Crowdfunding in the United Kingdom: A cultural economy

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Abstract

Crowdfunding is a digital economy in which funds provided by large numbers of individuals ('the crowd') are aggregated and distributed through online platforms to a range of actors and institutions. In the United Kingdom (UK), crowdfunding is a particularly diverse and dynamic economy: the forms taken by funding now range from donations to business loans and the issue of equities by start-up enterprises, and recent rapid growth is concentrated in its financial market circuits. This article analyses the changing composition of the UK's crowdfunding economy as a process of financial marketization, and develops a sympathetic critical engagement with cultural economy scholarship on the geographies of money and finance. Consistent with previous cultural economy research into socio-technical processes, the financial market circuits of crowdfunding are shown to be produced through the mobilization of economic theory and the enrolment of calculative market devices. When calling for a broadening of the existing analytical remit of cultural economy scholarship, however, emphasis is also placed upon regulation and governance and monetary valuations as constitutive and relational forces in the assembly of markets-in-the-making. Regulation and governance are shown to deploy sovereign powers and techniques to territorialize, legitimize and bolster the financial market circuits of crowdfunding. Money, meanwhile, is shown to play a dual role. While it certainly enables calculative and marketized valuations, money simultaneously creates scope for a multiplicity of values to be inscribed into its circulations such that the diversity of the crowdfunding economy persists and proliferates amidst financial marketization.

Keywords: crowdfunding; peer-to-peer lending; finance; marketization; money

Introduction: 'the most complete crowdfunding market in the world'

The digital economy of crowdfunding emerged in the United States of America (USA) and United Kingdom (UK) around a decade ago, and has subsequently developed throughout North America, Europe, Asia and Oceania (Esposti 2014). It is closely related to the wider trends of 'crowdsourcing', 'co-production' and 'the sharing economy', wherein ideas, knowledge and otherwise idle assets are made available and accessed by geographically distributed online communities (Arvidsson and Peiterson 2013; Belk 2014; Howe 2009). Rather than carrying ideas and knowledge or making car rides or rooms available, crowdfunding circuits transfer funds that are provided by large numbers of individuals who are collectively referred to as 'the crowd'. Funds are aggregated and distributed through online platforms to a range of actors and institutions, including artists and performers, charitable and community projects, and start-up businesses and small- and medium-sized enterprises (SMEs). The 'calls' for funding posted on platforms are typically project-based, and those raising funds often stage 'campaigns' through social media (e.g. Facebook, Twitter, Linked-in). Platforms specialize in different types of crowdfunding circuits, and earn feeincome in return for their role as intermediaries.

A defining feature of the crowdfunding economy is that funding is not sourced from dedicated public or private institutions, whether branches of government or banks and financial market agencies. Most notable in this respect is that crowdfunding is very different from mainstream banking: it does not entail fractional reserve lending, debt leverage, or a maturity mismatch between short-term liabilities and long-term assets. Of particular significance to what follows, however, is a further notable feature of the crowdfunding economy; that is, the heterogeneity of its monetary and financial circuits. As Table I below

summarizes by way of a typology for the UK, the crowdfunding economy includes five main circuits. Donation crowdfunding has a strong resemblance with the symbolic compensation of charity and gift giving. Rewards crowdfunding has parallels with making monetary payments to pre-order retail products, and combines this with the receiving of future discounts or markers of prestige of some kind (so-called 'pretail'). In these forms, crowdfunding by friends, supporters, enthusiasts and fans is a well-established source of funding for community projects, musicians, filmmakers, and artists (Bennett, Chin and Jones 2015). But the crowdfunding economy also includes a number of thoroughly financial market circuits; most notably, equity and fixed-interest crowdfunding, and peer-to-peer (P2P) lending. The offering of equity in start-up enterprises and the issuing of fixed-interest instruments (i.e. debentures, mini-bonds) for project finance ensures that the crowdfunding economy intersects with venture capital, and with the capital markets more broadly. Those providing funds in these crowdfunding circuits are widely characterized as investors, and not as supporters, backers or fans. In P2P circuits, meanwhile, the savings of the crowd are channelled into unsecured interest-bearing loans which are extended to business and domestic borrowers. P2P business loans tend to fund the specified projects (e.g. new plant and machinery) of relatively established SMEs. P2P domestic loans, meanwhile, are not projectbased. Savings are allocated to anonymised loan pools, with each pool containing borrowers who are grouped according to their credit risk and/or the duration of their loan requests.

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This article provides the first social scientific and geographical investigation of the crowdfunding economy in the UK. It is informed by a scoping study that combined: participant observations of crowdfunding industry events held in London in December 2012

and November 2014 (each event is discussed later in this article); a discourse analysis of six of the principal platforms, two from each of the P2P lending and equity and fixed-interest circuits; and nine confidential semi-structured interviews with representatives from platforms, industry associations and regulatory agencies that were conducted in London during July 2014. The article's starting point, meanwhile, is a description of the distinctive changes underway in the UK's crowdfunding economy, provided during fieldwork by a representative of one of its leading platforms: it is in the process of becoming 'the most complete crowdfunding market in the world'.¹ As detailed in the opening section below, crowdfunding in the UK has experienced a step-wise growth in aggregate flows since 2011 that has combined with the emergence of P2P business lending and equity and fixed-interest crowdfunding circuits (Nesta 2013b, 2014). Crowdfunding in the UK now includes all of the five main circuits outlined above. What is especially striking, moreover, is that as crowdfunding becomes 'complete', so rapid growth is disproportionately concentrated in its expanding array of financial market circuits. This combination of quantitative and qualitative change is thus serving to transform the very content and character of the crowdfunding economy. As financial market circuits come to prevail, the crowdfunding economy is marked by a shifting socio-demographic participant profile and an increasingly uneven geographic distribution of funding that favours London and the South East.

Sections two, three and four below provide an account of the composition of the changing crowdfunding economy in the UK. The analysis that is offered draws upon and seeks to further develop cultural economy scholarship on the geographies of money and finance. As Sarah Hall (2011) summarizes, this scholarship is allied with an interdisciplinary literature known as 'the social studies of finance' (Knorr Cetina and Preda 2012). It draws sustenance

¹Confidential interview, representative of an equity crowdfunding platform, London, 8th July 2014.

from a research agenda that - including a body of work in economic geography (Amin and Thrift 2004; Berndt and Boeckler 2009, 2011; Boeckler and Berndt 2013) – typically takes insights from science and technology studies (STS) in order to study processes of 'economization' and 'marketization' (Çalışkan and Callon 2009, 2010). As it contributes, then, to bringing 'the market' to the fore in economic geographical inquiry (Peck 2012), cultural economy research is marked by concerns with the plurality of economic mechanisms of valuation and coordination, the contingent and variegated qualities of markets-in-themaking, and the contested boundary drawing that differentiates 'who and what are included in the realm of the market and who and what are not' (Participants in the Economic Geography 2010 Workshop 2011: 115). And, in terms of the geographies of money and finance in particular (Hall 2011; Pryke and du Gay 2007), cultural economy presently focuses on how relatively discrete and variegated financial markets are assembled through sociotechnical processes that intersect with specific, place-based contexts.

Change in the UK crowdfunding economy will be analysed here as a process of financial marketization; that is, a process which is making possible market circuits wherein credit is exchanged for debt obligations and capital for ownership claims on future profits. This is a somewhat different set of processes to those that are typically captured by social scientists and geographers through the concept of 'financialization' (French, Leyshon and Wainwright 2011; Pike and Pollard 2010). Processes of 'financialization' tend to entail the production of secondary financial markets and associated logics of risk-taking and risk-distribution. Financialization thereby serves to commodify credit-debt relations and make possible capitalized claims upon future income streams (Leyshon and Thrift 2007), transforming the instruments of financial exchange into transferable objects of speculation (Amato and Fantacci 2013). There are, to be sure, indications that financialization is underway in

crowdfunding in the UK, as institutional investors searching for a 'new asset class' are beginning to fund domestic loan portfolios in P2P circuits in particular (Liberum Capital 2014). Yet, the financialization of UK crowdfunding remains nascent and limited, especially in contrast with the USA where, as Rob Aitken (2015) has shown, P2P circuits are becoming absorbed within mainstream financial circuits by a pronounced trajectory of financialization that serves to convert loan receivables into investable assets. Crowdfunding's financial circuits in the UK are, for the present at least, relatively simple, primary markets for credit and capital. There is no secondary market: once funded, P2P loans and crowdfunded financial instruments are only very rarely re-sold to a third party.

Consistent with previous cultural economic research into socio-technical processes of market making, the second section below will show that the mobilization of economic theory and the enrolment of calculative market devices is contributing to the composition of the financial market circuits of UK crowdfunding. It will highlight that these processes intersect with place-based knowledge and innovation which is centred on London, and on East London's digital economy and 'FinTech' hub in particular (McWilliams 2015). Configured through theory and practices of 'FinTech' (Economist 2015), the financial market circuits of crowdfunding appear to result from the 'disruptive' efficiencies of digital economic enterprises which take business away from mainstream banking intermediaries.

Running through the account of the changing composition of the UK crowdfunding economy offered across the third and fourth sections of this article, meanwhile, is a sympathetic critical engagement with cultural economy scholarship on the geographies of money and finance. This is an engagement that, seeking to deepen accounts of more-or-less discrete and variegated markets-in-the-making, calls for a broadening of the remit of cultural economy

analysis to include both regulation and governance and monetary valuations. Put another way, it is an engagement which encourages cultural economy to encroach onto analytical terrain which is typically occupied by political economy, and to recover the previous preoccupations of geographers with the nature of money and its role in socio-economic life. Typically neglected by existing cultural economy analyses of the socio-technical assembly of markets, regulation and governance and monetary valuations are conceptualized below as constitutive and relational forces which feature in the comings together of contingent and variegated processes of financial marketization. As section three draws out, regulation and governance in the UK has deployed sovereign powers and techniques to territorialize the financial market circuits of crowdfunding, thereby spatially reconfiguring this digital economy as a distinct, apparently well-regulated and tax-favoured market space which is specific to a sovereign jurisdiction. And, as section four shows, money enables the calculative valuations which, in a number of different ways, are crucial to the composition of the financial market circuits of crowdfunding. At the same time, however, money is also held to create scope for a multiplicity of values to be inscribed into its circulations. In the crowdfunding economy, this duality of money ensures that diversity persists and proliferates amidst financial marketization. Crowdfunding's donation and rewards circuits continue to grow, and its financial market circuits include flows of credit and capital that incorporate and cultivate ethical values in their monetary valuations.

The changing crowdfunding economy in the UK

Crowdfunding globally is the focus for expert studies that target professionals and policymakers (e.g. Dresner 2014), online magazines and websites highlighting key trends and making 'big data' available (e.g. crowdfundinginsider.com, thecrowdfudingcentre.com), and

'how to' guides written for popular consumption (e.g. Rees-Mogg 2014). Not dissimilarly, the crowdfunding economy in the UK is the object of a number a dedicated data services (e.g. peertopeerlendinguk.com, Alt-Fi.com), and it also provides the focus for industry research and 'grey literature'. The most influential research to date has been produced by the innovation charity, Nesta (2012, 2013a, 2013b, 2014a, 2014b). Nesta's (2013b, 2014b) annual benchmarking reports place crowdfunding at the core of what it terms the 'alternative finance' sector, thereby juxtaposing this digital economy with mainstream banking and financial markets. They also detail the rapid expansion of crowdfunding in recent years. While the UK's crowdfunding economy has been developing for over a decade - the Londonbased P2P domestic lending platform Zopa was created, for instance, in 2005 - it is experiencing a step-wise expansion that began in 2011. Annual growth rates for the aggregate flows of crowdfunding averaged roughly 75% between 2011 and 2013 (Nesta 2013b: 7-8). And, in 2014, they more than doubled again to reach approximately £1.5 billion in total (Nesta 2014). Indeed, newspaper reports suggest that, in the first six months of 2015, aggregate flows had already more than doubled once again to stand at over £4 billion (Evans 2015). Amidst the global growth in recent years, epitomised by the expanding global coverage of platforms such as Kickstarter and IndieGoGo (Esposti 2014), the UK has become established as the third largest national crowdfunding economy, after the USA and China.

The step-wise expansion of UK crowdfunding is coinciding, moreover, with significant qualitative change. Growth in the number of platforms operating in the UK since the turn of the decade - thirty-six platforms are currently members of the UK Crowdfunding Association, while eight are members of the Peer-to-Peer Finance Association – is producing a crowdfunding economy which is more heterogeneous. In particular, a number of new financial market circuits have been added to the already established flows of P2P domestic

lending and donation and rewards crowdfunding. For example, Funding Circle, the UK's first P2P business lending platform, was launched in August 2010. Now joined by other platforms that specialize in this crowdfunding circuit (e.g. LendingCrowd), Funding Circle had intermediated £650 million worth of business loans by May 2015. Moreover, during 2011, the world's first equity and fixed-income crowdfunding platforms, Crowd Cube and Abundance Generation, were both launched in the UK. Crowd Cube now has a number of competitor platforms that also organize equity issues (e.g. CrowdBnk, Seedrs), and itself recently expanded into the fixed-interest circuit. Further diversity continues to develop as new platforms seek to establish their own market niche. For instance, two years after its May 2013 launch, LendInvest had intermediated over £300 million worth of P2P investment in mortgage loans secured against residential property. Similarly, since late 2013, P2P investment in loans secured against commercial property has generated £230 million worth of intermediary business for Wellesley & Co.

What is especially striking is how quantitative and qualitative change is combining to remake UK crowdfunding. Nesta's (2013b) initial benchmarking report calculated that the annual aggregate flows of donation crowdfunding to charities, community-led projects and individuals – rising from £215 million in 2011 to £310 million in 2013 - were greater than those for any of the other four main circuits. Just a year on, however, and the landscape of the diverse crowdfunding economy was found to be quite different (Nesta 2014). As Table II summarizes, accelerating rates of growth are disproportionately concentrated in crowdfunding's financial market circuits, and especially in the relatively new circuits of P2P business lending and equity crowdfunding. Such have been the rates of growth in crowdfunding's financial market circuits since 2011 that the annual aggregate flows the P2P domestic and business lending circuits combined are now roughly six-times greater than

those in donation crowdfunding. The step-wise expansion of the increasingly diverse crowdfunding economy is serving, in sum, to transform the very character and content of that economy.

<<< TABLE II >>

Crowdfunding in the UK is now characterised less by exchanges that resemble charity, gift giving and pretail, and more by those of financial market exchange. This is also bringing about a shift in the socio-demographic profile of those who are participating in this digital economic space. Women, for example, are in the majority amongst those who raise funds in donation and rewards circuits, but in the minority amongst those raising funds in P2P business lending (24%) and equity crowdfunding (22%) (Nesta 2014: 15). Those providing funds in donations and rewards circuits, meanwhile, tend to be drawn relatively broadly from across the income and age spectrum. In contrast, high-net worth individuals usually provide funds in equity circuits, and men aged 55 and over, with incomes in excess of £50,000, are the typical funders of P2P business and domestic loans (FCA 2013: 37; Nesta 2014: 15-17).

The shifting socio-demographic profile of crowdfunding participants is accompanied, moreover, by an intensification of uneven regional geographies that favours London and the South East. To be clear, London and the South East are the most active regions in the UK crowdfunding economy overall: those providing funds or fundraising are most frequently located in these regions (Nesta 2014: 17-19). Yet, the distribution of funding is also uneven in ways that favour London and the South East, a tendency which is especially pronounced in the crowdfunding economy's financial market circuits. For example, 26% of those raising rewards crowdfunding are located in London, a figure that rises to 41% in the equity circuit.

Add the South East and the result is that over half (52%) of those raising funds for start-up enterprises through equity crowdfunding are found in these two regions (Nesta 2014: 18-19). In P2P domestic lending, meanwhile, 25% of borrowers live in London and the South East, but 37% of funders are located in these two regions (p. 18). Assuming that borrowers continue to meet the repayment obligations, the result over time of the aggregations and distributions of P2P domestic lending is actually an inflow of funds into London and the South East.

Towards a cultural economy of crowdfunding

How might the composition of the UK's changing crowdfunding economy be accounted for in social scientific and geographical terms? At present, limited academic research into crowdfunding globally is located in business studies and the digital humanities. The former is preoccupied with teasing out why past projects have been successful in attracting funding in order to provide lessons for future calls (Mollick 2014), or with proposing theoretical models to explain why different stages of start-up entrepreneurship may be most appropriately facilitated by either rewards or equity crowdfunding (Belfamme *et al.* 2014). In the digital humanities, meanwhile, research concentrates on donation and rewards crowdfunding. It is particularly interested in the fandom and other affective energies that animate the crowdfunding of artists and performers, and which may serve to transform the cultural industries from 'the bottom-up' (Bennett, Chin and Jones 2015).

Read from the vantage point provided by cultural economy scholarship, research in business studies and the digital humanities tends to treat the crowdfunding economy as an object or thing (Mitchell 2008), and as 'a pre-existing reality that can be simply revealed and acted

upon' (Çalışkan and Callon 2009: 370). There is a lack of attention to the contingent composition of crowdfunding as an economic entity, and thus little scope for understanding how these processes have changed in the UK in ways that might be said to a process of financial marketization. From a cultural economy perspective, what needs to be analysed are the relatively discrete processes that make possible the financial market circuits of crowdfunding; that is, the P2P lending and fixed-interest and equity circuits wherein credit is exchanged for debt obligations and capital for ownership claims on future profits. And, in the first instance, cultural economy also directs an analysis of the financial marketization of crowdfunding to consider how these processes are configured through economic knowledge. Much has been made by cultural economists of the mobilization and performative power of economic science in the production of market practices (Barnes 2008; Callon 2007; MacKenzie, Muniesa and Sui 2007; cf. Christophers 2014a), especially in the domains of the financial markets (e.g. MacKenzie 2006). 'Economics' here includes not only the theories and concepts of an academic discipline, but also the models and techniques of economics 'at large' and 'in the wild' (e.g. accounting, consultancy) (Callon 2007; Christophers 2014b). As research into 'market devices' illustrates (Muniesa, Millo and Callon 2007: 4), sociotechnical processes of marketization include the activation of all manner of economic procedures, formulas and tools. Crucial in this regard are the materialities and technicalities of those devices that are enrolled to make the valuations of pricing, exchange and circulation possible. Such devices render, qualify and abstract action in the bounded and calculative space of 'the market', and work to summon-up particular market subjectivities and embodied competences.

How are economics and its devices at work, then, in producing the financial market circuits of UK crowdfunding? Financial marketization in this instance is certainly not characterized

by the performative power of a singular economic theory. Multiple theoretical concepts are mobilized and coexist, circulating to purportedly describe crowdfunding in various ways as a financial market economy. For example, orthodox liberal economic concepts are invoked in debates over the growth of P2P lending circuits. For those who regard this growth as largely conjunctural and linked to macro-economic conditions, the funding of P2P loans is the cumulative result of the rational decisions of savers who are seeking higher returns amidst the low interest rate regime that has come to prevail in the wake of the global financial crisis.² A different set of orthodox economic concepts are mobilized, on the other hand, by those who favour a structural explanation. Relative to mainstream banks, P2P lending platforms are said to have a competitive advantage as a consequence of lower operational and transaction costs (i.e. no branch networks or sales staff) (FCA 2013: 39). According to some projections (Liberum Capital 2014), the result of structural change will be that P2P platforms will account for one-quarter of gross consumer and business lending in the UK by 2024, a dramatic increase from their current market share of 2-3%.

When explaining, more broadly, the relative merits of the financial market circuits of crowdfunding, representatives of platforms consistently reiterate James Surowiecki's (2004) influential notion of *The Wisdom of Crowds*. And, in doing so, they invoke a body of economic theory that is quite different from the orthodoxy. Surowiecki draws on behavioural economics to posit the bounded rationality of financial market agents and the collective psychology of pricing and trading (pp. 228-234). Yet, he also departs from behavioural economics to make a positive case for the collective intelligence of markets. Surowiecki quotes Hayek on the 'spontaneous order' which is said to result from the aggregation of the imperfect decisions of a market crowd (Suroweicki 2004: 102, 282-3; cf. Borch 2012), and he

² Confidential interview, two representatives of the Financial Conduct Authority, London, 9th July 2014.

also takes inspiration from the reception of complex adaptive systems theory into economics (see Taylor 2004: 265-301). Financial markets, for Suroweicki, are thus not the efficient and equilibrating machines of orthodox theory, but dynamic and nonlinear ecosystems that may achieve an extemporary order that is far-from-equilibrium.

The economic theory of financial markets that is mobilized through the notion of 'the wisdom of crowds' is also embedded in one of the key 'encountering devices' (Çalışkan and Callon 2010: 14) at work in crowdfunding; that is, the so-called 'all-or-nothing model'. As a representative of a UK platform describes it, 'the all-or-nothing model organizes the market according to the basic principles of crowdfunding that ... well, I would say anyhow, say that the wisest investment decisions are collective and connected'.³ Common to platforms that intermediate across crowdfunding circuits, the all-or-nothing model requires that those seeking funding for a project set a target amount. This threshold has to be achieved in an agreed timescale, typically between one and three months, in order for funding to proceed. If a campaign is not judged to be sufficiently attractive according to the collective wisdom of the crowd - such that is fails to reach its funding target by the deadline - then would-be funders automatically have their money returned to them.

While the widespread operation of the all-or-nothing model embeds a certain body of economic theory into the online encounters of crowdfunding, P2P lending and fixed-income and equity circuits also depend upon the enrolment of particular market devices. Platforms in these circuits become not merely spaces of encounter, but spaces for calculative market encounters where credit-debt and capital-equity are exchanged. In P2P domestic lending, for example, the devices of credit reporting and scoring are enlisted by platforms in a number of

³ Confidential interview, representative of a fixed-income crowdfunding platform, London, 7th July 2014.

ways. Typically taken out for the purposes of car purchases, home improvement and debt consolidation, unsecured P2P loans are only available to those who are adjudged to be highly creditworthy on the grounds of their credit reports and scores. RateSetter, for instance, rejects 80-85% of the loan applications that it receives.⁴ Devices for the calculation of creditworthiness thus tend to operate in a manner that is reminiscent of their initial working in UK retail banking two decades ago (Leyshon and Thrift 1996). They produce the 'cherry picking' of borrowers who are deemed to be 'low risk', rather than the differentiation and 'risk-based pricing' of borrowers that presently prevails across mainstream consumer credit markets (Langley 2014).

Calculative devices also feature, more broadly, as crowdfunding's financial market circuits are constituted as spaces of borrowing, saving and investment populated by particular kinds of financial subjects. In their encounters with P2P domestic lending platforms, for instance, individual borrowers are explicitly made-up as financial consumers who shop around for loans on the basis of the price (i.e. interest rate) that they can expect to pay. Platforms pursue 'vigorous strategies' aimed at 'getting the "savvy consumer" message out there', often by ensuring a 'very visible presence for P2P on price comparison websites' (e.g. moneysupermarket.com).⁵ Meanwhile, as they summon-up the savers who crowdfund P2P loans, platforms are noticeably transparent about their historical and projected rates of default. As the FCA (2013) observe, keeping default rates low via the enrolment of credit reporting and scoring devices - such that would-be funders are much more likely to have their principal returned and interest paid – is critical to the business model of P2P lending platforms. And, for P2P domestic lenders such as RateSetter and Zopa, attempts to make

⁴ Confidential interview, representative of a P2P lending platform, 9th July 2014.

⁵ Confidential interview, representative of a P2P lending platform, 9th July 2014.

saving appear secure also feature the enrolment of the devices of insurance to put in place contingency funds to cover losses in the event of borrower defaults.

In P2P business lending and fixed-income and equity circuits, the operation of credit rating and scoring devices is part of the broader calculations of due diligence. It is due diligence that enables platforms to sort those businesses and projects which are permitted to appeal to the crowd for credit and capital. FundingCircle, for instance, prides itself on its 'experienced credit team' who undertake 'considerable due diligence on potential borrowers', and to 'only allow creditworthy businesses to borrow'.⁶ Techniques of due diligence also feature as those who crowdfund start-ups and businesses through loans and financial instruments are hailed as figures who perform the calculative practices of the investor subject. When weighing up the balance of risk/reward, investors are expected to undertake their own due diligence on the projects that they fund. What this indicates is that the investor subject of the crowdfunding economy is somewhat different to the popular investor that has emerged from transformations in UK financial services over recent decades (Langley 2008).⁷ Typically taking a stake in the financial markets through mutual fund products, occupational and personal pension schemes and/or the recommendations of financial advisors, the popular investor subject pays fees to professionals to undertake due diligence and other portfolio allocation and management calculations on their behalf. The investor subject that is called-up in crowdfunding is a more active figure who seeks greater returns by dint of their own calculative embrace of risk. In equity circuits in particular, high-risk investment thus appears as 'a chance to be part of the

⁶ https://www.fundingcircle.com/investors

⁷ This crystalized for me at the Personal Finance Society's London Region Conference on Crowdfunding and P2P Finance (London, 11th November 2014) at which I conducted a participant observation. The event was staged to introduce financial advisors to the financial market circuits of the crowdfunding economy as 'a new asset class', but the roundtable discussion was dominated by the expectation of due diligence. It was stressed by advisors that fee-paying, high-net worth clients would actually expect due diligence to be undertaken on their behalf, and that this would create additional burdens (time, legal, expertise) which could not be easily covered by existing fee structures.

next big thing', a 'revolutionary opportunity' which 'enables anyone to invest in British businesses alongside professional investors and VCs' (venture capitalists).⁸

Consistent, then, with previous cultural economy research into the socio-technical processes of markets-in-the-making, the composition of the thriving financial market circuits of UK crowdfunding features the mobilization of economic knowledge and market devices. However, as the reception of cultural economy scholarship by geographers reminds us, a cultural economy analysis needs to be wary of 'taken-for-granted assumptions about the nature of financial knowledge as a highly mobile, homogeneous market device' (Hall 2011: 238). Analytical attention should thus extend to how the socio-technical processes intersect with the place-based agglomeration of knowledge and expertise. This is especially apposite in UK crowdfunding where the economics that is 'at large' is primarily found on and around the online platforms, the majority of which are based in the hinterland of the City of London as global centre of financial knowledge, expertise and power (Lee 2011).

To be clear, not all platforms acting as intermediaries in crowdfunding's financial market circuits are London-based. For instance, the leading equity platform, Crowd Cube, was founded, and continues to be based, in Exeter in the South West of England. Proximity to the City is clearly important for many platforms, however. A good number of London-based platforms were founded by former City bankers, and all employ specialist staff with knowledge and expertise in financial operations and accounting, credit scoring and/or due diligence, and risk management and regulatory compliance. Related, it is clearly not without significance that several of the leading London-based platforms are located in East London's digital economy and 'FinTech' hub. According to McWilliams (2015: 49), between 2008 and

⁸ See, respectively, https://www.seedrs.com/invest/why_invest_in_startups#invest, and http://www.crowdcube.com/pg/investing-your-money-1513

2013, venture capital investment in high-tech start-ups in Shoreditch and surrounding areas of East London grew at twice the rate of similar investments made in the leading global hub by volume, Silicon Valley. This includes investments in 'FinTech' firms, digital market entrants who share the business rationale of 'disrupting' the practices of various mainstream monetary and financial market circuits which have traditionally been dominated by banking intermediaries (Economist 2015). Ostensibly 'virtual' crowdfunding platforms are a complex amalgam of the material technologies - software (e.g. data structures, algorithms, protocols) and hardware (e.g. computers, fibre optic cables, servers) - that produce the digital realm (see Kinsley 2014). London-based platforms thus benefit from 'the halo effect' of 'the whole Shoreditch story', both mobilizing the material-technological knowledge that has built up in this area and 'appearing attractive to VCs hunting for tech offerings so long as, well, so long as they could put out good numbers' (i.e. profit projections).⁹ Furthermore, as platforms make markets by reaching out to would-be funders and fundraisers through branding and digital marketing, they deploy precisely the other kinds of expertise which have become centralized in East London as the UK has become the world's leading digital retail economy (McWilliams 2015).

Regulating and governing crowdfunding

Cultural economy scholarship typically neglects the generative force of juridical regulation and governance in discrete processes of marketization (Mirowski and Nik-Khah 2008). That markets are made by political processes provides, in contrast, a key analytical entry point for political economy accounts of contemporary financial markets (e.g. Engelen *et al.* 2011). Certain contributions to cultural economy nonetheless suggest a route by which greater

⁹ Confidential interview, representative of a P2P lending platform, London, 11th July 2014.

analytical weight can be given to regulation and governmental interventions, but without giving these forces the overly-privileged position that they usually occupy in political economy accounts. In Donald MacKenzie's (2005) essay calling for the socio-technical 'black boxes' of finance to be opened-up, for example, regulation is one of the black boxes that he identifies to be in need of critical attention. As he has it, what is required are 'fine-grained studies' that prise open regulation and 'examine connections between the apparent ''detail'' of regulation and larger issues in the construction of financial markets' (p. 567). Put differently, and in the terms subsequently adopted by cultural economists, regulatory techniques and policy measures should be interrogated as relational elements present in the socio-technical and governmental assemblage of financial markets (Langley 2015). Such an analytical move also raises further theoretical questions about the play of sovereign power – a juridical, centralizing and territorializing mode of power (Foucault 2007) – in the making of markets which are characterized by a de-territorializing spatiality of circulation (Deleuze and Guattari 1987).

The financial marketization of UK crowdfunding features the registering of dedicated juridical regulatory measures. In October 2013, the Financial Conduct Authority initiated a consultation process on the regulatory arrangements to be applied to crowdfunding (FCA 2013). New rules were agreed in March 2014, coming into effect from the following month (FCA 2014). For P2P lending, the regulations combine 'a disclosure-based regime' with an additional 'set of core requirements for firms' (FCA 2013: 6). The former requires platforms to meet certain standards on information and communication. For instance, platforms now have to be more careful than in the past when drawing comparisons with the returns available on bank deposit accounts, and they are required to highlight the different risks that each

entails.¹⁰ The regulatory 'core requirements' that apply to P2P platforms, meanwhile, focus on arrangements for the management of loans 'in the event of a firm failure' (FCA 2013: 6). To that end, platforms are now required to periodically report their financial position to the FCA, establish their own rules for dispute resolution between savers and borrowers, and hold an amount of regulatory capital that is very small relative to the capital adequacy provisions which apply to mainstream retail banks.

Prior to the dedicated regulation of crowdfunding, equity and fixed-income platforms were already covered by the FCA's regulatory provisions. Because they are involved in 'arranging deals in investments, or the communication of a financial promotion' (FCA 2013: 4), fixed-income and equity platforms were covered by rules that apply to all persons and institutions undertaking such practices. The dedicated regulation of equity and fixed-income crowdfunding is thus of import because it registers a subtle change of regulatory emphasis, rather than a range of new rules. Taking equity and fixed-income together and referring to them as 'investment-based crowdfunding', regulation is seeking to 'make this market more accessible to retail clients' (FCA 2013: 6). At the same time, however, and informed by behavioural economics (p. 43), the new regulations set out a principles-based approach that aims to ensure that 'only investors who can understand and bear the risks participate in the market' (p. 6). Platforms are required to request that would-be investors classify themselves as receiving regulated financial advice, or self-certify that they are a 'sophisticated investor' or 'high net worth individual', or declare that 'they will not invest more than 10% of their net investible portfolio in unlisted shares or unlisted debt securities' (FCA 2013: 7).

¹⁰ Confidential interview, two representatives of the Financial Conduct Authority, London, 9th July 2014.

The constitutive significance of dedicated regulations to processes of financial marketization is, in effect, recognised by the platforms that specialise in the financial market circuits of UK crowdfunding. For example, the outcome of an industry event in London in December 2012 was an open letter to the FCA and HM Treasury, signed by representatives from platforms and industry associations, calling for faster progress towards a regime of market regulation.¹¹ Throughout the event, regulation was articulated not as restricting market innovation – as a legal prohibition enacted to further the security of the sovereign state, in Foucault's (2007) terms - but as potentially giving the digital financial market circuits of crowdfunding the same level of legitimacy as mainstream banking and other retail financial markets. Indeed, informing such views on the market-making qualities of regulation were the problems being experienced with the regulatory regime for equity crowdfunding in the USA. The Jumpstart Our Business Start-ups (JOBS) Act of April 2012 was supposed to usher in equity crowdfunding in the USA, paving the way for the Securities and Exchange Commission (SEC) to revise regulations on popular investment that date to the aftermath of the 1929 Wall Street Crash (Zeoli 2014). Yet, in December 2012, the SEC were struggling to arrive at a set of regulatory provisions that would enable popular participation in equity crowdfunding whilst, at the same time, protect investors from themselves. And, at the time of writing in May 2015, these struggles continue, with the consequence that the 'world leader' (Moules 2014) status of London's regulated equity crowdfunding circuits goes largely unchallenged by would-be competitors such as New York, Los Angeles and San Francisco.

Acting in relation with regulation and economic knowledge and devices, governmental intervention grounded in sovereign fiscal powers and techniques is also a constitutive force in the financial marketization of UK crowdfunding. Two sets of policy initiatives are especially

¹¹ Participant observation, Peer-to-Peer Finance Policy Summit, London, 7th December 2012.

important. First, amidst shortfalls in business lending which have followed the global crisis of 2007-09 (Macartney 2014), policy has targeted crowdfunding's financial market circuits and fashioned public spending to fund their ability to provide a new source of capital for private investment. In December 2012, the Department of Business, Innovation and Skills (DBIS) contributed £20 million to support of £140 million worth of loans to be made to SMEs via Funding Circle (Nesta 2013a: 9-10). A further £40 million was made available to fund calls listed on Funding Circle from February 2014. For the then Secretary of State for Business, Innovation and Skills, Vince Cable, the government's stake in the funding of up to £450 million worth of P2P business loans was said to be a matter of contributing to 'a properly functioning business lending market' which extends beyond 'the big banks' and includes 'alternative providers' (British Business Bank 2014). In April 2014, and following a similar, pump-priming model, the Mayor of London's London Co-Investment Fund announced that £5 million of public money would be invested, via Crowd Cube, in the equity of London-based start-ups operating in the digital, technology and science sectors.

Second, and through legal changes to the fiscal rights of the sovereign to tax the population, HM Treasury (2014: 46-7) is presently seeking to open up a significant new route through which UK domestic savings might be channelled into the financial circuits of crowdfunding. Under these plans, the eligibility for tax relief provided through Individual Savings Accounts (ISAs) is being extended to include cash investments in P2P loans. A further addition to these provisions, to cover investments in fixed-income and equity crowdfunding, is under review at the time of writing. The Seed Enterprise Investment Scheme (SEIS) and Enterprise Investment Scheme (EIS) already provide facilities for write-offs that, for higher-rate taxpayers in particular, incentivise equity crowdfunding (Voinovich 2013). However, given that ISAs are held by around half of all UK adults, and that the 'New ISA' (NISA) regime

raises the annual limit on this tax relief to $\pm 15,000$, the policy measure could well be of considerable consequence to the financial marketization of crowdfunding.

In sum, the regulation and governance of crowdfunding is consistently furthering processes of financial marketization, deploying sovereign powers and techniques in such a way as to legitimize and bolster the equity, fixed-interest and P2P lending circuits. It is noticeable, for instance, that the dedicated regulation of crowdfunding explicitly leaves aside what the FCA (2013: 11) refer to as the 'unregulated activities' of donation and rewards circuits. Policies too are a constitutive force that necessarily and only contributes to bringing into being crowdfunding's financial market circuits. And, as they receive the legitimacy and backing of sovereign regulatory and fiscal powers, the digital financial market circuits of UK crowdfunding are territorialized: that is, they are spatially reconfigured as a distinct, apparently well-regulated and tax-favoured market space which is specific to a sovereign jurisdiction.

What this suggests for further cultural economy analyses of financial markets-in-the-making is thus a broadened remit for inquiry that, when turning its attention to regulation and governance, does not collapse into ontological assertions about the political manufacture of markets by the state. On the one hand, how particular regulations and governmental interventions might be found to contribute to the contingent assemblage of a specific marketization process is a matter for critical and concrete analysis. Regulation and governance are not understood as *the* generative forces in processes of marketization, but are conceptualized as forces amongst others which may hold a constitutive capacity when operating in relation with, for example, economic knowledge and market devices. On the other hand, this constitutive capacity itself arises from the sovereign mode of power which,

making possible the sovereign's right to rule and appropriate wealth within a given territory, would appear to be antithetical to processes of marketization and to de-territorializing market circulations. Sovereign powers and techniques are not static, however. Rather, in modern liberal forms of government in particular, sovereign power is brought into question and limited by other, biopolitical modalities of power-knowledge in which economic theory, logics and practices loom large (Foucault 2008). Sovereign techniques, such as those of juridical regulation and fiscal appropriation, therefore tend to be repurposed and redeployed in the production and reproduction of discrete markets-in-the-making (Langley 2015). The sovereign territorialization of market spaces through regulation and policy tends to feature interventions that seek not to constrain innovations and prevent circulations, but to stabilize and further the ostensibly vital and de-territorializing energies of marketization.

The monetary valuations of crowdfunding

As cultural economy studies of financial markets come to the fore in the geography literature, earlier preoccupations with the nature of money and its role in socio-economic life largely disappeared from view. Compare, for instance, the careful reviews of the geographies of money and finance provided initially by Leyshon (1997), and latterly by Hall (2011). In Leyshon's review, 'money' is itself an object for critical inquiry by geographers. In contrast, 'geographies of money are invoked in Hall's review to signal a body of previous research into which cultural economy scholarship is to be received and reconsidered. However, the neglect of money is common to cultural economists working in other disciplines (cf. Maurer 2006). It is also somewhat surprising. The role of money in markets-in-the-making was stressed in Michel Callon's (1998: 33-42) editorial introduction to *The Laws of Markets*, a volume that is widely heralded as the key milestone in the initial development of cultural

economy research. The opening chapter in the volume is also authored by an influential contributor to the social theory of money, Viviana Zelizer (1998), and this provides much of the basis for Callon's introductory remarks.

Zelizer's (1994) contribution to the social theory of money also gave impetus to research into geographies of money during the mid-to-late 1990s, feeding the development of contemporary perspectives which challenged the classical social theory offered by Marx, Weber, Simmel and others (Leyshon 1997; Leyshon and Thrift 1997). Gaining traction in geography through the contribution of David Harvey (1982), classical theory focuses on the universal qualities of 'modern' and/or 'capitalist' money. Here money is an extremely powerful force that, providing the prevailing calculative and abstract measure of value which renders things equivalent in market exchange, has alienating effects as is rationalizes and flattens social relations. Zelizer (1994), in contrast, holds that there are no essential qualities that define 'moneyness' (cf. Ingham 2004), even when socio-economic spaces are colonized by the singular and territorializing monetary form of modern sovereign currencies (Gilbert 2005). Given the social and political construction of money in all its forms, there is always already scope for diverse meanings to be inscribed into monetary valuations and circulations. Money, in short, is not a singular and homogenising force of modern capitalist markets that is indifferent to the substance of social life. Rather, money is fungible, open to 'active reinvention by its users' (Dodd 2014: 14). Not only does this ensure that money takes multiple forms such as local currencies or bitcoins, but that even modern sovereign currencies in circulation can be subject to 'earmarking' (Zelizer 1994); that is, they can carry and communicate multiple values and thereby actually contribute to the differentiation of social relations.

How might the recovery of geographer's concerns with the nature of money serve to deepen cultural economic analysis of processes of marketization, and what might be said to be distinctive about a cultural economy of money? Callon's (1998) aforementioned remarks are intriguing is this respect. While Callon (1998: 35) is clear that, as classical social theory holds, money is 'an operator of equivalence' in markets-in-the-making, he is also sympathetic to Zelizer's (1994) research into earmarking which highlights that money in use is necessarily charged with social meanings. To try to hold both of these facets of money together, Callon (1998: 36-8) introduces the pragmatist category of 'real money' to stress that the monetary valuations which are a generative force in the extension of markets are always a 'variable compromise' between 'incommensurable and antagonistic logics'. What Callon reaches for is a perspective that regards the singularity and multiplicity of money as coexisting and operating simultaneously, at once and together. Such a perspective on 'the duality of money' has been more fully advanced by Martijn Konings (2015: 18). For Konings, routine users of money 'have no difficulty treating money as simultaneously an objective, unitary standard of value and a contingent construction of beliefs and symbolic attachments'. The duality of money does not create confusion and 'intractable conceptual trade-offs' because users 'are capable of grasping money as both universal and particular at the very same time' (pp. 19-20). Recovering geographer's previous concerns with money in order to breathe further life into cultural economy scholarship is thus not a call to revive debates between classical and contemporary social theories of money. Rather, it is a move that precisely seeks to go beyond this theoretical cleavage by emphasizing the generative forces of the duality of money in contingent and ambivalent processes of marketization.

What, then, of the monetary valuations of crowdfunding? The recognition that crowdfunding in the UK is produced through monetary valuations and circulations that are denominated in

pounds and pence certainly contrasts with industry, regulatory and policy accounts. This is because, save for the occasional acknowledgement that crowdfunding is enabled by digital payments systems such as PayPal (e.g. Nesta 2013c: 8), the operations of money are largely taken-for granted in UK crowdfunding. Yet, monetary valuation makes possible all forms of crowdfunding. Crowdfunding calls and campaigns are expressed and calculated in monetary units. Success or failure under the all or nothing model is measured by whether a monetary threshold is reached. Money also plays a further role as an operator of equivalence in the relational composition of the financial market circuits of crowdfunding. This is because the obligations to funders that are created in these circuits are measured and met in the terms of money. Monetary valuation makes it possible, in short, for the financial market circuits of crowdfunding to create exchange relations as monetized relations of credit-debt and capitalequity. That which a would-be saver or investor seeks to receive by way of compensation for their calculations of risk/reward is, in essence, more money.

Once obligations and returns are valued in terms of money, so equivalences are created within, across and beyond the financial market circuits of crowdfunding. Commensuration through money is a constitutive force, for example, when an investor selects between competing calls for capital by start-ups in equity crowdfunding, or when a savvy saver decides to move their nest-egg away from a poorly-paying deposit account and into a basket of P2P domestic loans. Significantly, the measures and equivalences of money are also crucial to how the financial market circuits of UK crowdfunding are presently being assessed as a so-called 'new asset class' by large financial institutions (Liberum Capital 2014). In contrast with the USA, where large volumes of P2P lending intermediated by platforms such as LendingClub and Prosper are funded by institutional investors (Aitken 2015), UK crowdfunding's financial market circuits are funded by crowds of individual savers and

investors. The recent interest of institutional investors in UK crowdfunding, and in P2P lending in particular, is premised on monetary valuations of the relative financial returns that are calculated to be available from the sector.

As it contributes to the financial marketization of UK crowdfunding, money always and already also ensures that these processes are ambiguous and incomplete. The valuations of money do not only squeeze out social values and difference in crowdfunding, but also enable their persistence and proliferation. Most obviously, the duality of money is crucial to producing a crowdfunding economy in which diverse circuits coexist. That money can be gifted, pledged, saved or invested - without these fungible and contrasting uses of money appearing to be contradictory - makes the heterogeneity of crowdfunding possible. So, while recent growth in UK crowdfunding has been disproportionately concentrated in its financial market circuits, donation and rewards circuits also continue to flourish. As Nesta (2014: 71) observe in their most recent benchmarking report, for example, rewards crowdfunding 'is probably the model that has really captured the public's imagination and media's attention'. What is also notable in this respect is how the multiple uses and values of money are regarded as crucial to meeting the different needs of fundraisers. For the kinds of 'small operations, often individuals with little trading history and modest if any turnover' who are in 'the social sector or creative industries' (Nesta 2014: 71), it appears to be fully appropriate to call for supporters to part with their money without any guarantee of receiving even nonmonetary rewards. Yet, very different meanings are attached to money in circulation when, for example, an established SME calls for loan capital to fund its expansion plans.

Within the circuits of crowdfunding - including the P2P business lending and equity and fixed-interest circuits - the duality of money also enables calls for project funding to

differentiate themselves on the grounds of their social and/or ethical qualities. Although money renders the competing projects of two firms seeking a P2P loan commensurate in quantitative terms, for example, it simultaneously creates the possibility that the projects in question might appeal to the earmarking practices of would-be funders who are seeking some kind of social return in addition to monetary compensation. As is common to the 'meaningful exchanges' of other digital economies with which it bears some similarities (Howe 2009: 14; see Arvidsson and Peiterson 2013), crowdfunding is replete with so-called 'social entrepreneurship' (see Buckingham, Pinch and Sunley 2012). While this is especially prevalent in the donation and rewards circuits - where it is explicitly cultivated by leading global platforms such as Kickstarter and IndieGoGo, for instance - it also permeates the financial market circuits of crowdfunding. And, when roughly half of calls for project funding are unsuccessful (Nesta 2013b), it is a well-established strategy for fundraisers to attempt to mobilize certain social meanings imbricated in monetary flows by attaching those meanings to their project (see Rees-Mogg 2014).

Furthermore, the financial market circuits of UK crowdfunding also feature a number of platforms that, in effect, explicitly build their business models on the duality of money. For example, Rebuilding Society, a P2P business lending platform, explicitly invokes the mutuality of money that was embedded in the operating principles of the UK's building societies during the post-1945 period. Meanwhile, the pioneering fixed-income platform, Abundance Generation, only intermediates between UK renewable energy projects seeking funding and investors who 'make money while supporting the planet'.¹² Abundance is thus banking on environmental and ethical meanings being inscribed into the monetary flows that it aggregates and distributes. As Bruce Davis, co-founder of Abundance, put it in a blog post

¹² https://www.abundancegeneration.com/

of October 2014, 'People want to make ethical choices with their money. ... We want to put our money not just to work, but to do good work.¹³ Not dissimilarly, Buzzbnk is a platform that explicitly hosts calls for funding by social enterprises in both the rewards and P2P lending circuits, and promotes loan agreements designed to ensure that those enterprises receiving the backing of the crowd pay relatively low rates of interest.

Conclusions

The contribution of this article to economic geography and allied social scientific literatures is both analytical and conceptual. Providing the first in-depth study of the crowdfunding economy in the UK, the article's analytical contribution has focused on developing a critical understanding of recent change in this diverse and dynamic digital economy. It has shown how the composition of the flourishing financial market circuits of crowdfunding entails the coming together of a number of constitutive forces: the mobilization of economic theory and the enrolment of calculative market devices, intersecting with place-based knowledge and innovation centred on East London's digital economy and FinTech hub; the registering of dedicated juridical regulations and enactment of government policies aimed at securing and furthering flows of funds; and the valuations of money which, at once, enable the calculations and commensurations of crowdfunding whilst creating scope for social meanings to be inscribed into its circulations. Such an analysis of change in UK crowdfunding is not likely to satisfy those economic geographers who would firmly centre their accounts of all markets-inthe-making on the apparently universal power and agency of capital (e.g. Christophers 2014a). Indeed, as digital humanities research into European crowdfunding circuits suggests, it would be quite possible to understand UK crowdfunding as driven by the logic of an

¹³ http://blog.abundancegeneration.com/2014/10/is-your-money-stuck-in-neutral/

emergent form of 'platform capitalism' (Ridgway 2015). What this would likely leave underexplored, however, is precisely the discrete, contingent and relational forces that have been interrogated in this article as combining to compose the UK's changing crowdfunding economy.

The conceptual contribution made here has turned on the development of a sympathetic critical engagement with cultural economy scholarship on the geographies of money and finance. By stressing the socio-technicalities of the financial market circuits of crowdfunding, and by revealing the role of economic theory and market devices in these relational processes, the article is largely consistent with previous cultural economy research. Indeed, when conceiving of change in UK crowdfunding as financial marketization and not as financialization, the article underscores the need for accounts of the geographies of money and finance that more carefully distinguish between discrete processes of economization. However, the analysis offered here has also developed a conceptual call for the broadening of the existing remit of cultural economy scholarship to include the constitutive forces of money, regulation and governance in accounts of financial markets-in-the-making. To extend the remit of cultural economy in this way is not an ontological assertion about the universal role of regulation and money in all capitalist markets, although much can be learnt from political economy research which explicitly seeks to address the significance of money to processes of financialization (Lapavitsas 2014; Soederberg 2014). Rather, it is a call to analyse, in greater breadth as well as depth, the discrete and relational processes through which financial markets are produced through time and across space. Wherever they are present, specific rules and policy measures that repurpose and redeploy sovereign powers and techniques are thus likely to feature in accounts of the assembly of particular markets. And, when reviving previous concerns with the geographies of money, cultural economy can make

a distinctive contribution by beginning to interrogate the duality of money in contingent and ambivalent processes of marketization.

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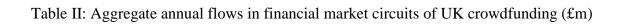
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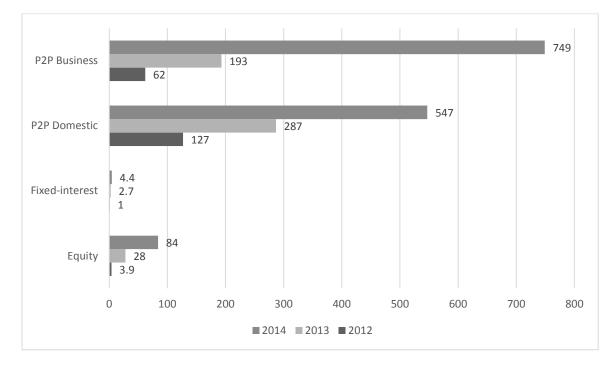
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Table I - The principal crowdfunding circuits in the UK: A typology

Circuit	Typical Funding	Financial	Leading
	Recipients	Instruments	Platforms
Donation	Individuals	None	Buzzbnk; Hubbub
	Community projects		IndieGoGo;
	Registered charities		JustGiving
	Social enterprises		
Reward	Individuals	None	Buzzbnk; Crowdpatch
	Community projects		IndieGoGo;
	Social enterprises		Kickstarter
Fixed-income	SMEs	Debentures	AbundanceGeneration;
	Social enterprises	Mini-bonds	Crowd Cube
Equity	Start-ups	Shares	CrowdBnk; Crowd
			Cube; Seedrs
Peer-to-peer	Individuals	Unsecured loans	Funding Circle;
	SMEs		RateSetter; Zopa





Source: Nesta (2014).