

Kent Academic Repository

Full text document (pdf)

Citation for published version

Zokaityte, A (2016) A Financial Literacy Measure: Gendering and Contextualising Financial Technicalities. *Onati Socio-Legal Series*, 6 (1). pp. 26-61. ISSN 2079-5971.

DOI

Link to record in KAR

<https://kar.kent.ac.uk/57051/>

Document Version

UNSPECIFIED

Copyright & reuse

Content in the Kent Academic Repository is made available for research purposes. Unless otherwise stated all content is protected by copyright and in the absence of an open licence (eg Creative Commons), permissions for further reuse of content should be sought from the publisher, author or other copyright holder.

Versions of research

The version in the Kent Academic Repository may differ from the final published version.

Users are advised to check <http://kar.kent.ac.uk> for the status of the paper. **Users should always cite the published version of record.**

Enquiries

For any further enquiries regarding the licence status of this document, please contact:

researchsupport@kent.ac.uk

If you believe this document infringes copyright then please contact the KAR admin team with the take-down information provided at <http://kar.kent.ac.uk/contact.html>

A Financial Literacy Measure: Gendering and Contextualising Financial Technicalities

ASTA ZOKAITYTE*

Zokaityte, A., 2016. A Financial Literacy Measure: Gendering And Contextualising Financial Technicalities. *Oñati Socio-legal Series* [online], 6 (1), 26-61. Available from: <http://ssrn.com/abstract=2533828>



Abstract

This article analyses the relationship between law, gender, and finance, with a particular focus on gender inequalities in the financial literacy measure which was constructed by the Organisation for Economic Cooperation and Development (OECD). It seeks to trouble predominant claims about financial literacy as an effective, 'edu-regulatory' policy to address gender inequalities in the financial services market. The article suggests that instead of acting as a neutral assessment of people's financial literacy, the measure, in fact, embodies gendered assumptions about finance and financial practices. The measure presents a financial world in abstract terms and fails to account for different contexts within which financial decisions are made. The article exposes the measure's problematic deployment of the literacy/illiteracy binary in thinking about financial gender inequalities. Rather than being attentive to the ways in which gender inequalities are produced in financial markets, the OECD measure misattributes these to irrational financial behaviour, and further reproduces the marginalisation of women in the global financial market.

Key words

Financial literacy; financial literacy measure; gender inequality; irrationality; financial crisis

Resumen

Este artículo analiza la relación entre derecho, género y finanzas, realizando un enfoque particular en las desigualdades de género existentes en el estudio sobre los conocimientos financieros que elaboró la Organización para la Cooperación y el Desarrollo Económico (OCDE). Busca contrastar las afirmaciones dominantes sobre

An early version of this paper was presented at the Bilkura workshop on *Law, Gender, Sexuality: Inequality and Austerity after the Global Financial Crisis* held at the International Institute for the Sociology of Law in Oñati, Spain on 6-9 July, 2013.

I would like to thank the IISL and Social and Legal Studies Journal for supporting the workshop. I would also like to thank conference participants for their insightful comments and suggestions. Special thanks to Toni Williams, Donatella Alessandrini, Will Mbioh, and anonymous reviewers for their observations and recommendations. All remaining errors in this paper are my own.

* Dr Asta Zokaityte works at University of Kent where she researches in the area of financial services regulation and consumer protection. Please direct all correspondence to Asta Zokaityte, University of Kent, Kent Law School, CT2 7NS, Canterbury; A.zokaityte@kent.ac.uk



los conocimientos financieros como una política efectiva, “edu-reguladora” para abordar las desigualdades de género en el mercado de servicios financieros. El artículo sugiere que, en lugar de realizar una evaluación neutral de los conocimientos financieros de las personas, la medida plasma asunciones de género sobre las finanzas y las prácticas financieras. El estudio presenta un mundo financiero en términos abstractos y no tiene en cuenta los diferentes contextos en los que se toman las decisiones financieras. El artículo plantea el uso problemático que el estudio realiza del binomio conocimiento/desconocimiento al pensar sobre desigualdades de género financieras. En lugar de prestar atención a cómo se producen las desigualdades de género en los mercados financieros, el estudio de la OCDE las atribuye erróneamente a un comportamiento financiero irracional, y reproduce así la marginalización de las mujeres en el mundo financiero.

Palabras clave

Conocimientos financieros; estudio de conocimientos financieros; desigualdad de género; irracionalidad; crisis financiera

Table of contents

1. Introduction	29
2. The OECD financial literacy measure as troubleshooting: responding to financial inequalities in the age of austerity	30
2.1. The OECD financial literacy measure: detecting household irrationality	30
2.2. Theorising financial literacy measures: scholarship on indicators and social studies of finance	32
3. Measuring financial literacy through the OECD core questionnaire	35
3.1. The OECD questionnaire's structure: financial knowledge, financial behaviour and financial attitudes	36
3.2. Income inequalities and financial inequalities.....	39
3.3. Intra-household money distribution and gendered financial inequality	40
3.4. Ethnicity, religion and immigration status.....	42
4. Resocialising, repoliticising, gendering and racialising the OECD financial literacy measure	43
5. Some reflections and concluding remarks	45
References.....	46
Appendix 1. Behaviour questions.....	58
Appendix 2. Financial attitude questions.....	61

1. Introduction

Over the last two decades consumer education has been increasingly used, and relied upon by policy makers and activists of various social movements, to change consumer behaviour (Brennan and Ritters 2004, Sandlin 2005). Targeting the so-called vulnerable consumers, educational programmes have sought to address and manage all sorts of risks and problems: from social and technological exclusion, to environmental pollution, low food standards, and unethical consumption.¹

Similarly, attempting to re-adjust consumer financial decision-making to rapidly changing retail financial markets, governments across the world, in cooperation with public and private institutions, have been developing consumer financial education programmes to fight financial illiteracy,² financial ignorance, and financial exclusion (FSA 2006, Financial Consumer Agency of Canada 2006, Financial Literacy Foundation 2007, Bucher-Koenen and Lusardi 2011, Commission for Financial Literacy and Retirement Income 2012, García, *et al.* 2013). The importance of consumer financial education has also been recognised internationally; in 2011 the G20 Finance Ministers and Central Bank Governors listed it as one of the main regulatory principles on consumer protection in financial services markets (OECD 2011a).

Relatedly, national, regional and international initiatives have been launched to measure financial illiteracy. Such measures aim to assess the spread of financial illiteracy and to identify social groups and communities who are in special need of edu-regulatory intervention (Atkinson *et al.* 2006, Habschick *et al.* 2007, Atkinson and Messy 2012). Financial illiteracy maps have been created by different countries and international organizations, mapping places and socio-economic groups who are in need of financial education (Clark 2013). As Clark (2013) observes, maps of financial illiteracy often represent commonplace findings where financial illiteracy geography intersects with issues of gender, race, ethnicity, age, culture, and socio-economic status (see, for example, Atkinson and Messy 2012).

National and international initiatives on financial education typically reflect assumptions about a causal link between financial illiteracy and financial exclusion (Collard *et al.* 2001, OECD 2005, Lusardi *et al.* 2010). This assumption, and the financial education practices it supports, has been a subject of scholarly attention (Bernheim and Garret 2003, Fox *et al.* 2005, Lusardi 2005), including critical, scholarly attention (Williams 2007, Pearson 2008, Willis 2008, 2009). There has been little critical analysis, however, of financial literacy measurement practices themselves. Literature on financial literacy measures has often focused on the deployment of measuring techniques and surveys within certain geographies and communities, yet little or no questioning has been directed towards the scope, aims, and politics of measuring people's levels of financial literacy (see, for example, Dvorak and Hanley 2010, Huston 2010, Lusardi 2005, Taylor 2011).

The objective of this paper is to trouble the usual assumption about the neutrality and technicality of financial literacy measures, and to think about these measurement practices socially and politically. The article therefore asks: how do financial literacy measures represent financial knowledge and practices? Also, how do these measures understand the relationship between law, gender and finance? More importantly, to what extent, if at all, do financial literacy measures provide a

¹ See, for example, Yeung and Morris (2001), Brennan and Ritters (2004), Livingstone (2004), Silverstone (2004), Sandlin (2005), Thogersen (2005), Livingstone and Wang (2011), Sonigo *et al.* (2012), Mason *et al.* (2012).

² Various researchers define and measure financial literacy differently. In this article, the concept of financial literacy is generally used to refer to the OECD's definition and measuring practices of financial literacy. The OECD has defined financial literacy as "a combination of awareness, knowledge, skill, attitude and behaviour necessary to make sound financial decisions and ultimately achieve individual financial wellbeing" (OECD 2011b, p. 3).

productive analytic and policy-driven engagement with gender inequalities in the aftermath of the financial crisis?

To investigate these questions, my research focuses on the analysis of the OECD financial literacy questionnaire, which has been used to construct the OECD financial literacy indicator.³ Referring to feminist, socio-legal, and sociological academic work, I examine the questionnaire and problematise the literacy/illiteracy framework which is currently so often used by international and national policy makers to analyse gender inequalities in contemporary financial markets. Moreover, I draw heavily upon the literature on indicators to expose financial literacy indicator's 'performative' side; that is, its ability to construct new literacy/illiteracy categories and reinforce gender inequalities rather than merely reflect existing ones. Finally, I link up my findings on the questionnaire's problematic measurement of financial literacy with its 'edu-regulatory' vision, and expose the limitations of the financial literacy project to tackle gender inequalities in the aftermath of the financial crisis.

Section two of this article presents some international political debates that emerged around consumer financial education after the financial crisis, and, briefly, accounts for how it came to be seen as a viable consumer protection tool. Linking up scholarly work on indicators with social studies of finance, it also introduces framework for analysing gender inequalities and the OECD financial literacy indicator. Section three examines the OECD financial literacy measure and exposes its failure to account for different contexts within which people make financial decisions. Here I argue that instead of acting as a neutral assessment of people's financial literacy, the measure embodies gendered, racialised and class-based assumptions about finance and financial practices. In Section four I show how the financial literacy/illiteracy binary created by the OECD financial literacy indicator to assist policy-makers and academics to analyse gender inequalities in financial markets is problematic. First, this approach limits understanding of the complex environment and processes which shape and produce inequalities in financial markets. More importantly, by misattributing existing gender inequalities to women's illiterate financial decision-making, the measure reinforces, rather than address, gender inequalities in financial markets. Section five concludes that the OECD financial literacy measure has produced a problematic understanding of gender inequalities in financial markets. The OECD financial literacy measure misattributes people's financial illiteracy to irrational financial behaviour and, therefore, reproduces the marginalisation of women in the global financial market.

2. The OECD financial literacy measure as troubleshooting: responding to financial inequalities in the age of austerity

2.1. The OECD financial literacy measure: detecting household irrationality

As a result of the global financial crisis, when Merrill Lynch, Citigroup, Goldman Sachs, Deutsche Bank, Societe Generale, American International Group, Royal Bank of Scotland, UBS, and other large financial centres faced liquidity problems, the United States and United Kingdom governments injected vast amounts of public funds into private, financial corporations to safeguard and stabilise the financial system (Gowan 2009, French and Leyshon 2010, Watkins 2010). The use of large amounts of public money to bail out investment banks was followed by a deep economic recession, increased unemployment, and diminishing tax receipts (French and Leyshon 2010). Bank rescue packages and the indirect consequences of the global financial crisis⁴ required that governments borrowed heavily. As a result, "everywhere from California to Greece", the ability of countries to guarantee

³ Financial literacy indicator is better known, and more commonly referred to as 'financial literacy measure'. In this article, both terms will be used interchangeably.

⁴ Which also resulted in a significant drop in the employment rates and a closure of businesses.

future debt repayment was questioned (Harvey 2012, p. xv). Describing Britain's economy in 2010, Mervyn King, the governor of the Bank of England, explained that the "debt has moved from the financial to the public sector, [so] the banking crisis has turned into a potential sovereign debt crisis" (Allen 2010, p. 1). To protect their status as reliable borrowers, the United Kingdom and most countries of the European Union, have announced austerity budgets (Taylor-Gooby and Stoker 2011, Pietras 2012).

Many different commentaries on the causes of the global financial crisis have been presented in the press and academic literature: from structural transformations in contemporary capitalism, and the effects of financial deregulation (see Amin 2008, Foster 2010, FSA 2009); to specific market failures, such as "shadow banking", inadequate liquidity, and regulatory manipulation (King 2010, Independent Commission on Banking 2013).⁵ Yet, one of the notable explanations, or causal factors, of the financial crisis has been human irrationality or, put differently: behavioural weaknesses (Griffin 2013). Behavioural explanations for the financial crisis have emphasized the "human factor"; specifically, irresponsible and irrational behaviour (Griffin 2013).

These findings about the limitations of human rationality were supported by a vast amount of research in behavioural economics conducted in the decades prior to the global financial crisis. Behavioural economists had questioned the rational actor model and argued for a more realistic representation of human behaviour (Tversky and Kahneman 1974, Mitchell and Utkus 2003, Thaler 1980). According to behavioural economists, human rationality is bounded, therefore, people often use heuristics, various mental short cuts and rules of thumb, when making decisions (Tversky and Kahneman 1974). Behavioural economists' empirical work has documented multiple inconsistencies and errors in decision-making processes, where, for instance, changes to the phrasing of the same choices result in inconsistent decision-making (Tversky and Kahneman 1974).

Although behavioural economics has been used to explain financial firms' and households' irrational money management before the crisis, the before and after narratives were quite distinct from each other. While men's irrational behaviour in the City and Wall Street was commonly associated with, and explained by, their greed, moral delinquency, fraud and risk-taking (Pollard 2012, Griffin 2013), women's and household irrationality was attributed to the lack of financial knowledge and poor participation in financial services markets (Gwinner and Sanders 2008, OECD 2009a, 2009b, Rutledge *et al.* 2010). As a result, regulatory responses to curbing these masculine failings after the crisis (Pollard 2012) have focused on capping bonuses (Council of the European Union 2013), reducing risk-taking incentives (Bank on International Settlements 2011), and fighting reckless behaviour.⁶ Consumer financial education programmes have been engineered to target households and, mainly, women, ethnic minorities, children and the elderly. As a subtle and non-violent regulatory intervention, financial education has been viewed to responsabilise consumers, strengthen their 'shopping' capabilities, restore confidence, and tackle financial inequalities in contemporary markets (OECD 2009a, 2009b).

Despite well documented problems with the financial education project (Williams 2007, Pearson 2008, Willis 2008, 2009, Pinto and Coulson 2011), it continues to be seen as an appropriate and effective regulatory response to what has been

⁵ As a result, global and local regulatory responses were engineered to target these specific financial and regulatory ills. The Third Basel Accord, for example, was signed by the Basel Committee on Banking Supervision to strengthen bank capital requirements and increase their liquidity. The European Commission has launched a communication on the regulation of shadow banking (European Commission 2013). The Group of Twenty Finance Ministers and Central Bank Governors (also known as G20) established a Financial Stability Board, which amongst other tasks was mandated to respond to the "too-big-to-fail" problem (see Riles 2013).

⁶ See, for example, Parliamentary Commission on Banking Standards 2013.

identified as the global mis-management of domestic money (OECD 2009b). More importantly, although presented as a protective measure for all consumers, financial education is highly gendered, racialised and based on socio-economic class; that is, financial education programmes aim to target women, low-earners, and ethnic minority groups. As it was put by the OECD (2012, p. 15), commenting on the best strategies of approaching financial education:

In principle, a [National Strategy] should aim to ensure that all segments of the population become financially literate. In practice and according to national circumstances and identified needs, this may mean targeting specific (vulnerable) groups with more intensive interventions or greater resources. Such groups may include elderly populations, youth, migrants, low income groups, women, workers, the unemployed as well as communities speaking a different language and ethnic groups.

In order to identify groups and countries “in special need” of financial education, governments and international organizations, respectively, drafted financial literacy questionnaires, conducted surveys and, as a result, devised financial literacy measures (FSA 2006, OECD 2011b). Financial literacy and illiteracy geographies have been crafted, mapping places and communities who are marginalised in the global and local financial markets due to their lack of financial knowledge and skills. More importantly, as economic geographer Clark (2013) has noted, the findings of financial literacy measures are “commonplace”; that is, financial illiteracy is generally found amongst women, minorities, less educated and low income earners, and in countries like Armenia, South Africa, Poland, and Albania (Atkinson and Messy 2012). On the other hand, 40-50 year old, white males, with higher education and high income (Clark 2013), and people living in the British Virgin Islands, Germany, and Ireland (Atkinson and Messy 2012) tend to score higher results. Geographies of financial illiteracy are also mapped within countries, where, for example, Russia’s most literate places are Moscow and St Petersburg, with illiteracy increased further East; Northern Italy is more literate than the Southern part, and the UK’s Southern part is more literate than the Northern (Clark 2013).

2.2. Theorising financial literacy measures: scholarship on indicators and social studies of finance

Used in the context of ‘edu-regulatory’ reform, the OECD financial literacy measure has been represented as a technical and neutral depiction of the ‘real world’. This view assumes that the financial literacy measure merely finds, mirrors, and situates different levels of human irrationalities and financial inequalities in particular places and communities. Thus, the OECD measure has been used by international and national policy makers to identify ‘problematic’, troubled sites that could potentially benefit from policy intervention. This view, however, fails to consider performative features of financial literacy measures themselves.

As recent sociological and anthropological scholarly work has shown, statistical (Davis *et al.* 2012) and legal technicalities (Riles 2005) are highly political and social. Calling for a new agenda for the culturalist study of legal thought, for example, Riles (2008) has explained how politics and governance practices are encapsulated in legal techniques. In her book *Collateral Knowledge*, she has unpacked one of these legal techniques – collateral and its uses in financial markets – and has concluded that “the technicalities of regulation are its core element” (Riles 2008, p. 14). Advocating for a different understanding of legal technicalities, Riles (2008) has emphasized the importance of laying open the political practices and moves embedded in technicalities.

Socio-legal scholars, anthropologists and political scientists have ‘taken on’ other types of technicalities – indicators, rankings, indexes and measures⁷ to

⁷ The terms ‘indicator’ and ‘measure’ will be used in this text to refer to the definition of an indicator provided by Davis *et al.* (2012). An indicator was defined in this literature as “a named collection of

demonstrate how these statistical representations of society, the economy, and culture act as new technologies of governance and knowledge production. By subjecting indicators to the gaze of sociological, anthropological and socio-legal studies, indicators scholars have described different salient features of these tools; reactivity⁸ (Espeland and Sauder 2007, Espeland and Stevens 2008); simplification of the real world⁹ (Andreas and Greenhill 2010, Davis *et al.* 2012); standardization¹⁰ of performance of particular phenomenon (Espeland and Stevens 2008, Davis *et al.* 2012); resistance to criticism¹¹ (Perry-Kessaris 2011); and, most importantly, power to govern human behaviour. All these characteristics are regarded as significant factors in understanding and explaining how indicators are produced and employed, and how they determine the broader social, political, economic and cultural changes. Interested in the way these indicators are represented and conceived of as mere measurement tools that do not participate in, or affect 'real life', academic scholars have argued that indicators should be seen as new technologies of knowledge production and governance. As Merry (2011, p. S84), for example, has put it: "[i]ndicators, particularly those that rely on ranks and numbers, convey an aura of objective truth and facilitate comparisons", adding that some of these conceal their political origins and their "underlying theories of social change and activism" (Merry 2011, p. S84).

These academic critiques of statistical, legal and other 'technicalities' suggest that in order to fully understand the implications for measuring financial literacy, the participation of the OECD financial literacy indicator in the construction of reality has to be taken into consideration. What is more, acting as a tool and technology of governance, the OECD financial literacy indicator embodies certain political projects and visions of the world. Therefore, the question of what kind of financial world is presented in the financial literacy measure is particularly important.

With few exceptions,¹² however, scholarly literature that has attempted to examine various financial literacy indicators provide only limited critical/theoretical frameworks for analysing finance. Finance and financial practices are routinely analysed through the lens of orthodox economics (see Lusardi 2009, Lusardi and Mitchell 2011). Within this framework, money and financial knowledge is understood as 'universal', asocial, apolitical, and capable of travelling across borders and communities. Even more generally, thinking about finance has traditionally been the domain of economic enquiry (Goede 2005b). Recently, however, academic analysis of finance has taken on a multidisciplinary turn.

rank-ordered data that purports to represent the past or projected performance of different units. The data are generated through a process that simplifies raw data about a complex social phenomenon. The data, in this simplified and processed form, are capable of being used to compare particular units of analysis (such as countries or institutions or corporations), synchronically or over time, and to evaluate their performance by reference to one or more standards" (Davis *et al.* 2012, p. 6).

⁸ Espeland and Sauder have argued that some measures do not merely reflect the world but intervene in the social world it depicts. Not only do they "cause people to think and act differently", they also create new ontologies and new relations among things (Espeland and Sauder 2007, p. 412).

⁹ Indicators scholars have argued that numerical representation of a particular phenomenon, especially in the form of indicators, tends to simplify its complexity and strip context from the phenomenon (see Espeland and Sauder 2007, Davis *et al.* 2012).

¹⁰ Standardization as one of the features of indicators has been used to explain the ways in which indicators set certain standards against which performance of a particular phenomenon or process is measured. As it was stated by Davis *et al.* (2012, p. 9): "we single out indicators from other collections of data based on their potential use in evaluating performance. Indicators set standards. The standard against which performance is to be measured is often suggested by the name of the indicator – corruption, protection of human rights, respect for the rule of law, etc".

¹¹ Because of their numerical form and scientific appearance, indicators have been claimed to "delimit the space of possible interpretations of the world" (Perry-Kessaris 2011, p. 416), as a result, restricting ways for the wider public to engage in and question indicators' suggested reading of the world.

¹² See, for example, Clark (2013).

Using diverse perspectives and new analytical frameworks, sociologists, geographers,¹³ feminists, and socio-legal researchers have expanded the understanding of the processes of financialisation,¹⁴ financial practices, and money by engaging in what is widely known as the 'social studies of finance'. Concerned with, and being suspicious of, 'mainstream' representations of finance (Zelizer 1994, Strauss 2009, Lee *et al.* 2009, Datta 2012, Goede 2012a, Mann 2012), these scholars have taken a closer look at money from fields outside of orthodox economics and economic enquiry, its logic and discourses of 'efficiency', 'cost-benefit analysis', 'rationality', 'objectivity' and 'neutrality'. Calling for a need to examine and study money and finance as social, political, and cultural practices that are embedded in and shape people's day-to-day life, academic scholars have sought to disentangle dominant representations of finance as merely scientific, measureable and technical (see Beunza *et al.* 2006, Langley 2008, Goede 2005a, Cetina and Preda 2006, Mackenzie 2010, 2011).

Contributing to a critical approach to finance, for example, the sociology of money has offered a more social and relational understanding of this "medium of modern economic exchange" (Zelizer 1994, p. 7). Examining money management practices in 1900-1930s American households, Zelizer has concluded that money not only has a variety of social meanings, it also affects and participates in people's daily routines, practices, and traditions; that is, money is used by people in many different ways and for many different purposes. Complicating the assumption that capital markets are the main controllers of money flows, she has also demonstrated how the circulation of "domestic" or household money was subjected to "a set of domestic rules distinct from the rules of the market" (Zelizer 1994, p. 64). In a more recent academic account, combining cultural and sociological approaches, Miller has looked at the ways in which middle class African Americans manage their money and assign social meaning to money. She has argued that African Americans use "a filter through which they make their financial decisions" (Miller 2010, p. 11). According to her, this filter, or way of viewing financial matters, is informed and shaped by family and cultural expectations (Miller 2010). This view is both structurally and culturally informed; African American experiences of "slavery, racism, discrimination, unfair policies and practices and overall marginalization in the United States", combined with barriers to accessing financial capital, has led them to develop a "common set of cultural values that...[place importance] on family/extended family, fictive kinship and collectivism/communalism" when making financial decisions (Miller 2010, p. 15).

Gender studies has also made an important contribution to the analysis of the social and political aspects of finance. First and foremost, feminists have documented the conditions that lead to women's marginalisation in financial markets (Warren *et al.* 2001, Vlachantoni 2012).¹⁵ Gender studies have questioned

¹³ Economic geographers have become increasingly interested in the geographies of financial markets (see Leyshon 1995, Leyshon and Thrift 1995, Tickell 2000, Clark 2003, Pardo-Guerra 2010, Pike and Pollard 2010). Critiquing a dominant depiction of money and finance as spaceless and timeless, as travelling freely to different places and at any time, geographers have mapped out particular centers and regions where finance is situated, or communities to whom finance is more accessible. The studies have also shown that those financially situated places and communities are geographically uneven; that is, not only financial access is different (Leyshon and Thrift 1995), the conditions on which finance becomes available are unequal (Langley 2008).

¹⁴ The increasing influence of financial capital on all aspects of people's lives have led some academic researchers to conclude that contemporary political economies are highly financialised (Erturk *et al.* 2008, Epstein 2005, Ireland 2009, Harvey 2009, Strauss 2009). It has been claimed that financialisation has transformed the locus of economic profit-making from trade and commodity production to increasingly financial wealth accumulation through financial channels and centers (Krippner 2005). It has also been argued that the number of, and the extent to which, households rely on financial capital to service their long-term and short-term needs has expanded (see Aalbers 2008, Langley 2008, Harvey 2009, French *et al.* 2011, Ireland 2011).

¹⁵ Examining the historical conditions over women's access to financial services, these scholars have argued that the adoption of laws prohibiting discrimination in credit sanctioning based on gender, marital status, race, religion or income source have resulted in women's greater inclusion into financial markets.

and made visible gendered representations of, and discourses around, finance; exposing the gendered aspects of binaries as rational/irrational (Goede 2005a), paid/unpaid, productive/reproductive (Ghosh 2010), public/private (Zelizer 1994), and autonomous/social (Beneria 1995).

While critical scholarship on technicalities, and social studies of finance, have contributed to a research programme that seeks to “re-politicise” and “re-socialise” (Goede 2005a) statistical, technical and financial knowledge, there has been little academic attempt to link these bodies of work together. Yet analytic engagement with both of these types of critiques can bring new insights to thinking about the relationship between law, gender, and finance. More specifically, it can offer different ways of looking at the financial literacy measure and contribute to academic literature on financial education that problematises the use of consumer financial education to regulate consumer financial markets.

Instead of reinforcing the idea that the financial literacy measure is a mere technical tool, which was devised to explain financial inequalities using neutral and universal financial knowledge,¹⁶ I analyse the OECD measure socially and politically. In the next section I look at the OECD’s questionnaire, which is used to measure financial literacy, and I unpack embedded discourses and assumptions about finance and financial practices. Mainly drawing upon feminists’, sociologists’ and geographers’ critiques of dominant understandings of money, I contrast the OECD’s representation of finance, embedded in the questionnaire, with the documented day-to-day financial experiences of people living in the UK. I also expose its highly political project, which not only limits space for analytic engagement, but also presents a problematic regulatory vision for policy-makers.

3. Measuring financial literacy through the OECD core questionnaire

The OECD’s policy work and research on the development of financial education programmes and strategies started in the late 1990s and was a constitutive part of the OECD’s project on pension privatisation (OECD 1999, 2000). However, it was not until the early to mid-2000s that the OECD’s work became more coordinated.¹⁷ After the financial crisis of 2007, the OECD’s policy work on financial education intensified, resulting in an increased production of policy documents (OECD 2011a, 2011b, 2012a, 2012b), the expansion of cooperative initiatives (OECD 2011a, Russia’s G20 Presidency and OECD 2013), and an increased number of conferences and seminars organised across the world.¹⁸ In 2008, the International Network on Financial Education (INFE) and the International Gateway for Financial Education (IGFE) were set up to facilitate greater coordination and expansion of financial education initiatives across the OECD member and non-member states (OECD 2009c).

Subsequent to their establishment, the INFE and the IGFE took over the main policy work on financial literacy education, including the development of appropriate measures for financial literacy. In 2011, the INFE published the OECD financial literacy questionnaire, which, among other things, was created to help

However, this type of financial inclusion worsened and reinforced inequality since “historically disenfranchised social groups” were given access to subprime markets. It has been demonstrated how ethnic minority groups and single mothers had to pay much higher interest rates and were subjected to “more stringent criteria” than other non-subprime borrowers (Montgomerie 2008, p. 5). For further studies see, for example, Dymski (2009), Young (2009), Montgomerie and Young (2010), Roberts (2012).

¹⁶ Where, for example, the lack of financial knowledge is linked to overindebtedness (Lusardi and Tufano 2009), financial wealth dis-accumulation (Lusardi 2005, Stango and Zinman 2007, Lusardi and Mitchell 2008), or poor market performance (Hastings and Tejada-Ashton 2008).

¹⁷ The policy work on different aspects of financial education undertaken by different departments and groups within the OECD were put together to ensure a more coherent and efficient development of consumer education policies. As a result, the INFE and IGFE were set up to ensure consistency and cooperation in the development of consumer financial education initiatives and policy strategies.

¹⁸ See, for example, OECD (2008, 2009d, 2012c, 2012d, 2013a), Chakrabarty (2013).

governments and public authorities to “identify national levels of financial literacy”, “provide a baseline and set benchmarks for national [educational] strategies”, as well as “identify the needs of the population, the groups with the greatest needs and gaps in provision” (OECD 2011b, p.3).

The questionnaire has been used to measure financial literacy in fourteen countries,¹⁹ including the UK. In the UK it was found that women, the youngest and oldest consumers, and those on lower incomes underperformed in comparison to men, the middle-aged, and higher income consumers (Atkinson and Messy 2012). According to this measure, women were found to be less financially knowledgeable and less financially responsible than men, however, they tended to have better attitudes to finance and money matters.²⁰ To make sense of these findings, one needs to look closer at the particular assumptions that the questionnaire contains. Specifically, attention needs to be paid to the ways in which the questionnaire divides and categorises certain types of financial knowledge, financial behaviour, and attitudes to finance into financial literacy and financial illiteracy.

3.1. The OECD questionnaire’s structure: financial knowledge, financial behaviour and financial attitudes

The OECD’s questionnaire consists of four main parts: the first part includes general questions about age, gender, place of residence, education, and income; the remaining three parts focus on measuring financial literacy through financial knowledge, financial behaviour and attitudes to finance.

The second, main part of the questionnaire, which measures *financial knowledge* includes eight questions that are designed to test knowledge of certain financial terms, principles, and processes. Participants are required to answer at least six questions to be considered financially knowledgeable. The questions are structured to measure: skills in performing mathematical division; ability to calculating interest rates; awareness of inflation and its impact on the value of money; and the relationship between risk and return on financial investments (see below Table 1). However, these questions do not have the same weight; one question aims to assess people’s skills in performing mathematical division; three questions measure ability to calculate interest rates; two questions concern the relationship between the value of money and inflation; and two questions measure knowledge of the relationship between risk and return in financial investment strategies.

¹⁹ Of these are Albania, Armenia, British Virgin Islands, Czech Republic, Estonia, Germany, Hungary, Ireland, Malaysia, Norway, Peru, Poland, South Africa.

²⁰ Since the questionnaire consists of three main parts that aim to measure people’s financial knowledge, financial behaviour and attitudes to finance, the results of the survey were also reported in a manner that reflected these three categories. Accordingly, women scored lower in the categories of ‘financial knowledge’ and ‘financial behaviour’ but higher in the category of ‘attitudes to finance’. A more detailed analysis of what each category means and how it has been defined has been provided in the following section of this article.

Table 1. Questions on Financial Knowledge

Tested knowledge	Question	Value towards final score
Division	Imagine that five brothers are given a gift of \$1000. If the brothers have to share the money equally how much does each one get? [Open response: \$200]	1 for correct response. 0 in all other cases.
Time-value of money	Now imagine that the brothers have to wait for one year to get their share of the X. In one year's time will they be able to buy: Multiple choice: a) More, b) the same amount, or c) less than they could buy today, d) it depends on inflation, e) it depends on the types of things they want to buy	1 for responses c, d, e. 0 in all other cases.
Interest paid on a loan	You lend \$25 to a friend one evening and he gives you \$25 back the next day. How much interest has he paid on this loan? [Open response: 0]	1 for correct response. 0 in all other cases.
Calculation of interest plus principle	Suppose you put \$100 into a savings account with a guaranteed interest rate of 2% per year. You don't make any further payments into this account and you don't withdraw any money. How much would be in the account at the end of the first year, once the interest payment is made? [Open response: \$102]	1 for correct response. 0 in all other cases.
Compound interest	And how much would be in the account at the end of five years? Would it be: a) More than \$110 b) Exactly \$110 c) Less than \$110 d) Or is it impossible to tell from the information given	1 for a correct response IF the previous response was also correct. 0 in all other cases.
Risk and return	An investment with a high return is likely to be high risk [True/False]	1 for correct response. 0 in all other cases.
Definition of inflation	High inflation means that the cost of living is increasing rapidly [True/False]	1 for correct response. 0 in all other cases.
Diversification	It is usually possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares [True/False]	1 for correct response. 0 in all other cases.

Source: OECD (2011b).

The questions on financial knowledge assume a particular underlying, theoretical framework. They require an individual to know neoclassical, economic (Friedman 1963) and financial theories²¹ to understand how, for example, inflation affects the economy and people's day-to-day life; what is the relationship between risk and

²¹ On financial theories, see Bresciani-Turroni (1968), Elton *et al.* (2009).

return in modern portfolio theory; or what role diversification plays in managing investment risks. For example, the answers to the questions on the calculation of interest rates are based on understandings of interest that are deeply embedded in neo-classical economics. According to neo-classical, economic theorists, any state control of interest rates should be lifted and interest rates should be determined by free-markets (see, Friedman 1953, pp. 263-266). This approach to interest rates is significantly different to the approach, for example, represented in Islamic schools of thought (*Hanbali; Shafi'i; Hanafi; Maliki*). *Shari'ah* law prohibits payment of interest as it is considered to be usury and unjust (see Sharaway 2000, El-Gamal 2001, Siegfried 2001). Therefore, the way in which one calculates or understands interest depends on the theoretical framework through which interest is conceived of.

What is more, despite recent public debates and scholarly work that has problematized, and empirically proved, that some aspects of the theoretical frameworks upon which the questions rely are flawed,²² the answers to the questions are structured in a true/false binary, leaving no space for alternative understandings and interpretations. One could argue that not only does a neo-classical, theoretical framework underlie the structure of questions and answers used in the *financial knowledge* part of the questionnaire, the questionnaire also prioritises a decontextualised, asocial, acultural and apolitical view of money.²³ Likewise, these theories conceive of money as homogeneous, easily calculable, divisible and measurable, and conceive of the relationship between people and money as technical, and devoid of the social, cultural and political context. Even more concerning, this overall approach to measuring financial literacy assumes that if one has a certain understanding of finance, she or he will be well equipped to effectively access and participate in the financial services market.

Relatedly, the *financial behaviour* and *financial attitudes* parts of the questionnaire also seem to leave the context out of the measure's scope. Both the *financial behaviour* part, which consists of nine questions on consumer behaviour,²⁴ and the *financial attitudes* section, which contains three questions on long-term financial planning, reflect an underlying, neoclassical, economic approach to consumer behaviour and decision making processes (see Appendix 1 and Appendix 2). This approach assumes that consumer preferences can be measured by observing people's choices. Reducing complex processes of decision-making to a mere expression of will, neoclassical, economic analysis ignores important factors that constrain consumer choice. The neoclassical, economic simplification of consumer decision-making has been well articulated in the literature on the social studies of finance (Zelizer 1994, Goede 2005a, Dymski 2009). A socio-economic position of consumers, for instance, has been shown to have shaped and determined the availability of choices for credit²⁵ (Dymski 2009).

The *financial behaviour* and *financial attitudes* parts focus on particular, financial choices that people make, rather than on the context, the socio-economic, cultural, and political environment within which people's financial decisions are negotiated, shaped, changed, influenced, and constrained. Representing money management through the binary of positive/negative financial behaviour and attitudes, the questionnaire lists inadequate saving, unaffordable spending, borrowing to make ends meet, and failure to pay bills on time or plan for the future as risky and negative financial behaviour and attitudes. On the other hand, people who frequently and repeatedly access financial services, shop around and borrow money

²² On the problematisation of 'diversification' and 'risk-return spectrum', see Mackenzie (2005), Lee *et al.* (2009), Tickell (2003), Arnold (2011), Haworth (2012).

²³ A broader discussion on the ways in which neoclassical economics presents an asocial, apolitical and acultural understanding of money could be found in Zelizer (1994).

²⁴ People need to score 6 out of 9 to be considered having positive financial behaviour.

²⁵ In his study of subprime credit market in the US, Dymski (2009) has shown how low-income consumers' access to and choice of credit was limited to subprime market.

for investment, rather than consumption, pay bills on time, keep track of their financial affairs and save money in a particular way are held to be financially responsible and literate.²⁶

This de-contextualised approach to money management practices, and finance more generally, reflects an implicit assumption that what needs to be 'fixed' and 'changed' is the way some individuals deal with their money rather than the environment that shapes, and in various ways, constrains and directs their decision making. This approach also sits uncomfortably with the literature on social studies of finance, where feminists, sociologists and geographers have documented many conditions and factors other than market forces that participate in, determine, and model different ways in which people save, spend, invest, accumulate, as well as view, their money. In the sections that follow, I juxtapose the approach to money reflected in the financial literacy questionnaire with the one that recognises the significance of gender, race, class, culture, and socio-political relations in shaping everyday financial dynamics. I argue that this scholarly exercise can assist with interrogating the questionnaire's framework and its underlying assumptions and, more importantly, the analytical and practical usefulness of financial literacy/illiteracy binary.

3.2. *Income inequalities and financial inequalities*

With the growing financialisation of all spheres of life,²⁷ many scholars, as well as governmental agencies and institutions, have become increasingly interested in exploring various ways in which inequalities are produced in financial services markets (OFT 1997, Hedges 1998, Langley 2008, Strauss 2009, Pollard 2012). These studies have documented geographically uneven access to financial services and financial infrastructure (Leyshon and Thrift 1995), gendered, racialised and class-based access to financial services on exploitative terms (Langley 2008, Young 2009, Dymski 2009, Roberts 2012, Rankin 2013),²⁸ and gendered dis-accumulation of financial wealth (Strauss 2009, Montgomerie and Young 2010, Price 2006, 2007). To explain these gendered financial inequalities, some studies have focused on and drawn upon the literature on gendered income inequalities.

Older, as well as more recent, sociological and feminist research on Britain's gendered labour market has extensively shown different dimensions and sources of gendered income inequality (see Crompton *et al.* 1990, Hutton 1994, Himmelweit 1995, Kuiper *et al.* 1997, Westaway and McKay 2007, Warren 2008, Warren *et al.* 2010, Jefferson 2009). Mainly, but not entirely, due to women's greater caring work during their lifetime, women earn on average lower incomes than men, and their incomes fluctuate more often than men's. According to the UK Office for National Statistics:

On average, women spend far less time per day on paid work or study (as a main activity) than men: 146 minutes compared with men's 225. [...] Conversely, women spend 228 minutes daily on domestic unpaid work (including care for their children

²⁶ Only money saving in formal institutions and organisations (banks, building societies, saving clubs, etc.) has been acknowledged as financially literate ways of saving. This understanding of 'good' or 'literate' money-saving practices have excluded many other important channels that people use to put some money aside, such as giving money to their friends to keep it safe, contributing to informal, communal funds or paying in advance for the commodities or services that will be necessary in the future, see Collins *et al.* (2010).

²⁷ The term 'financialisation' is used here to refer to the expansion of power of finance through ever greater practices of financial capital accumulation and over-accumulation (Krippner 2005, Harvey 2011), including the financialisation of household day-to-day lives (Martin 2002).

²⁸ Referring to the transformations of "racial exploitation" from redlining to predatory lending in the United States, for example, Dymski (2009) has argued that "racial exclusion – the refusal to make loans to minority credit-applicants – was partly replaced by extortionary racial inclusion – providing access to credit to those formerly excluded from it, but only at terms and conditions that are predatory, that is, which involve far higher costs and penalties for non-compliances than 'normal' loans".

in the household; cooking, washing up, cleaning, washing clothes; also repairs and gardening) compared with men's 129 minutes (Warren *et al.* 2010, p. 195).

It has also been argued that women who are employed full time earn less than men due to other gendered dimensions of labour market inequalities (Warren *et al.* 2001, Jefferson 2009). Women's over-representation in low-status, poor sectors of the labour market, and men's typically higher occupational status has also contributed to women earning less than men (Warren *et al.* 2001). The combination of earning less, working part-time and in lower paid sectors, and engaging in unpaid or charitable work, have resulted in women being more likely to find themselves financially worse off than men.²⁹

A 2007 study carried out by Westaway and McKay (2007) has found that women were more likely to save than men but their savings were worth less on average; that is, women on average saved £100 a month compared to men's saving of £120 a month. Despite this, the gap between savings was much smaller than the gap between median income, where women's median total income was £161 a week, and men's £303 (Westaway and McKay 2007). Gendered income inequality has also been shown to shape and contribute to women's patterns of borrowing. The same study has found that women were "more likely to use catalogue or home credit, forms of 'sub-prime' credit, that is [...] credit that is extended to those who find it hard to access other credit due to a low income, lack of assets or bad credit history and which typically charges relatively high levels of interest" (Westaway and McKay 2007, p. 15). Because gendered income inequality determines women's choice of credit, an argument could be made that income inequality also increases women's exposure to over-indebtedness due to them accessing high-priced credit.

3.3. *Intra-household money distribution and gendered financial inequality*

Gendered income inequality only partially explains women's different saving and borrowing patterns, and their lower levels of accumulated financial capital. Women's financial wellbeing is also moulded and affected by internal, less visible "domestic rules" (Zelizer 1994), governing the way money is shared, allocated, divided, spent, and saved.

Rejecting the orthodox model of households as an egalitarian decision-making and economic unit, multidisciplinary studies on within-household distribution of finance have studied the material conditions of family life, (Pahl 1989, Jenkins 1991, 1994, Goode *et al.* 1998, Vogler 1998, 2005). These researchers have examined heterosexual couples' financial life, behaviour and attitudes within the household (Bennett 2013). Looking at many different ways in which money is shared, managed, budgeted, allocated, spent, consumed and saved between women and men within households, these scholars have shown that money is not simply combined in joint accounts with equal access by men and women (Pahl 1989, Jenkins 1991, 1994, Goode *et al.* 1998, Vogler 1998, 2005). Money and its use, allocation and control often produce inequalities within the household and at a broader societal level (Vogler 1998, Kan and Laurie 2010, Bennett *et al.* 2010).

In Pahl's pioneering study on intra-household money distribution, where she has identified four main money allocative systems used by households in the UK,³⁰ she has found that money management does not necessarily translate into money control or equal access to financial capital (Pahl 1989). The studies that followed, have further complicated money allocation process within households by exploring

²⁹ On pension inequality, for example, see OFT (1997), Price (2006, 2007), Strauss (2009).

³⁰ She singled out: 1. *Wife management system*, where one partner, often the wife, takes full responsibility for managing all household finances, except the partner's, usually, man's personal spending money; 2. *Allowance system*, where one partner, often a man, gives his wife a fixed amount of money; 3. *Money pooling system*, where income is pooled, generally in a joint bank account, and both partners have access to money; 4. *Independent management system*, where both partners have separate access to their own individual income/bank account.

other important variations in money management and control across different forms of intimate relationships (Vogler and Pahl 1993, Burgoyne 2007, Vogler *et al.* 2008).³¹ But more importantly, the literature on intra-household money distribution has exposed different ways in which gender financial inequalities are created, sustained or made invisible. For example, older and more recent studies have found that women living within low-income households are more likely to be given responsibility to manage low household budgets single-handedly. As principal managers of stretched budgets, women find themselves struggling to make ends meet and, as a result, reduce their own personal spending or allowance for the benefit of the household (Vogler and Pahl 1994, Goode *et al.* 1998, Sung and Bennett 2007).

In addition, researchers have exposed the highly gendered nature of money saving and spending practices. Earlier scholarly work has documented the importance of couple's conceptualisations of 'individual' and 'collective' spending in reproducing financial inequalities within families (Goode *et al.* 1998). Despite the fact that women were responsible for money management in the family,³² they experienced higher levels of financial deprivation and less access to personal spending than men because, contrary to personal men's spending, "women's collective spending on family matters was seen by couples as personal women's spending" (Goode *et al.* 1998).

More recent academic work that has focused on the examination of pooled or jointly-managed household money systems, has revealed gendered expenditure patterns where men were largely responsible for paying bills and rent, while women were responsible for household shopping (Sung and Bennett 2007, Bennett *et al.* 2010). A 2005 Scottish Widows survey has shown how gendered spending and saving practices remain to be sustained in British families; that is,

when asked what they would do with an extra £100, the majority of both mothers and fathers would rather spend than save, but [women] would rather spend on children, fathers on themselves. Even among those who said they would save, mothers would save for their children, fathers for themselves. Among those with young families, 70% of women said family was their biggest financial priority while only 49% of men said the same (Westaway and McKay 2007, p. 19).

Additionally, the British Household Panel Survey data, taken during 1991-2005 period had shown that:

women are more likely to save for short-term use, whereas men are more likely to save for long term use. Of those who save, 44% of men are doing so mainly for the long-term, compared to 36% of women. Meanwhile 33% of men are saving mainly for the short-term, compared with 40% of women. This may play a contributory role in women's lower levels of savings; as they save more for the short-term, their savings get used, while men's more long-term savings are less likely to be spent. Women are more likely than men to save for special events, holidays, home improvements and children, men more likely than women to save for old age, house purchase and cars (Westaway and McKay 2007, p. 17).

A particular structure of the household was reported to also have contributed to gendered financial inequalities. Single mothers and those who had larger families stood out as experiencing significantly lower rates of saving, lower value of savings and higher debts. According to the 1991-2005 British Household Panel Survey, "only 24% of lone mothers [were] saving from their current income, compared to 36% of lone fathers." Single mothers were more likely to fail to pay the bills on time when compared to men (Westaway and McKay 2007, p. 43); single parenting

³¹ For example, some academic scholars have analysed how money is managed and controlled in lesbian and gay couples (Burgoyne 2007), non-married, cohabiting couples with children, and non-married, cohabiting, childless couples (Vogler *et al.* 2008).

³² It was usually the wife management system.

was and remains to be highly gendered, with 90 per cent of single parents being women (Westaway and McKay 2007).

Since “so much economic behaviour takes place [...] behind closed doors” (Burgoyne *et al.* 2006, p. 619), researchers into intrahousehold finances have exposed not only the significance of internal, domestic rules over the way money is thought of, used and allocated, but the way violent forms of money management and control generate gendered financial inequalities within families. Domestic violence is commonly perpetrated by men against women, and women also experience economic and financial abuse more often (Sharp 2008). Research carried out by the charity ‘Refuge’³³ in 2008 found that 89% of respondent women survivors of domestic violence indicated that economic abuse was a part of their experience (Sharp 2008). Economic abuse was perpetrated in many different forms: from taking all of the woman’s money to limiting her personal spending and access to benefits and putting debt in her name.³⁴

3.4. *Ethnicity, religion and immigration status*

Over the last decade, the UK has seen “an increased number of new, small and scattered, multi-origin, transnationally connected, socio-economically differentiated and legally stratified immigrants” (Vertovec 2007, p. 1024). Such “super-diversity”, which has manifested in people practicing all sorts of customs and religions (Vertovec 2007) across the UK, has also revealed many differences in the way people think of, save, spend, and invest their money. Academic scholars that have investigated ethnic minorities’, including migrants’, financial behaviour, attitudes and lives in the UK, have revealed how money saving and spending decisions were informed not only by income, or intricate and highly complex ‘domestic rules of money distribution’, but also by the processes of racialisation, immigration status, religious beliefs, and social connections (Datta 2007, 2009, 2011, Khan 2008).

In her studies on low-income migrant communities’ access to and use of financial services,³⁵ Datta has argued that despite the fact that migrants were aware of and appreciated the significance of being ‘included’ in the financial system by, for example, having a bank account, they encountered language, legal and economic barriers (Datta 2007, 2009, 2011). For ethnic minority groups, including migrants, having a bank account and being ‘financially included’ provided not only the ability to comfortably shop online, buy travel tickets and find work or receive benefits (Datta 2007, 2009, 2011, Khan 2008). A bank account also acted as proof of migrants’ status as legal (Datta 2007, 2009, 2011). However, language barriers, the lack of certain documentation³⁶ (passports, identity cards, driving licence, address, letters of recommendation from employers, schools or benefits office) and minimums required for opening bank accounts, created barriers to accessing the ‘formal’ financial system (Datta 2007, Khan 2008).

³³ The UK’s national domestic violence charity Refuge sent questionnaires to women who were users of the Refuge system of safe housing for victims of domestic violence. Approximately 370 questionnaires were distributed and a total of 55 were returned, representing a response rate of nearly 15 per cent.

³⁴ It was found, for example, that 18% of respondents also reported that their partner had forced them to take out loans, credit cards, contract mobile phones in their own name but then denied them access to these products. Also, the majority of women who experienced economic abuse were what the Government considers to be financially excluded with around 1 in 3 of the respondents accessing Refuge’s domestic violence services not having a bank account (compared to 1 in 20 UK’s national average), see Sharp (2008).

³⁵ Kavita Datta looked at many different migrant communities, including but not limited to Brazilian, Polish, Turkish, Somali, Bolivian, Ecuadorian, Mexican, Colombian, Algerian, and Bulgarian, see (Datta 2007, 2009, 2011).

³⁶ Datta explained that for some migrants, for example Somali community, access to required documents was more problematic than for others, see (Datta 2012, p. 73).

Datta has also shown that although migrants were eager to become ‘banked’,³⁷ they were less willing to engage in formal saving and credit institutions. As was the case with access to a bank account, migrants understood the importance of long-term and short-term saving, yet due to fears of deportation, low wages, benefit dependency and the high cost of living, some migrants decided not to save (Datta 2007). Those who reported to be saving, were remitting money back to their countries (Datta 2007). Other research named remittances as the main reason for ethnic minority groups’ lower savings rates; it was reported that “roughly 2.7 million people may be sending cash abroad despite many of them being on low wages”³⁸ (Khan 2008). Ethnic minority groups, including migrants, were more likely to take credit from their family members and friends not only because family could be trusted but also because they sought to avoid paying high interest rates (Datta 2007, 2012).³⁹

Muslim migrants reported experiencing problems when using their money in accordance with their religious beliefs (Datta 2007, 2012, Goede 2012b). Because Islam prohibits the keeping of money in institutions and places where interest on finance is paid or received, Muslim communities were not only reluctant to open savings accounts or take out loans, they were also more inclined to store cash in their homes rather than in formal financial institutions (see Goede 2012b).

4. Resocialising, repoliticising, gendering and racialising the OECD financial literacy measure

The OECD’s project on financial literacy education operates through a financial wellbeing paradigm, which categorises and divides people into only two mutually exclusive categories: financially literate and financially illiterate consumers. It could be argued, this model assumes that financial literacy can empower vulnerable consumers, challenge and fight financial inequalities, improve financial risk management, and enhance overall financial wellbeing. The OECD core questionnaire is intended to identify those who fit into each of the two categories. People’s knowledge on money matters, their financial decisions and attitudes can fall only under one of the possible categories - literate or illiterate. The view of the ‘financial world’, that the questionnaire represents, obscures the complexity of decision making processes and takes the context out of analysis and consideration.

First and foremost, by prioritising certain kinds of financial knowledge and financial behaviour over others, the questionnaire reinforces stigmatisation and marginalisation of people whose financial behaviour and knowledge is different from the model represented in the questionnaire; that is, those who think about money differently, who manage finances in different ways, for different purposes, and within different cultural, and socio-economic contexts.

While counting and valuing financial knowledge on interest rates, diversification, inflation and risk-return investment, the questionnaire ignores household budgeting techniques, or the different ways in which limited sums of household money are allocated and distributed within the family (Vogler 1998); how money-spending on products or services sold in the market is substituted by domestic unpaid work that results in household money-saving (Gibson-Graham 1996); and how risks, other than those relating to financial markets, are managed and minimised (for example, sickness, irregular or low income). However, studies on intra-household money distribution show that both what people know about finance, and how they make

³⁷ The term “banked” has been used by Datta to refer to individuals who had open a bank account in one of the formal financial institutions, such as commercial banks or building societies, see Datta (2011).

³⁸ It is estimated that ethnic minority groups might be annually sending from £2.3 billion to £2.5 billion from the UK.

³⁹ Ethnic minority groups were more likely to incur high interest rates charges not only because of their lower salaries and negative credit history but also because they were more likely to live in the geographic areas that were associated with greater risk (see Khan 2008).

financial decisions, are shaped and informed by many different factors: gender roles; socio-economic class; and day-to-day problems and circumstances. Because the use of household money is still highly gendered in the UK, it is more likely that women, when making their financial decisions, will use techniques, skills and knowledge suitable for short-term saving or money spending on household necessities. The knowledge and skills of men are more likely to be shaped and determined by concerns over long-term saving and money-spending on bills, rent, and insurance.

The OECD questionnaire also fails to take into account the UK migrant community's financial knowledge and practices as formed and influenced by their different lives and economic needs. Instead of saving for the long-term or making financial investments, migrants are more likely to follow the exchange rate or remittance fee changes to assess their ability to remit money back to their countries (Datta 2011). Also, aware of high interest rates and the 'inflexibility' of financial institutions, they are more likely to take on loans from their friends or family members who 'understand' their financial situation and do not ask for interest. Attributing importance to the question of interest rate calculations, the questionnaire excludes other possible interpretations of finance used by the Muslim community, which considers the practices of paying or asking for interest as contrary to the principles of *Shari'ah* (see Sharaway 2000, El-Gamal 2001, Siegfried 2001).

Further, by focusing on the end results of decision-making processes, the OECD questionnaire fails to account for many of the reasons underpinning financial choice. The OECD questionnaire defines 'negative' and, therefore, 'illiterate' financial behaviour as: failure to make ends meet, pay bills on time, plan for the future, and actively save (see OECD 2011b). People are also more likely to be categorised as illiterate if they buy products or things they cannot afford or do not own any financial products from the list provided in the questionnaire.⁴⁰ Yet interestingly, the maps of illiterate financial behaviour tend to collide and coincide with the maps of poverty, social and financial exclusion;⁴¹ low income earners, women, and Black and Minority Ethnic groups have less savings, borrow money to pay off debts, fail to pay their bills on time and are unbanked (Datta 2012, Goodwin *et al.* 2000, Khan 2008, Westaway and McKay 2007). All these factors that shape poverty and people's ability to accumulate financial assets, however, are more diverse and intricate than 'illiterate behaviour', ranging from mainstream explanations such as difficult access to financial services, high prices or inadequate marketing (Kempson and Whyley 1999) to less visible ones.

For instance, low and irregular income has been identified as one of the main contributors to unequal possession and distribution of financial wealth across the lines of gender, ethnicity and class (Price 2006, Datta 2007, Westaway and McKay 2007, Khan 2008). Women's unpaid work commitments (Strauss 2009), gendered money saving and spending patterns (Vogler and Pahl 1994, Goode *et al.* 1998), single parenting responsibilities (Westaway and McKay 2007) and vulnerability to financial violence (Sharp 2008) contribute to their meagre accumulation of financial wealth and a higher likelihood of failing to 'make ends meet'. Low income earners and ethnic minority groups may intentionally decide not to save because of "low interest rates" (Datta 2007), religious principles (Datta 2012) or other uses of money more relevant to their particular situation, such as reduction of household expenses (Khan 2008).

All measuring tools and indicators are statistical representations and abstractions of the real world; therefore, it could be argued, it is hardly surprising that the OECD's

⁴⁰ The questionnaire lists: pension fund, investment account, mortgage, bank loan, credit card, current account, savings account, microfinance loan, insurance, stocks, shares, bonds, mobile phone payment account and prepaid payment card among the possible options.

⁴¹ Some other scholars have called it an exploitative financial inclusion, see, for example, Langley (2008).

financial literacy measure has ignored certain contexts and circumstances. The striking finding of this articles is not, however, the indicator's abstract, narrow, and simplified representation of financial world. Rather it is the claim that the OECD financial literacy measure can detect and identify financial inequalities and problems in places and communities without even looking at differences in people's lives, money management practices and the socio-economic, cultural environment within which they live and make decisions. The use of the categories of financial literacy and illiteracy to think about financial inequalities ignores the complexities in the socio-economic, political and cultural practices of inequality production. Erroneously and irresponsibly attributing financial inequalities to women's, low-earners, and ethnic minority's illiterate decision-making, the measure, in fact, reproduces their marginalization and exclusion⁴² from financial markets.

5. Some reflections and concluding remarks

The project on consumer financial literacy education, which was initiated by the OECD before the financial crash and intensified after, continues to operate across countries. It is gaining acceptance amongst national and global policy-makers as a viable and necessary tool to strengthen financial systems and protect consumers, especially those defined as in special need or vulnerable.⁴³ This article has sought to problematise this project.

By looking at some of the scholarly work that has examined how finance is conceptualised, used, controlled, managed and distributed in the UK within various social, economic and cultural environments, this article has contributed to critical, academic literature on financial literacy education. It has exposed the limitations of the OECD financial literacy indicator to identify and detect financially unequal and troubled sites. The decontextualized analysis of the financial world embraced by the measure has been shown to have obscured complexities in the processes of financial decision-making and management. As such, the article has demonstrated the dangers of relying on the OECD measure in constructing 'edu-regulatory' interventions directed towards fighting financial inequalities. The use of financial literacy/illiteracy binary to think about and design consumer protection policies redirects regulators' attention from important practices that participate in creating, shaping and sustaining gender inequalities in financial markets. Also, by misattributing financial inequality to people's irrational and illiterate behaviour, the measure contributes to the legitimization of the distribution of wealth which is inherently, highly unequal.

The article has also contributed to thinking about the relationship between gender, law and finance in the age of austerity. It has teased out the potential gender consequences in the adoption of financial education that is based on a financial literacy/illiteracy binary. This boundary has been shown to have significantly limited analytical space for fruitful engagement with the question of how gendered, racialised and class-based inequalities are produced and sustained in financial services markets before and after the crisis. Yet also, and more importantly, it has highlighted that the binary thinking created by the OECD financial literacy measure is not merely reflective but rather generative of gender inequalities in the age of austerity.

⁴² The term "exclusion" has been used here not to refer to popular policy-based discourses on "financial exclusion" but rather to show and emphasize women's, low-earners', and ethnic minority's *invisibility* in financial markets. It is to argue that invisibility and exclusion are produced by failing to account for their participation in financial markets which is different to the one 'expected' by the measure.

⁴³ For more information on the projects, see Taylor and Wagland (2011), APEC (2012), Grifoni and Messy (2012), Messy and Monticone (2012), OECD (2013b).

References

- Aalbers, M.B., 2008. The Financialization of Home and the Mortgage Market Crisis. *Competition & Change*, 12 (2), 148-166.
- Allen, K., 2010. Bank of England voices fears over UK deficit and European debt crisis. *The Guardian* [online], 12 May. Available from: <http://www.guardian.co.uk/business/2010/may/12/bank-of-england-fears-over-uk-deficit-european-debt-crisis> [Accessed 19 September 2013].
- Amin, S., 2008. Financial Collapse, Systemic Crisis? Illusory Answers and Necessary Answers. *Investig'Action* [online], 22 November. Available from: <http://www.michelcollon.info/Financial-collapse-systemic-crisis.html> [Accessed 6 September 2013].
- Andreas, P., and Greenhill, K.M., 2010. *Sex, Drugs, and Body Counts. The politics of Numbers in Global Crime and Conflict*. New York: Cornell University Press.
- APEC – Asia-Pacific Economic Cooperation, 2012. *2012 APEC Finance Ministerial Meeting – Joint Ministerial Statement* [online]. Singapore: APEC. Available from: http://www.apec.org/Meeting-Papers/Ministerial-Statements/Finance/2012_finance.aspx [Accessed 10 October 2013].
- Arnold, M., 2011. How modern portfolio theory has failed investors. *Money Management* [online]. Available from: <http://www.moneymanagement.com.au/opinion/financial-services/archive/debunking-mpt> [Accessed 17 September 2013].
- Atkinson, A., et al., 2006. *Level of Financial Capability in the UK: Results of a Baseline Survey* [online]. London: Financial Services Authority. Available from: <http://www.fca.org.uk/your-fca/documents/research/fsa-levels-of-financial-capability-in-the-uk-results-of-a-baseline-survey> [Accessed 10 September 2013].
- Atkinson, A., and Messy, F.A., 2012. Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study [online]. Paris: OECD Publishing. Available from: http://www.oecd-ilibrary.org/finance-and-investment/measuring-financial-literacy_5k9csfs90fr4-en [Accessed 1 October 2013].
- Bank on International Settlements, 2011. *81st Annual Report* [online]. Basel: Bank on International Settlements. Available from: <http://www.bis.org/publ/arpdf/ar2011e.pdf> [Accessed 20 September 2015].
- Beneria, L., 1995. Toward a greater integration of gender in economics. *World Development*, 23 (11), 1839–1850.
- Bennett, F., De Henau, J., and Sung, S., 2010. Within-household inequalities across classes? Management and control of money. In: J. Scott, R. Crompton, and C. Lyonette, eds. *Gender Inequalities in the 21st Century: New barriers and Continuing Constraints*. Cheltenham: Edward Elgar, 215–240.
- Bennett, F., 2013. Researching Within-Household Distribution: Overview, developments, Debates, and Methodological Challenges. *Journal of Marriage and Family*, 75 (3), 582-597.
- Bernheim, B.D., and Garrett, D.M., 2003. The effects of financial education in the workplace: evidence from a survey of households. *Journal of Public Economics*, 87 (7-8), 1487–1519.
- Beunza, D., Hardie, I., and MacKenzie, D., 2006. A Price is a Social Thing: Towards a Material Sociology of Arbitrage. *Organization Studies*, 27 (5), 721-745.

- Brennan, C., and Ritters, K., 2004. Consumer education in the UK: new developments in policy, strategy and implementation. *International Journal of Consumer Studies*, 28 (2) 97–107.
- Bresciani-Turroni, C., 1968. *The Economics of Inflation*. Northampton: Augustus M. Kelley.
- Bucher-Koenen, T., and Lusardi, A., 2011. Financial Literacy and Retirement Planning in Germany. *Journal of Pension Economics and Finance*, 10 (4), 565-584.
- Burgoyne, C.B., *et al.*, 2006. All I worldly goods I share with you? Managing money at the transition to heterosexual marriage. *The Sociological Review*, 54 (4), 619-637.
- Burgoyne, C.B., 2007. *Money Management in Lesbian and Gay Couples* [online]. Swindon: Economic and Social Research Council. Available from: <http://www.esrc.ac.uk/my-esrc/grants/RES-000-22-0588/outputs/read/4722b461-fd08-455d-ae9c-8ef5401a4e46> [Accessed 15 September 2015].
- Cetina, K.K., and Preda, A., 2006. *The Sociology of Financial Markets*. New York: Oxford University Press.
- Chakrabarty, K.C., 2013. Welcome Address. *India-OECD-World Bank Regional Conference on Financial Education* [online], 4 March 2013, New Delhi. Available from: http://www.rbi.org.in/scripts/BS_SpeechesView.aspx?id=785 [Accessed 20 October 2013].
- Clark, G.L., 2003. *European Pensions and Global Finance*. New York: Oxford University Press.
- Clark, G.L., 2013. *Financial Literacy in Context* [online]. Roepke Lecture in Economic Geography. Available from: <http://www.geog.ox.ac.uk/events/120927/glclark.pdf> [Accessed 25 September 2013].
- Collard, S., Kempson, E., and Whyley, C., 2001. *Tackling Financial Exclusion: An Area-Based Approach* [online]. Bristol: The Policy Press. Available from: http://www.bridge.bris.ac.uk/pfrc/Reports/Tackling_financial_exclusion.pdf [Accessed 14 September 2013].
- Collins, D., *et al.*, 2010. *Portfolios of the Poor: How the World's Poor Live on \$2 a Day*. Princeton University Press.
- Commission for Financial Literacy and Retirement Income, 2012. *Charting a course: A review of financial education in New Zealand* [online]. Wellington: Commission for Financial Literacy and Retirement Income. Available from: <http://www.cffc.org.nz/assets/Documents/Fin-Ed-Charting-a-Course-2012.pdf> [Accessed 20 October 2013].
- Council Directive 7746/13 of 26 March 2013 on the access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms.
- Council of the European Union, 2013. *Bank capital rules: Council confirms agreement with EP* [online]. Press release, Brussels. Available from: http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ecofin/136581.pdf [Accessed 19 September 2015].
- Crompton, R., Hantrais, L., and Walters, P., 1990. Gender Relation and Employment. *The British Journal of Sociology*, 41 (3), 329-349.
- Datta, K., 2007. *Money matters: Exploring financial exclusion among low paid migrant workers in London* [online]. Queen Mary, University of London. Available from: <http://www.geog.qmul.ac.uk/docs/staff/4144.pdf> [Accessed 15 October 2013].

- Datta, K., 2009. Risky Migrants?: Low-Paid Migrant Workers Coping With Financial Exclusion in London. *European Urban and Regional Studies*, 16 (4), 331-344.
- Datta, K., 2011. New Migrant Communities and Financial Services. Keeping themselves to themselves? [online]. Dorking: Friends Provident Foundation. Available from: <http://www.friendsprovidentfoundation.org/wp-content/uploads/2013/03/QMUL - New migrant communities - Full Report.pdf> [Accessed 1 October 2013].
- Datta, K., 2012. *Migrants and their money: surviving financial exclusion in London*. Bristol: The Policy Press.
- Davis, K., et al., 2012. *Governance by Indicators: Global Power Through Classifications and Rankings*. Oxford University Press.
- Goede, M. de, 2005b. *Virtue, Fortune and Faith: a Genealogy of Finance*. Minneapolis: University of Minnesota Press.
- Goede, M. de, 2005a. Resocialising and Repoliticising Financial Markets: Contours of Social Studies of Finance. *Economic Sociology Newsletter*, 6(3), 19-28.
- Goede, M. de, 2012a. "Smart Targeting" and the Meaning of Money. *Cultural Anthropology*, Special Issue.
- Goede, M. de, 2012b. *Speculative Security. The Politics of Pursuing Terrorist Monies*. Minneapolis: University of Minnesota Press.
- Dvorak, T., and Hanley, H., 2010. Financial literacy and the design of retirement plans. *The Journal of Socio-Economics*, 39 (6), 645-652.
- Dymski, G.A., 2009. Racial Exclusion and the Political Economy of the Subprime Crisis. *Historical Materialism*, 17 (2), 149-179.
- Elton, E.J., et al., 2003. *Modern Portfolio Theory and Investment Analysis*. John Wiley & Sons.
- El-Gamal, M.A., 2001. *An Economic Explication of the Prohibition of Riba in Classical Islamic Jurisprudence* [online]. Houston: Rice University. Available from: <http://www.ruf.rice.edu/~elgamal/files/riba.pdf> [Accessed 3 October 2013].
- Epstein, G.A., 2005. Introduction: Financialization and the world economy. In: G.A. Epstein, ed. *Financialization and the World Economy*. Cheltenham: Edward Elgar, 3-16.
- Erturk, I., et al., 2008. *Financialization At Work: Key Texts and Commentary*. Routledge Chapman & Hall.
- Espeland, W.N., and Sauder, M., 2007. Rankings and Reactivity: How Public Measures Recreate Social Worlds. *American Journal of Sociology*, 113 (1), 1-40.
- Espeland, W.N., and Stevens, M.L., 2008. A Sociology of Quantification. *European Journal of Sociology*, 49 (3), 401-436.
- European Commission, 2013. *Communication from the Commission to the Council and the European Parliament: Shadow Banking – Addressing New Sources of Risk in the Financial Sector* [online]. Brussels: European Commission. Available from: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52013DC0614&from=EN> [Accessed 20 September 2015].
- Sonigo, P. et al., 2012. *Policies to encourage sustainable development: full report* [online]. Brussels: European Commission. Available from: http://ec.europa.eu/environment/eussd/pdf/report_22082012.pdf [Accessed 3 October 2013].

- Financial Consumer Agency of Canada, 2006. *Why Financial Capability Matters* [online]. Ottawa: Government of Canada. Available from: http://www.fcac-acfc.gc.ca/Eng/resources/researchSurveys/Documents/SEDI-FCAC_FinCapability-eng.pdf [Accessed 3 October 2013].
- Financial Literacy Foundation, 2007. *Financial Literacy: Australians Understanding Money* [online]. Canberra: Commonwealth of Australia. Available from: <http://www.financialliteracy.gov.au/media/209293/australians-understanding-money.pdf> [Accessed 9 October 2013].
- Foster, J.B., 2010. The Financialization of Accumulation. *An independent socialist magazine – a monthly review* [online], 62 (5). Available from: <http://monthlyreview.org/2010/10/01/the-financialization-of-accumulation> [Accessed 9 September 2013].
- Fox, J., Bartholomae, S., and Lee, J., 2005. Building the case for financial education. *The Journal of Consumer Affairs*, 39 (1), 195-214.
- French, S., and Leyshon, A., 2010. 'These f@# king guys': the terrible waste of a good crisis. *Environment and Planning A*, 42 (11), 2549–2559. Available from: <http://www.envplan.com/epa/editorials/a43421.pdf> [Accessed 15 September 2015].
- French, S., Leyshon, A., and Wainwright, T., 2011. Financialising Space, Spacing Financialisation. *Progress in Human Geography*, 36 (6), 798-819.
- Friedman, M., 1953. *Essays in Positive Economics*. University of Chicago Press.
- Friedman, M., 1963. *Inflation: Causes and Consequences*. New York: Asian Publishing House.
- FSA, 2006. *Financial Capability in the UK: Establishing a Baseline* [online]. London: FSA. Available from: http://www.fsa.gov.uk/pubs/other/fincap_baseline.pdf [Accessed 4 October 2013].
- FSA, 2009. *The Turner review: A regulatory response to the global banking crisis* [online]. London: FSA. Available from: http://www.fsa.gov.uk/pubs/other/turner_review.pdf [Accessed 10 June 2013].
- García, N., et al. 2013. *Financial Education in Latin America and the Caribbean: Rationale, Overview and Way Forward* [online]. Paris: OECD Publishing. Available from: <http://dx.doi.org/10.1787/5k41zq7hp6d0-en> [Accessed 20 September 2013].
- Ghosh, J., 2010. Financial Crisis and the Impact on Women. *Development*, 53 (3), 381–385.
- Gibson-Graham, J.K., 1996. *The end of capitalism (as we knew it): a feminist critique of political economy*. Oxford: Blackwell.
- Goode, J., Callender, C., and Lister, R., 1998. *Purse or Wallet? Gender Inequalities and Income Distribution within Families on Benefits*. London: Policy Studies Institute.
- Goodwin, D., Adelman, L., and Middleton, S., 2000. *Debt, Money Management and Access to Financial Services: Evidence from the 1999 PSE Survey of Britain* [online]. Bristol: Centre for Research in Social Policy, University of Bristol. Available from: <http://www.bristol.ac.uk/poverty/pse/99PSE-WP8.doc> [Accessed 19 September 2015].
- Gowan, P., 2009. Crisis in the Heartland: Consequences of the New Wall Street System. *New Left Review*, 55 (Jan/Feb), 49-72.
- Griffin, P., 2013. Gendering Global Finance: Crisis, Masculinity, and Responsibility. *Men and Masculinities*, 16 (9), 9-34.

- Grifoni, A., and Messy, F., 2012. *Current Status of National Strategies for Financial Education: A Comparative Analysis and Relevant Practices* [online]. Paris: OECD Publishing. Available from: <http://dx.doi.org/10.1787/5k9bcwct7xmn-en> [Accessed 12 September 2013].
- Gwinner, W.B., and Sanders, A., 2008. *The Subprime Crisis: Implications for Emerging Markets* [online]. Washington: The World Bank. Available from: <https://openknowledge.worldbank.org/bitstream/handle/10986/6976/WPS4726.pdf?sequence=1> [Accessed 19 June 2013].
- Habschick, M., Seidl, B., and Evers, J., 2007. *Survey of Financial Literacy Schemes in the EU27* [online]. Hamburg: Evers and Jung. Available from: http://ec.europa.eu/internal_market/fin services-retail/docs/capability/report_survey_en.pdf [Accessed 15 October 2013].
- Harvey, D., 2009. The Crisis and the Consolidation of Class Power: Is This Really the End of Neoliberalism? *CounterPunch* [online], 13 March. Available from: <http://www.counterpunch.org/2009/03/13/is-this-really-the-end-of-neoliberalism/> [Accessed 29 September 2013].
- Harvey, D., 2011. *The Enigma of Capital: and the Crises of Capitalism*. London: Profile Books.
- Harvey, D., 2012. Foreword: The Urban Roots of the Financial Crisis. In: M.B. Aalbers, ed. *The Political Economy of Mortgage Markets*. Blackwell Publishing, xiii-xx.
- Hastings, J.S., and Tejada-Ashton, L., 2008. *Financial Literacy, Information, and Demand Elasticity: Survey and Experimental Evidence from Mexico* [online]. Cambridge: National Bureau of Economic Research. Available from: http://www.nber.org/papers/w14538.pdf?new_window=1 [Accessed 22 August 2013].
- Haworth, R., 2012. 2008 revealed flaws in modern portfolio theory. *Pensions&Investments* [online]. Available from: <http://www.pionline.com/article/20120920/REG/120929999> [Accessed 10 October 2013].
- Hedges, A., 1998. *Pensions and Retirement Planning*. London: Corporate Document Services.
- Himmelweit, S., 1995. The discovery of "unpaid work": the social consequences of the expansion of "work". *Feminist Economics*, 1 (2), 1-19.
- Huston, S.J., 2010. Measuring Financial Literacy. *The Journal of Consumer Affairs*, 44 (2), 296-316.
- Hutton, S., 1994. Men's and Women's Incomes: Evidence from Survey Data. *Journal of Social Policy*, 23 (1), 21-40.
- Independent Commission on Banking, 2013. *Interim Report: Consultation on Reform Operations* [online]. Available from: <http://www.eifr.eu/files/file0910949.pdf> [Accessed 16 September 2013].
- Ireland, P., 2009. Financialization and Corporate Governance. *Northern Ireland Legal Quarterly*, 60 (1), 15-34.
- Ireland, P., 2011. Law and the Neoliberal Vision: Financial Property, Pension Privatization and the Ownership Society. *Northern Ireland Legal Quarterly*, 62 (1), 1-31.
- Jefferson, T., 2009. Women and Retirement Pensions: A Research Review. *Feminist Economics*, 15 (4), 115-145.
- Jenkins, S.P., 1991. Poverty Measurement and the Within-Household Distribution. *Journal of Social Policy*, 20 (4), 457-483.

- Jenkins, S.P., 1994. *The within-household distribution and why its matters : an economist's perspective*. University College of Swansea.
- Kan, M.Y., and Laurie, H., 2010. *Savings, investments, debts and psychological well-being in married and cohabiting couples* [online]. Essex: Institute for Social and Economic Research. Available from: https://www.iser.essex.ac.uk/files/iser_working_papers/2010-42.pdf [Accessed 15 October 2013].
- Kempson, E., and Whyley, C., 1999. *Kept our or opted out? Understanding and combating financial exclusion* [online]. Bristol: The Policy Press. Available from: http://www.pfrc.bris.ac.uk/Reports/Kept_out_opted_out.pdf [Accessed 6 October 2013].
- Khan, O., 2008. *Financial inclusion and ethnicity* [online]. London: Runnymede. Available from: <http://www.runnymedetrust.org/uploads/publications/pdfs/FinancialInclusion-2008.pdf> [Accessed 3 October 2013].
- King, S., 2010. The GFC and Regulation. *Core Economics: Commentary on Economics, Strategy and More* [online], 20 June. Available from: <http://economics.com.au/?p=5782> [Accessed 10 August 2013].
- Krippner, G., 2005. The Financialisation of American Economy. *Socio-Economic Review*, 3 (2), 173-208.
- Kuiper, E., et al., 1997. *Out of the Margin: Feminist Perspectives on Economics*. London: Rutledge.
- Langley, P., 2008. *The Everyday Life of Global Finance: Saving and Borrowing in Anglo-America*. New York: Oxford University Press.
- Lee, R., et al., 2009. The remit of financial geography-before and after the crisis. *Journal of Economic Geography*, 9 (5), 723-747.
- Leyshon, A., 1995. Geographies of money and finance I. *Progress in Human Geography*, 19 (4), 531-543.
- Leyshon, A., and Thrift, N., 1995. Geographies of financial exclusion: financial abandonment in Britain and the United States. *Transactions, Institute of British Geographers, New Series*, 20 (3), 312-341.
- Livingstone, S., 2004. Media Literacy and the Challenge of New Information and Communication Technologies. *The Communications Review*, 7 (1), 3-14.
- Livingston, S., and Wang, Y., 2011. *Media Literacy and the Communications Act: What has been achieved and what should be done?* [online]. London School of Economics and Political Science. Available from: <http://eprints.lse.ac.uk/38613/1/LSEMPBrief2.pdf> [Accessed 1 October 2013].
- Lusardi, A., 2005. *Financial Education and the Saving Behavior of African-American and Hispanic Households* [online]. Hanover: Department of Economics, Dartmouth College. Available from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.318.9166&rep=rep1&type=pdf> [Accessed 17 September 2015].
- Lusardi, A., 2009. *U.S. Household Savings Behavior: The Role of Financial Literacy, Information and Financial Education Programs* [online]. Cambridge, MA: National Bureau of Economic Research. Available from: <http://www.nber.org/papers/w13824.pdf> [Accessed on 20 August 2013].
- Lusardi, A., and Mitchell, O., 2011. The Outlook for Financial Literacy. In: A. Lusardi and O. Mitchell, eds. *Financial Literacy. Implications for Retirement Security and the Financial Marketplace*. New York: Oxford University Press, 1-13.

- Lusardi, A., and Mitchell, O.S., 2008. *Planning and Financial Literacy: How do Women Fare?* [online]. NBER Working Paper No. 13750. Available from: <http://www.nber.org/papers/w13750.pdf> [Accessed 26 September 2013].
- Lusardi, A., and Tufano, P., 2009. *Debt, Literacy, Financial Experiences, and Overindebtedness* [online]. Cambridge, MA: National Bureau of Economic Research. Available from: <http://www.nber.org/papers/w14808.pdf> [Accessed 2 September 2013].
- Lusardi, A., Mitchell, O.S., and Curto, V., 2010. *Financial Literacy among the Young: Evidence and Implications for Consumer Policy* [online]. Cambridge, MA: National Bureau of Economic Research. Available from: <http://www.nber.org/papers/w15352.pdf> [Accessed 2 September 2013].
- Mackenzie, D., 2005. Opening the black boxes of global finance. *Review of International Political Economy*, 12 (4), 555-576.
- MacKenzie, D., 2010. *Knowledge Production in Financial Markets: Credit Default Swaps, the ABX and the Subprime Crisis* [online]. Available from: http://www.sps.ed.ac.uk/_data/assets/pdf_file/0010/55936/ABX13.pdf [Accessed 10 September 2013].
- MacKenzie, D., 2011. The Credit Crisis as a Problem in the Sociology of Knowledge. *American Journal of Sociology*, 116 (6), 1778-1841.
- Mann, R.J., 2012. After the Great Recession: Regulating Financial Services for Low- and Middle-Income Communities. *Washington and Lee Law Review*, 69 (2), 729-750. Available from: <http://scholarlycommons.law.wlu.edu/wlulr/vol69/iss2/8> [Accessed 17 September 2015].
- Martin, R., 2002. *Financialization of Daily Lives*. Philadelphia: Temple University Press.
- Mason, M., Sinclair, D., and Berry, C., 2012. *Nudge or Compel? Can behavioural economics tackle the digital exclusion of older people?* [online]. London: The International Longevity Centre. Available from: http://www.ilcuk.org.uk/images/uploads/publication-pdfs/Nudge_or_compel.pdf [Accessed 1 October 2013].
- Merry, S.E., 2011. Measuring the World. Indicators, Human Rights, and Global Governance. *Current Anthropology*, 52 (S3), S83-S95.
- Messy, F., and Monticone, C., 2012. *The Status of Financial Education in Africa* [online]. Paris: OECD Publishing. Available from: <http://dx.doi.org/10.1787/5k94cqqx90wl-en> [Accessed 17 September 2015].
- Mitchell, O., and Utkus, S., 2003. *Lessons from Behavioural Finance for Retirement Plan Design* [online]. Philadelphia: Wharton Financial Institutions Center. Available from: <http://fic.wharton.upenn.edu/fic/papers/03/0334.pdf> [Accessed 12 June 2013].
- Miller, J.J., 2010. *Exploring "ethnic money knowledge" as an aspect of financial literacy among middle class African Americans* [online]. Boston, MA: Northeastern University. Available from: <http://hdl.handle.net/2047/d20000264> [Accessed 17 September 2015].
- Montgomerie, J., and Young, B., 2010. *How is Where the Hardship is. Gender and Wealth (Dis)Accumulation in the Subprime Boom* [online]. Walton Hall: Centre for Research on Socio-Cultural Change. Available from: <http://www.cresc.ac.uk/medialibrary/workingpapers/wp79.pdf> [Accessed 5 September 2013].
- OECD, 1999. Conclusions. *In: Conference on Institutional Investors in Latin America* [online], 1-2 September 1999, Santiago de Chile. Paris: OECD.

- Available from: <http://www.oecd.org/pensions/insurance/2351014.pdf>
[Accessed 2 September 2013].
- OECD, 2000. *Fifteen Principles for the Regulation of Private Occupational Pension Schemes* [online]. Paris: OECD. Available from: <http://www.oecd.org/finance/private-pensions/2403207.pdf> [Accessed 16 September 2013].
- OECD, 2005. Improving Financial Literacy: Analysis of Issues and Policies. *Financial Market Trends*, 11 (2), 109-123.
- OECD, 2008. *OECD-Bank Indonesia International Conference on Financial Education: Bali, Indonesia, 21-22 October 2008* [online]. Paris: OECD. Available from: <http://www.oecd.org/finance/financial-education/oecd-bankindonesiainternationalconferenceonfinancialeducation.htm> [Accessed 16 October 2013].
- OECD, 2009a. *Financial Education and the Crisis* [online]. Paris: OECD. Available from: <http://www.oecd.org/finance/financial-education/50264221.pdf> [Accessed 2 June 2013].
- OECD, 2009b. *Financial Literacy and Consumer Protection: Overlooked Aspects of the Crisis* [online]. Paris: OECD. Available from: <http://www.oecd.org/finance/financial-markets/43138294.pdf> [Accessed on 6 June 2013].
- OECD, 2009c. *OECD Project on Financial Education and its International Network on Financial Education* [online]. Paris: OECD. Available from: http://www.addkeen.net/biblioteca/OECD_INFE.pdf [Accessed 27 August 2013].
- OECD, 2009d. *OECD-Brazilian International Conference on Financial Education: 15-16 December 2009, Rio de Janeiro, Brazil* [online]. Paris: OECD. Available from: <http://www.oecd.org/daf/fin/financial-education/oecd-brazilianinternationalconferenceonfinancialeducation.htm> [Accessed 11 September 2013].
- OECD, 2011a. *G20 High-Level Principles on Financial Consumer Protection* [online]. Paris: OECD. Available from: <http://www.oecd.org/daf/fin/financial-markets/48892010.pdf> [Accessed 10 September 2013].
- OECD, 2011b. *Measuring Financial Literacy: Questionnaire and Guidance Notes for Conducting an Internationally Comparable Survey of Financial Literacy* [online]. Paris: OECD. Available from: <http://www.oecd.org/daf/fin/financial-education/49319977.pdf> [Accessed 10 April 2013].
- OECD, 2012a. *High-Level Principles on National Strategies For Financial Education* [online]. Paris: OECD. Available from: http://www.oecd.org/finance/financial-education/OECD_INFE_High_Level_Principles_National_Strategies_Financial_Education_APEC.pdf [Accessed 17 September 2015].
- OECD, 2012b. *INFE High-Level Principles for the Evaluation of Financial Education Programmes* [online]. Paris: OECD. Available from: <http://www.oecd.org/finance/financial-education/49373959.pdf> [Accessed 19 August 2013].
- OECD, 2012c. *Progress of Global Policies and Practices and Latin American Experience: Colombia-OECD-World Bank International Conference on Financial Education, 31 October - 1 November 2012, Cartagena, Colombia* [online]. Paris: OECD. Available from: <http://www.youtheconomicopportunities.org/sites/default/files/uploads/announ/Invitation%20Participants%20-%20Colombia%20Conference%20-%20Oct%202012.pdf> [Accessed 3 September 2013].
- OECD, 2012d. *Challenges Ahead: Turning Policy Guidance into Efficient Practices: OECD-Spain Conference on Financial Education, 10-11 May 2012, Madrid, Spain* [online]. Paris: OECD. Available from: <http://www.oecd.org/daf/fin/>

- [financial-education/oecd-spainconferenceonfinancialeducationturningpolicyguidanceintoefficientpractices.htm](#) [Accessed 11 September 2013].
- OECD, 2013a. *Promoting financial wellbeing through financial education and awareness: Czech Republic-OECD Conference on Financial Education, 16-17 May 2013, Prague, Czech Republic* [online]. Paris: OECD. Available from: <http://www.oecd.org/daf/fin/financial-education/czechrepublic-oecdconferenceonfinancialeducation.htm> [Accessed 16 October 2013].
- OECD, 2013b. OECD/INFE Peer review and regional reports: Financial Education in Africa and Latin America [online]. Available from: http://www.oecd.org/daf/fin/financial-education/TrustFund2013_OECD_INFE_Peer_Review_and_Regional_Reports_LatinAmerica_Africa.pdf [Accessed 14 September 2013].
- OFT, 1997. *Report of the Director General's Inquiry into Pensions* [online]. London: Office of Fair Trading. Available from: http://webarchive.nationalarchives.gov.uk/20140402142426/http://www.oft.gov.uk/shared_oftr/reports/financial_products/of191a.pdf [Accessed 2 March 2013].
- Pahl, J., 1989. *Money and Marriage*. Basingstoke: Macmillan.
- Pardo-Guerra, J.P., 2010. Creating flows of interpersonal bits: the automation of the London Stock Exchange, c. 1955-1990. *Economy & Society* 39 (1), 84-109.
- Parliamentary Commission on Banking Standards, 2013. *Fifth report: Changing banking for good* [online]. London: The Stationery Office Limited. Available from: <http://www.publications.parliament.uk/pa/jt201314/jtselect/jtpcb/27/2702.htm> [Accessed 20 September 2015].
- Pearson, G., 2008. Reconceiving Regulation: Financial Literacy. *Macquarie Law Journal*, 8, 45-58. Available from: <http://www.law.mq.edu.au/public/download.jsp?id=65771> [Accessed 18 September 2015].
- Perry-Kessarlis, A., 2011. Prepare your Indicators: Economics Imperialism on the Shores of Law and Development. *International Journal of Law in Context*, 7 (4), 401-421.
- Pietras, J., 2012. *Austerity Measures in the EU - A Country by Country Table* [online]. Washington: The European Institute. Available from: <http://www.europeaninstitute.org/index.php/112-european-affairs/special-g-20-issue-on-financial-reform/1180-austerity-measures-in-the-eu> [Accessed 3 September 2013].
- Pike, A., and Pollard, J., 2010. Economic Geographies of Financialisation. *Economic Geography*, 86 (1), 29-51.
- Pinto, L., and Coulson, E., 2011. Social Justice and the Gender Politics of Financial Literacy Education. *Journal of the Canadian Association for Curriculum Studies*, 9 (2), 54-85.
- Pollard, J., 2012. Gendering capital: Financial crisis, financialization and (an agenda for) economic geography. *Progress in Human Geography*, 37 (3), 403-423.
- Price, D., 2006. Gender and Generational Continuity Breadwinners, Caregivers and Pension Provision in the UK. *International Journal of Ageing and Later Life*, 1 (2), 31-66.
- Price, D., 2007. Closing the Gender Gap in Retirement Income: What Difference Will Recent UK Pension Reforms Make? *Journal of Social Policy*, 36 (4), 561-583.

- Rankin, K.N., 2013. A Critical Geography of Poverty. *Third World Quarterly*, 34 (4), 547-568.
- Riles, A., 2005. A New Agenda for the Cultural Study of Law: Taking on the Technicalities. *Buffalo Law Review*, 53 (3), 973-1033.
- Riles, A., 2008. *Collateral Knowledge. Legal Reasoning in the Global Financial Markets*. The University of Chicago Press.
- Riles, A., 2013. *Is New Governance the Ideal Architecture For Global Financial Regulation?* [online]. Tokyo: Institute for Monetary and Economic Studies, Bank of Japan. Available from: <http://www.imes.boj.or.jp/research/papers/english/13-E-01.pdf> [Accessed 15 July 2013].
- Roberts, A., 2012. Financing Social Reproduction: The Gendered Relations of Debt and Mortgage Finance in Twenty-first-century America. *New Political Economy*, 18 (1), 21-42.
- Russia's G20 Presidency, and OECD, 2013. *Advancing National Strategies for Financial Education* [online]. Paris: OECD. Available from: http://www.oecd.org/finance/financial-education/G20_OECD_NSFinancialEducation.pdf [Accessed 29 October 2013].
- Rutledge, S.L. et al., 2010. *Good Practices For Consumer Protection and Financial Literacy in Europe and Central Asia: A Diagnostic Tool* [online]. Washington: The World Bank. Available from: http://siteresources.worldbank.org/INTECAREGTOPPRVSECDEV/Resources/GoodPractices_August2010.pdf [Accessed 5 June 2013].
- Sandlin, J.A., 2005. Culture, Consumption, and Adult Education: Refashioning Consumer Education for Adults as a Political Site Using a Cultural Studies Framework. *Adult Education Quarterly*, 55 (3), 165-181.
- Sharaway, H.M., 2000. Understanding the Islamic Prohibition of Interest: A Guide to Aid Economic Cooperation Between the Islamic and Western Worlds. *Journal of International and Comparative Law*, 29 (1), 153-180. Available from: <http://digitalcommons.law.uga.edu/gjicl/vol29/iss1/5> [Accessed 18 September 2015].
- Sharp, N., 2008. "What's yours is mine" *The different forms of economic abuse and its impact on women and children experiencing domestic violence* [online]. London: Refuge. Available from: <http://refuge.org.uk/files/Whats-yours-is-mine-Full-Report.pdf> [Accessed 16 October 2013].
- Siegfried, N.A., 2001. Concepts of Paper Money in Islamic Legal Thought. *Arab Law Quarterly* 16, (4), 319-332.
- Silverstone, R., 2004. Regulation, Media Literacy and Media Civics. *Media, Culture & Society*, 26 (3), 440-449.
- Stango, V., and Zinman, J., 2007. *Fuzzy Math and Red Ink: When the Opportunity Cost of Consumption is Not What It Seems* [online]. Bonn: IZA. Available from: <http://www.iza.org/en/papers/Zinman12072007.pdf> [Accessed 17 September 2013].
- Strauss, K., 2009. Gender, Risk, and Occupational Pensions. In: L.C. Gordon, et al., ed. *Managing Financial Risks: From Global to Local*. New York: Oxford University Press.
- Sung, S., and Bennett, F., 2007. Dealing with money in low-moderate income couples: insights from individual interviews. *Social Policy Review*, 19, 151-173.
- Taylor, M., 2011. Measuring Financial Capability and its Determinants Using Survey Data. *Social Indicators Research*, 102 (2), 297-314.

- Taylor, S., and Wagland, S., 2011. Financial Literacy: A Review of Government Policy and Initiatives. *Financial Literacy and Education* [online], 16 June. Available from: <http://www.finlitedu.org/database/view/167/> [Accessed 11 October 2013].
- Taylor-Gooby, P., and Stoker, G., 2011. The Coalition Programme: A New Vision for Britain or Politics as Usual. *The Political Quarterly*, 82 (1), 4-15.
- Thaler, R., 1980. Towards a Positive Theory of Consumer Choice. *Journal of Economic Behaviour and Organization*, 1 (1), 39-60.
- Thøgersen, J., 2005. How many Consumer Policy Empower Consumers for Sustainable Lifestyles? *Journal of Consumer Policy* 28 (2), 143-177.
- Tickell, A., 2000. Local geographies of money. In: G.L. Clark, M.S. Gertler, and M.P. Feldman, eds. *A handbook of economic geography*. New York: Oxford University Press.
- Tickell, A., 2003. Cultures of Money. In: K. Anderson *et al.*, eds. *Handbook of Cultural Geography*. London: Sage Publications, 116-130.
- Tversky, A., and Kahneman, D., 1974. Judgment under Uncertainty: Heuristics and Biases. *Science*, 185 (4157), 1124-1131.
- Vertovec, S., 2007. Super-diversity and its implications. *Ethnic and Racial Studies*, 30 (6), 1024-1054.
- Vlachantoni, A., 2012. Financial inequality and gender in older people. *Maturitas*, 72 (2), 104-107.
- Vogler, C., and Pahl, J., 1993. Social and economic change and the organization of money within marriage. *Work Employment and Society*, 7 (1), 71-95.
- Vogler, C., and Pahl, J., 1994. Money, power and inequality within marriage. *The Sociological Review*, 42 (2), 263-288.
- Vogler, C., 1998. Money in the household: some underlying issues of power. *The Sociological Review*, 46 (4), 687-713.
- Vogler, C., 2005. Cohabiting couples: rethinking money in the household at the beginning of the twenty first century. *The Sociological Review*, 53 (1), 1-29.
- Vogler, C., Brockmann, M., and Wiggins, R.D., 2008. Managing money in new heterosexual forms of intimate relationships. *The Journal of Socio-Economics*, 37 (2), 552-576.
- Warren, T., Rowlingson, K., and Whyley, C., 2001. Female Finances: Gender Wage Gaps and Gender Assets Gaps. *Work, Employment & Society*, 15 (3), 465-488.
- Warren, T., 2008. Moving Beyond the Gender Wealth Gap: On Gender, Class, Ethnicity, and Wealth Inequalities in the United Kingdom. *Feminist Economics*, 12 (1-2), 195-219.
- Warren, T., Pascall, G., and Fox, E., 2010. Gender Equality in Time: Low-Paid Mothers' Paid and Unpaid Work in the UK. *Feminist Economics*, 16 (3), 193-219.
- Watkins, S., 2010. Shifting Sands. *New Left Review*, 61 (Jan/Feb), 5-27. Available from: http://newleftreview.org/article/download_pdf?id=2817 [Accessed 18 September 2015].
- Westaway, J., and McKay, S., 2007. *Women's financial assets and debts* [online]. London: Fawcett. Available from: http://wbg.org.uk/GBA_Present_2_923671226.pdf [Accessed 22 October 2013].

- Williams, T., 2007. Empowerment of Whom and for What? Financial Literacy Education and the New Regulation of Consumer Financial Services. *Law and Policy*, 29 (2), 226-256.
- Willis, L.E., 2008. Against Financial Literacy Education. *Iowa Law Review*, 94 (1), 197-285.
- Willis, L.E., 2009. Evidence and Ideology in Assessing the Effectiveness of Financial Literacy Education. *San Diego Law Review*, 46 (2), 415-458. Available from: <http://ssrn.com/abstract=1098270> [Accessed 18 September 2015].
- Young, B., 2009. *When "Credit Becomes Debt" in the Subprime Crisis – Is There a Gender Dimension?* [online]. Available from: http://www.havenscenter.org/files/Young_NPE_Subprime_Gender-1.doc [Accessed 18 September 2015].
- Yeung, R.M.W., and Morris, J., 2001. Food Safety Risk: Consumer perception and purchase behaviour. *British Food Journal*, 103 (3), 170-186.
- Zelizer, V.A., 1994. *The Social Meaning of Money: pin money, paychecks, poor relief, and other currencies*. New York: Basic Books.

Appendix 1. Behaviour questions

Tested behaviour	Question	Value towards final score
Considered purchase	Before I buy something I carefully consider whether I can afford it. Completely agree, 2, 3, 4, completely disagree (Don't know, refused)	1 point for respondents who carefully consider before buying things. 0 in all other cases.
Timely bill payment	I pay my bills on time. Completely agree, 2, 3, 4, completely disagree (Don't know, not applicable, refused)	1 point for respondents who pay bills on time. 0 in all other cases.
Keeping watch of financial affairs	I keep a close personal watch on my financial affairs. Completely agree, 2, 3, 4, completely disagree (Don't know, refused)	1 point for respondents who keep a close watch on financial affairs. 0 in all other cases.
Long term financial goal setting	I set long term financial goals and strive to achieve them. Completely agree, 2, 3, 4, completely disagree (Don't know, refused)	1 point for respondents who set long term financial goals. 0 in all other cases.
Responsible and has a household budget	<p>Who is responsible for day-to-day decisions about money in your household?</p> <p>a) You b) You and your partner c) You and another family member (or family members) d) Your partner e) Another family member or (or family members) f) Someone else g) Nobody h) Don't know i) Refused</p> <p>Does your household have a budget?</p> <p>a) Yes b) No c) Don't know d) Refused</p>	1 point if personally or jointly responsible for money management and has a budget. 0 in all other cases.

Active saving	<p>In the past 12 months have you been [personally] saving money in any of the following ways, whether or not you still have the money?</p> <ul style="list-style-type: none"> a) Saving cash at home or in your wallet b) Building up a balance of money in your bank account c) Paying money into a savings account d) Giving money to family to save on your behalf e) Saving in <an informal savings club> f) Buying financial investment products, other than pension funds g) Or in some other way h) Has not been actively saving i) Don't know j) Refused 	<p>1 point for any type of active saving (excluding letting money build up in a current account as this is not active). 0 in all other cases.</p>
Choosing products	<p>Please can you tell me whether you currently hold any of these types of products (personally or jointly)?</p> <ul style="list-style-type: none"> A pension fund An investment account, such as a unit trust A mortgage A bank loan secured on property An unsecured bank loan A credit card A <current> account A savings account A microfinance loan Insurance Stocks and shares Bonds Mobile phone payment account Prepaid payment card Don't know Refused to respond Holds none of the above <p>Which of the following statements best describes how you last chose a product?</p> <ul style="list-style-type: none"> a) I considered several products from different companies before making my decision 	<p>1 point for people who tried to shop around or gather any information. 2 points for those who had shopped around and gathered independent information. 0 in all other cases.</p>

	<ul style="list-style-type: none"> b) I considered the various products from one company c) I didn't consider any other products at all d) I looked around but there were no other products to consider e) Don't know f) Not applicable g) Refused 	
Borrowing to make ends meet	<p>Sometimes people find that their income does not quite cover their living costs. In the last 12 months, has this happened to you?</p> <ul style="list-style-type: none"> a) Yes b) No c) Don't know d) Not applicable (I don't have any personal income) e) Refused <p>What did you do to make ends meet the last time this happened?</p> <p><i>1 Existing resources</i></p> <ul style="list-style-type: none"> a) Draw money out of savings or transfer savings into current account b) Cut back on spending, spend less, do without c) Sell something that I own <p><i>2 Creating resources</i></p> <ul style="list-style-type: none"> d) Work overtime, earn extra money <p><i>3 Access credit by using existing contacts or resources</i></p> <ul style="list-style-type: none"> e) Borrow food or money from family or friends f) Borrow from employer/salary advance g) Pawn something that I own h) Take a loan from my savings and loans clubs i) Take money out of a flexible mortgage account j) Apply for loan/withdrawal on pension fund <p><i>4 Borrow from existing credit line</i></p> <ul style="list-style-type: none"> k) Use authorised, arranged overdraft or line of credit l) Use credit card for a cash advance or to pay bills/buy food <p><i>5 Access new line of credit</i></p> <ul style="list-style-type: none"> m) Take out a personal loan from a financial service provider (including bank, credit union or microfinance) n) Take out a payday loan 	<p>0 if the respondent used credit to make ends meet. 1 in all other cases.</p>

	o) Take out a loan from an informal provider/moneylender <i>6 Fall behind/ go beyond arranged amount</i> p) Use unauthorised overdraft q) Pay my bills late; miss payments <i>7 Other responses</i> r) Other s) Don't know t) Refused	
--	--	--

Appendix 2. Financial attitude questions

Tested attitude	Question	Value towards final score
Short-term or long-term	1) I find it more satisfying to spend money than to save it for the long term. 2) I tend to live for today and let tomorrow take care of itself. 3) Money is there to be spent.	If long-term, respondent's attitude is positive.

Source: OECD (2011b).