa Khaleeli, “[The truth about working for Deliveroo, Uber and the on-demand economy](#)”, *The Guardian*, 15th June 2016

⁸⁷ Moorcrofts, “[Gigs – they’re not just for rock bands](#)”, 6th October 2016

⁸⁸ ONS, “[Trends in self-employment in the UK: 2001 to 2015](#)”, July 2016

dissatisfaction with their part-time self-employed status and appear to have come directly from unemployment.⁸⁹ This possibly indicates a choice made under economic necessity rather than choice. These workers do not feel that this type of collaborative economy work is flexible or acts as a supplement to their income from their main job. Similar findings were found from a report by the McKinsey Global Institute which estimate that a sizeable minority of around 30 per cent of independent workers are taking on this type of independent work “reluctantly” or out of financial necessity⁹⁰. This growth in the size of the collaborative economy workforce will further fuel the importance of employment issues and may lead to reviews of current employment laws.

Due to the rise in the number of individuals engaged in the collaborative economy, and the recent ruling on classification of gig economy workers⁹¹, a number of tax implications are likely to be faced according to the Office of Tax Simplification (OTS)⁹². The (multiple) income streams accrued from collaborative activities is taxable, but is not clear how HMRC can collect it simply and efficiently under the existing tax system. Individuals may not realise that these income streams are subject to tax and/or they may have issues in navigating the complexities of the system when attempting to declare, leading to non-compliance or under-reporting. The growth of the collaborative economy has also increased the burden of tax collection because, instead of dealing with one employer, HMRC has to now deal with numerous individuals. Additionally, the replacement of a companies with employees by platforms (potentially not based in the UK) using self-employed will result in much lower/nil employers’ NICs. Couple this with the risk of non-compliance, the growth in the collaborative economy will lead to less tax revenue being generated for the Exchequer.⁹³ HMRC are currently consulting providers to find out how they can support its growth while making it easier for people to meet their tax obligations and access the allowances they are entitled to⁹⁴.

The OTS suggest the tax system should be designed to be well understood and which easily informs collaborative economy individuals of their tax obligations and facilitates them, in a simple way, in complying with these obligations. Among their suggestions is the requirement for platform operators, such as Uber, to check that all its worker users have a relationship with HMRC. Alternatively there could be a requirement for those engaging workers through platforms to report activities, or even the introduction of some form of withholding tax.

⁸⁹ *ibid*

⁹⁰ James Manyika et al., “[Independent work: Choice, necessity, and the gig economy](#)”, McKinsey Global Institute, October 2016

⁹¹ Chris Johnston, “[Uber Drivers Win Key Employment Case](#)”, BBC, 28th October 2016

⁹² [Gig Economy Focus Paper](#), Office of Tax Simplification, November 2016

⁹³ See OBR estimates for the Autumn Statement 2016 which suggest the Gig economy will costs the Exchequer £3.5bn in 2020-21: <http://www.bbc.co.uk/news/business-38082535>

⁹⁴ <http://natcen.ac.uk/taking-part/studies-in-field/sharing-economy/about/>

Social Impacts

Gentrification

Over the past decade the accommodation sector has been transformed by the emergence of peer-to-peer accommodation platforms in the collaborative economy. Many European countries have experienced a rise in tourism due to more frequent low-fare airline routes and city branding. Connecting cities with large population centres in Europe has facilitated a high demand for tourism accommodation in these cities – particularly the low priced “short stays” segment. The collaborative economy accommodation sector has helped to meet this increased demand through the use of digital platforms that enable individuals to rent out access to their unused accommodation to travellers whom want to holiday like a local, getting to the heart of a community instead of perched on its hinterland as a “tourist”. Despite having drawn increased discussion over the past years in relation to its economic impact on the incumbent hotel industry, especially short-term rentals, there are however potential negative social externalities/impacts associated with the peer-to-peer accommodation sector that have been voiced by local governments and residents in recent years.

One of the main concerns is that the accompanying growth in the collaborative economy accommodation sector is placing pressure on housing availability and affordability for local residents. There is a market incentive for property owners as they may find that buying and converting residential stock into a short-term rental on a peer-to-peer platform can be a more lucrative and flexible business model than letting it as a long-term residence. This type of arbitrage has been voiced to have led to the gentrification of cities as it is argued to be restricting the housing supply for local residents, equating to even higher house prices and rental values that price them out of inner-city neighbourhoods, thereby altering the social make-up of these urban centres and neighbourhoods. The issue is politically sensitive for cities such as London, Amsterdam and Berlin whom are currently experiencing housing crisis^{95,96} and platforms do not want to be blamed for facilitating and exacerbating the situation as this view could strengthen critics’ call for more stringent regulations on the sector, thereby harming their business model.

The sector’s proliferation into suburban areas have led to other issues that are borne by local residents and may incentivise them to move, these include: increased instances of nuisance noise⁹⁷, lack of available parking, reduced sense of community and security, and decreasing availability of amenities. As planning/zoning regulations are not being enforced or adhered to by hosts of short-term rentals, neighbouring property owners and tenants lose their ability to make decisions about what kind of environment they are suited to living in. For example, a family may find that they are living next to an “illegal hotel” that regularly accommodates disorderly parties that cause load noise and rubbish.

⁹⁵ Guy Chazan, [“Germany: Berlin’s war on gentrification”](#), *Financial Times*, 10th October 2016

⁹⁶ Renate van der Zee, [“The ‘Airbnb effect’: is it real, and what is it doing to a city like Amsterdam?”](#), *The Guardian*, 6th October 2016

⁹⁷ Dan Newlin, [“Increase in Airbnb rentals leads to huge rise in noise complaints”](#), *Evening Standard*, 1st November 2016

Estimating the proportion of hosts renting out their primary residence for peer-to-peer rental as opposed to unregulated “commercial” leasers (and the scale of the latter) remains difficult and is up to dispute. Insideairbnb’s metrics provide alternative indicators to scope local short-term rentals⁹⁸. Insideairbnb data seeks to distinguish between genuine accommodation sharing – where the owner or tenant is renting out their primary residence – from accommodation that is run on a commercial basis – likely avoiding regulatory requirements⁹⁹ and displacing residents by taking long-term rentals off the property market. According to Insideairbnb’s data, high availability listings¹⁰⁰ constitute 59 and 64 per cent of listings in London and Edinburgh respectively, with average occupancy in these two cities being 89 and 82 nights a year. 41 and 44 per cent of all hosts in these two cities, respectively, are found to have more than a single listing on the platform. These figures are reflected in other European cities.

Airbnb state that data compiled from public scrapes of its site (method used by Insideairbnb) are inaccurate and misleading as it confuses availability for nights booked, and as such, high availability is not proof that they have been rented out for over the allowed limit. Instead, Airbnb release aggregate data on the economic impact on cities and the behaviour of ‘typical’ users. They suggest that the majority of listings are the ‘shared or private room’ types, with 80 per cent of London hosts only renting out their primary residence¹⁰¹, and that the average London host rents for 50 nights a year¹⁰².

Despite unregulated “commercial” listings having been found to represent a significant portion of Airbnb’s revenues¹⁰³, they however make up a small per cent of the total number of rental units, and as such, any impact on rental supply would be small and limited to a handful of neighborhoods where such services are most popular.

Airbnb have been reluctant to disclose information on these types of hosts, citing that it would violate customer privacy. Reasons for this non-disclosure may be due to findings that hosts with multiple listed properties constitute a third of the company’s US revenues¹⁰⁴. This goes against Airbnb’s ethos of users supplementing their income by “sharing” their accommodation, strengthening critics claim for tighter regulations on the service which would likely harm the company’s profitability.

Listings are typically concentrated in the inner city neighbourhoods and those closest to tourist precincts, becoming more dispersed further away from the city centres. The argument championed by the likes of Airbnb is that the majority of listings are instead

⁹⁸ <http://insideairbnb.com> data accessed December 2016

⁹⁹ Insideairbnb data assumes that whole apartments with high availability all year round and/or owners with multiple listings are likely to be professional landlords or hotelier listings and could be in violation of most short term rental laws designed to protect residential housing. It should be noted that these are just indicators and it is by no means proof of commercial rental initiatives.

¹⁰⁰ Indicators for high availability: London over 90 days/year; Edinburgh over 60 days/year.

¹⁰¹ Airbnb, “[Economic Impact Study UK](#)”, January 2014

¹⁰² Airbnb, “[Discover Greater London: The Impact of Sharing an Authentic London](#)”, February 2016

¹⁰³ Jason Clampet and Alexandra E. Petri, “[Airbnb Data Highlights From Penn State’s Year-Long Host Study](#)”, *Skift*, 20th January 2016

¹⁰⁴ *ibid*

located outside the main hotel areas¹⁰⁵ as travellers want to “live like a local”. As such, part of the expenditure by these tourists staying outside city centres will be spent on local businesses and amenities, thus distributing the economic impacts of tourism more broadly across a city. Although there is some merit to this argument, it is likely that these tourists will allocate most of their time in the popular tourism precincts with expenditure being concentrated in these areas. It can also be argued that neighbourhoods could lose their social character and unique identity if local businesses that create ties between residents are replaced by businesses that only focus on the new tourists that stay in the area.

Discrimination

One of the collaborative economy’s methods of self-regulation is by facilitating trust in the platforms by establishing identity-based reputation systems. From Airbnb’s help centre: “When your profile is robust, it helps others feel that you’re reliable, authentic, and committed to the spirit of Airbnb. Whether you’re a host or a guest, the more complete your profile, the more reservations you’re likely to book, too.” That is, unfortunately, more true for some users than it is for others as a side-effect of some of these collaborative economy platforms’ design, which makes race and gender present in users’ personal profiles with pictures and descriptions of the user, is that it can foster discrimination and bias. Since users are able to select what other users they wish to interact with, population bias can be expressed through the platform where some groups are unfairly favoured over others. Recent empirical evidence has shown that characteristics such as race, ethnicity and gender play a part in users’ decision making process on these collaborative economy platforms^{106,107}, unfairly damaging users’ earnings and potential future activity in platforms.

Impact on Wealth Inequality

Due to the minimal transactions costs of exchange enabled by online platforms in the collaborative economy, these collaborative marketplaces have been able to unlock income generating potential from underused resources and to provide convenient and affordable access of goods and services for consumers, typically without the burden of owning goods. These opportunities can have positive impacts on low-income individuals as they could help to lower the cost of living – a particular attractive approach to the exchange of goods and services in light of the increased income inequality seen today.¹⁰⁸ However, concerns regarding wealth inequality are often raised in connection with the collaborative economy as it is expressed that it has the potential to further perpetuate the issue. The argument is that the shift towards access rather than ownership of goods will lead to fewer people owning assets and that these existing owners of assets – particularly high valued physical

¹⁰⁵ Airbnb, “[Airbnb Economic Impact](#)”

¹⁰⁶ Ge Yanbo et al., “[Racial and Gender Discrimination in Transportation Network Companies](#)”, NBER Working Paper No. 22776, October 2016

¹⁰⁷ Benjamin Edelman, Michael Luca and Dan Svirsky, “[Racial Discrimination in the Sharing Economy: Evidence from a Field Experiment](#)”, American Economic Journal: Applied Economics, Vol. 9, No. 1, November 2016

¹⁰⁸ Angela Monaghan, “[Income inequality still at record levels, says OECD](#)”, *The Guardian*, 24th November 2016

assets such as cars and real estate – are able to generate significant returns through their utilisation on collaborative economy platforms, further expanding the wealth gap between asset rich and asset poor groups. For instance, the positive income effect from renting for middle class families shown by an Airbnb study¹⁰⁹, may have equalising effects with respect to upper middle class families, but may have polarising effects with regard to property-less middle class and lower middle class families.

One of the only studies on the distributional effects of the collaborative economy suggests – using data from the traditional US car market and from just one online peer-to-peer rental service (Getaround) – that the benefits of the collaborative economy could in the long run decrease wealth inequality¹¹⁰ – a conclusion proclaimed by the media¹¹¹. The study's modelled simulation shows that peer-to-peer rental markets change the allocation of goods significantly, substituting rental for ownership and lowering used-good prices while increasing consumer surplus. As ownership is a more significant barrier to consumption for people who have less wealth or income, these peer-to-peer marketplaces allow them to enjoy a disproportionate fraction of eventual welfare gains through broader inclusion, higher quality rental-based consumption, and new ownership facilitated by rental supply revenues.

Due to underutilised assets being used more and therefore fewer assets needing to be bought, the demand for capital would also reduce, thereby lowering the returns on capital – affecting those with the greatest existing stock of wealth. The importance of wealth inequality could be reduced if society were in a state where the degree to which wealth is necessary to access valuable assets is minimised.¹¹²

In addition, it can be argued that the collaborative economy has helped increase consumer equality as it has enabled lower income individuals to experience greater consumer choice and high-quality options at an affordable cost. Many of these options were only available to wealthier individuals in the previous state of affairs. For instance, home sharing platforms (e.g. Airbnb and LoveHomeSwap) have made holidays more accessible for lower income individuals and have exposed them to significantly more diverse rental options – consumers are not just restricted to a set range of room types in large hotels within a set range of locations. Transport platforms (e.g. Uber and BlablaCar) have allowed the option for private hire transport to be available for those who previously relied exclusively on public transportation – particularly useful in areas with low public transit coverage.

Environmental Impact

The growth and the model on which the collaborative economy is based – pooling and sharing of goods and services, and the increased use-life and optimal reuse of assets – has the potential to enable a more sustainable society, thereby delivering

¹⁰⁹ Airbnb, "[Airbnb Economic Impact](#)"

¹¹⁰ Samuel Fraiberger and Arun Sundararajan "[Peer-to-Peer Rental Markets in the Sharing Economy](#)", NYU Stern School of Business Research Paper, March 2016

¹¹¹ Della Bradshaw "[Sharing economy benefits lower income groups](#)", *Financial Times*, 22nd April 2015

¹¹² Andrew Lilico and Matthew Sinclair, "[The cost of non-Europe in the sharing economy](#)" Report for the European Parliament. Brussels: European Parliamentary Research Service, January 2016

significant environmental benefits. In a situation where the traditional societal behaviour of purchase and ownership is reduced in favour of one that is focused on use and access could lead to less production which would decrease pressures on natural resources and energy, and reductions in waste generation. For example, utilising existing accommodation for collaborative economy purposes would reduce the construction of new hotels and work spaces, while the sharing or reuse of goods would reduce the production of new goods.

In the case of cars, which is one of the most expensive and idle asset to own, the transportation sharing platforms (e.g. Uber and Blablacar) open up the use capacity of these existing assets thereby reducing the need for private cars which could lead to less congestion and emissions. A study stated that every car sharing vehicle removes between nine and thirteen other vehicles on the road, and that one household's yearly greenhouse gas emissions would decrease by 34-41 per cent with the use of car sharing¹¹³. Accommodation sharing platforms allow the arguably underutilised asset of housing to be used more efficiently and reduce the need for more commercial hotels which have been found to be responsible for 21 per cent of carbon emissions¹¹⁴. Airbnb suggest in their study on the environmental impact of home sharing that Airbnb properties in Europe produce 89 per cent lower greenhouse emissions per guest night compared to hotels¹¹⁵.

Although these claims of contributing to sustainability are consistently made by the platforms, the results have been hotly debated however as the research to date on the environmental impacts has been insufficient and it is extremely challenging and complex to demonstrate at aggregate level the net impacts in terms of environmental sustainability¹¹⁶. There are indications that not all activities in the collaborative economy result in these claims and may in fact have undesirable effects on the environment.

Different consumption patterns, as the result of the possibilities of collaborative platforms, may not necessarily mean consuming less. These so called "second order" or "rebound" effects may result in the increased quantity of consumption of goods and services that have a significant environmental impact. The money that is saved in the context of the use of the collaborative economy may be used later in for other forms of non-sustainable consumption. For example, due to collaborative accommodation platforms being able to lower the cost of short-term rentals, the number of short-term holidays in these destinations will likely increase as more people are now able to afford to visit them. As a consequence of this new demand in tourism, customers will subsequently require the use of environmentally detrimental travel such as airplanes.

The income generating attributes of collaborative economy activities may instead lead to an increase in the use of environmentally damaging goods. This increase in

¹¹³ Elliot Martin and Susan Shaheen, "[Greenhouse Gas Emission Impacts of Carsharing in North America](#)", IEEE Transactions on intelligent transportation systems, vol. 12, no. 4, December 2011

¹¹⁴ Alex Kyriakidis and Julia Felton, "[Too Hot to Handle? The Hospitality Industry Faces up to Climate Change](#)", The Travel & Tourism Competitiveness Report 2008, Chapter 1.7

¹¹⁵ Airbnb, "[A greener way to travel: the environmental impacts of home sharing](#)", Airbnb Blog, 31st July 2014

¹¹⁶ Juliet Schor, "[Debating the Sharing Economy](#)", Great Transition Initiative, October 2014

ownership may be more than the corresponding decrease for that good from the presence of the collaborative economy. For example, people may purchase a car to use on a ridesharing platform (e.g. Uber and Blablacar) because of the platforms existence.

Should the growth in ridesharing platforms continue to rise, offering more convenient and affordable travel options, customers may decide to use these services as a substitute for public transportation. This growth in ridesharing platforms could encourage governments to limit their investments into public transportation. However, it could otherwise complement existing public transit as people can take a ridesharing service to or from public transportation – indeed recent research from the U.S. supports the claim that public transit and ridesharing offer reciprocal benefits¹¹⁷. People may take public transit more often if they are certain they can later use a ride service.

The potential environmental benefits from the fall in production and resource harvesting as a result of the increased use of the collaborative economy could however lead to negative indirect effects on the economic activity along the supply chain. For example, if the increased use of existing accommodation on collaborative economy platforms leads to a fall in demand for new hotels and work spaces, there will be a negative direct impact on the construction sector: lower level of output and workers employed. The reduced output of the construction sector will consequently have indirect effects on the interconnected sectors that provide input goods and/or services to the construction sector (e.g. cement and steel companies) as fewer inputs are now required. These intermediate suppliers in turn lower their demand for goods and services and employ fewer workers and so on down the supply chain.

Integration of the Collaborative Economy into Public Services

Although most time and money in the collaborative economy has been spent on commercial peer-to-peer ventures that provide non-essential goods and services more cheaply and conveniently for users, many grassroots driven initiatives/models have cropped up that instead focus on addressing social challenges. These initiatives can create a more inclusive economy, regenerate communities and tackling gaps in public services. Many of these initiatives tap into peoples' motivation for altruistic actions rather than the incentive to participate in the collaborative economy as a means to earn income.

Examples include platforms such as the UK's Streetbank and the Netherland's Peerby which connect users with their neighbours and communities by enabling them to more easily share goods such as tools, gardening equipment and more unusual items between themselves. Wheeliz is a platform from France which enables peer-to-peer rental of adapted vehicles for those with reduced mobility¹¹⁸. Other examples can be found in the fields such as eldercare, where platforms such as SuperCarers help UK families find local carers and manage their care directly¹¹⁹. Casserole Club and Shareyourmeal help address issues of isolation and loneliness by facilitating volunteers to share their home cooked meals with (often elderly)

¹¹⁷ Cat Johnson, "[Research finds that Uber complements public transit](#)", *Shareable*, 21st March 2016

¹¹⁸ See: <https://www.wheeliz.com/en/how-wheeliz-works>

¹¹⁹ See: <https://supercarers.com/who-we-are/>

community members. Other variants in healthcare that supplement the existing service include GoodSAM, which is a NHS and Nesta supported smartphone app that alerts those with medical training to nearby emergencies, linking them with ambulance emergency dispatchers after a 999 call is dispatched.

Some European governments are using collaborative platforms to re-engage citizens in democratic processes, empowering them to shape the societies they live in. In 2014, the city of Paris opened up its budgeting process through the “Madame Mayor I have an Idea” participatory scheme. The project allocates five per cent of the city’s investment to projects proposed and voted on by citizens. Iceland has a similar scheme where residents use the online Betri Reykjavik platform, which allows them to put forward policy ideas that the city government is then committed to discussing. As discussed earlier, cities such as Amsterdam and Seoul have been able to scale such initiatives in the urban environment by proactively enabling and/or initiating them through the dedicated strategies within their “Sharing City” projects. Certified projects range from local car-sharing company SoCar, tool libraries, websites like Billiji that help people share things with their neighbours, and schemes that match students struggling to find affordable housing with older residents who have a spare room¹²⁰. Local government approval that a company is an official collaborative economy organisation acts as an incentive for companies to participate in the collaborative economy. The initiative Nanum-Car (comprising of car sharing services SoCar and Green Car) introduces car sharing into the city’s transportation network. It encourages citizens to use public transportation in the first instance and then car sharing as an alternative option by offering discounts for frequent public transportation users and low-income families¹²¹. In Amsterdam the city is working with organisations to connect collaborative platforms to the city pass (Stadspas) so that 180,000 more residents – those that are elderly, of low income, and kids of low income families – can benefit from the collaborative economy.

Despite the clear positive benefits, the uptake of social purpose platforms has been considerably low across the UK. Nesta’s research shows that only six per cent of all British adults surveyed had accessed support for themselves, or community, from someone else in this way. Also, only three per cent of over-55s have used any kind of platform for health and care. This shows that there is a huge potential to deliver real social impact by reaching these citizens that are well-suited to benefit from the social collaborative platform approach.

Conclusion

In conjunction with the Scottish Government, the panel has identified that the key considerations are how to:

- ensure that regulation is fit for purpose and that an appropriate balance is struck to allow competition to flourish;
- protect and empower consumers and identify clear routes to redress;
- develop digital leadership skills to enable Scotland's business base to digitally transform and compete in the evolving market place;

¹²⁰ Nesta, “[10 people-centred smart city initiatives](#)”

¹²¹ Nikola, “[Seoul operates car-sharing service](#)”, Kojects, 20th February 2013

- prepare Scotland's current and future workforce for the digital workplace by ensuring they can access courses to gain or update skills; and
- ensure that the wider economic, social and community impacts, including taxation, social inclusion and employment conditions are taken into account and embedded into the final recommendations.