The relationship between demographic variables and consumer confidence levels in the rationales for regulation:

A quantitative study of Scottish retail banking consumers

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A thesis submitted in partial fulfilment of the requirements of Edinburgh Napier University, for the award of Doctor of Philosophy

April 2020
DECLARATION

I hereby declare that the work presented in this thesis has not been submitted for any other degree or professional qualification, and that it is the result of my own independent work.

Claire Lynne McCafferty

April 2020
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

ABSTRACT

Confidence in the banking system is critical to the health of households, businesses and the overall economy. Government intervention in the financial services sector and the strict regulation of the banking industry is rationalised by the need to minimise the occurrence of events that could undermine the reputation of banks and threaten confidence in the system.

This aim of this research is to answer the question, ‘Are Scottish consumers confident in retail banking regulation?’ This research has taken a unique approach to answering this question by measuring the levels of confidence in each of the specific rationales identified in the literature for regulating the retail banking system.

Analysis of the findings was undertaken in three distinct stages: individual demographics in relation to levels of confidence; the direction of confidence in relation to these demographics; and the combined demographic factors that have the greatest impact on the levels of confidence in each of the areas that regulation seeks to address.

In designing the survey, a three-stage approach was also adopted; theorists, practitioners and end-users contributed to the development of a consumer survey. The questions were derived from the theoretical framework and developed into the final consumer survey that would gather the demographic information and test the hypotheses.

The main findings are that the youngest age group (18-29 years) have the highest levels of confidence in their retail banks. Those with a higher income and those with higher educational attainment have the least confidence in the areas that regulation seeks to address. This has implications for both industry and the regulators in terms of how they target these specific groups to increase their levels of trust and satisfaction. A lack of trust threatens the stability of the financial system and the wider economy.

Finally, this research has contributed to the continued debate into the use of parametric methods of data analysis when using Likert scales. The finding is that the use of parametric tests for the analysis of Likert scale data is robust.
ACKNOWLEDGEMENTS

I would like to thank my Director of Studies, Malcolm Pettigrew, and my Supervisor, Dr David White, for their guidance, patience, encouragement and support.

I would also like to thank the theorists, practitioners, and end-users who took part in the three stages of the survey design, and the participants who took part in the final study.

Also my family, in particular my husband and Mum, who have been on this journey with me and have kept me going throughout the challenging times.

This is dedicated to my Dad, Alexander William Blackwood (1957-2010).
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<th>Full Form</th>
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<td>ABCUL</td>
<td>Association of British Credit Unions Limited</td>
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<td>AFI</td>
<td>Alternative Financial Institution</td>
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<td>ANOVA</td>
<td>Analysis of Variance</td>
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<td>Basel III</td>
<td>Basel Capital Accord III</td>
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<td>BBC</td>
<td>British Broadcasting Corporation</td>
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<td>BCCI</td>
<td>Bank of Credit and Commerce International</td>
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<tr>
<td>BIPRU</td>
<td>Banks, Building Societies and Investment Firms Prudential Sourcebook</td>
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<td>BIS</td>
<td>Bank for International Settlements</td>
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<td>BoE</td>
<td>Bank of England</td>
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<td>BSB</td>
<td>Banking Standards Board</td>
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<td>BSRC</td>
<td>Banking Standards Review Council</td>
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<td>CAB</td>
<td>Citizens Advice Bureau</td>
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<td>CEO</td>
<td>Chief Executive Officer</td>
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<td>CSFI</td>
<td>Centre for the Study of Financial Innovation</td>
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<td>CLT</td>
<td>Central Limit Theorem</td>
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<td>CMA</td>
<td>Competition and Markets Authority</td>
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<td>COB</td>
<td>Conduct of Business</td>
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<td>CPP</td>
<td>Card Protection Plan</td>
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<td>CRA</td>
<td>Consumer Rights Act 2015</td>
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<td>CRD</td>
<td>Capital Requirements Directive</td>
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<td>DFA</td>
<td>Dodd-Frank Wall Street Reform</td>
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<td>DG FISMA</td>
<td>Directorate-General for Financial Stability</td>
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<td>DPA</td>
<td>Deferred Prosecution Agreement</td>
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<td>EEA</td>
<td>European Economic Area</td>
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<td>EFER</td>
<td>Economics for Effective Regulation</td>
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<td>FCA</td>
<td>Financial Conduct Authority</td>
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<td>FOS</td>
<td>Financial Ombudsman Service</td>
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<td>FS</td>
<td>Financial Services</td>
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<td>Financial Services Authority</td>
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<td>FSCS</td>
<td>Financial Services Compensation Scheme</td>
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<td>FSMA</td>
<td>Financial Services and Markets Act 2000</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<table>
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<tr>
<th>Acronym</th>
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<tr>
<td>GENPRU</td>
<td>General Prudential Sourcebook</td>
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<td>GfK</td>
<td>Growth from Knowledge</td>
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<td>HSBC</td>
<td>Hong Kong and Shanghai Banking Corporation</td>
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<td>ICB</td>
<td>Independent Commission on Banking</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>LIBOR</td>
<td>London Inter-Bank Offered Rate</td>
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<td>LOLR</td>
<td>Lender of Last Resort</td>
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<td>MMR</td>
<td>Mortgage Market Review</td>
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<td>NRAM</td>
<td>Northern Rock Asset Management</td>
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<td>OFT</td>
<td>Office of Fair Trading</td>
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<td>ONS</td>
<td>Office for National Statistics</td>
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<td>PPI</td>
<td>Payment Protection Insurance</td>
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<td>PRA</td>
<td>Prudential Regulation Authority</td>
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<td>RBS</td>
<td>Royal Bank of Scotland</td>
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<td>RDR</td>
<td>Retail Distribution Review</td>
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<td>RFTS</td>
<td>Ring Fencing Transfer Scheme</td>
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<td>SIB</td>
<td>Securities and Investments Board</td>
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<td>SIFI</td>
<td>Systemically Important Financial Institution</td>
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<td>SPSS</td>
<td>Statistical Package for the Social Sciences</td>
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<tr>
<td>SRR</td>
<td>Special Resolution Regime</td>
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<td>SVM</td>
<td>Shareholder Value Model</td>
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<td>TBF</td>
<td>Too Big To Fail</td>
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<td>TCF</td>
<td>Treating Customers Fairly</td>
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<td>Tukey HSD</td>
<td>Tukey Honestly Significant Difference</td>
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<td>UK</td>
<td>United Kingdom</td>
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<td>USA</td>
<td>United States of America</td>
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CHAPTER 1 INTRODUCTION

1.1 Background

A bank account is a basic necessity to participate in modern society. It is a requirement for employment and housing. With no bank account it would be almost impossible to borrow money. Paying for goods and services, paying utility bills, or transferring money to friends and family are all facilitated through bank account services. Plastic cards, internet banking, mobile payments are all services accessed through bank account provision. Commercial banks provide retail banking services to household and business customers. They play the vital role of channelling funds between savers and borrowers and operating the payments system.

In the facilities described above, commercial banks are undertaking the crucial role of financial intermediation. In this role they are providing the essential economic mechanism of transferring and allocating funds to their most productive use. A bank provides loans to borrowers (deficit units) and accepts deposits from savers (surplus units). Since households make up the largest proportion of surplus units (consumer spending is by far the single biggest part of aggregate demand), they are providing a high proportion of the finance that businesses and governments require through the deposits held in their bank accounts.

Financial intermediation reconciles three disparate needs of deficit units and surplus units which cannot be met through direct lending. The first is the difference in size of deposits to loans. Depositors may be making relatively small, albeit frequent, deposits into their bank accounts, whilst borrowers may by looking to borrow a substantial sum perhaps to finance a home purchase, or to finance a large-scale commercial project. Secondly, depositors may need the flexibility to be able to withdraw their funds at relatively short notice, a liquidity preference, but home finance loans and commercial loans for investment projects tend to require long-term borrowing. Lastly, higher risk is associated with the probability of higher return, consequently banks will seek out contracts which offer the best returns, and conversely depositors may be risk-averse. Additionally, borrowers who are more
inclined to take risk are less resistant to higher interest rates. These unequal requirements are resolved through the transformation function that banks perform.

To overcome the disparity in size of deposits to loans, banks lend the aggregated deposits. To resolve the mismatch of demand deposits to long-term loans banks use maturity transformation. Banks are able to lend for a longer timeframe than they borrow because they maintain a net balance which in normal operating conditions is not significantly affected by the daily inflows and outflows of deposits and withdrawals. Lastly, since two contracts exist when banks accept deposits (between bank and depositor) and make loans (between bank and borrower) the risk is transformed. The risk-averse depositor does not take on any of the loan risk, and the bank is able to diversify their risk by investing in a range of products, industries, geographical areas, and consumer profiles.

Confidence in the system is essential since depositors would demand their deposits and possibly trigger a bank run if they feared that there was a risk of loss. Without these deposits, banks would soon find their capital depleted and could not make loans. Banks that face liquidity and capital shortages may face insolvency and could cause a shock to the overall system, triggering a financial crisis.

Where banks have a shortage of funds to lend, or decide to cut back on lending (such as after Global Financial Crisis) businesses will struggle to raise the finance they need to invest and grow. This in turn will lead to slower economic growth (see Figure 1.1 overleaf) and higher unemployment (see Figure 1.2 overleaf).
Figure 1.1: Comparison of Real GDP Growth from 2007-2017 in UK and USA

(Adapted from Statista, 2019)

Figure 1.2: Comparison of Unemployment Rate from 2007-2017 in UK and USA

(Adapted from Statista, 2018 and 2019)
Confidence in the banking system is consequently critical to the health of households, businesses and the overall economy. Hence, government intervention in the financial services sector and the strict regulation of the banking industry is rationalised by the need to minimise the occurrence of events that could undermine the reputation of banks and threaten confidence in the system.

The Global Financial Crisis of 2007-2008 left the United Kingdom’s financial services sector with a less than favourable reputation. Bennett and Kottasz (2012, p.128) argued that “a substantial deterioration in the favourability of public attitudes towards the banking industry seems to have occurred following the crisis”.

The aftermath of the collapse, the nationalisation of Northern Rock and rescuing of The Royal Bank of Scotland Group by the taxpayer are likely to remain in the forefront of the media and general public’s minds for decades to come.

In fact, the situation in the financial sector became so desperate that the United Kingdom’s government abandoned the Office of Fair Trading and the Competition Commission rules and allowed Lloyds TSB to take over Halifax Bank Of Scotland in order to avoid their collapse and try to regain financial stability on the grounds of “national interest” (Hall, 2009, p.445). This controversial acquisition became the subject of a court case nearly a decade later when 6000 retail and institutional investors sued the bank for £600m. Shareholders argued that they had been deliberately misled by the bank and its executives about Halifax Bank of Scotland’s financial situation. Lloyd’s TSB executives argued that the waiving of the competition restrictions was an opportunity that was too good to be missed (George, 2018).

Akinbami (2011, p.134) described it as “the most significant financial crisis to occur since the Great Crash of 1929”. To put this comparison into perspective, in 2009 Gross Domestic Product (GDP) fell by 4.8% compared to a fall of 5.1% in 1931 (The Economist, 2010). However, the UK economy was around 400 times larger in 2009 compared to 1931 (Measuring Worth, 2018). Gamble (2009, p.452) wrote of the “economic, financial, organisational, political and ideological” hurdles faced during recovery in the 1930s and the long depression that followed the crash. This differed
from the predictable 10-year boom and bust cycles which characterised the 19th century UK economy; crisis came to mean not just financial struggles, but also the socio-political obstacles to recovery.

In contrast, Richardson (1969) described the social and political struggles faced by the British public in the 1930s as mild compared to their counterparts in the United States of America or Germany, with unemployment rising by not much above 5%, wages increasing by an average of 3% annually, national income barely declining, and an “upswing” from 1932 onwards. In reality, in comparison to the rest of the world, the UK depression was minor.

What has compounded public mistrust during this most recent crisis, are the scandals which some feel amount to, at least metaphorically, criminal acts. For example: Payment Protection Insurance (PPI) mis-selling; London Interbank Offered Rate (LIBOR) fixing; and interest rate swap mis-selling, to name just a few. Gosling (2011, p.40) wrote of the PPI debacle, “In the history of financial crimes perpetrated against the public in this country…the mis-selling of PPI…is up there with the best of them”. PPI was sold alongside retail credit as an insurance product that enabled consumers to ensure that their repayments would be met should they become unable to earn income due to accident, illness, death and certain other circumstances.

1.2 Recent Scandals in the UK Retail Banking Sector

There have been a number of scandals in the sector which have been attributed to a failure of regulation. Many of these can be linked to the market failures of asymmetric information, when one party to a transaction has more material knowledge than another. Additionally, the principal-agent problem, which exists due to bank executives acting on behalf of shareholders, can lead to problems of moral hazard and conflicts of interest. Furthermore, the inequality in bargaining power has led to a rise in accusations of fraud and mis-selling. Some examples of these scandals will now be discussed.
1.2.1 Mis-selling

One of the biggest retail banking mis-selling scandals of recent years, in terms of number of consumers affected, amount of compensation paid out and time taken to resolve, was exposed in September 2005 when the Citizens Advice Bureau (CAB) published a report which demonstrated the problems consumers faced with PPI. In the report, CAB reviewed cost, exclusions, sales process, and claims. CAB revealed unfair treatment of consumers in all of these areas. For example, one-off premiums of up to 56% of the loan value were being added to the loan and interest charged on the premiums (Citizens Advice Bureau, 2005). Additionally, CAB found that consumers were being pressurised into taking PPI without having the exclusions explained properly, or sufficient questioning carried out to establish suitability of the product. Consumers who were experiencing financial difficulty were finding their debts increase through consolidation loans with PPI added to them. Often these consumers would have to refinance as they struggled to meet the monthly loan repayments, and a new PPI policy would be sold with each new loan. CAB (2005) also found that there were several obstacles when a consumer tried to make a claim. Firstly, for many consumers this was the earliest point in which policy exclusions came to light. Next, the evidence that had to be provided in order to make a claim, either medical or unemployment related, was expensive and time consuming to obtain. Then, the claims process was protracted, in some cases resulting in missed repayments which resulted in financial detriment to the consumer.

CAB raised a super-complaint with the Office of Fair Trading and urged them, the Financial Services Authority and the Treasury Select Committee, to investigate further. In October 2006 the Office of Fair Trading published its findings and in February 2007 recommended referral to the Competition Commission under section 131 of the Enterprise Act 2002 (Competition Commission, 2009).

The Competition Commission made several recommendations to resolve the adverse effect on competition and consumer detriment:

i. A ban was to be placed on selling PPI at the point of sale of credit;
ii. A personal quote was to be provided; and

iii. Information relating to costs, benefits, optional nature, alternative providers and protection products must be stipulated in the marketing material (Competition Commission, 2009).

In April 2011 the British Banker’s Association decided to challenge the new rules imposed by the FSA, following the Competition Commission findings, in the High Court, a case which they lost and decided not to appeal (Wells, 2011). Several years later, claims are still being made and in March 2019 the Financial Conduct Authority (FCA), the FSA successor, announced that the total paid since January 2011 was £34.2bn (FCA, 2019b). However, a deadline for claims of August 2019 was imposed by the FCA in 2017.

1.2.2 Ring Fencing

There have also been a number of scandals outwith retail banking which have strengthened the case to ring fence them from investment banks. The current regulatory structure is discussed in more detail in Section 2.4.4. Ring fencing is the separation of retail banking from the riskier global operations and investment banking side of the business. During the bank bail-outs, the taxpayer, via the Bank of England (BoE), was effectively bailing out not just the essential retail part of the business but the much riskier and profitable investment side. In future the BoE would be able to act in its capacity of Lender of Last Resort (LOLR) and save the retail side (to protect consumers) and allow the investment side to fail (FCA, 2016c). There will be further discussion of ring fencing in Section 2.4.5. This echoes the reforms in the United States following the Global Financial Crisis. The Dodd-Frank Wall Street Reform Act and the Consumer Protection Act (DFA) was enacted in July 2010 to bring an end to implicit guarantees of bail-out for those institutions regarded ‘Too Big To Fail’ (TBTF). Balasubramnian and Cyree (2014, p.156) argue that “for market discipline to be effective there must be the market belief that uninsured creditors and shareholders will bear the losses in the event of failure”. However, their research
finds that although market discipline has improved since the passing of the DFA, there are opportunities for further improvements.

i. LIBOR-fixing Scandal

Barclays was accused of fixing the London Interbank Offered Rate (LIBOR), the rate at which international banks in the UK lend to each other, and was fined £59.5 million in June 2012 under section 206 of the Financial Services and Markets Act 2000 (Walker, 2013). Dillow (2012) stated that the biggest cost of the Barclay’s scandal was trust, as this in turn depresses long-run economic growth. The reason for this, he explains, is asymmetric information, which is explored in more detail in Section 2.6.3. The LIBOR scandal is a textbook example of what Llewellyn (Financial Services Authority, 1999) termed ‘grid lock’. Grid lock is discussed in more detail in Section 2.2.4.

ii. Money Laundering

The United States Department of Justice (2012) released a statement reporting that HSBC UK and HSBC USA had admitted to Anti-Money Laundering and sanctions violations. This included permitting drugs traffickers to “launder hundreds of millions of dollars through HSBC subsidiaries, and to facilitate hundreds of millions more in transactions with sanctioned countries”. HSBC forfeited $1.256bn and agreed to enter into a five-year Deferred Prosecution Agreement (DPA). This meant that if HSBC failed to comply with the agreement in any way they could be prosecuted.

In October 2017 the British Broadcasting Corporation (BBC, 2017) reported that the UK financial regulators and the Serious Fraud Office were to review allegations that HSBC and Standard Chartered were linked to a South African corruption scandal. Despite this, HSBC’s Press Office (2017) reported that the DPA had expired and that as HSBC had “lived up to all of its commitments” it would be seeking the dismissal of all charges.
Simultaneously, Withers (2017) reported that Lord Hain, in the House of Lords, had advised that a whistle-blower was assisting the FCA in their investigations. However, there has been no further information released from the regulator, in the House of Lords or in the national press.

iii. Interest Rate Hedging Products

The FCA (2016b) identified major failings in the selling of these complex products and ordered a total of nine banks to pay redress amounting to £2.2bn and over £500m in losses.

iv. Foreign Exchange Rates

In November 2014 the FCA announced they were fining five banks a total of £1.1 billion for manipulating the spot foreign exchange currency rates (FCA, 2014b).

In January 2018 HSBC entered a further Deferred Prosecution Agreement with the Ministry of Justice and was fined over $100 million for currency rigging (The United States Department of Justice, 2018).

1.2.3 Bank Runs

Perhaps the most critical of events occurred in 2007. Prior to this it was believed that depositor insurance would always prevent a bank run (Diamond and Dybvig, 1983). BBC News (2007) reported the panic started when they announced on the 13 September 2007 that Northern Rock had asked for assistance from the Bank of England, in its Lender of Last Resort capacity.

On 14 September 2007 the Bank of England agreed to provide emergency funding at a penalty rate to Northern Rock following assurances from the FSA that the bank was not insolvent. However, the panic was perpetuated by media images of consumers queuing outside their branches and did not cease until an announcement from Alistair Darling, then Chancellor of the Exchequer, on 17 September 2007.
confirming all deposits held by Northern Rock would be guaranteed (Edmonds, 2008).

On 1 October 2007 the Chancellor attempted to restore consumer confidence further by increasing the level of depositor protection obtainable under the Financial Services Compensation Scheme (FSCS) from 100% of the first £2,000 plus 90% of the next £33,000, to 100% of £35,000, per institution, per consumer (Hall, 2009, p.429).

There are different levels of compensation dependent on the claim category, as at August 2018, these are detailed in Table 1.1 below.

**Table 1.1: Financial Services Compensation Scheme: Compensation Levels**

<table>
<thead>
<tr>
<th>Claim Category</th>
<th>Compensation Level</th>
<th>Date Effective From</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deposits</td>
<td>£85,000 per person per firm (100%)</td>
<td>From 30 January 2017</td>
</tr>
<tr>
<td></td>
<td>The above figure is calculated on the exchange rate equivalent of €100,000 in EU countries to prevent regulatory arbitrage.</td>
<td></td>
</tr>
<tr>
<td>Deposits</td>
<td>£1M for temporary high balances (100%)</td>
<td>From 3 July 2015</td>
</tr>
<tr>
<td>Investments</td>
<td>£50,000 per person per firm (100%)</td>
<td>From 1 January 2010</td>
</tr>
<tr>
<td>Home Finance</td>
<td>£50,000 per person per firm (100%)</td>
<td>From 1 January 2010</td>
</tr>
<tr>
<td>Insurance Business</td>
<td>No upper limit Long-term, compulsory, professional, and certain claims for injury, sickness or infirmity (100%) Other types of claims (90%)</td>
<td>From 3 July 2015</td>
</tr>
<tr>
<td>General insurance advice and arranging</td>
<td>No upper limit (90%) Compulsory insurance (100%)</td>
<td>From 14 January 2005</td>
</tr>
</tbody>
</table>

(Source: Financial Services Compensation Scheme, 2018)

Investments, Home Finance, Insurance Business and General insurance advice and arranging compensation limits are not in place to protect against bank runs, however,
they are essential to maintain a level of trust and protection against bad advice or mis-selling.

1.3 Who was to Blame?

Arguments as to where the blame lay for these scandals were plentiful. ‘Greedy bankers’ was a popular theme in the national press, fuelled by coverage of extortionate bonus payments when the rest of the UK population struggled through the credit crunch. Black (2008, p.32) argued that although subprime lending was the ‘trigger’ of the Global Financial Crisis, the cause was the abundance of credit available to all. He goes on to say that if the regulators had stepped in it would have been tantamount to stopping the “party” and it is “the politicians and the public who should accept the blame for this. We all did it and benefited from it”.

Somewhat ironically, the regulator in authority during the above scandals was set up after a series of bank failures in the 1990s. Logan (2001, p.320) referred to the period as “the small banks’ crisis…when failure was last widespread and the system faced a potentially systemic threat”.

1.4 The Financial Services Authority

The FSA came into power as the sole regulator of the financial services sector in the UK in 2001 as a result of the Financial Services and Markets Act (2000). Gordon Brown, the then Chancellor, later publicly admitted setting up the FSA to monitor individual institutions was a “big mistake”. During a key note speech at the Institute for New Economic Thinking he explained, “We set up the FSA believing that the problem would come from the failure of an individual institution”. He then went on to say that the understanding of what “global” meant was “incomplete” and misunderstood by almost everyone involved in regulation (Brown, 2011).

On 24 April 2012 Hector Sants made his last speech as CEO of the FSA. In this speech he outlined what he felt were the reasons the FSA had failed. Firstly, inadequate capital and liquidity standards of banks; secondly, many of those in key board positions, both executive and non-executive, lacked the technical skills to
manage the risks in their banks; thirdly, the culture of high rewards for short-term gain and lack of governance; and fourthly, the perception of high performing senior individuals being above the law. Rather unapologetically, there is no mention of the billions of pounds of on-going mis-selling scandals that have caused harm to millions of customers and small businesses. The banks were clearly, in his opinion, to blame for the financial crisis (Monaghan, 2012).

1.5 The Financial Conduct Authority

In 2013 the FSA was abolished and replaced with the FCA. The FCA work alongside the Prudential Regulatory Authority (PRA) to create a “twin peaks regulatory structure in the UK” (Competition and Markets Authority, 2015, p.5). The role of the PRA is to ensure authorised firms are managed appropriately and sufficiently robust financially, whilst the FCA monitors authorised firms’ conduct, with particular focus on consumer protection and product intervention. It is hoped that the reduction in span of control and defined areas of regulatory control will prevent further failure to maintain systemic stability and protect consumers.

The FCAs regulatory objectives are:

i. market confidence
ii. financial stability
iii. the protection of consumers
iv. the reduction of financial crime

In June 2018, the FCA published ‘The financial lives of consumers across the UK’. Their findings were that only 40% of UK adults are confident in the UK financial services industry, and only 31% feel that financial firms are honest and transparent.

1.6 Consumer Confidence

Prior to the aforementioned FCA research, Ernst and Young published its third Global Consumer Banking Survey, in 2014. Over 32,000 participants from 43 countries were surveyed, including 767 from the UK. The Ernst and Young press release title ‘Two years of declining confidence in UK banking draws to a close’
perhaps suggests a more positive impression than the data itself. Although almost
double the number of participants in 2013 stated that their confidence had increased
since 2011 and 2012, this was only 11% of participants, with 52% saying their level
of confidence had not changed and 37% saying their confidence had decreased;
therefore, still a long way to go in terms of meeting the FCA objective of maintaining
consumer confidence in the UK financial system. Interestingly, the UK consumer
has double the level of distrust in their banks than their counterparts in the United
States, Germany, France and Switzerland. Ernst and Young found that the key
driver of mistrust in the UK was the national press (67%), whilst the key driver of
trust was how the individual consumer was treated by their bank (68%). However,
the survey found that trust does not prevent the price-sensitive UK consumer from
switching, with 66% of consumers who had switched in the past 12 months citing
rates and fees as the reason for doing so.

It is clear that the events of the last decade, such as Payment Protection Insurance
and interest-rate hedging product mis-selling scandals, LIBOR-fixing, money
laundering and foreign exchange rate fixing have compounded distrust of the
industry, the culmination of a bank run has elevated this distrust to suspicion of
corruption, destroying confidence in the institutions and those in place to regulate
them. Trust and consumer confidence, and why they are so important in financial
services will be discussed in more detail in Section 2.4.4.3.

The purpose of this research is to measure specifically the confidence of consumers
in the areas which regulation seeks to address, fundamentally the prevention of
events such as those mentioned above.

1.7 Research Aim and Objectives

Considering the above issues, and acknowledging the critical role that financial
institutions contribute to the health and development of the economy, the aim of this
thesis is to answer the question, ‘Are Scottish consumers confident in retail banking
regulation?’ Based on the answer to this question, the implications of the levels of
trust afforded by Scottish consumers on the banking sector, wider financial services
sector, and ultimately the economy, will be assessed. The June 2018 FCA Report, ‘The financial lives of consumers across the UK’ found the differences in levels of confidence between regions to be marginal. Therefore, it could be argued that results from a Scottish study can be more widely applied to the UK.

The specific research objectives are:

i. Undertake a critical review of the existing theory of financial regulation literature, from the perspective of consumer confidence in retail banking, and identify the areas that retail banking regulation seeks to address;

ii. Contextualise the theory and develop a set of key research questions through a three-stage survey design with theorists, practitioners and end-users; from theoretical model to empirical testing, to identify relevant theoretical and practical issues;

iii. Create and conduct a Consumer Survey which measures levels of consumer confidence in the areas that retail banking regulation seeks to address;

iv. Analyse and evaluate the data to determine the measure of overall levels of confidence, levels of confidence in each of the areas that regulation seeks to address, and differences in levels of confidence between demographic groups, such as age, income and education;

v. Present the findings and contributions of this study to theory and practical implications for the regulator, banks, consumer groups and government, and make recommendations for future research.

1.8 Research Methods

The study will involve the following research methods:

i. Secondary data collection through a review of the literature in terms of the theory of banking regulation and applicable economic theories;

ii. Primary data collection will take a mixed method approach of a three-stage survey design and a survey of over 400 Scottish banking customers.
The survey will be empirically tested with three groups: the first with theorists, the second with practitioners, and the third with end-users.

1.9 The Importance of the Research

The research will provide an insight into the levels of consumer confidence in each of the rationales that regulation seeks to address. As far as the researcher is aware this is the first study that has been conducted to obtain this data. The research has identified the arguments for regulating the banking industry and, specifically, the reasons why retail consumers in particular must be protected. Motivations for regulating the industry are mainly driven by the need to protect against market failures, such as externalities, asymmetric information, moral hazard, and additionally non-economic, social rationales for regulation. Maintaining the confidence levels of consumers is paramount to the safety and stability of the financial system and is a key objective of the UK regulator. The researcher has therefore elected to measure the levels of confidence in each of the areas that regulation seeks to address to establish if regulation is ‘fit for purpose’ in this regard. Secondly, the researcher has used established demographics, such as age, gender, income level and education level to determine if there are differences in the levels of confidence between the groups.

The methodology adopted in this research has sought to achieve a 360 degree view of the problem by including theorists and practitioners in the initial research stages to ensure the consumer survey questions were a true and accurate interpretation of each of the rationales for regulation.

The importance and value of the potential findings and recommendations from this research are mainly twofold. Firstly, this adds a new dimension to the academic literature on regulation and consumer protection in financial services. The confidence levels of retail banking consumers has been broken down into each specific area that regulation seeks to address, and additionally compares the demographic characteristics of those consumers and how this affects their levels of confidence. Secondly, this adds to practice by improving knowledge of consumers
within particular demographic profiles. This has implications for both the regulator and commercial banks in the industry, which may treat consumers differently based on their profiles and specific needs.

1.10 Structure of the Thesis

The thesis is organised into six chapters. The first chapter has introduced the background of mis-selling and institutional failures which brought about the reform of the UK financial sector regulator, and described the research aims, objectives and methods.

The second chapter is a review of the literature in terms of the key theories and concepts. Each theme will be explored by tracing the theory back to its roots to understand how it has developed over time to become accepted practice. This chapter is split into two distinct sections. The first section contextualises the research and the second section provides the theoretical framework.

The third chapter provides an outline of the research methodology and methods employed by the researcher. The relationship between the research question, the philosophical assumptions and the techniques used to conduct the research are demonstrated. Additionally, there is an overview of the preliminary research, including changes made to the Consumer Survey following examination of the feedback obtained during the three-stage empirical testing with theorists, practitioners and end-users. Further, the data collected in the final study is described, including the characteristics and demographics of the sample population and the validity of the sampling approach is discussed.

The fourth chapter presents the descriptive statistics and correlation analysis. The data from the Consumer Survey theoretical questions is analysed, focusing on specific characteristics of the participants.

The fifth chapter presents a stepwise multiple regression analysis to identify the combination of demographic variables that would be used to predict the levels of confidence in the rationales for regulation.
The sixth, and final, chapter concludes the thesis and provides the development of the research topic, suggestions for future work, summary, and contribution.
CHAPTER 2 LITERATURE REVIEW

2.1 Introduction

The first chapter introduced the series of events, such as mis-selling and institutional failures, which brought about the reform of the UK financial sector. In this chapter, an analytical overview of the key literature and development of regulation will be undertaken. From this, the theories identified will inform the research method employed to answer the question, ‘Are Scottish consumers confident in retail banking regulation?’

This question can only be answered by examining the trilateral relationship between the banks, the consumers and the regulator(s). This chapter is therefore split into three distinct themes. The first is the retail banks, why they exist and their structure and culture, and how this impacts consumer confidence; the second is the consumer and the role of consumer protection in banking; and the last is regulation and the structure and role of regulatory bodies in maintaining consumer confidence. Each of these themes is split into sub-themes that explore the applicable economic theories.

2.2 Retail Banks

The definition of a retail bank will first be examined and how they have evolved over time in the UK market. The structure and culture of these institutions will be explored and how these factors influence the treatment of consumers and impact consumer confidence in the effectiveness of regulation.

2.2.1 What is a Retail Bank?

The definition of a bank has changed considerably over the past few decades as there has been rapid change within the sector. The most up-to-date definition provided in the FCA Handbook (2018a) is:

a. A firm with a Part 4A permission, which includes accepting deposits and:
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

i. which is a credit institution; or

ii. whose Part 4A permission includes a requirement that it comply with the rules in GENPRU and BIPRU relating to bank; but which is not a building society, a friendly society or a credit union;

b. an EEA bank which is a full credit institution.

Part 4A permission refers to the permission granted by the FCA, or PRA under Part 4A of the Financial Services and Markets Act (2000). The Financial Services Act (2012) amended the 2000 Act and implemented the new regulatory framework by replacing the FSA with the FCA and PRA.

2.2.2 The Evolution of the Retail Bank Market in the UK

UK financial institutions underwent significant structural change during the 1970s and 1980s (Bowen, Hoggarth and Pain, 1999) as a result of deregulation and a changing market environment (Bank of England, 1991). The move from a fragmented system, with a large number of providers with clear differentiation in the products and services provided, to a smaller number of large multinationals was facilitated by “the natural economic drivers of economies of scale and scope, interacting with demand-side drivers are financial deregulation” Davies, Richardson, Katinaite and Manning (2010, p.330). “The bank branch network has been declining steadily for nearly 30 years. There were 20,583 branches in 1988 but only 8,837 in 2012” (Edmonds, 2018). Further consolidation of the sector followed the Global Financial Crisis. The growth in the size of firms has resulted in a move away from relationship banking to transactional banking (Llewellyn, 2014).

2.2.3 Retail Bank Structure (Business Models)

In the UK there is dominance in terms of the ownership structure of financial firms, that is, the Shareholder Value Model (SVM). Llewellyn (2014) identified that this lack of diversity is the root cause of a multitude of problems faced by the industry over
the past two decades. In particular, this has led to a reduction in consumer choice and effective competition. In 2002 the Competition Commission (later replaced by the Competition and Markets Authority) revealed findings of an inquiry into banking services provisions to small and medium-sized enterprises (which fall within the retail banking remit). They concluded the market was operating as a complex monopoly which had an adverse effect on choice and information, and increased consumer detriment through exploitive practices such as excessive pricing (Competition Commission, 2002). The Centre for Policy Studies retaliated with a report which claimed that it was the government’s deluge of regulations which had ‘obstructed innovation’ and ‘impeded competition’ (Lodge, 2002).

Llewellyn (2014) posits that there are clear economic, systemic and welfare benefits to a more diversified financial system. Mutual firms (which he calls the Stakeholder Value Model), such as Building Societies, focus on their members and as a result of addressing agency problems more efficiently may be more suited to providing financial products with longer-term contractual relationships such as mortgages and life assurance.

The separation of ownership and control in the SVM also means that there is a lack of personal responsibility for decisions (Llewellyn, 2014). Further, the business objectives of SVM focus on short-term rate of return on capital. This gives rise to the creation of incentive structures and a culture that emphasises bonuses based on sales and maximising shareholder wealth (Llewellyn, 2014).

2.2.4 Retail Bank Culture

Spicer et al., (2014) undertook a significant study of the culture in UK retail banking. The motivation for the study was the lack of progress in culture change, compared to other areas such as capital ratios, remuneration, competition and ring fencing. They noted that the financial crisis had not been enough to incite cultural change and it was only after the LIBOR scandal that culture came more into focus. The first of their main conclusions was that an aggressive sales culture, which was reinforced through reward, was to blame for widespread bad practices and bank failure. During
their research, Spicer et al., (2014) found that in some cases the ‘dropped sales targets’ had simply be rebranded as ‘expectations’, ‘customer needs’ or ‘customer outcomes’. In the worst cases a return of the ‘sales target whiteboard’ had been witnessed.

Second, culture change is the responsibility of the banks themselves and not of the regulator. The Banking Standards Review Council (BSRC) has been set up to support the process of cultural change. However, to avoid what Stigler named ‘regulatory capture’ and “maintain its public credibility and independence, its senior positions must not be solely filled by secondees from banks, nor can there be allowed to develop a revolving door between banks, audit firms and the BSRC” (p.11). Spicer et al., (2014) add that senior leaders in the banks must take responsibility for embedding the new culture and changing behaviour as a priority. However, only by the BSRC assessing the front-line staff can they be sure that the message is not 'lost in the middle'.

Third, the research indicated that more occurrences were likely to be uncovered. This is supported by the findings that in many cases banks were aware of problems for a number of years before they attempted to address them. This is another example of Llewellyn’s ‘grid lock’ as the banks’ justification for not doing anything sooner was that everyone else was doing exactly the same. Grid lock occurs when firms know how they should be behaving but adopt hazardous strategies as there are short-run advantages, which they may also believe their competitors are adopting (Llewellyn, 1998).

Fourth, the banks are trying to change their cultures and become more ‘customer centric’, and all have programmes in place. However, the research revealed that customer outcomes and metrics can be ‘gamed’ easily. The examples given in the report are:

i. closing ‘easy-win’ complaints quickly so they remain non-reportable and

ii. a satisfied customer at point of sale, does not necessarily mean a satisfied customer later
The illustration used in the report is a loan customer who is happy to get the loan but later cannot afford the repayments when interest rates rise.

Last, the old culture has become so engrained staff are wary and/or so overloaded by change that Spicer et al., (2014) predict it will take a whole generation to accomplish any significant change.

In 2011, the CEOs and Chairmen of five of the UK’s biggest banks signed up to a new ethical code of conduct aimed at improving the way they do business. They committed to treat customers and colleagues with respect and integrity and act fairly, paying close attention to risks (Goff, 2011). The next section discusses ethics in organisations.

### 2.2.5 Organisational Ethics

Jones and George (2008, p.150) define organisational ethics as “the guiding practices and beliefs through which a particular company and its managers view their responsibility toward their stakeholders”.

Although it must be acknowledged that there are hundreds of conflicting definitions of the stakeholder (Miles, 2012), it is generally accepted that a consumer can be defined as a stakeholder (see Donaldson and Preston, 1995; Cullum, 1997; Crane and Matten, 2007; Jones and George, 2008). An early definition of stakeholders from Stanford (1963) as cited by Freeman (2010, p.31), “those groups without whose support the organisation would cease to exist”, is particularly fitting since banks would not exist without consumers. For the purposes of this thesis, organisational ethics will be investigated in the context of the consumer and the protection of this stakeholder within financial services.

Donaldson and Preston (1995) identified three distinct aspects of stakeholder management theory:

1. Descriptive/empirical
2. Instrumental
3. Normative
Descriptive stakeholder theory is, as the name suggests, used to describe and explain different aspects of the firm and managerial behaviour, such as, how the firm operates, what the managers think about how they manage (Brenner and Molander, 1977, as cited in Donaldson and Preston, 1995), how the firm is actually managed (Clarkson, 1991; Halal, 1990; Kreiner and Bhambri, 1991, as cited in Donaldson and Preston, 1995), and how the interests of the various stakeholders are considered by the board (Wang and Dewhirst, 1992, as cited in Donaldson and Preston, 1995). In short, what does the firm do to manage the interests of their stakeholders?

Instrumental stakeholder theory is used to determine whether taking stakeholders interests into account actually benefits the firm and positively contributes to the successful achievement of corporate objectives. Briefly, the firm takes stakeholders interests into account because it is good for the bottom line.

Normative stakeholder theory considers the moral and philosophical reasons why a firm should take their stakeholders interests into account. In summary, the firm takes stakeholders interests into account because it is the right thing to do. Donaldson and Preston, (1995), find that essentially there is value in using all three approaches, which are complementary, with normative theory being central to the theory.

The stakeholder value model, or mutual model, discussed by Llewellyn (2014) implies that a firm will not pursue financial objectives above all others. Christen, Rosenberg and Jayadeva (2004) previously developed what they describe as ‘double bottom line’ institutions. That is, they pursue social objectives in addition to financial objectives. They called these institutions ‘alternative financial institutions’ (AFIs) who serve the needs of consumers who have difficulties accessing microfinance financial institutions, particularly in developing or transitioning economies. In the UK, Credit Unions are a type of financial cooperative who offer savings and loans provisions to those who may otherwise be excluded from the high street. Credit Unions are not-for-profit and have been endorsed by Ethical Consumer magazine as providing truly ethical current accounts (ABCUL, 2012).
There are questions about who is accountable and responsible for a firm’s ethical, or otherwise, decisions. Particularly since no executives were prosecuted for the behaviour that led to the 2007/08 crisis. Overall, a strong ethical culture is considered essential to make the banks less vulnerable to misconduct (Vigeo-Eiris, 2017).

2.2.5.1 The Corporation as a Moral Agent

French (1979, p.207) provided the foundations of a theory in which he proposed “corporations can be full-fledged moral persons and have whatever privileges, rights and duties as are, in the normal course of affairs, accorded to moral persons”. French (1979, 1984) argued that corporations are both legal and moral persons and therefore are moral agents. According to French, what makes the organisation a moral person is its ability to perform acts separate to any individuals associated with the organisation, and for these acts to have intentions which are also separate to the intentions of the individuals associated with the organisation. Additionally, French (1995) adds to ‘intentionality’ the ability to make rational decisions and arguments, and the ability to respond to and change behaviour that is detrimental to others and their own interests.

Green (1989) argued that companies do have ethical responsibility and are not protected by limited liability from the consequences of their actions. Sheppard (1994) reiterated the concept that corporations are moral persons. He proposed that corporate culture can be viewed as the organisation’s personality and that the board of directors, who provide the emotional capacity to be a moral person, are ultimately responsible for the corporate moral person.

However, after some criticism (Donaldson, 1982; Werhane 1985), French (2005, p.577) later revisited his original work and conceded that organisations are not moral persons as they “fail to make it as intentional agents”. He explains, if intentions are understood in terms of desires and beliefs, then organisational policy cannot be understood as intentions.
In more recent work, Hess (2013) argued that corporations are moral agents but not moral persons. He defined a moral agent as having moral obligations and a moral person as being entitled to specific rights and protections. His argument was based on whether corporations should be entitled to rights and protections from the perspective of four different paradigms: legal, political, cultural and business ethics. From a legal position Hess (2013) argued that corporations are recognised as persons for practical reasons only; such as entering contracts, rather than to afford them any rights and protections. From a political standpoint he argues that whilst corporations can be termed rational agents (capable of entering into contracts), are entitled to certain political privileges, rights and duties, this does not make them a moral person with moral privileges, rights and duties. Thirdly, what is culturally accepted as a person; the emotions and feelings experienced, and the ‘vulnerabilities’ people are susceptible to, he argues, is what separates them from corporations. The fourth and final paradigm relates to business ethics and is derived from French’s (1979) seminal theory on the moral person, which he himself later retracted, leading Hess (2013, p.330) to describe it as a “red herring”.

Hess (2013) concludes by reasoning that corporations are moral agents in that they can and should be expected to act in accordance with their moral obligations, however, they are not moral persons entitled to rights and protections as they cannot experience physical and emotional pain and suffering as a result of their vulnerabilities, and therefore, there is no valid argument to grant them rights and protections.

Since the financial crisis there have been reforms within the industry to increase the accountability of the board of financial institutions. The Senior Managers and Certification Regime (SM&CR) introduced a statutory duty of responsibility in March 2017.
2.2.5.2 Ethical Frameworks

There are certain ethical frameworks that can be applied when making ethical business decisions. Jones and George, (2008) present four ethical frameworks for use in a business context:

i. utilitarian rule
ii. moral rights rule
iii. justice rule
iv. practical rule

An ethical decision made under the utilitarian rule should produce the “greatest good for the greatest number of people” (Jones and George, 2008, p.139). The philosophy of utilitarianism is linked back to “British philosophers and economists Jeremy Bentham (1748-1832) and John Stuart Mill (1806-1873) and has been influential in modern economics in general” (Crane and Matten, 2007, p.94). Utilitarianism is based on the principle of utility; the value of actions. This is a variable which is commonly used in economics and therefore complements its numerical approach. As an ethical decision under the utilitarian approach weighs ‘good’ against ‘bad’, Crane and Matten, (2007) relate it to “cost-benefit analysis”. In a corporate situation, when management are faced with an ethical dilemma their decision should result in the greatest amount of good for their stakeholders. A shortcoming of the utilitarian approach can be demonstrated when the common good and individual rights clash. Jones and George, (2008) acknowledge that in capitalist societies, such as the UK, the rights of the shareholders will be favoured above the rights of other stakeholders in the case of cost-cutting exercises. This is evidenced by the announcements off-shoring of 4,000 UK jobs by HSBC to Asia in 2003 (Cave, 2003) and 9,000 job losses at Lloyds in 2014 as the business moves towards digital rather than face-to-face banking (Lawson, 2014). Their ethical justification in these situations was had they not undertaken these cost-cutting exercises they would become uncompetitive and may face closure, resulting in greater harm to all stakeholders.
According to Jones and George (2008), moral rights rule is concerned with protecting the rights of the people who will be affected by the decision. "The British philosopher John Locke (1632-1714)...conceptualised the notion of natural rights" (Crane and Matten, 2007, p.100). When faced with a dilemma, managers need to consider the rights of each group of stakeholders and how these would be affected by different decision outcomes. They should choose an outcome that protects the rights of all stakeholders. This can present difficulties when a decision has positive effects for one group and has negative effects for another. As with the utilitarian approach, one of its shortcomings is the clash between individual rights and the common good. Natural rights are often referred to as human rights today and a breach of these in the UK would be breaking the law. HSBC came under fire in 2014 for financing companies such as Wilmar International and Sime Darby which have questionable human rights abuse records (Green Century Funds, 2014). So, although not directly breaching human rights laws, it could be perceived that they are advocating these companies by financing and holding shares in them. It would not be surprising to find that consumers are confused as to how this could be, since HSBC promotes itself as a leading supporter in the campaign against climate change and states that “sustainability underpins our strategic priorities" (HSBC, 2017).

The justice rule is concerned with ensuring that ethical decisions are made fairly and impartially; and therefore address the clash between individual rights and the common good. In the situation of a bank, management would have to ensure that the costs and benefits are fairly distributed to all stakeholders relative to their input into the organisation. Traditionally, their stakeholders can be identified as:

i. Shareholders
ii. Customers
iii. Employees
iv. Suppliers (Crane and Matten, 2007).

When looking at how a bank distributes its increased profits from the types of cost-cutting exercises mentioned above, it is clear that shareholders benefit through dividends received and employees through bonuses received. What is not so clear
is how these cost savings are transferred to consumers as some would argue that customer service standards are falling (Which?, 2019) and costs of running a bank account are rising via service charge and penalties. In reality, lower bank borrowing costs have not been passed on to consumers in the form of lower overdraft costs (Rovnick, 2016).

Jones and George, (2008) suggest that a fourth rule has been introduced, the practical rule, in response to the conflict in stakeholder interests the three rules above present. Three questions must be positively satisfied in order for a business decision to be deemed ethical. Firstly, have today’s accepted business “standards” and “values” been met? Secondly, do you feel comfortable that your decision, and how it has “affected” individuals and groups, will be “communicated” to the public and press? Lastly, will friends, family and associates with which you have a “significant” connection “approve”? For example, when bank managers decided to pressurise their sales teams into selling PPI to every customer who opened a personal loan or credit card (whether they needed the product or not) could they justify this decision to their families and would they approve? This approach can be used to determine the practical effects and outcomes of any decisions, however, reliance on others perceptions may lead to poor judgement.

The FCA Principles for Businesses (see Table 2.1 overleaf) are founded on ethics. Language used such as, “integrity” (Principle 1), “due care and due diligence” (Principle 2), “treat [customers] fairly” (Principle 6), “clear, fair and not misleading” (Principle 7), and “manage conflicts of interest fairly” (Principle 8) set the foundations of how financial organisations should be applying ethics in their day-to-day processes and procedures and dealings with consumers.
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

### Table 2.1 FCA Principles for Business

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<tr>
<td>1.</td>
<td><strong>Integrity</strong> A <em>firm</em> must conduct its business with integrity</td>
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<td>2.</td>
<td><strong>Skill, care and due diligence</strong> A <em>firm</em> must conduct its business with due skill, care and diligence</td>
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<tr>
<td>3.</td>
<td><strong>Management and control</strong> A <em>firm</em> must take reasonable care to organise and control its affairs responsibly and effectively, with adequate risk management systems</td>
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<td>4.</td>
<td><strong>Financial prudence</strong> A <em>firm</em> must maintain adequate financial resources</td>
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<td>5.</td>
<td><strong>Market Conduct</strong> A <em>firm</em> must observe proper standards of market conduct</td>
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<td>6.</td>
<td><strong>Customers’ interests</strong> A <em>firm</em> must pay due regard to the interests of its customers and treat them fairly</td>
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<td>7.</td>
<td><strong>Communications with clients</strong> A <em>firm</em> must pay due regard to the information needs of its clients, and communicate with information to them in a way that is clear, fair and not misleading</td>
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<td>8.</td>
<td><strong>Conflicts of interest</strong> A <em>firm</em> must manage conflicts of interest fairly, both between itself and its customers and between a <em>customer</em> and another <em>client</em></td>
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<td>9.</td>
<td><strong>Customers: relationships of trust</strong> A <em>firm</em> must take reasonable care to ensure the suitability of its advice and discretionary decisions for any customer who is entitled to rely upon its judgement</td>
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<td>10.</td>
<td><strong>Clients’ assets</strong> A <em>firm</em> must arrange adequate protection for <em>clients’</em> assets when it is responsible for them</td>
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<td>11.</td>
<td><strong>Relations with regulators</strong> A <em>firm</em> must deal with its regulators in an open and cooperative way, and must disclose to the <em>appropriate regulator</em> appropriately anything relating to the <em>firm</em> of which that regulator would reasonably expect notice</td>
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(Source: Financial Conduct Authority, 2018)
In 2013, Black and Anderson produced a paper which examined how an ethical framework could be created for the financial services industry. Firstly, the suggestion of more legislation was dismissed on the grounds that more rules replace and reduce ownership of responsible decision making and “devalues ethics as it then becomes a question about what is required, rather than what is just and the right thing to do” (Black and Anderson, 2013, p.3). Jackman (2012) describes the reduction in the need for firms to think for themselves as “a kind of laundering of conscience; if it’s legal, it must be all right…and often focuses attention on minimum standards”. He goes on to say there is a “need to create space for ethics – space in the sense of deliberate ‘gaps’ in regulation”. The Black and Anderson (2013) paper acknowledges ethical duties have long since been part of the regulatory rules, dating back to 1988 (with the passing of The Bank of England Act, 1998), and suggested that the problem is more interpretation and application by financial firms and appropriate supervision by the regulator.

Secondly, it was suggested remuneration structures and performance incentives which drive behaviour could include ethical targets. Each firm’s performance against these objectives could be used to benchmark strong and weak ethical behaviour which could be used to gain competitive advantage. Presently, firms and individuals who are found to be conducting bad ethical practice are subject to public rebuke, however, there is no such recognition for good behaviour.

In 2013, O’Loughlin reported that HSBC was joining Barclays and the Cooperative Bank in removing sales targets from frontline staff and instead focusing on customer needs. This followed an investigation by the FSA which demonstrated that of the incentive schemes in place at the 22 firms examined, most were likely to lead staff to mis-sell to meet targets and gain bonuses (O’Loughlin, 2013).

Thirdly, it was suggested that an ethical group could be created which would self-regulate the industry as a whole. BBC News (2014) reported on the establishment of The Banking Standards Review Council (BSRC), an independent body set up to report on the behaviour and competence of member banks. It is fully funded by the industry but membership is not mandatory, which led to criticism and headlines such
as “Ethics panel for banks on the brink” due to the lack of commitment from several investment banks and none from foreign banks at the time (Wallace, 2014). However, to date (2019), 34 UK, foreign, and investment banks, and building societies have joined the renamed Banking Standards Board (BSB) which was launched with a new board in May 2015 (BSB, 2015).

Webley and Werner, (2008) found that although most large corporations had ethical codes of conduct there was a gap between the values and principles conveyed in the code and the attitudes and behaviour of the firm. Their research revealed this gap was due to ineffective ethics programmes and deficient corporate culture. However, McKinney, Emerson and Neubert, (2010) found that firms which had a written code of ethics tended to exhibit more ethical responses to common business dilemmas. The ‘Big 4’ banks all subscribe to a code under various titles. HSBC’s is called ‘Our Values’; Barclays’ is called ‘Purpose and Values’; Lloyds are called ‘Ethics and Values’; and RBS’ are called ‘Our Code’.

Painter-Morland (2010) argued that through the process of formulating corporate ethical codes they (the codes) become institutionalised, losing moral responsiveness and undermining ethical responsiveness. Essentially, imposing control mechanisms and rules was counter-intuitive to informing ethical behaviour. Painter-Morland (2010) suggested ‘self-questioning’ which would “allow the moral conscience to be spurred into action” (2010, p.273). Within RBS’ code is a ‘Yes check list’ (see Figure 2.1 overleaf). This exercise encourages employees to actively engage in a process which enables them to make ethical decisions; this is a step ahead of their competitors and addresses the dilemma highlighted by Painter-Morland (2010).
Fourthly, if agreement on ethical conduct could be reached, which Black and Anderson, (2003) concede would be difficult, a form of ‘scenario analysis and stress-testing’ could be conducted; much in the same way that the banking system’s capital adequacy is currently tested. The purpose of these exercises would be to identify weaknesses and develop strategies to deal with them, consequently raising the profile of ethics in banking and opening the channel of communication between the regulator and regulated concerning these matters.

Lastly, Black and Anderson, (2013) suggest, with hesitation, the regulators presence within financial organisations may help to overcome ethical issues as and when they arise. However, it is accepted that this strategy would conflict with the FCA approach of reducing contact with the regulated. Additionally, they highlight the possible risk
of regulatory capture. To date, there is no UK banking industry wide ethical code of practice. In the next section, the consumer and the role of consumer protection in banking will be explored.

2.3 Retail Bank Consumers

In this second theme, the definition of retail bank consumer will be considered from the perspective of the industry regulator, and therefore the legal definition. Next, the regulatory bodies and laws which are in place to protect the interests of the consumer will be introduced. Lastly, the reasons why consumers demand regulation will be explored.

2.3.1 Who is a Retail Bank Consumer?

Although the terms consumer and customer are often used interchangeably, the economic definition is generally accepted as the former being defined as the individual who *consumes* a good or service and the latter as the individual who *purchases* a good or service. Generally, in retail banking both are performed simultaneously making it hard to differentiate. Cartwright (2004) regards consumers of financial services as both private bank customers and private investors and are not restricted to their economic definitions. Therefore, for the purpose of this thesis the terms consumer and customer should be treated as ‘one and the same’.

The FCA’s consumer mandate has been expanded under section 404E of the Financial Services and Markets Act (2000) and covers the following:

Persons using, contemplating using or those who have rights or interests in services provided by an authorised person/regulated firm, either for themselves or on another’s behalf. The services include: acceptance of deposits, consumer credit, investment activity, payment services, electronic money and ancillary services (The National Archives, 2018).
2.3.2 Consumer Protection in Retail Banking

What is consumer protection? In the context of retail banking, it is the legislation that is in place to regulate banks and protect the interests of the consumer. The Financial Services Act (2012) outlines the FCA’s statutory strategic and operational objectives. The first of the operational objectives, and the only one considered for the purposes of this thesis, is the consumer protection objective:

Figure 2.2: FCA Consumer Protection Objective

(1) The consumer protection objective is: securing an appropriate degree of protection for consumers.

(2) In considering what degree of protection for consumers may be appropriate, the FCA must have regard to—

(a) the differing degrees of risk involved in different kinds of investment or other transaction;

(b) the differing degrees of experience and expertise that different consumers may have;

(c) the needs that consumers may have for the timely provision of information and advice that is accurate and fit for purpose;

(d) the general principle that consumers should take responsibility for their decisions;

(e) the general principle that those providing regulated financial services should be expected to provide consumers with a level of care that is appropriate having regard to the degree of risk involved in relation to the investment or other transaction and the capabilities of the consumers in question;

(f) the differing expectations that consumers may have in relation to different kinds of investment or other transaction;

(g) any information which the consumer financial education body has provided to the FCA in the exercise of the consumer financial education function;

(h) any information which the scheme operator of the ombudsman scheme has provided to the FCA pursuant to section 232A.

(Source: The National Archives, 2018)
In a 2012 FSA report introducing the FCA, Wheatley said of the FCA’s new approach, “We will step in earlier, and act faster, when we identify problems that risk harming consumers or the integrity of the market” (FSA, 2012a, p.8). The new regulator intends to take a more proactive approach, however it is important to note that consumers are not protected against all risks or every eventuality, and are responsible for making their own decisions. This is aligned with the views of Llewellyn (1998, p. 315) who stated that “the objectives of regulation should be limited to correcting identified market imperfections, failures and externalities”. Further discussion of the rationales for regulation is in Section 2.6.

2.3.3 Consumer Protection Laws

The Consumer Rights Act (CRA) 2015 consolidated eight different general consumer law legislations into one. The Act covers unfair terms, the supply of goods and services, digital content, enforcement powers, and competition law. The FCA is an enforcer under the CRA and has the right to challenge any consumer credit provider. The FCA took over this responsibility from the Office of Fair Trading (OFT) whose services terminated in 2014. From a consumer perspective, complaints do not have to be pursued through a court of law; instead they can be referred to the Financial Ombudsman Service (FOS) if an unsatisfactory response is received from their bank. This is a free service for consumers, subsidised by the retail banks. There is further discussion of FOS powers in Section 2.4.2.

One of the roles of both the OFT and the Competition Commission was to scrutinise the Financial Services Authority rules and practices in the interests of competition and consumer protection (Wu and Lee, 2001). Consumer rights responsibilities were passed to the FCA, and anti-competitive behaviour became the remit of the Competition and Markets Authority (CMA) in 2014. It could be argued that by passing all consumer protection powers to the FCA it has diluted the rights of the consumer, particularly since it was the OFT who campaigned so vigorously for consumers in the PPI mis-selling scandal, insisting the then regulator, FSA, investigate. Conversely, Green and Perry (2016) argue that the new regime is much
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strictly and highlight the significant steps the FCA has taken to ensure the fair treatment of consumers by payday lenders and debt management companies.

2.3.4 Consumer Demand for Regulation

There are several reasons why consumers demand regulation of the banking industry. Llewellyn and the FSA (1999) identified that it stems from consumers’ need to feel assured. He argues that if consumers do not feel confident enough to purchase suitable financial products it has the same detrimental effect as being mis-sold unsuitable products. For example, protection and retirement products may be avoided due to their long-term nature resulting in a welfare loss (Llewellyn, 2014). He further explains that assurance is sought due to the very nature of financial products: complexity; cost; duration of consumption; and also due to the recent past experiences which have resulted in a reduction of trust. Ring (2012) found that some consumer knowledge or capability is important in assessing whether an adviser can be trusted, and where there are low levels of knowledge trust becomes most important; however is most lacking. The case is made for setting minimum standards, which all regulated firms must meet, to increase consumer confidence. Of course the consumer may be under the impression that regulation is free and for that reason, Llewellyn and the FSA (1999) suggest making them aware there is a cost to avoid demand distortion. Consumer demand as a rationale for the regulation of financial services is discussed in more detail in the next section.

2.4 Regulation

This theme is split into two distinct sections; context and theory. The first section provides a definition of regulation, followed by an analysis of the evolution of regulation of the industry. The development of a ‘twin peaks’ approach and current regulatory structure of the UK financial services sector is then examined, including the most significant new development of ring fencing.

The second half of this theme will address the theoretical framework, which evaluates the rationales for regulation such as demand from the public, market failures and economic and social justifications. The research questions have been
developed from this framework and the arguments against regulation are also appraised to ensure a comprehensive evaluation.

2.4.1 What is Regulation?

According to the Oxford Dictionary of Finance and Banking (2014), it is the imposition by a government of controls over the decisions of individuals or firms. It often refers to the control of industries in which there is monopoly or oligopoly; in order to prevent firms from exploiting their market power at the expense of the public…regulation is especially important in the financial services industry.

Certainly the UK financial services sector could be argued to be operating an oligopoly, with four major players, Barclays plc., Lloyds Banking Group plc., the Royal Bank of Scotland Group plc. and HSBC Holdings plc., collectively accounting for approximately 70% of the personal current account market (Competition and Markets Authority, 2015). However, if the purpose of regulation is to protect the public against exploitation from these powerful institutions, then in what form is this exploitation taking place and what is/can the regulator do to mitigate this?

Den Hertog (2010, p.223) defines regulation as “the employment of legal instruments for the implementation of social-economic policy objectives”. He identified two traditional economic theories of regulation; ‘public interest theories of regulation’ and ‘private interest theories of regulation’. Public interest theories assume that the regulators pursue the public interest and have sufficient information and enforcement powers to do so. Private interest theories assume that the regulators have imperfect information, and therefore can only imperfectly (if at all) promote the public interest. Additionally, some of the economic agents may pursue their own interests, at the cost of the public interest. In essence, the regulators have the same motivations as those in the private sector, that is, self-interest. Private interest theory
is the public sector equivalent of the principal-agent problem which is examined further in Section 2.6.3.3.

Harnay and Scialom (2016) argue that the economic theories of regulation have played a significant role in moulding banking regulation policy since the 1960s. They suggest that the public interest view of regulation is strongly connected with welfare economics. For example, by promoting public interest and increasing social welfare through correcting market failures such as externalities and natural monopolies (discussed further in Section 2.6.3.1). They assert that by the 1970s there was much criticism towards this theory of regulation and a move towards the private interest view of regulation where it was believed that regulation was actually stifling business and paved the way towards deregulation.

2.4.2 The Evolution of the Regulation of UK Financial Services

Prior to The Banking Act 1979 there was no regulation of the UK financial services sector. The introduction of regulation was intended to protect depositors, partially in response to the secondary banking crisis of the 1970s and primarily due to the need to meet the requirements of the Directive 77/780/EEC (Cartwright, 2004). However, the near collapse of Johnson Matthey Bank in 1984 exposed deficiencies in the Act, particularly the two-tier system of supervision of recognised banks and deposit takers (Cartwright, 2004). This led to the introduction of The Banking Act 1987 which was intended to strengthen the BoE supervisory powers and replaced the 1979 Act.

The Financial Services Act (1986) established a series of self-regulatory organisations for different types of financial institutions and firms under the overall supervision of the Securities and Investments Board (SIB) (The Association of Futures Brokers and Dealers, the Financial Intermediaries, Managers and Brokers Regulatory Association, the Investment Management Regulatory Organisation, the Life Assurance and Unit Trust Regulatory Organisation, and The Securities Association). The deregulation of the financial services sector led to increased competition and an overhaul of the products and services provided by financial institutions. Traditional banks were now able to offer mortgages, investments,
general insurance, pensions and life assurance and no longer acted solely as deposit takers. However, this fragmented approach of having 11 separate bodies led to both overlap and under-lap issues of regulatory supervision.

Yet it was not long until the shortcomings of the Banking Act 1987 were realised. In 1991, the Bank of Credit and Commerce International (BCCI) was forcibly shut down by the Bank of England, owing billions around the world (Hemraj, 2005). The collapse “raised serious questions about the effectiveness of bank regulation in an era of international finance” (Adams and Frantz, 1992, p.9). BCCI was accused of being a corrupt criminal organisation; banking dictators, drug dealers and arms merchants. This led to its closure in a number of jurisdictions due to fraud, with the Bank of England being heavily criticised for failing in its oversight of BCCI.

In 1997 self-regulation was replaced, after several mis-selling scandals and a series of bank failures during that decade, with an independent regulatory body and SIB became known as the Financial Services Authority (FSA). The FSA was granted statutory power by the Financial Services and Markets Act (2000). When this Act came into force in December 2001 the FSA became the single regulatory body for the UK, responsible for banking, insurance and investment business. This formed part of a tripartite regulatory system in which the BoE, the FSA and HM Treasury had collective responsibility for financial stability.

The FSA was responsible for the systemic, prudential and conduct of business regulation for the retail and wholesale markets. It was believed that having one body to oversee the whole market would lead to greater efficiencies. Goodhart, Hartmann, Llewellyn, Rojas-Suarez, and Weisbrod, (1998) suggested these efficiencies could be realised through a shared infrastructure which would reduce duplication, overlap, gaps and inconsistencies; thereby reducing costs. Additionally, it was believed that a more simplified structure would lead to greater regulator accountability and better understanding and recognition by both financial firms and consumers. Furthermore, a single regulator would be able to monitor a firm’s full range of activities and there would be no conflict in the different objectives used to manage this. Goodhart et al., (1998) did concede that there were limitations, such as problems of coordination due
to the need to create divisions to deal with the different aspects of regulation and different types of financial institution within the single regulator.

The Financial Services and Markets Act (2000) gave the FSA four statutory objectives:

i. Market (maintaining confidence in the UK financial system).
ii. Public Awareness (promoting public understanding of the financial system).
iii. Consumer Protection (securing the appropriate degree of protection for consumers).
iv. Financial Crime Reduction (reducing the possibility of regulated businesses to be used for purposes connected with financial crime).

The Public Awareness objective was later replaced by Financial Stability (contributing to the protection and enhancement of stability in the UK financial system) by the Financial Services Act 2010.

In the FSA’s first Annual Report, 2001/02, the regulator set out what they hoped to achieve as the new single supervisory power. In terms of consumer protection, the FSA vowed to “help consumers achieve a fair deal” (FSA Annual Report 2001/02, p.13). The Handbook of rules and guidance was created which amalgamated the rulebooks of 10 previous regulators and introduced new policies covering money laundering, complaint handling and market abuse. Section 4 of the Annual Report was dedicated to ‘a fair deal for consumers’. This section of the report detailed how the FSA undertook a Treating Customers Fairly (TCF) project which examined the after-sales experience. Their key findings suggested that consumers:

i. did not always fully understand the information they were given about certain products
ii. were not kept fully informed post-sale
iii. expectations were not met by either the product and/or firm
iv. switching between product and firm was discouraged
v. complaints were not always dealt with fairly.
The FSA took significant steps to guide firms to improve on these shortcomings by highlighting what they considered to be “good and bad practice” (FSA Annual Report 2001/02, p.34) covering fairness in marketing and advertising, disclosure at point of sale, and complaint handling. Products such as annuities, with-profits policies and endowments were reviewed and new disclosure rules introduced to ensure consumers understood they had wider options than those that their provider may offer. The Financial Ombudsman Service (FOS) was established as an independent body to deal with complaints that were not satisfactorily resolved between the consumer and firm. The Financial Services Compensation Scheme was also set up to provide compensation to consumers where a regulated firm is unable to meet its liabilities. Additionally, the FSA took over some of the Unfair Terms in Consumer Contracts Regulations from the OFT. The pensions review undertaken by the FSA required firms to compensate consumers for historic mis-selling. In its first year the FSA seemed to be taking significant steps to safeguard and protect consumers from detriment. Baldwin, Cave and Lodge (2012, p.19) assert that “making information more extensively available, accurate, and affordable” encourages a strong competitive market and reduces the market failures of imperfect and asymmetric information.

A year later the FSA reported that “38% of consumers now know of the FSA” (FSA Annual Report 2002/03, p.14). They hailed this as “significant” progress and attributed this to its considerable work with consumer bodies such as the Citizens Advice Bureau (CAB). The FSA was now turning its attention to educating young people, increasing financial literacy in adults and alerting consumers to high-risk products and fraudulent firms and individuals. The consumer had a part to play in taking responsibility for their finances and making informed choices. The FSA introduced product comparison tables to encourage consumers to shop around and competition between providers.

From 2003/04 until 2008/09 the FSA Annual Report contained a section dedicated to 'helping retail consumers achieve a fair deal'. Each report contained key themes which were publicised each year.
In the 2003/04 publication the FSA shared their belief that better education is the key to consumers becoming more capable of making better decisions. They suggest that asymmetric information hinders efficient markets. This may be the case; nevertheless, should consumers be expected to possess the same level of knowledge about complex financial products as financial services professionals? Just how much knowledge is enough knowledge is not really clear. The FSA set out plans to improve consumer financial capability with advice from the Financial Capability Steering Group. Additionally, the FSA made an announcement about reforming the regulation of the retail market, moving from a polarised system to a de-polarised system. This meant that the restrictions on the range of products and services that an adviser could sell were removed resulting in increased choice for consumers.

It appears slightly contradictory to provide consumers with more choice when at the same time it is suspected they are not sufficiently proficient to make suitable choices. The significance of this is addressed in Section 2.6.4.1.

In 2004/05 the FSA publicised the work they had commenced with partners, the Personal Finance Research Centre at the University of Bristol, to undertake a survey to measure financial capability in the UK. Additionally, they announced the introduction of ‘Key Facts’ documents which were to be provided to consumers of mortgage and/or investment products as a result of the eradication of polarisation. These documents would provide consumers with simple, clear and user-friendly information about the product and any associated risks and costs. Depolarisation was intended to improve consumer choice by introducing a ‘third way’. Previously financial advisers could either be independent or not. Now, advisers could be multi-tied, meaning that they could offer a range of products from a limited range of providers. However, the introduction of more choice for consumers did not coincide with the development of a financial education strategy or wider advice networks, which was viewed as a missed opportunity which may have led to interim problems (Ring, 2004). The FSA launched a newly designed consumer website which they reported experienced an increase of 20% in average monthly visits and an update.
on their TCF initiative. The FSA identified that firms were not taking TCF into account when developing products or when designing sales staff reward and remuneration schemes.

In the 2005/06 publication the FSA focused on the outcome of their survey, ‘Financial Capability in the UK; Establishing a Baseline, March 2006’. Their findings revealed four key themes:

i. there is a significant lack of planning ahead for retirement in general by UK consumers

ii. the moderately small number of people affected by debt are acutely affected and those that are just managing would encounter financial strain if there was a change in their personal circumstances or a downturn in the economy as a whole; as people are not putting money away for a ‘rainy day’

iii. people are not choosing products which are suitable for their needs

iv. the age range most affected by these finding are those in the 18-40 year old bracket.

This younger generation did not appear to be as financially competent as the over 40s. The FSA believed that their seven-point programme, ‘Financial Capability in the UK, Delivering Change’ could address these issues by reaching over 10 million people in five years.

The FSA also provided an update on their TCF initiative and ‘encouragement’ they had given the industry to adopt TCF as part of their organisations culture and values.

In the 2006/07 publication the FSA announced its intention to review the retail investment market, called the Retail Distribution Review (RDR). The intentions of this review were to understand the root causes of the problems in the retail markets for investment products. The FSA estimated that their financial capability programme had reached approximately one million people; although the outcome of this is not clear from the publication. With regards to their TCF initiative the FSA published a number of examples of good and bad practice and announced fines against nine firms for breaches in the selling of PPI policies.
In 2007/08 the FSA publicised updates on their TCF initiative, the RDR and their financial capability programme. The FSA reported that there was evidence that senior management in most companies were taking TCF seriously and working towards embedding it within their organisation’s culture. This was demonstrated through improvements in a few product specific areas such as general insurance and mortgage disclosures. However, there was insufficient evidence of any improvement to customer outcomes for retail customers in general. The RDR had now been underway for a couple of years and the FSA had produced an interim report after working with both small and large firms for the industry and consumer groups. The FSA reported three major findings:

i. the need for a clear separation between advice and sales
ii. the need to raise professional standards
iii. the need to remove product provider influence on remuneration.

With regards to the FSA’s progress on their financial capability agenda the five-year ‘Delivering Change’ strategy was now at the half-way point. The FSA reported the success of the agenda stating that the programme had reached over three million people through schools, universities, youth work organisations, workplaces, health authorities and charities. The target was to reach ten million by 2011. It was between the publication of this Annual Report and the next that the financial crisis took hold in the UK.

In the 2008/09 Annual Report the FSA acknowledge the on-going financial crisis and the difficulties experienced by consumers over the previous year. The FSA response to this was an increased focus on conduct regulation whilst continuing their work on TCF, consumer education and the RDR. The FSA fined many firms for failing to meet the March 2008 deadline to have suitable measures in place to test whether they were treating customers fairly and providing sufficient evidence of embedding TCF within their organisation’s culture (the financial penalties incurred due to TCF implementation failure have not been quantified in the report). In response to the findings of the RDR (mentioned in the previous annual report) the FSA proposed the following:
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i. product providers will no longer be able to offer commission to adviser’s for selling their products

ii. a clear definition of independent and non-independent advice

iii. an increase in professional standards through increased skills and knowledge, raised ethical and behavioural standards and the governance of standards of practice.

These changes would be expected to be implemented by firms by the end of 2012. The FSA also undertook reviews of the mortgage and pensions market resulting in fines, public censures, prohibitions of individuals and cancellation of firm’s permissions for inadequate or unfair practices. Previously the Conduct of Business (COB) of Retail Banking had taken the form of self-regulation via the Banking Code, however, the FSA decided to bring it within its remit following its involvement in the test case between the OFT and several banks concerning unfair overdraft charges. Continuing with their work on consumer education and increasing consumers’ ability to manage their own financial affairs, the FSA had now reached over 6.5 million people through schools, universities, youth work organisations, workplaces, health authorities and charities. The FSA also published statistics following some of these initiatives which demonstrated a marked improvement in the confidence of these people to deal with money matters of up to 81% in some participant groups (FSA, 2009a).

In the 2009/10 publication of the Annual Report the ‘Helping retail consumers achieve a fair deal’ section is replaced with a section entitled ‘Delivering consumer protection and education’. The FSA had launched their new consumer protection strategy which aimed to achieve the following:

i. make the retail market work better for consumers

ii. avoid the crystallisation of conduct risks that exceed our risk tolerance

iii. deliver credible deterrence and prompt and effective redress for consumers.
The FSA acknowledged that to achieve these objectives they would have to become more ‘proactive’ and ‘intensive’ in their supervisory approach. In addition to increased engagement with firms the FSA also introduced metrics to quantify the effect of their work, these included:

i. redress paid by firms  
ii. a consumer awareness survey  
iii. complaints made to the Financial Ombudsman.

During 2009 the FSA took action to ensure ‘financial promotions and accompanying literature is fair, clear and not misleading’ by forcing firms to amend or withdraw 450 financial advertisements after receiving complaints. However, much of the work in this area was undertaken in retrospect; Lehman Brothers-backed products were found to have ‘serious deficiencies’ in their literature and sales advice.

As the FSA had taken over the COB for retail banking on 1 November 2009 it was now responsible for deposit taking and payment services but announced that their consumer education objective would now be taken over by a new consumer education body following the passing of the Financial Services Act 2010.

In 2010/11 the FSA dropped the ‘education’ element and focused on ‘delivering consumer protection’. The Mortgage Market Review (MMR) tackled irresponsible lending at the same time as setting out how a firm should deal with a consumer in financial difficulties and/or arrears. To some degree these could be partly viewed as a cause and effect of the financial crisis. The Financial Services Compensation Scheme (FSCS) compensation limit was increased to £85,000 per person, per authorised firm and extended to all European Economic Area (EEA) member states at the end of 2010 (agreed by all members at €100,000).

In the 2011/12 publication of the FSA annual report, in addition to the MMR and RDR, the FSA had undertaken a review of packaged bank accounts. They found
cases where the consumer was ineligible or unable to use some of the packaged products, for example insurance products, causing detriment. As a result, the FSA published new rules on the sale of general insurance contracts as part of a packaged bank account. Another significant development was the removal of the two stage complaint handling process. This meant that consumers could go straight to the FOS if they were unhappy with the first response they received from a financial firm when making a complaint. The FSA also announced an increase in the FOS compensation limit to £150,000.

The final annual report published by the FSA was in 2012/13. On the 31 December 2012 the RDR came into force, the main obligations being a higher professional standard, which included professional qualifications and the removal of commission from providers for advice. The creation of the Money Advice Service, launched in 2011, acknowledged the importance of ‘guidance’ in the new post-RDR landscape (Ring, 2016). In November 2012 Card Protection Plan (CPP) was fined £10.5M for widespread mis-selling of their products through financial firms which was the latest in a long line of product mis-selling scandals.

In January 2013 the FSA published its final guidance on ‘Risks to customers from financial incentives’ (FSA, 2013). In this report they begin by emphasising the need for consumer trust and confidence in financial services. The main findings of the investigation were that current staff incentives were likely to encourage mis-selling and banks were doing little to mitigate that risk. Indeed, the mis-selling of PPI and packaged bank accounts was primarily due to the ‘points’ accumulated by frontline staff when they sold these types of products. Conversely, selling a Basic Bank Account (which is not a money-maker for a bank) would accumulate few or no points towards a monthly or annual bonus. The FSA also reported that it welcomed the changes already implemented by some of the banks. Specifically, the changing incentive schemes so they are not based on sales volume, capping the maximum bonus, closer monitoring of high performing sales staff, identifying poor behaviour during face-to-face sales, stronger governance around signing-off incentive
schemes and reviewing past sales for possible systemic mis-selling incidents (FSA, 2013).

It is clear that the FSA carried out substantial work in an attempt to improve the marketplace for consumers and secure better protection for them. However, it was heavily criticised for failing to prevent the events that led to the Global Financial Crisis. The expectations of a single regulator leading to greater efficiencies, lower costs and improved monitoring of firms appeared to have failed. In reality, the FSA had grown in cost and size due to increased activity for FOS and the FSCS in the wake of mis-selling scandals such as PPI and unfair bank charges complaints. In 2010, the Guardian reported that the then Chancellor of the Exchequer, George Osborne, said of the FSA, “at the heart of the crisis was a rapid and unsustainable increase in debt that our macroeconomic and regulatory system utterly failed to identify let alone prevent” (Elliott, 2010). Indeed, the FSA’s Turner Review (2009b) concluded that the FSA had concentrated its efforts on the supervision of individual institutions and was lacking in attention to ‘wider sectoral and system-wide risks’.

The FSA admitted its failings over Northern Rock in a report published in March 2008. Crucially, the regulator did not probe for a more comprehensive analysis of the risks inherent in the business model and failed to engage at an appropriate level for a high impact firm (FSA, 2008a). The regulator conceded that it must increase its focus on prudential supervision, including liquidity and stress testing.

This reignited the debate for a ‘twin peaks’ approach to financial services regulation with Mervyn King, the then Bank of England governor, championing the approach, stating that prudential regulation, and consumer protection and market conduct must be separated as they require both different skills and approach (Taylor, 2009).

In The Tripartite Review, Sassoon (2009) details five possible options for discussion for a new regulatory model. The first suggestion was that the FSA should retain its current responsibilities but undergo a structural change away from focusing on Retail
and Wholesale divisions to Prudential and Conduct of Business divisions, with particular attention to financial stability issues. The second proposal was to implement the suggestions above, plus grant new supervisory powers to the Bank of England in addition to its new macro-prudential role. This would create a tripartite power, with the Treasury stepping in to resolve any differences between the FSA and the Bank of England. The third proposition was to abolish the FSA and replace it with two regulators, each with a clearly defined purpose and focus. One would be responsible for Prudential Regulation and the other for Conduct of Business regulation. The fourth recommendation was to combine proposals two and three with the Bank of England as the head of micro-prudential regulation in exceptional circumstances. The fifth, and final, suggestion was for the micro-prudential regulator to be merged with and become the joint responsibility of the Bank of England.

The Tripartite Review recommended the ways in which the three regulatory powers, the Bank of England, the FSA and HM Treasury could strengthen their capabilities in delivering their proposed regulatory roles (Sassoon, 2009). The Bank of England’s main remit would be enhancing financial stability; the FSA would focus on financial crime and consumer education, with HM Treasury playing a pivotal role in setting the direction of the UK’s economic policy.

The third option proposed by Sassoon was preferred, creating two new regulatory bodies (a twin peaks approach); one would be responsible for Prudential Regulation and the other for Conduct of Business regulation.

Cartwright (2004, p.5-6) defines prudential regulation as being “concerned with the solvency, safety and soundness of banks…in relation to consumer protection…even if there is no question of systemic risk” and conduct of business regulation is concerned with “how banks conduct business with their customers”.

2.4.3 Twin Peaks

This was not the first time such a regulatory structure had been proposed. The phrase ‘twin peak’ was first coined by Michael Taylor in his 1995 paper for the Centre
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for the Study of Financial Innovation (CSFI). This publication was calling for reform of the regulatory system pre-FSA. Taylor (1995) argued that the twin peaks approach to regulation would:

i. eradicate duplication and overlap
ii. create clear and precise objectives and focus for each supervisor
iii. encourage conflict resolution between the objectives of regulation
iv. encourage an ‘open’, ‘transparent’ and ‘accountable’ regulatory process.

His model proposed a Financial Stability Commission who would take responsibility for the prudential supervision of the system, ensuring it was sound; banks held sufficient capital and managed their risks appropriately (systemic protection). The second peak, the Consumer Protection Commission, would ensure responsibility for conduct of business regulation; ensuring consumers receive a fair deal (consumer protection).

The Deputy Governor of the Bank of England, Howard Davies, considered the arguments for a single or two separate regulatory structures in a speech in 1997. Davies was opposed to both a single regulator and the twin peaks approach due to the costs and ‘upheaval’ associated with regulatory reform. Davies argued that banks were unique and one regulator overseeing many different types of financial services firms would not be effective as it would need to ‘tailor the rules’ to meet each type of business. Davies felt that financial firms would not accept two regulators and that there would be a gap created as it was unclear where the regulation of markets fitted into Taylor’s proposal (Davies, 1997). Despite these reservations, the FSA was granted statutory power by the Financial Services and Markets Act (2000). When this Act came into force in December 2001 the FSA became the single regulatory body for the UK.

Following the Global Financial Crisis, Taylor (2009) published a further paper advocating the twin-peaks structure; emphasising that prudential and consumer protection goals should indeed be pursued separately. In 2012 this reform finally began to take shape.
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2.4.4 Current Regulatory Structure of the UK Financial Services Sector

The Financial Services Act (2012) implemented a new regulatory framework for financial services in the UK. The FCA took over as the regulator alongside the Prudential Regulatory Authority (PRA) to create a twin peaks approach.

A Memorandum of Understanding between the FCA and PRA set out their separate and independent mandates and their relationship to one another. The PRA is part of the Bank of England and is responsible for the prudential regulation of banks, building societies, insurance firms, investment firms and credit unions, it aims to promote ‘safety and soundness’ and ‘protect policyholders’. The PRA’s main focus is the harm that firms can cause to the stability of the UK financial system. The FCA is accountable to both HM Treasury and Parliament and is responsible for the conduct regulation of retail, wholesale and financial markets. The FCA is also responsible for the prudential regulation of firms which are outwith the PRA’s scope.

The aims of the FCA are threefold:

i. to secure the appropriate degree of protection for consumers
ii. to protect and enhance the integrity of the UK financial system
iii. to promote effective competition

Both the PRA and FCA aim to have a forward-looking, proactive and judgement-based approach to their areas of regulation.

In a speech to the British Bankers Association in early 2012, two months before the launch of twin peaks, Hector Sants spoke of ‘independent but coordinated regulation’ when he set out his vision for the model (Russell, 2012). The two regulators will have different objectives against which they will make their own separate judgements. They will also engage with firms separately but will share and exchange information and data internally ensuring that regulatory data is only collected once. However, firms could find that they are asked similar questions from the two supervisors as they will be gathering information for different purposes. Sants suggested that meeting objectives will be less challenging due to the greater clarity...
provided by the Financial Services Act 2010. In addition to a new regulatory framework, there have also been structural changes for the banks.

### 2.4.5 Ring Fencing

Schwarz (2013, p.82) defines ring fencing that is required by government regulation as, “legally deconstructing a firm to reallocate and reduce risk more optimally, such as by protecting the firm’s assets and operations and minimising its internal and affiliate risks”.

Perhaps the most significant transformation of the sector since the FCA came into power is the legal deconstruction of core retail deposits from investment banking. The Independent Commission on Banking (ICB) produced its Final Report (widely known as the 'Vickers Report') in September 2011 making several recommendations to enhance financial stability and competition; including loss-absorbency and ring fencing.

The ICB (2011) set out three objectives the retail ring fence should achieve ‘at the lowest possible cost to the economy’. The first is to make it easier to resolve troubles faced by both ring fenced and non-ring fenced banks, without the need for the taxpayer-funded government support. The second is to protect vital banking services from problems elsewhere in the financial system. The third is to limit the level of government guarantees, which should in turn reduce the risks taken by the banks. To achieve all three of these objectives the ICB (2011) set out five principles which can be summarised as follows. Firstly, only ring fenced banks will be given the regulatory power to provide mandated services (i.e. the taking of deposits from, and the provision of overdrafts to, individuals and small and medium-sized organisations). Secondly, ring fenced banks are prohibited from providing certain services which would expose them to global financial markets and the risks beyond the provision of payments services and financial intermediation. Thirdly, a ring fenced bank’s ancillary services are limited to those which are essential to carry out their non-prohibited activities, and there are limits placed on wholesale funding and exposures to non-ring fenced banks and non-bank financial companies. The fourth
and fifth principles relate to operation of a corporate body, where fourthly, the ring fenced and non-ring fenced banks should operate as separate legal entities, and lastly, the ring fenced bank must conduct its business with other entities in the group on a third party basis.

The Financial Services (Banking Reform) Act 2013 was enacted on 18 December 2013 and legislated for a process for transfer of business known as a ring fencing transfer scheme (RFTS). This enabled firms to restructure their businesses to comply with the ring fencing requirements that came into effect on 1 January 2019 (Bank of England, 2019). The largest firms (specifically those with deposits of £25bn or more) were required to fulfil this, and completed at various stages throughout 2018: Barclays, April 2018; Lloyds, May 2018; HSBC, July 2018; Santander, July 2018; and RBS, August 2018. Schwarz (2013) suggests that ring fencing can be used as a regulatory tool to correct market failures and protect against systemic risk. The rationales for regulation are discussed in more detail in Section 2.6.

2.4.6 Economics for Effective Regulation (EFER)

In March 2016 the FCA published Occasional Paper 13, ‘Economics for Effective Regulation’ (EFER), which set out a new approach to economic analysis of financial services (FCA, 2016a). In this paper they identified five key market imperfections which could lead to poor outcomes for consumers:

i. Information asymmetries
ii. Externalities
iii. Market power
iv. Behavioural distortions
v. Regulatory failure

The first three categories have traditionally been the focus of economic frameworks for public policy. Information asymmetries are explored in Section 2.6.3.2, externalities in Section 2.6.3.1 and market power was discussed in Section 2.4.1 of this thesis. Consideration of behavioural distortions, however, is a relatively new approach adopted very early on from the inception of the FCA.
behavioural economics in financial regulation is discussed in greater detail in Section 2.6.4.1.

The EFER paper (FCA, 2016a) identified 11 systematic drivers of poor market outcomes which are detailed in the Table 2.2 below.

<table>
<thead>
<tr>
<th>Driver Group</th>
<th>Specific patterns observed</th>
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<tbody>
<tr>
<td>Consumer behaviour</td>
<td>1. Appropriate information about products is not available or not used by customers</td>
</tr>
<tr>
<td></td>
<td>2. Difficulty in comparing products and services, and their value (e.g. due to complexity or bundling)</td>
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<td></td>
<td>3. Behavioural or rational inertia in taking appropriate action (e.g. switching)</td>
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<td></td>
<td>4. Errors by consumers in assessing own long-term needs</td>
</tr>
<tr>
<td>Supply-side behaviour and market structure</td>
<td>5. Unrecognised conflicts of interest between provider and their clients, leading to misaligned incentives</td>
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<td></td>
<td>6. Large providers in the market face little or no competitive discipline from rivals (market power)</td>
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<td></td>
<td>7. Barriers to entry and expansion arising from market structure or strategic conduct</td>
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<td></td>
<td>8. Providers coordinating activities in an anti-competitive way</td>
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<tr>
<td></td>
<td>9. Restrictive agreements or integration between firms at different levels of the supply chain</td>
</tr>
<tr>
<td>Other market distortions</td>
<td>10. Market participants act without considering side effects on markets or society</td>
</tr>
<tr>
<td></td>
<td>11. Unintended consequences of past interventions (e.g. perverse incentives or outdated regulation)</td>
</tr>
</tbody>
</table>

(Source: FCA, Economics for Effective Regulation (EFER), 2016)
The drivers are used by the FCA as a practical tool that helps to structure the analysis. The process of analysis in EFER for designing effective interventions can be broadly separated into three stages:

i. Problem diagnosis
ii. Intervention design
iii. Impact assessment

In diagnosing the root cause of problems the FCA identify the relevant markets, describe the facts about the market, identify the ways in which the market is not working well, assess the nature of harm caused, and evaluate the rationale for intervening. In designing effective interventions the FCA state the goals of intervention based on problem diagnosis, identify alternatives for addressing individual goals, eliminate unfeasible or highly inefficient alternative options, and combine individual actions into packages. In assessing the impact of interventions the FCA define the baseline, state the direct effects on an intervention, consider how market participants will respond, summarise the effects on market outcomes, and assess and, where appropriate, quantify the costs and benefits.

This methodology involves a much more complex analysis and for that reason the FCA would not adopt this approach in every situation. The economic analysis adopted will depend on the specific regulatory problem and are likely to be proportionate only for major interventions (FCA, 2016a). The specific rationales for adopting such a detailed approach will be outlined in Section 2.6. This will bring together the context and practice covered above with the theoretical framework below. First, the arguments against regulation of the sector are considered.

2.5 Arguments Against Regulation

There are several arguments against government intervention into the financial sector, such as inefficiency, costs of compliance, ineffectiveness, circumvention, impeding innovation and capture, to name a few.
First, however, a paper in which Benston (2000) appears to critically respond to the rationales set out by Llewellyn in his 1995 paper, 'Regulation of Retail Investment Services' will be considered.

On consumer protection as a justification for regulation, Benston (2000) sets out very clear arguments against the rationales he has found in the literature. The six consumer protection justifications he identified were:

i. to maintain consumer confidence in the financial system and financial services
ii. assure that a financial-services supplier on which consumers rely does not fail
iii. assure that consumers receive sufficient information to make good decisions and are dealt with fairly
iv. assure fair prices for financial services
v. protect consumers from fraud and misrepresentation
vi. protect invidious discrimination against individuals.

Each of these justifications and the reasons why he rejects them will now be discussed.

Benston (2000) argues that bank and payments systems failures can be eradicated with higher capital requirements. For this reason, he asserts intervention to maintain confidence is not necessary, with the exception of this and deposit insurance. He also argues that holding sufficient capital is the only appropriate regulatory requirement needed to provide assurance that a financial services supplier, on which consumers depend, does not fail. Holding sufficient capital would absorb losses, thereby avoiding insolvency. In a later publication, Benink and Benston (2005) reject the argument that intervention is required to protect against systemic risk since, they argue, retail banks should, without direction, hold sufficient capital reserves to mitigate this risk. Thus, Benston concurs with Llewellyn that capital requirements are necessary to maintain a stable and secure financial system, although he does not agree that there is a necessity to enforce it through regulation. The first
hypothesis that will be tested in the consumer survey is that the consumer is confident the retail banking system is stable and secure.

In the case of Lender of Last Resort, Benston (2003) argues that should one bank fail, it would simply be taken over by another bank and consumers would not notice any difference. Yet, this was not the case with Northern Rock. Despite four expressions of interest (from Virgin Money, J C Flowers, existing Northern Rock management, and a Group led by a former Abbey National chief executive) it was decided that no bid was good value for the taxpayer and the company was nationalised (Milne and Wood, 2009) in February 2008. After nationalisation the bank was split into two parts: Northern Rock plc. and Northern Rock Asset Management (NRAM), which have been described as the ‘good’ and ‘bad’ parts of the bank (Osborne, 2011). It wasn’t until 2012 that an agreement was reached for Virgin Money to purchase £465 million of mortgage assets from NRAM loans (Virgin Money, 2012). This demonstrates that it is not a straightforward or speedy process.

On consumer confidence in the financial system, Benston (2003) disagrees with the suggestion that one failed bank would cause a run on other banks. Indeed, the September 2007 bank run on Northern Rock did not spill-over and affect other solvent banks which could back his theory that consumers “can distinguish among sound and insolvent banks” (2003, p.33). However, Benston’s theory was not entirely proven by the events of 2007 as his belief that consumers do not run when their funds are protected by deposit insurance was incorrect. Depositors of Northern Rock clearly did run, despite compensation levels of 100% of the first £2,000, and 90% between £2000 and £35,000 in place. The average balance held at Northern Rock was £17,500 at 31 December 2006 (Northern Rock Annual Report and Accounts, 2006). Hence, this would suggest, the existence of deposit insurance is not sufficient to maintain consumer confidence where the compensation levels are not deemed to be adequate – or perhaps understood. The second hypothesis to be tested in the consumer survey is how confident consumers are that their money is protected should their bank fail.
Clearly there is some level of agreement between Llewellyn and Benston that capital requirements and depositor insurance are necessary for the existence of a stable and secure system and consumer confidence that their deposits are safe. However, financial products, Benston (1998) argues, are no different to any other type of product. To illustrate his point, Benston asserts Llewellyn’s ‘list of imperfections’ could also be applied to electronic goods or cars, where asymmetric information also exists in terms of the manufacturing process, and it may be some time before a fault develops. Nevertheless, some financial products are extremely complex and it could be decades (in the case of mortgages or pensions for example) before potentially harmful issues arise. Benston (2000) also uses the argument that financial products are no different to other products when he argues that consumers do not require regulation to ensure fair prices for financial services. The forces of supply and demand may work well in a perfect market. However, the current oligopoly, or as some argue complex monopoly (Competition Commission, 2002), would suggest that this argument is flawed. The same argument is used for fraud and discrimination, as is the existence of laws to protect all consumers in these areas. However cases of misrepresentation, such as endowment mortgages and payment protection insurance, would suggest that laws are deficient. Additionally, the fact that bank products and services are a basic requirement to function in society necessitates additional protection for the most vulnerable in society to ensure they are not financially excluded.

### 2.5.1 Hazards

As discussed previously, there are well argued and accepted rationale for the regulation of financial services; both economic and social. Banks are a ‘special’ case and inefficiencies and externalities such as asymmetric information and contagion are such justifications. However, the provision of financial services regulation gives rise to hazards.

Goodhart et al., (1998) identified the danger of over-regulation as one such hazard. Two causes were identified which explained this occurrence. Firstly, regulation is not supplied through a market mechanism, but rather is enforced through institutional
requirements, restrictions and guidelines. A major consequence of this is information loss, specifically how much regulation the consumer wants and needs and how much they are prepared to pay for it. Secondly, most consumers of financial services perceive regulation as a free good. However, this is not the case and there is a cost borne by the sector for regulation and compliance. Where the regulator pursues self-interest there could be ‘excessive’ regulation, which in turn may result in the cost of regulatory compliance outweighing the benefits. Moosa (2015) claims regulation should never be viewed in terms of cost only, but rather in terms of the costs and benefits. His line of reasoning is that, as good regulation pays off we should not worry about reducing the bonuses of the CEOs of banks.

Dowd (2009) points out that the existence of moral hazard is an underrated problem and it played a central role in the events leading up to the Global Financial Crisis. Dowd claims that the existence of deposit insurance is highly destabilising for the banking system. His argument is based on the premise that inefficient banks will go out of business as consumers will prefer the more prudent banks. Moosa (2015) opposes this view and suggests that inefficient bank theory is actually an example of bad regulation. Undeniably, the failures of Northern Rock and Royal Bank of Scotland were due to poor management decisions and excessive risk-taking encouraged by light-touch regulation. Further, claiming that regulation should be avoided as it impedes innovation is, in his view, counterintuitive. The use of derivatives and other ‘synthetic’ financial products actually played a major part in the Global Financial Crisis and he points to the use of these products to circumvent regulation.

Some underlying issues have been addressed through legislative or regulatory intervention. Moral hazard has been reduced through the introduction of alternative mechanisms for dealing with failing banks such as bail-ins. The Special Resolution Regime (SRR) is essentially a process for the Central Bank to step in and ensure that a failing bank does so in an orderly way, thus reducing systemic risk (Bank of England, 2019). To avoid a repeat of the bail-out of banks during the Global Financial Crisis, with what was fundamentally taxpayers’ money; the Bank of
England has put in place a mechanism that will allow banks to dissolve with the costs of failure falling on the shareholders and creditors, much like other corporations do, but taking into account the special role that they play in the economy. The resolution powers granted to the Bank of England enable them to stabilise the bank so that it’s critical functions remain available to its customers and restructure the bank, including replacing the senior executives of the bank. Restructuring may involve selling functions of the banks to competitors or moving them to a bridge bank managed by the government. Another alternative is a bail-in. This is where the balance sheet is repaired by swapping debt for equity (bonds for shares), much like what may be carried out by a corporation facing financial difficulties. The last option available to the Bank of England is to dissolve the bank by transferring customer deposits to another bank, or refunding them through depositor insurance.

2.5.2 Regulatory Capture

The term ‘regulatory capture’ was coined by George Stigler in 1971 in his paper, ‘The Theory of Economic Regulation’. Stigler begins with a powerful statement, “The state – the machinery and power of the state – is potential resource or threat to every industry in the society”. Stigler highlighted the fact that the state can choose who to assist and who to harm through penalties, financial or otherwise, or incentives. Stigler (1971, p. 3-6) presented the argument that, “as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit”. Stigler identified three policies where this can be evidenced, “control over entry by new rivals…substitutes and complements…and price-fixing”. There has, in recent years, been an emergence of new players in the UK financial services sector, hailed ‘Challenger Banks’ due to the dominance of the big four within the industry. Lloyds Banking Group, Royal Bank of Scotland, Barclays and HSBC provided 77% of current accounts and 85% of business lending (BBC News, 2014) when the Competition and Markets Authority (CMA) was formed in 2014. The CMA was a merger between the Office of Fair Trading and the Monopolies and Mergers Commission; they launched a competition inquiry into the sector in November 2014, the results of which were published in February 2016. The main findings were that
the sector was not as innovative or competitive as it needs to be and older banks have advantages over new entrants and smaller banks (CMA, 2016). A major consequence of this is that consumers are not switching, even in cases where they could make significant savings.

Baker (2010, p.647) found that a “growing number of respected commentators now argue that regulatory capture of public agencies and public policy by leading banks was one of the main casual factors behind the financial crisis of 2007-2009”. Further, he explains that this contributed to pro-cyclical behaviour (during financial booms there is an absence of public or political lobbying) and therefore it is the banks themselves, through industry lobbies, which have the greatest incentives to influence regulatory developments. In particular, he asserts the Basel II regulations that encouraged the use of banks’ own internal risk models, and were not robust enough to prevent the Global Financial Crisis, almost completely lacked public scrutiny. Whilst Baker observed this pro-cyclical, or positive, correlation between financial booms and bank incentives to influence regulation, Lucca, Seru and Trebbi (2014) identified countercyclical, negative, net worker inflows from industry to regulator in good times. Their study was interested in the phenomenon of the ‘revolving door’ which is discussed further in Section 2.5.3 below.

2.5.3 The Revolving Door

Recent studies (Lucca, Seru and Trebbi, 2014; Shive and Forster, 2016), media commentary (Arauzo, 2013; Ginsberg, 2014; Gilbert, 2015; Vassalos, 2018) and government reports (Committee on Standards in Public Life, 2016) have uncovered a growing trend for movement back and forth between industry and regulator. In 2015 Wheatley, the then Chief Executive of the Financial Conduct Authority defended the FCA’s revolving door into the private sector, stating that it is beneficial for the regulator to recruit from industry and for staff to take their knowledge into the sector (Norman, 2015). Two years later, Wheatley himself was recruited by a hedge fund based in Hong Kong (Denham, 2017). Wheatley had previously run the Securities and Futures Commission in Hong Kong where he introduced measures
to improve short selling transparency (Cash, 2017), before taking up the post with the UK regulator.

Lucca, Seru and Trebbi (2014) highlight some of the benefits of the revolving door, in particular the potential for regulators to employ higher ability workers. It is clear that the regulator would benefit from the practice knowledge of former industry workers, and, equally, banks would benefit from employing those who have a relevant understanding of compliance. An interesting finding from their research was the theory that regulators preferred to impose stricter and more intense regulations as this increased the likelihood that their skills would be required in industry and they would be highly rewarded in return. They call this ‘regulatory schooling’ a widely accepted theory in the studies of the revolving door between Washington and Wall Street. They conclude that limiting the mobility between the regulated and the regulators may have the negative impact of the reduction of attainment and retainment of talent.

Commentary in Europe tends to be less forgiving. Arauzo (2013) writes of the threat to public interest, where reform is being stifled and undermined, and causing repeated financial and social crises. Vassalos (2018) identified that one third of top positions at the Directorate-General for Financial Stability, Financial Services and Capital Markets Union (DG FISMA), in the period 2008-2017, were held by people who worked for the financial industry before or after leaving it. The DG FISMA is responsible for initiating and implementing EU policy in the area of Banking and Finance in Europe. He demonstrated that the overreliance of regulators on industry expertise leads to the crucial question of whether those appointed to serve the public interest have the neutrality necessary to fulfil this role, or whether they will naturally consider solutions to regulatory problems that are best for the industry. The Committee on Standards in Public Life (2016) made recommendations to the UK government to manage conflicts of interest when staff revolve in and out of the regulator, including the promotion of transparency and a corporate culture of integrity, however, there is no specific regulation to deal with this risk.
In summary, there is clearly a case against regulation. The debate about whether the current regulatory regime is effective is another matter. The rationales for regulating the retail banking market will be identified and will form the theoretical questions that will be used to measure consumer confidence in retail banking regulation in the UK. In the next Section, 2.6, the rationale for regulation will be explored.

2.6 Rationales for Regulation

Why is regulation especially important in the financial services industry? Some economists believe that market solutions are preferable to government solutions in the financial services market (Dowd, 1996; Benston and Kaufman, 1996; Stiglitz, 2010; Moosa and Ramiah, 2014), as discussed in the previous Section, 2.5. Now, the key rationales for regulation that have been identified in the literature will be discussed. These are: demand from the public; market failures; social justifications; and fraudulent activities.

2.6.1 Demand from the Public

The demand for regulation of financial services is linked to consumer confidence and trust (Llewellyn and the FSA, 1999). In fact, it could be argued to have a negative correlation, with demand rising as trust and confidence in the financial system falls. Public demand for regulation to correct market inefficiencies or inequities was developed initially by Pigou (1932) in Public Interest Theory. As discussed earlier, public interest theories assume that the regulators pursue the public interest and have sufficient information and enforcement powers to do so (Den Hertog, 2010). These theories had become unpopular by the 1970s as the UK government repealed their control and the UK moved towards the private interest view of regulation (Harnay and Scialom, 2016).

Llewellyn and the FSA (1999) highlight several reasons why consumers demand regulation. The first being lower transaction costs. Indeed, if each consumer had to investigate the safety and soundness of each institution there would be significant costs, both financial and time. Secondly, he highlights the issue of access to relevant
information, and whether the consumer has the knowledge or skills to use the information they may be able to gather. Thirdly, Llewellyn suggests that consumers need assurance when carrying out transactions with financial firms, which links to his fourth reason, their past experience of bad behaviour by financial firms. Fifth, due to the nature of financial contracts, the value can be determined after it has been signed and the product purchased, by the firm’s behaviour and solvency. Sixth, again related to the nature of contract and products, the consumer is often making a substantial commitment. Seventh, the old adage that prevention is better than cure. Llewellyn suggests that regulation will prevent ‘hazardous behaviour’ by firms, which is preferable to claiming redress afterwards. Eighth, the regulator can enjoy economies of scale in monitoring, and lastly, a part of the costs of regulation will be borne by the firms themselves. Of course the consumer may be under the impression that regulation is free and for that reason, Llewellyn and the FSA (1999) suggest making them aware there is a cost to avoid demand distortion.

Benston (2000) argues that the preservation of consumer confidence in banks and the banking system is not a valid reason to regulate banks. To put this into context, Benston is debating the need for regulation to protect the consumer against bank failure by regulating products and services. As discussed earlier, his theory is that deposit protection and capital requirements should be sufficient.

In addition to regulation being imposed to protect the public against monopolistic exploitation, Goodhart, et al., (1998) highlight two further reasons:

i. smaller, retail clients are less informed and so must be protected
ii. the need to safeguard systemic stability.

These are examples of ‘market failures’ which Baldwin et al, (2012, p.15) state justify the need for regulation as “the uncontrolled market place will, for some reason, fail to produce behaviour or results in accordance with the public interest”. As discussed previously, this is due, in part, to the unequal bargaining power of banks and consumers in the current oligopoly market structure.
2.6.2 Market Failures

The view of Baldwin et al, (2012) matched that of Llewellyn (1998, p.315) who not only suggested they were grounds for regulation, but who also stated that “the objectives of regulation should be limited to correcting identified market imperfections, failures and externalities”. The market failures highlighted in particular by Llewellyn were externalities and asymmetric information. In his 1999 publication for the FSA he classifies these as economic rationales for regulation. Cartwright (2004) identified that the rationales for regulation can be split into two principal categories, economic and social. It could be argued that consumer demand is in fact a social rationale for regulation since it is concerned with social welfare. On the other end of the spectrum, the Chicago economists, including George Stigler and Richard Posner amongst others, argued that regulation can be used to give benefits to particular individuals or groups. Stigler’s (1971, p.3) theory was that regulation is “acquired by industry and is designed and operated primarily for its benefit”. Posner (1974, p.344) argued that regulation can be viewed as a product whose allocation is determined by the basic principles of supply and demand. He goes on to explain, that when viewed in this way it can be accepted that, all other things being equal, regulation will be “supplied to those who value it the most”. Their views are more aligned to the private interest theory of regulation, or regulatory capture, which was discussed in Section 2.5.2.

2.6.3 Economic Rationales for Regulation

The economic rationales for regulation are those which are fundamental to the economic well-being of the country. As discussed previously, the UK financial system plays a pivotal role in the economy. The commercial banks play the vital role of channelling funds between savers and borrowers and operating the payments system. Confidence in the banking system is critical to the health of households, businesses and the overall economy. Hence, government intervention in the financial services sector and the strict regulation of the banking industry is rationalised by the need to minimise the occurrence of events that could undermine the reputation of banks and threaten confidence in the system.
2.6.3.1 Externalities

The primary external concern is that of systemic risk, “banks are subject to runs, which have contagion effects, and which can throw solvent banks into insolvency” (Goodhart et al., 1998, p.8-9). In today’s global economy this is not geographically restricted. The problem cannot be contained at a national level but becomes a global crisis. As witnessed in the Global Financial Crisis, what began as a problem in the USA soon rippled across the world. There are mechanisms in place to deal with the issue of both macro and micro risks.

Macroprudential financial regulation seeks to safeguard the financial system as a whole by recognising the importance of general equilibrium effects (Hanson, Kashyap, and Stein, 2011). Since the Global Financial Crisis, the necessity to achieve global financial stability has seen macroprudential policy become central to the development of public policy (Kenc, 2016). Kenc (2016) has traced the term macroprudential back to unpublished documents by the Bank for International Settlements (BIS) and the BoE in the late 1970s. By 1986 the BIS was using the term when discussing policies which aimed to secure the safety and soundness of the payments mechanism and the financial system as a whole. The rationale for macroprudential regulation is the existence of externalities which can lead to systemic risk and ultimately market failure. The International Monetary Fund (IMF) classified these externalities into three categories:

i. externalities related to strategic complementarities

ii. externalities related to fire sales

iii. externalities related to interconnectedness (De Nicolo, Favara and Ratnovski, 2012).

Strategic complementarities arise when banks expose themselves to the same types of risk through activities, such as reducing screening intensity and increasing lending activity during boom times, hiding losses or maintaining risky lending, and correlated asset choice. Fire sales can lead to the devaluation of similar assets held by other banks, reducing the capital ratio of those banks and leading to financial distress,
eventually triggering a credit crunch. The interconnectedness of banks can lead to issues of contagion, that is, the failure of one institution can have a spillover effect and lead to the failure of otherwise solvent banks. De Nicolo et al, (2012) emphasise that externalities arising from interconnectedness are particularly great in Systemically Important Financial Institutions (SIFIs). Further, they argue that the macroprudential tool that can address the externalities arising from all three categories is capital requirements.

Banks are required to hold capital reserves to enable them to absorb any unexpected losses. Both the UK and USA had minimum capital requirements in place as far back as 1981 (Bank for International Settlements, 1999). However, these requirements did not extend to non-domestic banks, giving foreign competitors an unfair advantage.

The collapse of German based Herstatt Bank in 1974 posed a systemic threat due to its heavy involvement in the foreign exchange markets (Schenk, 2014). The bank had losses (DM470 million reported, actual losses were much higher) of over 10 times what they held in capital and reserves (DM44 million). This led to discussions between the G10 central bankers (Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, the United Kingdom and the United States) to make international efforts to reduce such risks. The Basel Committee on Banking Supervision was launched in 1975.

Early in 1987, the UK and USA proposed an international agreement to impose risk-based capital standards, which by July 1988 had the agreement of the G10 central banks and bank regulators of Switzerland and Luxembourg (Wall, 1989). These new rules were to be effective from 1992 and focused on the credit risk of banks. The agreement became known as the Basel Capital Accord.

The bankruptcy of Barings Bank in 1995 highlighted weaknesses in the Accord. The Barings Bank collapse was mainly due to weaknesses in the bank's internal controls and management systems. Rogue trader, Nicholas Leeson, was the chief trader and floor manager for Barings Bank in Singapore, but, he was also the general
manager of the back office (Canac and Dykman, 2011). Being in control of both the front and back office functions allowed Leeson the opportunity to hide financial futures trade losses and simultaneously publicly record profits. By the time the losses of over £800 million (Stonham, 1996) were discovered they were so huge that they caused the bankruptcy of the over 200 year old merchant bank.

By 1996 there were proposals to amend the Accord to take account of market risks arising from exposure to foreign exchange, traded debt securities, commodities and options, and operational risk (BIS, 2018); this became known as Basel II, the revised international capital framework.

However, this was not sufficiently strong enough to prevent the Global Financial Crisis. Even before the collapse of Lehman Brothers it was apparent that advancements in financial technology and the development of new sophisticated and complex financial products had surpassed the framework of the existing guidelines. Following the Global Financial Crisis, Basel III was proposed which extended several areas of the existing framework. This new framework introduced liquidity ratios to deal with short-term shocks as well as enhancing the capital requirements to take account of different levels of risk exposures and stable funding over the medium- to long-term (BIS, 2018). Basel III has been implemented in Europe through the Capital Requirements Directive (CRD) IV package (European Banking Authority, 2018). CRD IV is an EU legislative package that contains prudential rules for banks, building societies and investment firms.

From past experience this market failure, and the need for regulation to be in place to protect consumers and the economy as a whole is unquestionable. Indeed, even Benston, who asserts that much of the rationale for regulation is weak (2003), concedes that bank capital is the exception (2000). If the consumer is confident that the UK retail banking system is stable and secure, and there is sufficient regulation in place to ensure that it is, then it could be argued that regulation has corrected this market failure. However, it may only become apparent that there is insufficient regulation in place, if and when, another crisis arises.
The first market failure addressed above is that of systemic risk at a macro-prudential level. The regulations are enforced at both a domestic and international level in an effort to reduce the likelihood of contagion, and thus increase the stability and security of the financial system. Therefore as part of this investigation, the confidence levels of consumers will be measured to assess the success of these macro-prudential regulations in maintaining consumer confidence in the financial system. The first hypothesis that will be tested is:

H1: The consumer is confident that the UK retail banking system is stable and secure

Microprudential regulation is aimed at preventing the failure of individual financial institutions (Hanson, Kashyap, and Stein, 2011). In 1983 Diamond and Dybvig published a seminal paper providing a model of bank runs and associated financial crises. The principal mechanism proposed to avoid bank runs was the government provision of deposit insurance. In their model they assert that deposit insurance is critical for the stability of the banking system. This was based on the premise that consumers would not panic and try to withdraw their demand deposits if they knew that their deposits were safe.

The UK was one of the first countries to introduce a deposit insurance scheme in 1982, which was later revised in 1995 following the failure of BCCI (Goodhart, 2008). The current scheme, operated by the Financial Services Compensation Scheme (FSCS), has been in existence since 2001; however, this did not prevent the run on Northern Rock in 2007. Goodhart (2008) identified two main issues that must be addressed so that deposit insurance is effective. First, the large majority of consumers’ balances must be covered, and second, depositors must have immediate access to their funds. At the time of the Global Financial Crisis, UK depositors may have had to wait up to three months, which is not feasible for most individuals. Ayadi and Lastra (2010) found that deposit insurance was ill-designed and insufficiently publicised. Hamalainen, Pop, Hall, and Howcroft (2011) found that the existence of co-insurance did not prevent a bank run as consumers were not
prepared to lose *any* of their funds. The compensation levels covered by the FSCS can be found in Table 1.1.

Diamond and Dyvbig (1983) also propose the LOLR function can act as a preventative tool against bank runs. However, they point out that if the LOLR were to unconditionally bail out every bank that found itself with liquidity problems then this in itself would create an incentive for banks to take greater risks. Conversely, the fact that it is not guaranteed does not then provide 100% confidence to consumers, and therefore, cannot prevent a bank run. Indeed, it was the announcement that Northern Rock was seeking assistance from the BoE that triggered the bank run of 2007. However, if the consumer is confident that the money in their retail bank account(s) is protected should their bank fail, and there is sufficient regulation in place to ensure that it is, then it could be argued that regulation has corrected this market failure.

The second market failure addressed above is that of systemic risk at a micro-prudential level. The regulations are enforced at a domestic level in an effort to reduce the likelihood of a bank run by guaranteeing the protection of a proportion of consumer deposits should a bank fail. Therefore as part of this investigation, the confidence levels of consumers will be measured to assess the success of these micro-prudential regulations in maintaining consumer confidence in the financial system. The second hypothesis that will be tested is:

**H2: The consumer is confident that the money in their retail bank account(s) is protected should their bank fail**

### 2.6.3.2 Imperfect and Asymmetric Information

In financial services it may be the case that the consumer does not have adequate information to make a fully informed decision. Additionally, the problem of asymmetric information occurs as the consumer has less information than the ‘expert’ supplying the financial product and/or advice. Consumers are unable to inform themselves adequately so as to avoid making decisions which may disadvantage them (Wood, 2001). The individual consumer does not have the time...
or the resources to sufficiently source information on ‘good’ and ‘bad’ products and providers (Llewellyn, 1995). Additionally, the “low level of financial literacy and product comprehension” compounds the issue (Gaskill and Ashton, 2008, p.160). The nature of financial contracts is such that it may be some time before the performance of a product can be determined (Llewellyn, 1995).

Mullineux (2000) believes that regulation is required to protect the consumer against fraud, excessive risk taking, incompetence or bad behaviour on the part of the financial organisation. There were many cases of PPI policies being added to personal loans without the consumers’ knowledge, or, the consumer being led to believe the policy was compulsory when in fact it was optional. This misbehaviour was largely target-driven and not at all in the interests of the consumer. This is an example of asymmetric information being used to ‘exploit’ the consumer; Llewellyn and the FSA (1999) describes this as the ‘agency cost’. Asymmetric information occurs in financial services when there is inequality in information; one party knows more than the other (Mishkin and Eakins, 2012). In retail banking it is almost always the case that the consumer will have less (product knowledge) information than the representative of the financial institution. This could, and has in the past, led to a situation where the consumer’s lack of knowledge is taken advantage of. However, if the consumer is confident that their retail bank will provide them with sufficient information to make informed decisions and there is sufficient regulation in place to ensure that firms do, then it could be argued that regulation has corrected this market failure.

The third market failure addressed above is that of imperfect and asymmetric information. The FCA conduct of business regulations set out how a firm must behave in its day-to-day dealing with consumers and the regulator monitors this through using tools such as Economics for Effective Regulation (discussed in Section 2.4.6). Therefore as part of this investigation, the confidence levels of consumers will be measured to assess the success of conduct of business regulations in reducing information problems and maintaining consumer confidence in their retail bank.
The third hypothesis that will be tested is:

**H3: The consumer is confident that their retail bank will provide them with sufficient information to make informed decisions**

### 2.6.3.3 Moral Hazard

One of the problems that arise when the externalities market failure is corrected is the emergence of moral hazard. Krugman (2008, p.63) describes moral hazard as “any situation in which one person makes the decision about how much risk to take, while someone else bears the cost if things go badly”. This is based on the theory that greater risks are taken if a party is “insulated” and therefore does not have to fully realise the consequences of their actions (Buckley, 2011, p.58).

By creating systems in which the consumer deposits are protected it may induce a bank to take greater risks (Hellman, Murdock and Stiglitz, 2000), perhaps even provide an incentive to intentionally take on the risk of failure (Boyd and De Nicolo, 2005), and so is not viable without regulation (Keeley, 1990). The introduction of ring fencing in the UK has reduced this risk in retail banking somewhat, since the level of risk that can now be taken by ring fenced banks has been reduced significantly. Ring fencing was introduced as a post-crisis regulatory response to the moral hazard problem surrounding ‘Too Big To Fail’ (TBTF) banks (Hardie and Macartney, 2016). Moral hazard can undermine the effectiveness of schemes such as LOLR, and magnify costs for the government providing it. The positive effects of ring fencing are two-fold: it reduces the firms’ ability to take excessive risk; and the firm is no longer able to ‘blackmail’ the state into a bailout (Lehmann, 2014).

Moral hazard also arises due to the existence of the principal-agent problem. The consumer frequently requires advice when purchasing financial products and the quality of the product cannot be ascertained at the point of purchase (Llewellyn and the FSA, 1999). The existence of asymmetric information between the principal (the consumer) and the agent (bank staff) can lead to exploitation of the consumer where the agent is motivated by self-interest. Certainly, the mis-selling of PPI and packaged bank accounts was primarily due to incentive structures which
encouraged high volume sales of these products by frontline staff in exchange for monetary reward. Thus these products were often sold with little consideration of whether this was the most suitable product for the consumer.

The rationale for regulation is to remove the probability that the moral hazard (caused by schemes such as LOLR and deposit insurance) and the principal-agent problem will be exploited (Llewellyn, 1998). If the consumer is confident that their retail bank will do the right thing and there is sufficient regulation in place to ensure that firms do, then it could be argued that regulation has corrected this market failure.

The fourth market failure addressed above is that of moral hazard. The FCA conduct of business regulations set out how a firm must behave in its day-to-day dealing with consumers and has published guidance on staff incentives and remuneration. Therefore as part of this investigation, the confidence levels of consumers will be measured to assess the success of conduct of business regulations in combatting moral hazard and maintaining consumer confidence in their retail bank. The fourth hypothesis that will be tested is:

**H4: The consumer is confident that their retail bank will do the right thing**

### 2.6.3.4 Fraudulent Activities

Fraudulent activity is linked to moral hazard and examples of the banks taking excessive risks when the costs are borne by others are plentiful. In the case of sub-prime mortgage selling in the US, the fraudulent reporting of income to ensure the acceptance of a home loan became standard practice at both small and large institutions (Skinner, 2016). However, the risk of default was not borne by the mortgage provider since the mortgages were then bundled together and their cash flows sold as securities, such as bonds. Likewise, in the UK, Northern Rock was offering a ‘Together’ mortgage which was made up of a mortgage worth 95% of the value of the property and a personal loan worth up to 30% (capped at £30,000) meaning that no deposit was required and buyers could borrow up to 5.9 times their income (Lythe, 2014). These ‘Together’ mortgages were then securitised to raise more funds for Northern Rock. Then, in the market for securitised mortgage
products, bankers were failing to perform adequate due diligence tests on the included loans or practices of the loan providers. RBS was heavily criticised for misrepresenting the risks associated with the underlying collateral of their mortgage securities (Skinner, 2016).

The PPI misconduct case alone amounted to four times the cost (£37bn) of the London Olympics (Treanor, 2016). A culture which focused on sales was also behind the mis-selling of several other products, specifically interest rate hedging products, endowment mortgages, packaged bank accounts, investment products and advice, pensions and ID theft and card protection insurance (Baker, 2016). However, fraud was not limited to the practices of a few banks competing with each other. LIBOR and foreign exchange market rate manipulation was essentially collusive, collaborative and collegial (Skinner, 2016) between the largest of the world’s banks. It had become industry accepted practice, essentially grid lock (see Section 2.6.4), and gave rise to significant social and economic costs.

Baker (2010) wrote that in the aftermath of the Global Financial Crisis many commentators cited regulatory capture of public bodies and public policy by leading banks as one of the main causal factors. The appointment of a person from the private business sector (for example, a bank) to a position of responsibility in government or a public body (for example, a regulator), or vice versa, leads to a conflict of interests, “such conflicts of interest may give rise to favouritism, abuse of power, discriminatory treatment, lack of impartiality and objectivity, and, ultimately, waste of public resources” (Cerrillo-i-Martinez, 2017, p.357). The regulator was widely criticised after the Global Financial Crisis for failing to regulate the banks that caused the crisis.

Boyer and Ponce (2012) found splitting supervisory powers between different supervisors to be the optimal arrangement, in terms of social welfare, as it could lower the potential that a single supervisor could be captured by banks. Regulatory capture was discussed in more detail in Section 2.5.2.
The steps taken to restructure the regulatory framework and separate the retail side of banks’ business from riskier operations does address some of the causes of fraudulent activity that have been experienced in banking in recent times. Nonetheless, there is still nothing to address the revolving door in the UK; which is not exclusive to the banking industry. However, if the consumer is confident that they are protected from retail bank misconduct and there is sufficient regulation in place to prevent it, then it could be argued that regulation has corrected this market failure.

The fifth market failure addressed above is that of fraudulent activity. The FCA conduct of business regulations set out how a firm must behave in its day-to-day dealing with consumers and the regulator monitors this through using tools such as Economics for Effective Regulation (discussed in Section 2.4.6). Therefore as part of this investigation, the confidence levels of consumers will be measured to assess the success of conduct of business regulations in combatting fraudulent activity and maintaining consumer confidence in their retail bank. The fifth hypothesis that will be tested is:

**H5: The consumer is confident that they are protected from retail bank misconduct**

### 2.6.4 Social Rationales for Regulation

In the previous section the economic rationales for regulating retail banking were discussed. These are the economic reasons for imposing regulations such as capital requirements, depositor insurance and Conduct of Business rules to reduce externalities, asymmetric information, moral hazard and fraudulent activities. These are justified as they are deemed necessary interventions for the efficient functioning of the economy. As discussed previously, confidence in the banking system is critical to the health of the economy.

The Organisation for Economic Cooperation and Development (OECD, 1997) defines social regulations as those that “protect public interests such as health, safety, the environment, and social cohesion”. Further, “the economic effects of
social regulations may be secondary concerns or even unexpected, but can be substantial”.

Llewellyn (1998, p.315) stated that “the objectives of regulation should be limited to correcting identified market imperfections, failures and externalities”. However, Cartwright (2004) identified the following social rationales for regulation:

i. Paternalism
ii. Distributive justice
iii. Community values.

2.6.4.1 Paternalism

Paternalism is when there is intervention in the interests of another, against their will. An example of this is the Mortgage Market Review (FSA, 2010a). This put an end to self-certified mortgages, consumers could no longer submit false income and expenditure information in order to pass the affordability checks. Additionally, it saw the introduction of mandatory advice on regulated mortgage products. These interventions were introduced solely to secure better outcomes for the consumer by reducing the likelihood that they will make decisions to their detriment; whether it was desired or not. Behavioural economics has been referred to as ‘light’ paternalism (Thaler and Sunstein, 2008).

As stated above, in its strictest sense, paternalism “removes choice and replaces it with the choice of the state” (Cartwright, 2004, p.19). The behavioural economists practice a libertarian version of paternalism by ‘nudging’ people to make more rational decisions (this is discussed in more detail below). Although an economic theory, it is important to distinguish between behavioural economics and neoclassical economics. In Section 2.4.1 the two traditional theories of economic regulation were discussed. The early neoclassical approach of welfare economics from which public interest theory originated, and the Chicago School of economics, also a neoclassical school of economic thought, from which private interest theory emerged. Neoclassical economics assumes that agents act rationally and in their own self-interests. Conversely, behavioural economics does not assume that
people make rational decisions, and instead studies the behavioural biases that can affect the decision making process. “A principal difficulty with describing a provision as paternalistic is that most apparently paternalistic laws can be justified on other grounds” (Cartwright, 2004, p.20). Although an economic theory, the use of behavioural economics in this context falls under a social rationale as the primary justification for intervention is not an economic one.

The FCA published its first Occasional Paper in April 2013 where it set out how it will apply behavioural economics to meet its overall strategic objective “to make markets for financial services work well for consumers” and use the insights to help “choose the right interventions” and “secure better outcomes for consumers” and “promote effective competition” (Erta, Hunt, Iscenko, Bramley and the FCA, 2013, p.3, p.51-52).

The FCA believed that by gaining better insight into consumer behaviour, specifically on how behavioural biases can affect the decision making process, particularly in financial services decisions, they could help consumers avoid making decisions to their detriment.

In the second occasional paper, also published in April 2013, called ‘Encouraging consumers to claim redress: evidence from a field trial’. An anonymous firm reproduced the experiment the government’s Behavioural Insights Team (also known as the ‘Nudge Unit’) undertook with non-payers of vehicle tax (The Economist, 2012). In this experiment they made subtle changes to the language used in their mailings to encourage a higher response rate. In the government experiment they found that by personalising the letter they experienced an increase in response rate of a third. In the FCA experiment changes were made to letters advising consumers of redress owed to them, due to an error identified in the sales process. The results were a sevenfold increase in response rate. The changes made were:

i.   envelope marked ‘act quickly’
ii.  FSA logo in the letterhead
iii. salient bullet points
iv. simplified text, reduced by 40%
v. stated in letter that claims process would take only ‘5 minutes’;
vi. CEO signed the letter instead of generic team
vii. a reminder letter was sent three to six weeks afterwards.

The above is a demonstration of the FCA’s commitment to “test remedies before implementation more frequently than previously and conduct research to gain deeper insights into specific markets” (Ert et al, 2013, p.52). The outcome of such research, using behavioural economics, will then be used by the FCA to decide the most appropriate intervention.

Behavioural economics “has emerged as an alternative view of financial markets” (Shleifer, 2000, p.2) and is the study of psychology and economics (DellaVigna, 2009). This relatively new field of study developed due to rising scepticism, increased by events such as the 1987 stock market crash, about the efficient market hypothesis (Mishkin and Easkins, 2012). Fama (1970, p.388) developed the efficient market hypothesis, “security prices at any point in time fully reflect all available information”. In doing so he asserted the financial markets are efficient and cannot be beaten. Theory developed over time to demonstrate that individuals are not fully rational (Shleifer, 2000) and therefore cannot make fully rational decisions. Consequently, the efficient market hypothesis cannot be applied to financial markets in such a way as they can be to alternative economic markets.

Altman (2012) suggests that due to behavioural biases and errors which are ‘hardwired in the brain’; financial education and the drive to improve financial literacy of the UK population by the FCA (and its predecessor the FSA) will actually do little to improve the decisions of consumer of financial services. Instead, Altman (2012) suggests nudging consumers into making decisions which ‘experts’ deem to be better for them under this approach to behavioural economics. Altman suggests that the ‘alternative’ approach (which he dubs the ‘Simon-March’ approach after cognitive psychologist Herbert A. Simon and behavioural theorist James G. March who collaborated on several publications on organisational theory) is more suitable for
government intervention to improve financial education and literacy and therefore there is less need for ‘nudges’, and quality of information is key.

The UK government have been using behavioural economics to ‘protect’ the general public or ‘persuade’ them to make better decisions. In a report sponsored by Aviva (previously, Norwich Union) Dixon (2006) suggested that as many as 30.5 million adults in the UK in early 2006 were experiencing some form of difficulty when it came to financial capability. Dixon (2006, p.2) suggested financial capability was more of “social welfare issue” for the government than an issue for the FSA. He then went on to suggest various ways in which the government could apply behavioural economics to improve consumers’ financial capability, such as, automated debt repayments from benefits and automated transfer of salary increases to savings accounts.

The UK government have been using behavioural economics to make policy decisions for some time via the ‘Nudge Unit’. Harford (2009, p.13) described his reservations in ‘nudging’ the public to “behave as the nanny state preferred” when he believes that the popularity of the theory has meant that it has become “mutated”. Harford’s reservations stem from his observation that behavioural economics has quickly become public policy panacea, and his belief that perhaps a more cautious approach by government would be to understand what people would prefer if they could be persuaded to give some proper thought to decisions.

Ormerod (2010) demonstrated why despite government assertion that behavioural economics can be used to ‘nudge’ the general public into making better decisions they are failing to successfully apply it in practice. For example, in the case of workless families the government hopes to change behaviour by cutting or changing the benefits they receive. Additionally, in the case of binge drinking the government approach is to increase the cost of alcohol. These approaches do not take into account that we are not “autonomous individuals” and that we are influenced by others and what our circle considers to be socially acceptable. This demonstrates that changing behaviour is not simple or straightforward and a deeper insight into
what influences consumers is required if the benefits of behavioural economics are to be realised.

Following the FCA’s first occasional paper, Miller (2013) published an article summarising how the FCA intended to use behavioural economics to resolve consumer issues and the four key ways in which they intend to do this. Firstly, the information provided to consumers would be more closely monitored so that it was marketed in a particular way and certain practices were forbidden; such as misleading information. Secondly, the choice that consumers are presented with when making financial decisions would be more closely scrutinised by the regulator. Thirdly, product distribution would be more closely supervised to ensure that products were only sold through the appropriate channels to the appropriate target market. Lastly, products would be more controlled so that their features could not lead to the exploitation of consumers.

Watt (2013) commented that the PPI mis-selling scandal is a perfect example of “people’s implied acceptance that the product was appropriate for their circumstances”. If the above four principles had been applied to PPI products, then it becomes clear that mis-selling on the scale that was seen would have unlikely occurred.

Chung (2013) suggests that using behavioural economics will only be effective if financial institutions have a good understanding of each consumer group’s behaviour and motivations, and that they can only do this by undertaking a comprehensive review of their profile, specifically: ‘demographics’, ‘channel use’, ‘affluence’, ‘ability to bear loss’, ‘financial sophistication and capability’, ‘investment appetite, investment objectives and willingness to accept loss’, and ‘risk type and emotional ability to accept loss’.

Spicer et. al., (2014) found that customer inertia exists due to information asymmetries and lack of transparency in the market. They suggest that the use of league tables and rankings would help consumers to compare offers and identify the
best option. This could alleviate some of the concerns expressed by Harford (above) and further enhance good competition in retail banking.

The sixth rationale for regulation is that of paternalism. Since coming into power the FCA has developed a keen interest in the use of behavioural economics to choose the right interventions, secure better outcomes for consumers and promote effective competition (Erta et al, 2013). Therefore as part of this investigation, the confidence levels of consumers will be measured to assess the success of paternalism in maintaining consumer confidence in their retail bank. The sixth hypothesis that will be tested is:

**H6: The consumer is confident that they can trust the expertise of their retail bank**

2.6.4.2 Distributive Justice

Distributive justice is concerned with distributing resources on the basis of what is fair, and when applied to the regulatory system it is concerned with the protection of consumers (Cartwright, 2004). Examples of regulatory protection of the most vulnerable financial services consumers are policies of financial inclusion and the FCA investigation into payday lenders which resulted in extra rules for firms providing high-cost, short-term credit which took effect on 1 July 2014 (FCA, 2014a).

The FCA published its eighth Occasional Paper, ‘Consumer Vulnerability’ in February 2015. The FCA conceded that much consumer protection legislation is “underpinned by the notion of the average or typical consumer” (Coppack, Raza, Sarkar, Scribbins, and the FCA, 2015, p.6). Their study found that many consumers in vulnerable circumstances are not being served consistently or well. The FCA defines a vulnerable consumer as, “someone who, due to their personal circumstances, is especially susceptible to detriment, particularly when a firm is not acting with appropriate levels of care” (Coppack et al, 2015, p.7). Some of the examples of risk factors for vulnerability identified in the FCA’s research were:

i. Low literacy, numeracy and financial capability skills
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ii. Physical disability
iii. Severe or long-term illness
iv. Mental health problems
v. Low income and/or debt
vi. Caring responsibilities (including operating a power of attorney)
vii. Being 'older old' for example over 80, although this is not absolute (may be associated with cognitive or dexterity impairment, sensory impairments such as hearing or sight, onset of ill-health, not being comfortable with new technology)
viii. Being young (associated with less experience)
ix. Change in circumstances (e.g. job loss, bereavement, divorce)
x. Lack of English skills
xi. Non-standard requirements or credit history (e.g. armed forces personal returning from abroad; ex-offenders; care-home leavers; recent immigrants).

It is beyond the scope of this research to examine all of the factors identified by the FCA. The researcher, for ethical reasons, is unable to access particular vulnerable groups and also does not have access to other specific groups, for example from the 'non-standard' list above. The specific demographic groups that will be tested for any significant difference in levels of confidence in this thesis are: age, education and income. A common problem encountered by each of these groups is access to affordable products (Coppack et al, 2015). In July 2018 the FCA set out a framework for considering both economic and distributive fairness considerations in the practice of price discrimination (Starks, Reynolds, Gee, Burnik, Vass, and FCA, 2018). If the consumer is confident that the price of retail banking products is fair, and there is sufficient regulation in place to ensure it is, then it could be argued that regulation has corrected this market failure.

The seventh rationale for regulation is the principal of distributive justice. Access to financial services should be equal for all and inclusive. Price tends to be a common problem which creates inequality of access. The FCA has published several papers to help firms identify and understand the specific needs of vulnerable groups and
challenge financial exclusion. Therefore as part of this investigation, the confidence levels of consumers will be measured to assess the principal of distributive justice in maintaining consumer confidence in their retail bank. The seventh hypothesis that will be tested is:

**H7: The consumer is confident that the price of retail banking products is fair**

### 2.6.4.3 Community Values

Community values are the values which society holds and wish regulation to protect and promote; such as trust, honesty and fair dealing (Cartwright, 2004). Due to market failures such as asymmetric information, trust is paramount in retail financial services, as without trust demand for products and services may decrease (Llewellyn, 2005). One of the FCA’s statutory objectives is to ‘maintain confidence in the UK financial system’ under the terms of the Financial Services and Markets Act 2000.

In 2004 the FOS found that not all consumers were receiving fair and equal treatment and their 37th newsletter focused on types of discrimination that can occur, namely disability, race and sex, which were protected under the Disability Discrimination Act (1995), the Race Relations Act (1976), and the Sex Discrimination Act (1975). In their 123rd newsletter published in 2015, the FOS revisited the issues which had been brought together, by this previously separate legislation, under the Equality Act (2010). They identified several case studies of discrimination at the hands of financial services providers. The FOS outlined the cases and the outcomes, clearly explaining how they had made their decision and how the service provider had fallen short of both expectations and the law. The purpose of these newsletter case studies is to provide those working within the industry with essential information on how to prevent and/or settle complaints, before escalation to FOS. Clearly, there is UK legislation in place to protect all citizens, not only consumers of financial services. However, the FOS has taken on the role of out-of-court settler of complaints which means that the consumer does not incur any legal costs (the firms pay a fee for each complaint against them). The FOS does have to consider the law when making a
ruling but can depart from it if it would lead to a conclusion contrary to what is fair and reasonable (Taylor, 2017). If the consumer is confident that they will not be unlawfully discriminated against by their retail bank, and there is sufficient regulation in place to prevent it, then it could be argued that regulation has corrected this market failure.

The eighth, and final, rationale for regulation studied in this thesis is the preservation of community values. In addition to the guidance and regulations in place, as discussed above, there is also an arbitrator, the Financial Ombudsman. The purpose of FOS is to ensure that consumers receive a fair deal and where this is not the case it is put right. This is particularly important for groups who could find they are discriminated against but may lack a voice. Therefore, as part of this investigation, the confidence levels of consumers will be measured to assess the impact of community values in maintaining consumer confidence in their retail bank. The eighth hypothesis that will be tested is:

**H8: The consumer is confident that they will not be unlawfully discriminated against by their retail bank**

When applying the philosophies of distributive justice and community values, it is clear there are ethical considerations as well as social ones. The organisational culture and ethics of UK financial institutions has come into question for decades, but more recently due to the Global Financial Crisis of 2007/08.

The above has set out the economic and social rationales for regulation of the financial services sector.

### 2.8 Conclusions

The structure and culture of retail banks has been explored, and how these factors influence the treatment of consumers and impact consumer confidence in the effectiveness of regulation. Firstly, the consolidation of the retail bank market has given rise to a complex monopoly which by its very nature is not conducive to the enhancement of consumer welfare. Additionally, the reduction in diversification of
business models gave rise to the incentive structures and cultures which were blamed for widespread bad practices and bank failure (Spicer et. al., 2014). Conversely, a strong ethical culture is considered to make banks less vulnerable to misconduct (Vigeo-Eiris, 2017); despite this there is still no mandatory ethical code for the industry (Jenkins, 2016).

It is important to consider the above factors since they heavily influence the behaviour of the firm which has consequences for the consumer. For example, whether the firm ‘will do the right thing’, ‘provide them with sufficient information to make informed decisions’, can be trusted ‘in their expertise’, and will ensure they are protected against widespread ‘misconduct’ and ‘discrimination’ is inherently down to the structure and culture of the organisation.

The research aim is to answer the question, ‘Are Scottish consumers confident in retail banking regulation?’ After undertaking a critical review of the existing theory of financial regulation literature, from the perspective of consumer confidence in retail banking, it is clear the areas that regulation seeks to address are the market failures which cause economic and/or social detriment.

Therefore, the theories have been contextualised to develop the following hypotheses:

H1: The consumer is confident that the UK retail banking system is stable and secure

H2: The consumer is confident that the money in their retail bank account(s) is protected should their bank fail

H3: The consumer is confident that their retail bank will provide them with sufficient information to make informed decisions

H4: The consumer is confident that their retail bank will do the right thing

H5: The consumer is confident that they are protected from retail bank misconduct
H6: The consumer is confident that they can trust the expertise of their retail bank

H7: The consumer is confident that the price of retail banking products is fair

H8: The consumer is confident that they will not be unlawfully discriminated against by their retail bank

H9: In general, the consumer is confident that as a retail bank customer they are adequately protected

These hypotheses will be used to develop a set of consumer survey questions which will be evaluated using a triangulated approach. The evaluation process is part of the survey design (from theoretical model to empirical testing) and is undertaken in three distinct steps, see Figure 2.3 below.

**Figure 2.3 Triangulated Approach to Research Design**

![Triangulated Approach to Research Design](image)

The researcher held a three-stage survey design, the first with subject knowledge academics (theorists), the second with industry experts (practitioners) and the third with a group of consumers (end-users) who would not be included in the main study. The rationale for separating the groups was due to the different levels of technical
knowledge, additionally, corrections and amendments could be made before ‘testing’ on the next group.

There are numerous studies, in particular those undertaken by the current regulator, where there is participation from either industry or consumer. The regulator and academics often conduct collaborative research, as evidenced in this chapter. However, the researcher could not find any specific studies where theorists, practitioners and consumers had direct input into the design of the study. The next chapter will provide an outline of the research methodology and the methods employed by the researcher in this thesis.
CHAPTER 3: RESEARCH METHODOLOGY AND METHODS

3.1 Introduction

In the previous chapter, the researcher explored the structure and culture of both the retail banking regulator(s) and the retail banking institutions and how this has changed over recent decades to become the system known today. Some of the changes were a result of innovation, others the result of failures, but essentially the rationales for regulating the sector have remained the same. The emphasis on the importance of confidence in the financial system has intensified since the Global Financial Crisis of 2007/8. There are of course still advocates of free-banking, and the regulation versus deregulation debate may never cease. Both the social and economic rationales for regulation are widely debated in the literature, and as mentioned above, although the industry has transformed over the decades the principles behind these have not. Nonetheless, the measurement of confidence in the processes to enforce these appears to be lacking in the literature. This research aims to measure consumer levels of confidence in the rationales for regulation and identify whether demographic factors such as age, education and income have any relationship to these levels of confidence. These are factors that the Financial Conduct Authority has identified as risk factors for vulnerability (Coppack at el, 2015).

i. Being young, or being ‘older old’
ii. Low literacy, numeracy and financial capability skills
iii. Low income

This chapter will provide an outline of the research methodology and methods employed by the researcher in this thesis. The relationship between the research question, the hypotheses previously identified in the Literature Review Chapter, the philosophical assumptions and the techniques used to conduct the research will be demonstrated. The researcher's overall research philosophy is stated in Section 3.2 Methodology. The research approach follows a positivist paradigm and there is a discussion of the methods deemed appropriate for the primary research and the
techniques adopted for analysis, including consideration of academic ethical issues arising from the research.

Finally, an overview of the preliminary research is provided, including changes made to the Consumer Survey following examination of the feedback obtained during the three-stage survey design.

A description of the data collected in the final study, including the characteristics and demographics of the sample population is defined and the validity of the sampling approach is discussed.

3.2 Methodology

The terms methodology and methods are often, incorrectly, used interchangeably. For example, Trochim (2000) defines epistemology as the philosophy of how we come to know, and methodology as the practice of how we come to know. There is no separation of methodology and methods in his definition. McGregor and Murnane (2010) offer concise definitions as follows: methodology refers to any philosophical assumptions that underpin the study, and methods are the techniques or procedures followed to conduct the study. Moreover, they explain that each research paradigm (discussed in section 3.2.1 below) has an associated group of methodological principles. Wainwright (1997) defines methodology as the philosophical analysis of research strategies, and the methods as the techniques used to gather and analyse the data. Furthermore, the philosophy of a paradigm is made up of the ontology, epistemology and methodology.

Based on the research outcomes of the study, and a comprehensive review of prior literature, the researcher has identified that to describe and explain the methodology and methods used there must be two distinct parts. First, the philosophical approach is discussed as the research paradigm; which constitutes ontology, epistemology and methodology. Second, the methods are discussed in terms of data collection procedures and data analysis strategy.
3.2.1 Research Paradigm

Kuhn (1970) coined the phrase ‘research paradigm’ in his book, *The Structure of Scientific Revolution*. He defined the paradigm as a source of guidance for conducting and evaluating research which is based on a shared set of theoretical assumptions. A paradigm, therefore, is the identity of a research community based on their shared belief system or set of principles (Cohen, Manion, and Morrison, 2013). The theoretical assumptions that characterise the research paradigms are ontology, epistemology and methodology (Guba, 1990).

Hitchcock and Hughes (1995) proposed that ontological assumptions lead to epistemological assumptions; these, in turn, lead to methodological considerations; and these, in turn, lead to issues of data collection (as cited in Cohen et al, 2013).

Ontology refers to the study of the nature of reality (Guba, 1990), the nature of existence, and understanding ‘what is’ (Gray, 2007). Velardo (2016) attempts to answer the question, ‘What is reality?’, by approaching the question from two disciplines, science and philosophy. He posits that while science focuses on empirical evidence and observation, philosophy tends to be more speculative and based upon argument and reasoning from values. Ontology determines what can be rationally understood (Poli and Seibt, 2010). The researcher’s position is that the world is external and objective, and through research one single reality, or truth, can be discovered. Objectivism is the epistemology which underpins the positivist stance (Crotty, 1998).

Epistemology refers to the study of knowledge and understanding what it means to know (Gray, 2007), how we know what we know (Crotty, 1998), and how we legitimise and validate this knowledge. Essentially, it is the theory of knowledge (Benton and Craib, 2011). In line with the aim and research objectives of this thesis the researcher has a positivist theoretical perspective as it is posited that reality can be measured in terms of this specific research project; facts are facts. Moreover, the researcher is independent from the study, hence it is purely objective. Guba (1990) proposed that all paradigms can be characterised by the responses to three
basic questions. Table 3.1 overleaf illustrates how the researcher formed a positivist philosophical position.

**Table 3.1: The Paradigm of Positivist Inquiry**

<table>
<thead>
<tr>
<th>Theoretical assumption</th>
<th>Basic questions</th>
<th>Positivist inquiry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontology</td>
<td>What is the nature of reality?</td>
<td>Realist – reality exists ‘out there’</td>
</tr>
<tr>
<td>Epistemology</td>
<td>What is the nature of the relationship between the researcher and reality?</td>
<td>Dualist/objectivist – distant and non-interactive. Values and other biases are automatically excluded from influencing the outcome</td>
</tr>
<tr>
<td>Methodology</td>
<td>How should the researcher go about finding out the reality?</td>
<td>Experimental/manipulative – questions or hypotheses are stated in advance in propositional form and subjected to empirical tests under carefully controlled conditions</td>
</tr>
</tbody>
</table>

(Source: adapted from Guba, 1990)

‘Positive’ or confirmatory data is a term used to describe hypothesis-driven research at the heart of science (Anderson, Sprott, and Olsen, 2013). Positivism is the philosophy that all knowledge comes from observable experiences. The positivists are driven by their belief that society could be studied like a natural science.

Criticisms of the positivist approach are that it fails to consider the subjective nature of participants and relies on experience as a valid source of knowledge (Scotland, 2012). Additionally, research findings are only descriptive; they will not produce in-depth insight into the issue being examined. Lastly, the reliance of experience as a valid source of knowledge has been criticised. On the contrary, for this study these
points are valid reasons for adopting this approach. In this research the aim is to measure the levels of confidence that retail bank consumers have in eight specific areas of regulation. Although individual opinions are subjective, collectively they form an objective reality that can be measured, the reality is ‘out there’ and the researcher cannot influence this or bias the results. The researcher will then undertake statistical analysis of the captured data; this forms part of the method and is discussed in more detail in the next section.

3.3 Methods

Owing to the researcher’s positivist ontology and epistemology, a quantitative approach to data collection was employed. Cohen et al, (2013), claim that positivist approach researchers will choose from ‘traditional’ tools, such as surveys or experiments.

However, most studies will be a mixture of both qualitative and quantitative categories with more emphasis on one or the other (Hackley, 2003). The researcher has opted to use a traditionally qualitative method, in the three-stage survey design, to validate the consumer survey questions. One of the main purposes of the process is to ensure the questions were not misleading or likely to be misinterpreted. A disadvantage of a questionnaire is that due to its standardised questions it is not possible to explain any points. It is therefore sensible to test the questions with at least one group of people knowledgeable about the issues being examined. The researcher held a three-stage survey design; the first with subject knowledge academics (theorists), the second with industry experts (practitioners) and the third with a group of consumers (end-users) who would not be included in the main study. The rationale for separating the groups was due to the different levels of technical knowledge, additionally, corrections and amendments could be made before ‘testing’ on the next group, see Figure 3.1 overleaf.

There are numerous studies; in particular those undertaken by the current regulator, where there is participation from either industry or consumer, however, the
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researcher could not find any specific studies where theorists, practitioners and consumers had direct input into the design of the study.

Figure 3.1: Stages of Survey Design: from Theoretical Model to Empirical Testing

For this study the primary data collection method used was a consumer survey in the form of a questionnaire. The researcher designed a consumer survey that would collect both demographic data, and, measure levels of confidence using a Likert scale. The data was collected online, over the telephone and face-to-face.

These three channels were used to ensure no group(s) was excluded from participation due to immobility, geographic location, or lack of internet access. Face-to-face surveys were conducted in shopping centres in the north, east and central
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Scotland. Additionally, a pensioners coffee morning in north east Scotland was attended to capture this age demographic. The participants who were contacted via telephone were selected at random from phone books purchased from BT which covered households in the south west of Scotland. Primarily, the researcher sought to ensure the widest range of ages and geographic locations were covered. There were practical limits on time and budget in relation to postcode data and specialised software (or employing an external company to conduct the research, such as the FCA has done in previous studies).

The advantages and disadvantages of the survey method differ slightly depending on the channel utilised to conduct the questionnaire and collect the data. It's widely recognised that surveys tend to be straightforward, quick and cheap to administer (Ackroyd and Hughes, 1992). However, this very much depends on the chosen channel. In terms of simplicity, an online survey will be easier to analyse than paper format conducted via telephone or face-to-face. In this research, the use of Novi Survey removed the requirement for data entry prior to coding. Another advantage the online survey has over paper completion is that the survey can be set up in such a way that questions cannot be missed. For example, one of the clauses on the consent form was that an incomplete questionnaire would be treated as a wish to withdraw from the research. It could be the case that some of the face-to-face surveys had unintentional gaps; since these were completed independently by the participants.

The online and face-to-face surveys were completed independently by the participants; however, the telephone surveys were completed by the researcher on the participants’ behalf. The researcher endeavoured to ensure they did not influence the outcome in any way, however, it must be acknowledged that a major potential disadvantage of this channel is interviewer bias (Szolnoki and Hoffmann, 2013).

It has been argued that an online survey is quicker than face-to-face or telephone research (Gunter, Nicholas, Huntington and Williams, 2002). However, the online survey for this research was actually open for 9 months, whereas the face-to-face
and telephone surveys were completed in a matter of days. Certainly, the researcher had to dedicate their full attention and time to the latter two methods as these were labour intensive. Nonetheless, this concurs with Duffy, Smith, Terhanian and Bremer (2005), that online surveys actually take some time if a wide-reach is required.

In terms of monetary cost, there was nothing incurred for the online or telephone surveys (the university had purchased the software licence, and the calls were made as part of a contract plan, so the researcher did not incur further charges), however, the face-to-face surveys did incur travel costs and other incidental costs.

In terms of sample representativeness, face-to-face surveys tend to deliver the best results, followed by telephone and then online surveys (Szolnoki and Hoffmann, 2013). In this research, face-to-face surveys were carried out after most of the online surveys had been completed. This enabled the researcher to target particular demographic groups that were lacking via the online method. The telephone surveys also targeted a particular demographic: males. The telephone method had the best response rate, with 100% of successful contact resulting in a completed questionnaire. Some face-to-face requests were declined, although not many, and it is impossible to determine how many potential participants did not click on the survey link, or clicked it and then decided against participation before commencing. However, around one fifth of surveys that were started were never completed.

A clear disadvantage of the online method was sample representativeness; this was made-up through the other two channels. It is clear that some of the disadvantages of one method can be overcome by adopting another. Using three methods to collect the survey data ensured a representative sample was achieved, which was the researcher’s highest priority.

The survey was analysed using quantitative methods. The principal reason for choosing to do this was to be able to capture a large, random sample which could allow the overall research findings to be generalisable. Additionally, the aim of the research was to address the key issue ‘Are Scottish consumers confident in the retail
banking system?" Based on the answer to this question, the implications of the levels of trust afforded by Scottish consumers on the banking sector, wider financial services sector, and ultimately the economy, will be assessed. Therefore, collecting data from any other stakeholder was not required to meet the aim and objectives of this research. Furthermore, due to the large sample required, a survey was deemed more appropriate than interviews, which are time-consuming and subject to more personal biases (both respondent and interviewer). The advantages of questionnaires are that they are relatively inexpensive and quick to administer and can be used to capture data from a large number of respondents in different geographical locations (Walliman, 2015).

3.3.1 Data Collection

The techniques applied for data gathering will be described in this section. Revisiting the research focus will add clarity to the aim of the method; ‘Are Scottish consumers confident in retail banking regulation?’ This can only be answered by gathering data on the key themes that have been identified in the banking regulation and consumer protection literature. Based on the answer to this question, the implications of the levels of trust afforded by Scottish consumers on the banking sector, wider financial services sector, and ultimately the economy, will be assessed.

Accordingly, the reasons for and against the regulation of financial services have been examined. An interesting finding was the consensus, from both sides of the debate, that the need for consumer confidence is grounds for regulating the banking industry (Llewellyn and the FSA, 1999); although the level of regulation deemed appropriate is still debated (Benston, 2000).

Secondly, the rationales identified in the pro-regulation literature have been categorised, and a survey question has been derived from each specific rationale. Each of the identified rationales has been split into one of two categories: economic rationales and social rationales. In total nine hypotheses have been derived from the literature.
Lastly, as consumer confidence is the main driver of regulation of the system, the measure of success in achieving the rationales is not that the regulator or industry perceives they are meeting them, but that consumers do. For that reason, the main focus that is being investigated through a number of research hypotheses can only be answered by measuring consumer perceptions that each of the rationales for regulation is being met. The results of the three-stage survey design, based on feedback from the groups, are discussed in detail in Sections 3.7 – 3.10. The method for obtaining this data will now be described.

In order to collect the data in a way which did not affect the participants, the researcher undertook an observational study in the form of a survey. The population of interest was individuals over 18 years old in Scotland; since retail banking is a service which should be available to every adult in Scotland. Per the CAB Scotland (2010) ‘Banking on the Basics’ report approximately 5% of the Scottish adult population was unbanked in 2007/8. Therefore, a question was added to the demographics section of the survey to establish if a personal current account was held by the participant. In June 2018, the FCA published ‘The financial lives of consumers across the UK’ (FCA, 2018b). In their findings differences between regions of the UK were marginal. Therefore, although this research is focused on Scotland it could be applied more widely to the UK.

The sample selected and presented with the questionnaire represented a cross-section of the Scottish adult population. Selecting a random cross-section avoids bias and supports legitimate results. The sampling frame was created from data obtained from the National Records of Scotland official government website. This defined target population did not statistically favour or exclude any groups (based on age, gender, and income or education level). The wording of the survey questions was carefully considered to ensure they were not misleading or created bias. Feedback from the Theorist group was received around the neutrality of the questions and this was acted upon and updated, for example, to change ‘good’ financial decisions to ‘informed’ financial decisions. A test of the validity and suitability of the questions was carried out by three groups:
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i. Theorists
ii. Practitioners
iii. End-users

One purpose was to ‘sense-check’ the survey, and obtain feedback, which may have led to amendments to the questionnaire before data collection began.

The sampling frame is the Scottish adult (18+ years) population. The data used to create this was obtained from the National Records of Scotland’s Mid-2016 population estimates. The sample was stratified using the subset of age group to ensure appropriate numbers were drawn from each set. The total population size is 4,372,939 (National Records of Scotland, 2017). The sample size was then determined, the characteristics of which are discussed in full from Section 3.11 onwards.

The survey was distributed in two main ways. First, the software Novi, was used to create an electronic questionnaire that could be emailed to participants and posted on websites to request participation (see Section 3.13 Data Collection for more detail). Secondly, a paper format was available. The researcher then visited several public locations in Scotland (also see Section 3.13) with the paper version with the aim to specifically target the strata of the target population that may not have been covered proportionally through the distribution of the electronic questionnaire, e.g. elderly respondents, people with limited access to the internet. The researcher decided to utilise a man on the street survey as the results may be biased to only those who had access to the internet and therefore some of the target population may not have the opportunity to respond if this method had not also been undertaken. Further to the man on street data collection the researcher also undertook telephone surveys in areas which it was not possible to visit.

The main limitations of the study are:

i. Firstly the location. Data was collected from residents of Scotland only, and therefore the results are specific to Scotland (although previous studies in this field have found differences between UK regions were marginal)
ii. Secondly, a survey can only report the relationships between variables and cannot claim cause and effect, that is, the research will be able to answer the ‘what’ but not the ‘why’.

iii. Lastly, a major limitation of stepwise regression is the increased likelihood of committing a type 1 error (Pandit and Khairullah, 2015), i.e. rejecting a true null hypothesis, due to a sampling error. However, sampling error is less of an issue with a larger sample size (Thompson, 1995).

Potentially, future research should be undertaken to encompass a wider participation in terms of location and examine the ‘why’ questions that this research may uncover.

There are two question sections in the surveys. The first section is comprised of demographic questions such as gender, age, education level, employment status and income. Several studies measuring trust and confidence in the financial services sector since the Global Financial Crisis of 2007-2009 did not report any significant gender differences in their findings, Moin, Devlin and McKechnie, 2017; the FCA Financial Lives survey, 2018; YouGov on behalf of Positive Money survey, 2018; Edelman Trust Barometer (UK results), 2019; and GfK Consumer Confidence Index, 2019, are a few recent examples.

The FCA’s Financial Lives Study (2017) found that confidence in managing financial matters increased with age. However, in addition to finding the youngest age group (18-24 year olds: 30%) had the least confidence in the financial services industry they also found the oldest group (age over 85: 31%) had low confidence.

Bannier and Schwarz (2018) found that a higher educational attainment increases actual and perceived financial knowledge; however, they qualified this by stating “there is hardly any evidence of a link between education and confidence in the finance context” (p.67).

Moin et. al. (2017) carried out a study where they measured the influence of demographics on trust in financial services. They found that levels of trust generally
increase with income. This corroborated the findings of research carried out by Alesina and La Ferrara in 2002.

Age, education and income were considered important variables owing to the research conducted by the regulators into consumer vulnerability (Coppack et al, 2015), access to financial services (Collard et al, 2016) and ageing populations (McLoughlin et al, 2017). Clearly, the regulator and academics consider these demographics to be of such significance to warrant collaborative research on several occasions. To re-iterate, the demographics this research focus on are age, education and income. This follows the risk factors for vulnerability identified by Coppack et al, (2015).

i. Being young, or being ‘older old’
ii. Low literacy, numeracy and financial capability skills
iii. Low income

Additionally, the researcher included the question ‘Do you currently work in the financial services sector’? The reason this demographic was included was to ensure the results were not skewed by a higher proportion of responses from those employed in financial services. This was verified in Chapter 4. The researcher was unable to find any studies that measured the difference (if any) in confidence levels between those employed in financial services and those who are not.

The second section of the survey covers the main theoretical questions which have been developed from the Literature Review. Overleaf and on page 101 and 102 are two tables which illustrate what the independent and dependent variables are and how they have been categorised.
Table 3.2: Demographic Questions and Variable Categorisation

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Variable</th>
<th>Categorisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Independent</td>
<td>Nominal</td>
</tr>
<tr>
<td>Age</td>
<td>Independent</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Education level</td>
<td>Independent</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Income level</td>
<td>Independent</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Work in Financial Services</td>
<td>Independent</td>
<td>Nominal</td>
</tr>
</tbody>
</table>
Table 3.3: Theoretical Questions and Variable Categorisation

<table>
<thead>
<tr>
<th>Rationales for Regulation</th>
<th>Variable</th>
<th>Categorisation</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Requirements</td>
<td>Dependent</td>
<td>Ordinal</td>
<td>H1: The consumer is confident that the UK retail banking system is stable and secure</td>
</tr>
<tr>
<td>Depositor Insurance</td>
<td>Dependent</td>
<td>Ordinal</td>
<td>H2: The consumer is confident that the money in their retail bank account(s) is protected should their bank fail</td>
</tr>
<tr>
<td>Asymmetric Information</td>
<td>Dependent</td>
<td>Ordinal</td>
<td>H3: The consumer is confident that their retail bank will provide them with sufficient information to make informed decisions</td>
</tr>
<tr>
<td>Moral Hazard</td>
<td>Dependent</td>
<td>Ordinal</td>
<td>H4: The consumer is confident that their retail bank will do the right thing</td>
</tr>
<tr>
<td>Corruption</td>
<td>Dependent</td>
<td>Ordinal</td>
<td>H5: The consumer is confident that they are protected from retail bank misconduct</td>
</tr>
<tr>
<td>Paternalism</td>
<td>Dependent</td>
<td>Ordinal</td>
<td>H6: The consumer is confident that they can trust the expertise of their retail bank</td>
</tr>
<tr>
<td>Distributive Justice</td>
<td>Dependent</td>
<td>Ordinal</td>
<td>H7: The consumer is confident that the price of retail banking products is fair</td>
</tr>
<tr>
<td>Community Values</td>
<td>Dependent</td>
<td>Ordinal</td>
<td>H8: The consumer is confident that they will not be unlawfully discriminated against by their retail bank</td>
</tr>
<tr>
<td>Overall Protection</td>
<td>Dependent</td>
<td>Ordinal</td>
<td>H9: In general, the consumer has confidence that as a retail bank customer they are adequately protected</td>
</tr>
</tbody>
</table>

The dependent variable questions were subject to scrutiny in the three-stage empirical testing and this is discussed in detail in Sections 3.7 – 3.10. As a Likert scale was used in Section 2 of the survey these variables are categorical and ordinal. In the next section the strategy for analysing the collected data is discussed.
3.3.2 Data Analysis

The data was analysed using IBM SPSS Statistics Software. The researcher consulted several SPSS sources to understand the general assumptions that apply to all of the parametric techniques. They can be summarised as follows:

i. The level or scale of measurement is of equal interval or ratio scale (Bryman and Cramer, 2001; Hinton, McMurray and Brownlow, 2014; Pallant, 2016)

ii. Random sampling (Hinton, McMurray and Brownlow, 2014; Pallant, 2016)

iii. Independence of observations (Pallant, 2016)

iv. The data is drawn from a normally distributed population (Bryman and Cramer, 2001; Hinton, McMurray and Brownlow, 2014; Pallant, 2016)

v. Homogeneity of variance (Bryman and Cramer, 2001; Hinton, McMurray and Brownlow, 2014; Pallant, 2016)

The first assumption is determined by the classification of the dependent variables in the study. Traditionally, Likert scale data is discrete categorical but this has sparked some debate. Analysing and interpreting this data has caused some controversy in the academic literature (Glass, Peckham and Sanders, 1972; Kuzon, Urbanchek and McCabe, 1996; Blaikie, 2003, Jamieson, 2004; Carifio and Perla, 2008; Norman 2010; Murray, 2013; Bishop and Herron, 2015; and, Knapp, 2016).

The Likert Scale was developed by Rensis Likert in 1932 to measure attitudes on an ordinal scale where respondents can rate the degree to which they agree or disagree with a statement (Sullivan and Artino, 2013), or a level satisfaction/dissatisfaction; importance/unimportance.

In this research, participants were asked to rate the degree to which they agreed or disagreed with a statement on a 6-point ordinal scale. The researcher intentionally chose a 6-point rather than a 5- or 7-point scale to avoid participants defaulting to neutral and force them “to use cognitive effort to think about their true feelings on the subject” (Garland, 1991). Previous research revealed that in uneven scales where a middle/neutral response is offered it is much more likely to be chosen.
The debate around analysing and interpreting Likert scale data has arisen from the principle that ordinal data, where the differences between responses (Agree – Disagree) cannot be assumed to be equidistant (Sullivan and Artino, 2013), and therefore cannot be treated as interval continuous data. Norman (2010) argues that studies dating back to the 1930s consistently show that parametric statistics are robust even when the data is not normally distributed. Jamieson (2004) maintains that due to the unknown distances between the categories, only non-parametric tests will produce valid results. Conversely, concurring with Norman (2010), Murray (2013) found no differences in the conclusions drawn from Likert data when using parametric and non-parametric analysis. Carifo and Perla (2008) rationalise that this debate only exists due to the problematic classification of Likert data, and, whether it is ordinal or interval. The researcher believes that the scale used in this research (Strongly Disagree, Disagree, Slightly Disagree, Slightly Agree, Agree, Strongly Agree) can be classified as interval data, much as if the responses had been numbered 1 - 6 on a scale. Bishop and Herron (2015) make the case that there is little need to use Likert scales at all in research and that a Visual Analog Scale (VAS) is more appropriate and suitable for parametric analysis. There is some consensus for the use of parametric tests; this assumption could be met with supporting justifications.

As the literature was inconclusive (Glass et al, 1972; Kuzon et al, 1996; Blaikie, 2003, Jamieson, 2004; Carifo and Perla, 2008; Norman 2010; Murray, 2013; Bishop and Herron, 2015; and, Knapp, 2016), the researcher decided to take a pragmatic approach and tested the data against the remaining assumptions of parametric tests first.

The second assumption is that the sample is not a biased selection. The researcher made all possible efforts to ensure the sample was randomly selected and therefore this assumption is met. In addition, checks were undertaken to ensure the characteristics of the respondents in the sample matched those of the wider
population in terms of age, gender, income level etc. This is discussed in more detail in Section 3.11 onwards.

The third assumption is that the observations or measurements are independent. The survey was designed in such a way that they would be completed independently without influence from the researcher or any other individual. For the face-to-face and telephone surveys this can be confirmed, for the online surveys the researcher was not present to police this, however, given the structure of the questions it is clear that the survey is seeking an independent opinion. Therefore it is reasonable to assume that this assumption is also met.

The fourth assumption is that the data is drawn from a normally distributed population. The populations that the researcher is interested in are those that are distributed in terms of age, educational level and income level. None of those could be described as normally distributed. First of all, the sampling frame is the adult population of Scotland so clearly there will be a positive skew for each of the three main independent variables. For example, there are more young adults than old (see Figure 3.2), there are more adults educated below higher education level than at Undergraduate or Postgraduate level (see Figure 3.3), and there are more adults earning lower incomes than high incomes (see Figure 3.4).
Figure 3.2: Age Distribution in Scotland

(Source: adapted from National Records of Scotland, 2017)

Figure 3.2 above demonstrates the positive skew of the adult population in terms of age.
Figure 3.3: Education Distribution in Scotland

(Source: adapted from National Records of Scotland, 2018)

Figure 3.3 above illustrates the positive skew of the adult population in terms of level of educational attainment.
Figure 3.4: Income Distribution in Scotland

(Source: adapted from Oxfam, 2018)

Figure 3.4 above demonstrates the positive skew of the adult population in terms of income.

Pallant (2016) argues that with a large enough sample size (over 30) violation of this assumption is immaterial as most of the techniques are tolerant. The sample size for this research is much larger than 30, therefore it can be argued that this assumption does not need to be met.

The fifth, and final, assumption is that the samples are obtained from populations which have equal variances. In order to check that this assumption is met the researcher will carry out a Levene’s test for equality of variances once the data is collected (Pallant, 2016). This is also an assumption that must be met for certain non-parametric tests.

Having considered the assumptions that must be met to perform parametric tests, that researcher is confident that their use would be statistically sound. However, in
addition to parametric tests, non-parametric tests will be used for robustness checks. The overall data sample selection and population are detailed from Section 3.11 onwards.

3.4 Strategy for Analysis

The first part of the analysis looks at each question based on the individual demographic factors in turn:

i. Employed in financial services sector
ii. Gender
iii. Age
iv. Education
v. Income

Correlation analysis will determine relationships between the above variables. Excluding the first demographic characteristic (the reason for including this was discussed on page 100), these demographic variables have been selected for two key reasons. The first is that they have been used in previous academic research on trust and confidence in the financial services sector (Alesina and La Ferrara in 2002; Moin, Devlin and McKechnie, 2017; and Bannier and Schwarz, 2018). The second is that they have been used in industry research of the same nature (the FCA Financial Lives survey, 2018; YouGov on behalf of Positive Money survey, 2018; Edelman Trust Barometer (UK results), 2019; and GfK Consumer Confidence Index, 2019). The results of these studies were discussed in more detail on pages 99-100. It is important to select the same demographics as previous studies so that the results can be more accurately compared and the resultant research findings contextualised with existing knowledge in the area. Additionally, it is important in primary research, such as this, that the sample is representative of the population (this was verified in Chapter 4).

Finally, step-wise multiple regression analysis will identify only those significant variables for each of the eight theoretical questions, and a final question which asks about general levels of confidence, in turn:
H1: The consumer is confident that the UK retail banking system is stable and secure

H2: The consumer is confident that the money in their retail bank account(s) is protected should their bank fail

H3: The consumer is confident that their retail bank will provide them with sufficient information to make informed decisions

H4: The consumer is confident that their retail bank will do the right thing

H5: The consumer is confident that they are protected from retail bank misconduct

H6: The consumer is confident that they can trust the expertise of their retail bank

H7: The consumer is confident that the price of retail banking products is fair

H8: The consumer is confident that they will not be unlawfully discriminated against by their retail bank

H9: In general, the consumer is confident that as a retail bank customer they are adequately protected

This may remove some of the significant relationships found in the correlation analysis; because certain independent variables are naturally correlated with others. So, while age, education and income may each individually be significantly related to one particular hypothesis, when they are included in a regression model only one of these is significant.

3.5 Research Ethics and Integrity

Ethical approval for this study was granted through formal application to the Faculty Research Ethics and Governance Committee of the Business School at Edinburgh Napier University.

Signed consent was taken from all participants in the Survey Design Groups and from all participants in the main study. Participants were free to withdraw from the study at any time.
study at any time before submission (afterwards it is impossible to retrieve their specific data since it was anonymous). Additionally, any incomplete questionnaire was treated as a wish to withdraw from the research. This resulted in a significant reduction of valid questionnaires (approximately 20% reduction) that were taken forward for the formal analysis, however, this is deemed to be preferable than including data that cannot be confirmed as being valid.

The University’s Codes of Practice, Research Integrity and Data Protection, were adhered to at all times.

The ethical committee did have further questions regarding the involvement of participants aged over 65 years. To exclude, marginalise or treat these participants as if they were less than fully competent would be unethical. No new, or unconsidered, ethical issues arose during the three-stage survey design process or data collection.

**3.6 Survey Design**

Although conducting a pilot study does not guarantee success in the main study it does increase the probability (van Teijlingen and Hundley, 2001). The main purpose of the three-stage survey design conducted for this research was to empirically test the validity of the questions in the consumer survey.

Ruel (2016) distinguishes between the pretesting and piloting of surveys. Pretesting, he explains, are the methods of validating the survey instrument and its measurements. Pilot testing, however, is the trial of survey administration and procedures. Stage 1 and 2 of the survey design were expert-driven pretests and stage 3 was a respondent-driven pretest. The purpose of the pretest was to ensure the questions measured what they intended to measure, were unbiased, and free of unnecessary technical language and jargon (Ruel, 2016). The researcher did not carry out a small-scale pilot and collect data during the pretests; instead this was an intentional three-stage validation process for the design of the survey questions. The key driver of this method was to close any gaps in theoretical and practical knowledge and understanding by ensuring each question had the same meaning.
regardless of the background of the participants and most crucially, that the meaning was not lost when translated from a theoretical hypothesis into a simple question for the layman. The researcher could find no other studies where this practice had been adopted. This is particularly important when conducting a study with consumers who may not be familiar, or even aware of, regulations or industry-specific terms. It is vital, however, that the denotation is not lost in translation. There is great value in future researchers adopting this approach for closing any gaps between principle, process and experience.

Since the survey questions were derived from the specific rationales for regulation found in the literature there was no need for a focus group to ascertain the areas to survey, but rather, a process to test the actual questions designed for the survey. The survey consisted of two parts; the first section is comprised of demographic questions such as gender, age, education level, employment status and income. These were considered important variables owing to the research conducted by the regulator into consumer vulnerability (Coppack et al, 2015), access to financial services (Collard et al, 2016) and ageing populations (McLoughlin et al, 2017). Clearly, the regulator and academics consider these demographics to be of such significance to warrant collaborative research on several occasions. To re-iterate, the demographics this research focus on are age, education and income.

This follows the risk factors for vulnerability identified by Coppack et al (2015):

i. Being young, or being ‘older old’
ii. Low literacy, numeracy and financial capability skills
iii. Low income

The second section of the survey covers the main theoretical questions which were developed from the Literature Review.

A three-stage survey design was undertaken. The first group, ‘Theorists’ was undertaken with subject academics. The second group, ‘Practitioners’ was undertaken with industry professionals. The participants in the Theorist and Practitioner groups were provided with a background to the literature in order that
they could understand the context of the study and which area of the literature each specific question related to. The purpose of this was to ‘test’ that the rationale for regulation identified translated into the question being asked and, as with the third group, ‘End-users’, to check that the wording of the question was such that it could be easily understood.

Since no data was collected during these initial studies, and additionally the participants were ineligible to take part in the final study, there was no risk of contamination (van Teijlingen and Hundley, 2001). Ethical approval was obtained for each stage of the survey design and the final data collection.

3.7 Stage 1: Theorists

Three academics from Edinburgh Napier University were invited via email to take part in stage one of the survey design, two of whom agreed and provided feedback. Both participants were male, aged over 55 and previously worked in the financial services industry before moving to academia. The participants were asked to complete consent forms and sign and return these. The participants were then provided with a copy of the intended consumer survey, including a background to the study. All exchanges took place remotely via email and telephone where further clarification was required.

The following questions were asked:

1. Do you believe other people may have difficulty in answering this questionnaire? If so, which question may pose a problem?

2. Given the purpose of the study outlined in the introduction section, would you suggest a question may perhaps be added or removed to enhance the study?

3. Did you read the instructions? Were the instructions clear? Did you object to answering any of the questions?

4. Was the layout of the questionnaire clear and logical?
5. **Is there any question that the wording could be enhanced to clarify?**

6. **How long did it take you to answer the questionnaire?**

### 3.8 Stage 2: Practitioners

In total, 12 industry professionals were invited to take part in stage two of the survey design, four of whom agreed to take part and provided feedback. All invitees were contacts from the retail banking industry that the researcher had through their own professional network. Three participants were male (40-44, 45-49, 60-64 age groups), and one was female (35-39 age group). Three participants are currently employed in the retail banking sector and one had recently retired. Each participant signed and returned a consent form. All exchanges took place remotely via email exchanges and telephone where appropriate. The industry professionals were asked the same questions as the academics (see above).

### 3.9 Feedback from Stage 1 and Stage 2

The feedback provided from the participants was mostly around clarity of the survey’s second section of questions. The first section of the survey covered demographic questions such as gender, age, education level, employment status and income.

The second section covered the main questions which had been developed from the Literature Review. This was helpful to the researcher and appropriate amendments were made prior to Stage 3 being carried out. Changes to the relevant questions are detailed in Table 3.4 overleaf.
Table 3.4: Changes to the Consumer Survey following Stages 1 and 2 of Survey Design

<table>
<thead>
<tr>
<th>RATIONALE</th>
<th>ORIGINAL QUESTION/HYPOTHESIS</th>
<th>REVISED QUESTION/HYPOTHESIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Externalities (macro)</td>
<td>I have confidence in the UK banking system</td>
<td>I have confidence in the UK retail banking system</td>
</tr>
<tr>
<td>Externalities (micro)</td>
<td>I have confidence that my money is protected should my bank fail</td>
<td>I have confidence that the money in my bank account(s) is protected should my bank fail</td>
</tr>
<tr>
<td>Asymmetric information</td>
<td>I have confidence that I have enough information from my bank to make good financial decisions</td>
<td>I have confidence that my bank will provide me with sufficient information to make informed decisions</td>
</tr>
<tr>
<td>Moral hazard</td>
<td>I have confidence that I am protected against bank fraud and misrepresentation</td>
<td>I have confidence that my bank will do the right thing</td>
</tr>
<tr>
<td>Corruption</td>
<td>I have confidence that, if required, my bank will face the consequences of its actions</td>
<td>I have confidence that I am protected from bank misconduct</td>
</tr>
<tr>
<td>Paternalism</td>
<td>I have confidence that my bank will help me to make good financial decisions</td>
<td>I have confidence that I can trust the expertise of my bank</td>
</tr>
<tr>
<td>Distributive Justice</td>
<td>I have confidence that the price of banking products is fair</td>
<td>No change</td>
</tr>
<tr>
<td>Community Values</td>
<td>I have confidence that I will not be discriminated against by my bank</td>
<td>No change</td>
</tr>
<tr>
<td>N/A - General</td>
<td>I have confidence that as a bank customer I am protected</td>
<td>I have confidence that as a bank customer I am adequately protected</td>
</tr>
</tbody>
</table>

3.10 Stage 3: End-users

Five consumers, from across different age groups and both genders, were invited to take part in stage three of the survey design, using the revised core questions from the feedback captured in stages one and two. These were acquaintances of the researcher who resided in England and who therefore would not be taking part in the final study. Two males (Group 1 and Group 2, see below) and three females (two in Group 2 and one in Group 4) provided feedback. The participants were
required to complete and sign a consent form (see Appendix A), four studies took place remotely and one face-to-face study was undertaken. After careful consideration of the feedback, further changes were made and are detailed in Table 3.5 overleaf.

i. Group 1: 18-29 year olds are defined as ‘Young Professionals’
ii. Group 2: 30-44 year olds are defined as ‘Married Professionals’
iii. Group 3: 45-59 year olds are defined as ‘Empty Nesters’
iv. Group 4: 60+ year olds are defined as ‘Retired’

The above groups have been segmented by age. This is a simplified life cycle model historically used by financial institutions due to the close association between age and product usage (Stanley, Ford and Richards, 1985). Of course there are deviations from this in reality and product marketing strategies have moved on to become much more sophisticated, taking into account larger quantities of data and using increasingly advanced techniques to extract and interpret it (Ionut, 2017). However, age profile remains a key demographic variable used in a variety of academic research, industry surveys and government statistics. The purpose of segmenting by age in this research is to ensure that a proportionate number of participants from each group have been included.
Table 3.5: Changes to the Consumer Survey Core Questions following Stage 3 of Survey Design

<table>
<thead>
<tr>
<th>RATIONALE</th>
<th>ORIGINAL QUESTION</th>
<th>REVISED QUESTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Externalities (macro)</td>
<td>I have confidence in the UK retail banking system</td>
<td>I have confidence the UK retail banking system is stable and secure</td>
</tr>
<tr>
<td>Externalities (micro)</td>
<td>I have confidence that the money in my bank account(s) is protected should my bank fail</td>
<td>I have confidence that the money in my retail bank account(s) is protected should my bank fail</td>
</tr>
<tr>
<td>Asymmetric information</td>
<td>I have confidence that my bank will provide me with sufficient information to make informed decisions</td>
<td>I have confidence that my retail bank will provide me with sufficient information to make informed decisions</td>
</tr>
<tr>
<td>Moral hazard</td>
<td>I have confidence that my bank will do the right thing</td>
<td>I have confidence that my retail bank will do the right thing</td>
</tr>
<tr>
<td>Corruption</td>
<td>I have confidence that I am protected from bank misconduct</td>
<td>I have confidence that I am protected from retail bank misconduct</td>
</tr>
<tr>
<td>Paternalism</td>
<td>I have confidence that I can trust the expertise of my bank</td>
<td>I have confidence that I can trust the expertise of my retail bank</td>
</tr>
<tr>
<td>Distributive Justice</td>
<td>I have confidence that the price of banking products is fair</td>
<td>I have confidence that the price of retail banking products is fair</td>
</tr>
<tr>
<td>Community Values</td>
<td>I have confidence that I will not be discriminated against by my bank</td>
<td>I have confidence that I will not be unlawfully discriminated against by my retail bank</td>
</tr>
<tr>
<td>N/A - General</td>
<td>I have confidence that as a bank customer I am adequately protected</td>
<td>In general, I have confidence that as a retail bank customer I am adequately protected</td>
</tr>
</tbody>
</table>

The term ‘retail’ was added to all the questions and clarification of what this term means was included in the introduction to the survey (see Appendix B). ‘Don’t know’ was added to the last question as one of the consumers expressed this during the End-User test. The consumers who took part in the design group were not eligible to participate in the final study.
3.11 Reliability and Validity Considerations for Data Collection

Reliability of data potentially enables study findings to be generalised to the wider population (Braham and Finch, 2004). The level of confidence in the validity of the data gives it credence as empirical evidence for a claim (Roberts and Johnson, 2015). The next sections will establish if the data can justly be claimed to be a true representation of reality and if there were any intervening variables which might reduce confidence in the accuracy of the data collected.

3.12 Sample

The first consideration for the researcher was the population to be studied. The aim of the research was to measure retail bank consumer confidence levels. The research was limited to Scotland and therefore the adult population (18+ years) residing in Scotland was the target population (since almost all adults in Scotland are ‘banked’) CAB Scotland (2010). According to the 2016 Scottish government data (National Records of Scotland, 2017) the adult population was 4,372,939. To calculate a representative sample the researcher used Slovin’s Formula (Tejada and Punzalan, 2012). Slovin’s Formula is used to calculate an appropriate sample size from a population.

Slovin’s formula: \[ n = \frac{N}{1+Ne^2} \]

Where \( n \) is the sample size, \( N \) is the total population (4,372,939) and \( e \) is the margin of error. Following the study by Tejada and Punzalan (2012), and well established practices in the wider research area, the researcher determined a standard confidence level of 95% to be appropriate for this research. Thus, the error tolerance, or margin of error, is 0.05.

\[ n = \frac{4,372,939}{1 + 4,372,939 \times 0.05^2} \]

\[ n = 399.93 \]
Using this formula, a minimum sample size of 400 useable surveys was required for a representative sample. In total, 538 surveys were completed, and of these, 432 were usable. Incomplete questionnaires were discounted as per the instructions on the consent form. Any incomplete questionnaire was treated as a wish to withdraw from the research. This resulted in a significant reduction of valid questionnaires (approximately 20% reduction) that were taken forward for the formal analysis, however, this is deemed to be preferable than including data that cannot be confirmed as being valid.

i. 138 paper questionnaires, with 126 being useable

ii. 400 electronic questionnaires, with 306 being useable

The target sample size (see Table 3.6 below) was exceeded with a total of 432 useable surveys being collected. A comparison of the group population and sample representation can be seen in Table 3.7 overleaf.

**Table 3.6: Sample Required for each Strata**

<table>
<thead>
<tr>
<th>Group</th>
<th>Population</th>
<th>%age of Population</th>
<th>Sample Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-29</td>
<td>865,468</td>
<td>20%</td>
<td>80</td>
</tr>
<tr>
<td>30-44</td>
<td>1,017,304</td>
<td>23%</td>
<td>92</td>
</tr>
<tr>
<td>45-59</td>
<td>1,169,763</td>
<td>27%</td>
<td>108</td>
</tr>
<tr>
<td>60+</td>
<td>1,320,404</td>
<td>30%</td>
<td>120</td>
</tr>
</tbody>
</table>

The National Records of Scotland Mid-2016 population statistics were used as the sampling frame. The researcher then created a basic segmentation model as discussed in Section 3.10. Using the figure of 4,372,939 obtained for the total adult population residing in Scotland (National Records of Scotland, 2017) the sample requirements were calculated (see Table 3.6 above).
A chi-square goodness-of-fit test indicates there was a significant difference in the proportions of the age groups identified in the current sample (18-29, 16%; 30-44, 29%; 45-59, 35%; 60+, 20%) as compared with the values (18-29, 20%; 30-44, 23%; 45-59, 27%; 60+, 30%) that were obtained from official published population statistics, $\chi^2 (3, n = 432) = 33.53, p <0.001$. However, due to the large population, and as the sample required is only 0.01% of the population, there will always be a significant difference.

Table 3.7 above illustrates the differences in representation of the four groups in the population and sample. Although the sample does not match the population age categorisation exactly, it reflects the sample in the FCA Financial Lives Survey (2017).

i. My study: age 18-29 16%; FCA study: age 18-24 11%
ii. My study: age 30-44 29%; FCA study: age 25-44 33%
iii. My study: age 45-59 35%; FCA study: age 45-65 33%
iv. My study: age 60+ 20%; FCA study: age 65+ 23%
Additionally, the FCA Financial Lives Survey (2017) used postcode, rather than targeting age or gender, indicating that these demographics are not considered critical to a relevant and valid survey in this particular subject area. For this research, postcode targeting was not possible due to the time and cost involved in obtaining the data and software. The FCA hired an external firm to gather this information for them (McLoughlin et al, 2017). However, in this study every effort to capture data from various regions of Scotland was made, both face to face and over the telephone.

3.13 Data Collection

The researcher employed a mixed data collection, whereby 71% of responses were achieved via an online survey, with 29% paper surveys attained to ensure the views of non-internet users were represented. These figures represent the total number of useable surveys.

Any incomplete questionnaires were deemed unusable. Clause 5 of the participants consent form stated that ‘a partial completion will indicate a wish to withdraw. Partial completions will not be included in the research and will be void’.

The data collection ran for a total of nine months. The online survey tool Novi Survey was utilised and the link distributed via email and shared on social media platforms such as Twitter, Facebook, Mumsnet, PistonHeads, Digital Spy, LinkedIn and Money Saving Expert. The link was removed from PistonHeads forum as it contravened their rules of ‘promotion’ as it was a link to a survey. The post was also removed from the Digital Spy forum as it contained a link to a third-party site. The LinkedIn share was not publicly posted but was instead sent via private message to the researcher’s connections that do not work in the financial services industry. Since the researcher has previously worked in the industry for over a decade this was done to avoid skewed results.

The paper questionnaires were distributed in shopping centres in Dundee, Edinburgh and Inverness. Additionally, a pensioner’s coffee morning was attended in a village in Angus to capture this age group’s opinions. Lastly, telephone surveys
were conducted with households in the South West of Scotland. The researcher made efforts to capture participants from different geographic areas and non-internet users.

The next sections of the data description concentrates on gender and age groups, and in particular on the ‘at risk’ groups identified by the FCA, older consumers, low income levels and low level of education. Additionally, those currently employed in the financial services sector are considered.

### 3.13.1 Gender and Age Groups

Figure 3.5 below illustrates the gender split of participants in the electronic survey, a ratio of females to males of 2.36:1.

**Figure 3.5: Gender: Electronic Surveys**

The paper survey (Figure 3.6, overleaf) reveals a more balanced split of 54% females, 44% males (1.2:1) and 2% did not wish to reveal their gender. Combined, approximately one third of participants were male, and almost two thirds were female.
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(1.92:1). Clearly, this is not representative of the population; however, as this study was not specifically looking at differences between these variables it was not considered a significant limitation. Additionally, several studies measuring trust and confidence in the financial services sector since the Global Financial Crisis of 2007-2009 did not report any significant gender differences in their findings. Including a study by Moin, Devlin and McKechnie (2017); the FCA Financial Lives survey, 2018; YouGov on behalf of Positive Money survey, 2018; Edelman Trust Barometer (UK results), 2019; and GfK Consumer Confidence Index, 2019, are a few recent examples.

Figure 3.6: Gender: Paper Surveys

![Bar Chart]

The bar charts overleaf represent the proportion of respondents by age group for both electronic (Figure 3.7) and paper format (Figure 3.8).

The FCA’s Financial Lives Study (2017) found that confidence in managing financial matters increased with age. However, in addition to finding the youngest age group
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(18-24 year olds: 30%) had the least confidence in the financial services industry. They also found the oldest group (age over 85: 31%) had low confidence.

**Figure 3.7: Age: Electronic Surveys**

![Age: Electronic Surveys](image_url)
These have been combined and are compared to the total population in Figure 3.9 overleaf. This demonstrates the representativeness of the sample by age group. Overall, the sample is representative, with only Group 4 being significantly under-represented. The researcher targeted males and older consumers with the paper version of the Consumer Survey to address the sampling problems of the online version. This will be discussed in more detail in the next section.
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3.14 Vulnerable Groups

Although the term ‘vulnerable’ is hard to define the FCA consider a vulnerable person to be someone who, “due to their personal circumstances, is especially susceptible to detriment” (Coppack et al, 2015, p.5). The FCA have carried out several studies into these groups, specifically consumer vulnerability (Coppack et al, 2015), access to financial services (Collard et al, 2016) and ageing populations (McLoughlin et al, 2017).

To reiterate, some of the examples of risk factors for vulnerability identified in the FCA’s research were:

i. Low literacy, numeracy and financial capability skills
ii. Physical disability
iii. Severe or long-term illness
iv. Mental health problems
v. Low income and/or debt
vi. Caring responsibilities (including operating a power of attorney)
vii. Being ‘older old’ for example over 80, although this is not absolute (may be associated with cognitive or dexterity impairment, sensory impairments such as hearing or sight, onset of ill-health, not being comfortable with new technology)
viii. Being young (associated with less experience)
ix. Change in circumstances (e.g. job loss, bereavement, divorce)
x. Lack of English skills
xi. Non-standard requirements or credit history (e.g. armed forces personal returning from abroad; ex-offenders; care-home leavers; recent immigrants)

It is beyond the scope of this research to examine all of the factors identified by the FCA. The researcher, for ethical reasons, is unable to access particular vulnerable groups and also does not have access to other specific groups, for example armed forces personnel, ex-offenders, and immigrants. The specific demographic groups that will be tested for any significant difference in levels of confidence in this thesis are: age, low income and low level of education.

3.14.1 Older Consumers

Although older consumers are not necessarily vulnerable it has been recognised by the FCA (Collard et al, 2016, p.7) that, “There are risks that older consumers’ financial services needs are not being fully met, resulting in exclusion, poor customer outcomes and potential harm”. While the FCA Occasional Paper looked at consumers aged 55 years and over, as this is the age at which people can draw a defined benefit pension, the researcher will include only those aged over 60 in this group (Group 4) since this research is not product focused. There are a broad range of products and services covered by regulation which could be considered to be a more specialist or particularly focused area for potential mis-selling due to their very nature: complexity; cost; duration of consumption.
In total, 20% of the participants who took part in this study were aged over 60. This is lower than the 28% of over 60s in the Scottish population (National Records of Scotland, 2017). However, as the researcher only visited public locations and the sample was randomly selected access to this age group was restricted.

### 3.14.2 Low Income

According to the Office for National Statistics (ONS) Annual Survey of Hours and Earnings (2016), 0.8% of the Scottish adult population earned below the minimum wage. As data on hours worked has not been collected in this research the figure is based on respondents who indicated that they work full-time but earn less than £13,500 per annum. The figure for participants in this study is 2.8% which is close to the population figure of 2.4%.

According to the ONS the median annual salary was £27,600 in 2016. Participants in this study, who work full-time but earn below the national median made up 36% of the sample. This indicates that, on average, the participants in this study were better-off than the general population.

Other income figures are:

i. 26.4% of participants in this study earn above the national median but below the higher tax rate threshold (£43,000 in tax year 2017/18).

ii. The HM Revenue and Customs statistics (2015) estimate 85.1% of the population will be non-higher rate tax payers in 2017/18. A similar figure of 84.3% of participants in the study fell into this category.

iii. 14.4% of participants in this study earn above the higher rate tax rate threshold but below the additional rate threshold. This is in line with HMRC statistics of 13.7% estimated for 2017/18.

iv. 1.4% of participants in this study earn above the additional rate tax threshold (over £150,000 in tax year 2017/18). This is in line with the HMRC statistics of 1.2% estimated for 2017/18.

The income distribution for all participants is presented overleaf in Figure 3.10.
3.14.3 Low Level of Education

A study undertaken by the FSA (2006a) in collaboration with Bristol University’s Personal Finance Research Centre found that there was a direct correlation between levels of education and qualifications, and levels of financial capability. This is important to this study as a low level of capability could lead to financial exclusion. Llewellyn and the FSA (1999) argue that if consumers do not feel confident enough to purchase suitable financial products it has the same detrimental effect as being mis-sold unsuitable products.

In total, 108 of all respondents held a university degree, this is 25% compared to the Scottish national average of 26% recorded in the Scottish 2011 Census. This indicates that the participants who took part in this research were representative of the national average.

Participants who had obtained only the mandatory level of education (Secondary School level, not including current students) represented 23% of the sample.
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**Figure 3.11: Education Levels: Groups**
3.15 Persons Working in Financial Services

Persons working in the financial services sector have been a focus of this research as it could be expected that they would have more knowledge about the industry and the regulatory requirements and consumer protection in place than the average layman.

The financial services sector is important to the Scottish economy, employing almost 200,000 people and generating over £8.8bn for the UK and Scottish economies (Office of the Secretary of State for Scotland, 2014). Based on the adult population figures, from the Mid-2016 population estimates by the Scottish government (National Records of Scotland, 2017), of 4,372,939, this is equal to 4.6% of the population working in the industry.

In total, 18 of the 432 participants, or 4.2%, currently work in financial services, which is in line with the national average.
3.16 Data Description Conclusion

The above has described the data obtained in terms of its reliability to represent the wider Scottish population and validity with respect to the appropriateness of the data being gathered in this study. It can be concluded that the sample of data collected in this study is representative in terms of:

- i. Size
- ii. Income distribution of participants
- iii. Education levels of participants
- iv. Participants employed in the financial services sector

In terms of the groups used to stratify the sample, Groups 1, 2 and 3 are representative, however Group 4 (over 60+ years), was under-represented due to the random sampling technique employed. It could be expected that fewer elderly participants are likely to participate online, and secondly, they may not be so readily available in busy public places. The researcher did attend a pensioner’s coffee morning in an attempt to capture the opinions of this age group. Gender was not considered a dependent variable and therefore, the study did not seek to stratify based on this demographic.

In the next chapter an analysis of the collected data has been undertaken focusing on the groups described above. The participants were asked to rank their confidence levels; the hypotheses were derived from the literature, and are as follows:

- H1: The consumer is confident that the UK retail banking system is stable and secure
- H2: The consumer is confident that the money in their retail bank account(s) is protected should their bank fail
- H3: The consumer is confident that their retail bank will provide them with sufficient information to make informed decisions
H4: The consumer is confident that their retail bank will do the right thing
H5: The consumer is confident that they are protected from retail bank misconduct
H6: The consumer is confident that they can trust the expertise of their retail bank
H7: The consumer is confident that the price of retail banking products is fair
H8: The consumer is confident that they will not be unlawfully discriminated against by their retail bank
H9: In general, the consumer is confident that as a retail bank customer they are adequately protected

In the next chapter an analysis of the collected data has been undertaken focusing on the groups outlined in this chapter:

i. Employed in the financial services sector
ii. Gender
iii. Age
iv. Education
v. Income

The analysis will establish differences in levels of confidence between each demographic group, the direction of confidence, and the combination of demographic factors that have the most impact on levels of confidence in the specific areas of regulation.
CHAPTER 4: DESCRIPTIVE STATISTICS AND CORRELATION ANALYSIS

4.1 Introduction

In this chapter the data from the core theoretical survey questions will be analysed, focusing on specific characteristics of the participants, as discussed in the Chapter 3:

i. Employed in the financial services sector
ii. Gender
iii. Age
iv. Level of education
v. Level of income

In the Methodology chapter the debate around the use of parametric and non-parametric analysis for Likert scale data was discussed. This is based on the arguments concerning whether Likert scale data can be treated as interval variables rather than ordinal variables. One of the assumptions that must be met for parametric tests to be valid is that the data is interval or ratio data (Field, 2013). As the literature was inconclusive (Glass et al, 1972; Kuzon et al, 1996; Blaikie, 2003; Jamieson, 2004; Carifio and Perla, 2008; Norman 2010; Murray, 2013; Bishop and Herron, 2015; and, Knapp, 2016), the researcher tested the data against the remaining assumptions of parametric tests first. After screening and cleaning the data and describing the characteristics of the sample to ensure it was representative of the population (discussed in the previous chapter) the data was tested to check that it met the assumptions of:

i. a normally distributed sampling distribution
ii. homogeneity of variance, and
iii. independence (Field, 2013)

4.1.1 Tests for Normality

In order to check this assumption of parametric statistical procedures is met there are various tests that can be conducted. However, due to the large sample size,
tests such as Skewness, Kurtosis and Kolmogorov-Smirnov were not required (Tabachnick and Fidell, 2014). Accordingly, the researcher undertook a visual inspection of the histograms for the total sample responses to each of the survey’s ‘levels of confidence’ questions. The data presented as moderately negatively skewed. The researcher undertook one further test of normality, the Shapiro-Wilk test, which confirmed that the data was not normally distributed (see Appendix C).

As discussed in the previous chapter, the central limit theorem (CLT) indicates that if a sufficiently large random sample size is taken from a population with a determinate level of variance, the mean of the samples (aggregated) will be approximately equal to the mean of the population (Kwak and Kim, 2017). Further, the CLT indicates that whether the underlying distribution is normal or skewed, in samples of over 30, the sample will be normal (Pallant, 2016; Seaman, Allen and Zetumer, 2018).

4.1.2 Outliers

The boxplots produced in SPSS were visually inspected for outliers. In four of these questions (44.4%) outliers were found. However, the 5% trimmed mean, where the lowest 5% and highest 5% of the data is excluded, for each question was very close to the mean so did not require further investigation (Pallant, 2016).

4.1.3 Scale Reliability

Lastly, a test to check the reliability of the scale was undertaken. The participants were asked to rate their levels of confidence on a scale of 1 (Strongly Disagree) to 6 (Strongly Agree). It is important that the scale selected in a study is reliable in terms of its ‘internal consistency’ (Pallant, 2016). That is, how well the survey is measuring what the study required it to measure. In addition to the three-stage empirical testing of the validity of the questions, the researcher has also applied one of the most commonly used indicators of internal consistency, Cronbach’s alpha coefficient to test reliability (Pallant, 2016). A low score may indicate a low number of questions, or poor correlation between items, conversely, a high score may indicate that some items are redundant (Tavakol and Dennick, 2011). Tavakol and
Dennick (2011) cited studies which suggested acceptable values of alpha, ranging from 0.70 to 0.95 (see, Nunnally and Bernstein, 1994 and Bland and Altman, 1997). Cronbach’s alpha score for the ‘level of confidence’ questions in this research is 0.922 (see Table 4.1 below).

**Table 4.1: Reliability statistics**

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha Based on Standardised Items</th>
<th>No of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.922</td>
<td>0.922</td>
<td>9</td>
</tr>
</tbody>
</table>

In summary, the data met the assumptions, where required, of distribution, homogeneity of variance and independence

### 4.1.4 Labelling of the Variables

Table 4.2 overleaf, clearly classifies the variables into Nominal and Ordinal. Levels of confidence were measured using a Likert scale. It has become common practice, although controversial, to assume interval status for Likert derived data (Blaikie, 2003).
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Table 4.2 Variable Classification

<table>
<thead>
<tr>
<th>Survey Question: Demographics</th>
<th>Variable</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Independent</td>
<td>Nominal</td>
</tr>
<tr>
<td>Age</td>
<td>Independent</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Education level</td>
<td>Independent</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Employment status</td>
<td>Independent</td>
<td>Nominal</td>
</tr>
<tr>
<td>Income level</td>
<td>Independent</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Work in Financial Services</td>
<td>Independent</td>
<td>Nominal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Survey Question: Theoretical</th>
<th>Variable</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: The UK retail banking system is stable and secure</td>
<td>Dependent</td>
<td>Ordinal</td>
</tr>
<tr>
<td>H2: The money in my retail bank account(s) is protected should my bank fail</td>
<td>Dependent</td>
<td>Ordinal</td>
</tr>
<tr>
<td>H3: My retail bank will provide me with sufficient information to make informed decisions</td>
<td>Dependent</td>
<td>Ordinal</td>
</tr>
<tr>
<td>H4: My retail bank will do the right thing</td>
<td>Dependent</td>
<td>Ordinal</td>
</tr>
<tr>
<td>H5: I am protected from retail bank misconduct</td>
<td>Dependent</td>
<td>Ordinal</td>
</tr>
<tr>
<td>H6: I can trust the expertise of my retail bank</td>
<td>Dependent</td>
<td>Ordinal</td>
</tr>
<tr>
<td>H7: The price of retail banking products is fair</td>
<td>Dependent</td>
<td>Ordinal</td>
</tr>
<tr>
<td>H8: I will not be unlawfully discriminated against by my retail bank</td>
<td>Dependent</td>
<td>Ordinal</td>
</tr>
<tr>
<td>H9: In general, as a retail bank customer I am adequately protected</td>
<td>Dependent</td>
<td>Ordinal</td>
</tr>
</tbody>
</table>

As can be seen from the above table, all of the hypotheses are classified as ordinal scale data which, as discussed below, has some contradictory advice concerning analysis.
4.2 Methods of Data Analysis and Presentation of Data

Following the statistical tests of the assumptions the researcher adopted parametric statistical techniques to compare groups for this research; the independent-samples \( t \)-test and one-way between-group analysis of variance. Due to the controversy surrounding the treatment of ordinal scales and interval scales (Jamieson, 2014) non-parametric tests were used as robustness checks, and as an opportunity to contribute to the literature in this area.

Table 4.3 overleaf, outlines the tests adopted in the preliminary analysis, and any observed variance.
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### Table 4.3 Observed Variance of Parametric vs. Non-Parametric Tests

<table>
<thead>
<tr>
<th>Demographic</th>
<th>Statistical Test</th>
<th>Robustness Check</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed in the financial services sector</td>
<td>Parametric test: Independent-samples t-Test</td>
<td>Non-parametric test: Mann-Whitney U Test</td>
<td>Both the parametric and non-parametric tests revealed the same findings</td>
</tr>
<tr>
<td>Gender</td>
<td>Parametric test: Independent-samples t-Test</td>
<td>Non-parametric test: Mann-Whitney U Test</td>
<td>Both the parametric and non-parametric tests revealed the same findings</td>
</tr>
<tr>
<td>Age</td>
<td>Parametric test: One-way between-group analysis of variance</td>
<td>Non-parametric test: Kruskal-Wallis Test</td>
<td>Both the parametric and non-parametric tests revealed the same findings</td>
</tr>
<tr>
<td>Level of education</td>
<td>Parametric test: One-way between-group analysis of variance</td>
<td>Non-parametric test: Kruskal-Wallis Test</td>
<td>Both the parametric and non-parametric tests revealed the same findings</td>
</tr>
<tr>
<td>Level of income</td>
<td>Parametric test: One-way between-group analysis of variance</td>
<td>Non-parametric test: Kruskal-Wallis Test</td>
<td>Non-parametric test recorded a difference across the groups under ‘fraudulent activities’ but no difference recorded between the groups. All other tests revealed the same findings</td>
</tr>
</tbody>
</table>
To explore the differences between groups an independent sample t-test was used where there were two different groups of variables (employed in financial services sector/not employed in financial services sector and male/female) and a one-way analysis of variance (ANOVA) was used where there were more than two independent groups (age, education and income). As ANOVA can only determine whether groups differ and not where the significant difference is, post-hoc comparisons were performed to establish which groups were significantly different from one another. The non-parametric alternatives adopted were the Mann-Whitney U Test (for the Independent-samples t-Test) and Kruskal-Wallis Test (for the ANOVA).

To detect and describe the relationship among variables and explore the association between pairs of variables, correlation analysis was used. Pearson product-moment correlation coefficient (r) was used to describe the strength and direction of the linear relationship between an independent variable and dependent variable. Further, Spearman Rank Order Correlation (rho), the non-parametric alternative, was used as a robustness test.

4.3 Descriptive Statistics

In this section each hypothesis based on each of the individual demographic factors is examined in turn. There are certain assumptions based on previous studies conducted by the regulator:

i. Employed in the financial services sector. Although the researcher could find no specific studies which compare the levels of confidence in these two groups, it would not be unreasonable to surmise that those employed may be more likely to have a higher level of confidence, based on their industry knowledge and expertise.

ii. Gender. The researcher could find no recent studies which suggested that gender played a significant role in the levels of consumer confidence in the retail banking sector. Additionally, recent studies did not base their methodology on gender differences or present their results by analysing the
effect of gender. For these reasons, it would be rational to conclude that there would be no difference found in the results of this study, which looks specifically at confidence in regulation of the sector.

iii. Age. The FCA associate being young with less experience and being ‘older old’ (over 80) with increased vulnerability (Coppack et al, 2015). Although this does not lead to a conclusion about whether these groups will have lower or higher levels of confidence in retail banking regulation, it does indicate that the results of these groups would be of particular relevance.

iv. Education. The FCA associate low literacy, numeracy and financial capability skill with financial vulnerability. The results of this group would be relevant to both the regulator (who looks to protect the most vulnerable groups) and the banks (who profile consumers using factors such as education since it often leads to higher net worth). However, higher levels of confidence in dealing with financial matters does not necessarily equate to higher levels of confidence in retail banking regulation. Given the focus of regulator initiatives on vulnerable groups it may actually suggest lower education groups would have higher levels of confidence in regulation.

v. Income. Low income has been identified as a higher risk factor for financial vulnerability. Given the profiling used by banks to attract higher net worth consumers the results would be of particular interest to them, and to the regulator who look to ensure vulnerable groups are protected. It would not be entirely unreasonable to surmise that higher income consumers, who have typically more exposure to the system, may feel more confident in dealing with financial matters. However, as mentioned above, it is not possible to predict whether those on a higher income have higher levels of confidence in regulation.

4.3.1 Externalities

The first two theoretical questions of the survey tested how confident consumers were that they were protected against failure at a macro and micro level. Question
one concerned the risk of contagion, or systemic risk. That is, the failure of one institution could cause the collapse of other, solvent institutions.

As discussed in Chapter 2, the interconnectedness of banks can lead to issues of contagion, that is, the failure of one institution can have a spillover effect and lead to the failure of otherwise solvent banks. De Nicolò et al (2012) emphasise that externalities arising from interconnectedness are particularly great in Systemically Important Financial Institutions (SIFIs). Further, they argue that the macroprudential tool that can address the externalities arising from all three categories is capital requirements. Banks are required to hold capital reserves to enable them to absorb any unexpected losses. The first consumer survey question will test the hypothesis that consumers are confident in this area that regulation seeks to address. The statement participants were asked to consider was, “I have confidence the UK retail banking system is stable and secure”.

Currently employed in the Financial Services sector: An independent-samples t-test was conducted to compare the confidence scores of those employed in the financial services sector and those who are not employed in the financial services sector. There is a significant difference in the scores for non-Financial Services employees ($M = 3.86$, $SD = 1.190$) and Financial Services employees ($M = 4.83$, $SD = 0.857$; $t(430) = -3.45$, $p = 0.001$, two-tailed).

A Mann-Whitney U Test was used as a robustness check and also revealed there is a significant difference in the confidence levels of FS employees ($Md = 5.00$, $n = 18$) and non-FS employees ($Md = 4.00$, $n = 414$), $U = 5410.5$, $z = 3.374$, $p = 0.001$, $r = 0.16$.

Both the parametric and non-parametric tests reveal the same findings:

i. There is a significant difference in levels of confidence of those who are employed in financial services and those who are not

ii. Participants who are employed in the financial services sector agree, whilst participants who are not employed in the financial services sector
slightly agree that they have confidence the UK retail banking system is stable and secure

iii. Therefore, those employed in the sector have more confidence

This is graphically represented in Figure 4.1 below.

**Figure 4.1 I have confidence the UK retail banking system is stable and secure: employment in sector vs. non-employment in sector**

This finding is not unexpected since those employed in the financial services sector are more likely to be aware of the Capital Requirements regulations.

**Gender:** An independent-samples t-test was conducted to compare the confidence scores of males and females. There was no significant difference in scores for males ($M = 4.01$, $SD = 1.22$) and females ($M = 3.85$, $SD = 1.17$; $t(427) = 1.34$, $p = 0.180$, two-tailed).
A Mann-Whitney U Test was used as a robustness check and also revealed no significant difference in the confidence levels of males \((Md = 4.00, n = 147)\) and females \((Md = 4.00, n = 282)\), \(U = 18,981.5, z = -1.488, p = 0.137, r = -0.072\).

Both the parametric and non-parametric tests reveal the same findings:

i. There is no significant difference in the levels of confidence of males or females

ii. Both males and females slightly agree that they have confidence the UK retail banking system is stable and secure

This is graphically represented in Figure 4.2 below.

Figure 4.2: I have confidence the UK retail banking system is stable and secure: male vs. female participants
**Age:** A one-way between-group analysis of variance was conducted to explore the impact of age on levels of confidence. Participants were divided into four groups according to their age (Group 1: 18-29 years; Group 2: 30-44 years; Group 3: 45-59 years; Group 4: 60 years and above). There was no statistically significant difference at the \( p < 0.05 \) level in confidence scores for the four age groups: \( F(3, 428) = 1.483, p = 0.218 \).

A Kruskal-Wallis Test was used as a robustness test and also revealed no significant difference in levels of confidence across the four different age groups (Group 1, \( n = 71 \): 18-29yrs, Group 2, \( n = 126 \): 30-44yrs, Group 3, \( n = 149 \): 45-59yrs, Group 4, \( n = 86 \): 60+yrs, \( x^2(3, n = 432) = 4.19, p = 0.241 \), all groups recorded median values of 4.00.

Both the parametric and non-parametric tests reveal the same findings:

i. There is no statistically significant difference in the levels of confidence between age groups.

ii. All age groups *slightly agree* that they have confidence the UK retail banking system is stable and secure.

This is graphically represented in Figure 4.3 overleaf.
Figure 4.3: I have confidence the UK retail banking system is stable and secure: age groups

Education level: A one-way between-group analysis of variance was conducted to explore the impact of education on levels of confidence. Participants were divided into four groups according to their level of educational attainment (Group 1: Secondary School; Group 2: College; Group 3: Undergraduate; Group 4: Postgraduate). There was a statistically significant difference at the $p<0.05$ level in confidence scores for the four education groups: $F(3, 428) = 2.689, p = 0.046$. However, post-hoc comparisons using the Tukey HSD test indicated that the mean score for each group did not differ significantly from any groups.

A Kruskal-Wallis Test was used as a robustness test and also revealed a statistically significant difference in levels of confidence across four different levels of education (Group 1, $n = 98$: Secondary School, Group 2, $n = 114$: College, Group 3, $n = 108$: Undergraduate, Group 4, $n = 112$: Postgraduate, $x^2(3, n = 432) = 8.30, p = 0.040$, however, all groups recorded a median value of 4.00. Dunn’s pairwise comparisons
with adjusted \( p \)-values (Bonferroni correction) revealed that despite the significant overall difference, none of the specific comparisons between groups indicate a significant difference in levels of confidence due to differing levels of education.

Both the parametric and the non-parametric tests reveal the same findings:

i. There is no statistically significant difference in the levels of confidence between education levels.

ii. Participants with different levels of education \textit{slightly agree} they are confident the UK retail banking system is stable and secure.

This is graphically represented in the chart Figure 4.4 below.

\textbf{Figure 4.4: I have confidence the UK retail banking system is stable and secure: level of education}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{chart}
\caption{I have confidence the UK retail banking system is stable and secure: level of education}
\end{figure}

\textbf{Income level:} A one-way between-group analysis of variance was conducted to explore the impact of income on levels of confidence. Participants were divided into five groups according to their annual income: Group 1: £13,500 or less; Group 2:
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

£13,501-£27,600; Group 3: £27,601-£43,000; Group 4: £43,001-£150,000; Group 5: £150,001 and above. There was no statistically significant difference at the p<0.05 level in confidence scores for the five income groups.

A Kruskal-Wallis Test was used as a robustness test and also revealed no significant difference in levels of confidence across five different income groups (Group 1, n = 128; £<13,500, Group 2, n = 122: £13,501-£27,600, Group 3, n = 114: £27,601-£43,000, Group 4, n = 62: £43,001-£150,000, Group 5, n = 6: £150,001+, x² (4, n = 432) = 7.21, p = 0.125, all groups recorded median values of 4.00.

Both the parametric and non-parametric tests reveal the same findings:

i. There is no statistically significant difference in the levels of confidence between income levels.

ii. Participants at all levels of income slightly agree they have confidence the retail banking system is stable and secure.

This is graphically represented in Figure 4.5 overleaf.
Figure 4.5: I have confidence the UK retail banking system is stable and secure: level of income

![Bar chart showing confidence in the UK retail banking system by income level]

4.3.1.1 Microprudential regulation is aimed at preventing the failure of individual financial institutions (Hanson, Kashyap, and Stein, 2011). In 1983 Diamond and Dybvig published a seminal paper providing a model of bank runs and associated financial crises. The principal mechanism proposed to avoid bank runs was the government provision of deposit insurance. In their model they assert that deposit insurance is critical for the stability of the banking system. This was based on the premise that consumers would not panic and try to withdraw their demand deposits if they knew that their deposits were safe. In the UK the deposit insurance scheme is run by the Financial Services Compensation Scheme (FSCS). The second question focused on the rationale that consumer deposits should be protected if a bank becomes insolvent, “I have confidence that the money in my retail bank account(s) is protected should my bank fail”.

Claire Lynne McCafferty PhD April 2020
Currently employed in the FS sector: An independent-samples t-test was conducted to compare the confidence scores of those employed in the financial services sector and those who are not employed in the financial services sector. There is a significant difference in the scores for non-FS employees ($M = 4.45$, $SD = 1.112$) and FS employees ($M = 5.17$, $SD = 0.707$; $t(20.8) = -4.10$, $p = 0.001$, two-tailed).

A Mann-Whitney U Test was used as a robustness test and also revealed there is a significant difference in the confidence levels of FS employees ($Md = 5.00$, $n = 18$) and non-FS employees ($Md = 5.00$, $n = 414$), $U = 5186$, $z = 2.991$, $p = 0.003$, $r = 0.144$.

Both the parametric and non-parametric tests reveal the same findings:

i. There is a statistically significant difference in the levels of confidence of those who are employed in FS and those who are not

ii. The parametric test reported a higher mean score (5.17) for those employed in FS compared to those not employed in FS (4.45), however, the non-parametric test recorded a median of 5, agree for both groups

iii. This is due to the small sample size of the group employed in the sector ($n = 18$)

iv. Figure 4.6 overleaf reveals that although the medians were the same, a higher proportion of respondents in the FS Group recorded a level of confidence above the median than in the non-FS Group.
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Figure 4.6: I have confidence that the money in my retail bank account(s) is protected should my bank fail: employment in sector vs. non-employment in sector

**Gender:** An independent-samples t-test was conducted to compare the confidence scores of males and females. There was no significant difference in scores for males ($M = 4.55$, $SD = 1.16$) and females ($M = 4.45$, $SD = 1.07$; $t(427) = 0.928$, $p = 0.354$, two-tailed).

A Mann-Whitney U Test was used as a robustness test and also revealed no significant difference in the confidence levels of males ($Md = 5.00$, $n = 147$) and females ($Md = 5.00$, $n = 282$), $U = 19,215.5$, $z = -1.318$, $p = 0.188$, $r = -0.064$.

Both the parametric and non-parametric tests reveal the same findings:
i. There is no statistically significant difference in the levels of confidence of males and females.

ii. Both groups agree they have confidence that the money in their retail bank account(s) is protected should their bank fail.

This is graphically represented in Figure 4.7 below.

**Figure 4.7: I have confidence that the money in my retail bank account(s) is protected should my bank fail: male vs. female**

**Age:** A one-way between-group analysis of variance was conducted to explore the impact of age on levels of confidence. Participants were divided into four groups according to their age (Group 1: 18-29 years; Group 2: 30-44 years; Group 3: 45-59 years; Group 4: 60 years and above). There was no statistically significant difference at the $p < 0.05$ level in confidence scores for the four age groups: $F(3, 428) = 1.90$, $p = 0.129$. 
A Kruskal-Wallis Test was used as a robustness test and also revealed no significant difference in levels of confidence across four different age groups (Group 1, n = 71: 18-29yrs, Group 2, n = 126: 30-44yrs, Group 3, n = 149: 45-59yrs, Group 4, n = 86: 60+yrs, \( x^2 (3, n = 432) = 4.57, p = 0.206 \), all Groups recorded median values of 5.00.

Both the parametric and non-parametric tests reveal the same findings:

i. There was no statistically significant difference in the confidence levels across the age groups.

ii. All age groups agree they have confidence that the money in their retail bank account(s) is protected should their bank fail.

This is graphically represented in Figure 4.8 below.

**Figure 4.8: I have confidence that the money in my retail bank account(s) is protected should my bank fail: age groups**

**Education level:** A one-way between-group analysis of variance was conducted to explore the impact of education on levels of confidence. Participants were divided
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

into four groups according to their level of educational attainment (Group 1: Secondary School; Group 2: College; Group 3: Undergraduate; Group 4: Postgraduate). There was no statistically significant difference at the \( p < 0.05 \) level in confidence scores for the four education Groups: \( F(3, 428) = 1.7, \ p = 0.157 \).

A Kruskal-Wallis Test revealed no significant difference in levels of confidence across the four different levels of education (Group 1, \( n = 98 \): Secondary School, Group 2, \( n = 114 \): College, Group 3, \( n = 108 \): Undergraduate, Group 4, \( n = 112 \): Postgraduate, \( x^2(3, n = 432) = 5.57, \ p = 0.135 \), Groups 1, 3 and 4 recorded the same median score (\( Md = 5.00 \)), and Group 2 recorded a median value of 4.50.

The parametric and non-parametric tests revealed the same findings:

i. There is no statistically significant difference in confidence levels between education levels.

ii. Only Group two (College) recorded a lower level of confidence: between slightly agree and agree

iii. Overall, the participants agree they have confidence that the money in their retail bank account(s) is protected should their bank fail.

This is graphically represented in Figure 4.9 overleaf.
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

Figure 4.9: I have confidence that the money in my retail bank account(s) is protected should my bank fail: education level

Income level: A one-way between-group analysis of variance was conducted to explore the impact of income on levels of confidence. Participants were divided into five groups according to their annual income: Group 1: £13,500 or less; Group 2: £13,501-£27,600; Group 3: £27,601-£43,000; Group 4: £43,001-£150,000; Group 5: £150,001 and above. There was a statistically significant difference at the \( p < 0.5 \) level in confidence scores for the five income groups: \( F(4, 427) = 4.567, p = 0.001 \). Post-hoc comparisons using the Tukey HSD test indicated that the mean scores for the groups did not differ significantly from each other; Group 1 \( (M = 4.41, SD = 1.075) \), Group 2 \( (M = 4.20, SD = 1.206) \), Group 3 \( (M = 4.64, SD = 1.032) \), Group 4 \( (M = 4.79, SD = 1.010) \), and Group 5 \( (M = 5.17, SD = 0.408) \).

A Kruskal-Wallis Test revealed a statistically significant difference in levels of confidence across five different income groups (Group 1, \( n = 128 \): <£13,500, Group 2, \( n = 122 \): £13,501-£27,600, Group 3, \( n = 114 \): £27,601-£43,000, Group 4, \( n = 62 \): £43,001-£150,000, Group 5, \( n = 53 \): £150,001 and above).
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£43,001-£150,000, Group 5, \(n = 6\): £150,001+, \(\chi^2 (4, n = 432) = 17.76, p = 0.001\). Group 2 (£13,501-£27,600) recorded a lower median score (Md = 4.00) than the other four groups, which all recorded median values of 5.00. Dunn’s pairwise comparisons with adjusted \(p\)-values (Bonferroni correction) revealed that Group 2 (£13,501-£27,600) was statistically different to Group 3 (£27,601-£43,000), \(p = 0.029, r = -0.194\). Group 2 was also statistically different to Group 4 (£43,001-£150,000), \(p = 0.009, r = -0.246\). None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to differing levels of income.

The parametric and non-parametric tests revealed slightly different findings:

i. There is a statistically significant difference in the levels of confidence across the income level groups

ii. The parametric test found no significant difference between the groups

iii. The non-parametric test found a statistically significant difference between those earning £13,501-£27,600 (slightly agree) and two other income Groups: £27,601-£43,000 and £43,001-£150,000 (agree)

iv. Overall, the respondents agree they are confident that the money in my retail bank account(s) is protected should my bank fail: education level

This is graphically represented in Figure 4.10 overleaf.
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

Figure 4.10: I have confidence that the money in my retail bank account(s) is protected should my bank fail: income level

![Independent-Samples Median Test](image)

4.3.2 Asymmetric Information

"I have confidence that my retail bank will provide me with sufficient information to make informed decisions"

In financial services it may be the case that the consumer does not have adequate information to make a fully informed decision. Additionally, the problem of asymmetric information occurs as the consumer has less information than the ‘expert’ supplying the financial product and/or advice. Consumers are unable to inform themselves adequately so as to avoid making decisions which may disadvantage them (Wood, 2001). This survey question was designed to test how confident consumers are that regulation can overcome this market failure.

Currently employed in the FS sector: An independent-samples t-test was conducted to compare the confidence scores of those employed in the financial
services sector and those who are not employed in the financial services sector. There is no statistically significant difference in the scores for FS employees ($M = 4.06, SD = 1.16$) and non-FS employees ($M = 4.18, SD = 1.15$; $t (430) = 0.455, p = 0.649$, two-tailed).

A Mann-Whitney U Test was used as a robustness test and also revealed no significant difference in the confidence levels of FS employees ($Md = 4.00, n = 18$) and non-FS employees ($Md = 4.00, n = 414$), $U = 3362.5$, $z = -0.738$, $p = 0.461$, $r = -0.36$.

Both the parametric and non-parametric tests reveal the same findings:

i. There is no statistically significant difference in the levels of confidence of the two groups

ii. Both those who are employed in financial services and those who are not, *slightly agree* they have confidence that their retail bank will provide them with sufficient information to make informed decision.

This is graphically represented in Figure 4.11 overleaf.
Figure 4.11: I have confidence that my retail bank will provide me with sufficient information to make informed decisions: employment in sector vs. non-employment in sector

Gender: An independent-samples t-test was conducted to compare the confidence scores of males and females. There was no significant difference in scores for males ($M = 4.21, SD = 1.18$) and females ($M = 4.17, SD = 1.12$; $t(427) = 0.380, p = .704$, two-tailed).

A Mann-Whitney U Test was used as a robustness test and also revealed no significant difference in the confidence levels of males ($Md = 5.00, n = 147$) and females ($Md = 4.00, n = 282$), $U = 20,002.5, z = -0.626, p = 0.532, r = -0.03$. 

![Figure 4.11: Independent-Samples Median Test](image)
Both the parametric and non-parametric tests reveal the same findings:

i. There is no statistically significant difference in levels of confidence of males and females

ii. However, males agreed and females slightly agreed they have confidence that their retail bank will provide them with sufficient information to make informed decision

iii. Therefore although males recorded a higher level of confidence in this question it is not of statistical significance

iv. Overall, the results indicate they slightly agree with this statement.

This is graphically represented in Figure 4.12 below.

**Figure 4.12: I have confidence that my retail bank will provide me with sufficient information to make informed decisions: males vs. females**

**Independent-Samples Median Test**

- **Grand Median = 4.000**

*Age:* A one-way between-group analysis of variance was conducted to explore the impact of age on levels of confidence. Participants were divided into four groups
according to their age (Group 1: 18-29 years; Group 2: 30-44 years; Group 3: 45-59 years; Group 4: 60 years and above). There was a statistically significant difference at the $p < .05$ level in the confidence scores for the four age groups: $F(3, 428) = 6.7$, $p = .000$. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 4.676, SD = 0.92$) was statistically different from Group 2 ($M = 3.952, SD = 1.26$) and Group 3 ($M = 4.094, SD = 1.08$). Group 4 ($M = 4.233, SD = 1.12$) did not differ statistically from Groups 1, 2, or 3.

A Kruskal-Wallis Test was used as a robustness test and also revealed a statistically significant difference in levels of confidence across four different age groups (Group 1, $n = 71$: 18-29yrs, Group 2, $n = 126$: 30-44yrs, Group 3, $n = 149$: 45-59yrs, Group 4, $n = 86$: 60+yrs, $x^2 (3, n = 432) = 20.46$, $p = < 0.001$). Groups 2 and 3 both recorded a lower median score ($Md = 4.00$) than Groups 1 and 4, which both recorded median values of 5.00. Dunn's pairwise comparisons with adjusted $p$-values (Bonferroni correction) revealed that Group 1 (18-29yrs) was statistically different to Group 2 (30-44yrs), $p = < 0.001$, $r = 0.299$. Group 1 was also statistically different to Group 3 (45-59yrs), $p = 0.001$, $r = 0.264$. None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to difference in age.

Both the parametric and non-parametric tests reveal the same findings:

1. There is a statistically significant difference in confidence levels between the age groups
2. The lowest age group (18-29yrs) agreed they have confidence that their retail bank will provide them with sufficient information to make informed decision
3. Group 2 (30-44 years) and Group 3 (45-59 years) only slightly agreed they have confidence that their retail bank will provide them with sufficient information to make informed decision.
4. Group 4, (60+ years) who slightly agreed, is not statistically different from any other group.

This is graphically represented in Figure 4.13 overleaf.
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

Figure 4.13: I have confidence that my retail bank will provide me with sufficient information to make informed decisions: age groups

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Confidence Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-29</td>
<td>4.42</td>
</tr>
<tr>
<td>30-44</td>
<td>4.25</td>
</tr>
<tr>
<td>45-59</td>
<td>4.14</td>
</tr>
<tr>
<td>60+</td>
<td>3.93</td>
</tr>
</tbody>
</table>

**Education level:** A one-way between-group analysis of variance was conducted to explore the impact of education on levels of confidence. Participants were divided into four groups according to their level of educational attainment (Group 1: Secondary School; Group 2: College; Group 3: Undergraduate; Group 4: Postgraduate). There was a statistically significant difference at the p< .05 level in confidence scores for the four education groups: $F(3, 428) = 3.5, p = 0.017$. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 4.42, SD = 1.025$) was statistically different from Group 4 ($M = 3.93, SD = 1.152$). Group 2 ($M = 4.25, SD =1.077$) and Group 3 ($M = 4.14, SD = 1.264$) did not differ significantly from either Group 1 or 4.

A Kruskal-Wallis Test was used as a robustness test and also revealed a statistically significant difference in levels of confidence across four different levels of education (Group 1, $n = 98$: Secondary School, Group 2, $n = 114$: College, Group 3, $n = 108$: Undergraduate, Group 4, $n = 112$: Postgraduate, $x^2(3, n = 432) = 12.74, p = 0.005$.}

Claire Lynne McCafferty PhD April 2020
Groups 3 (Undergraduate) and 4 (Postgraduate) recorded the lowest median score ($Md = 4.00$). Group 2 recorded a median value of 4.50 and Group 1 (Secondary School education) recorded the highest median value of 5.00. Dunn's pairwise comparisons with adjusted $p$-values (Bonferroni correction) revealed that Group 1 (Secondary School) was statistically different to Group 4 (Postgraduate), $p = 0.003$, $r = 0.243$. None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to differing levels of education.

Parametric and non-parametric tests revealed the same findings:

i. There is a statistically significant difference in confidence levels across the groups

ii. Between the groups there is a statistically significant difference between the lowest and highest education level groups

iii. Group 1 (Secondary School) recorded the highest level of confidence; they agreed with the statement that their retail bank will provide them with sufficient information to make informed decisions

iv. Group 2 (College) recorded a level of confidence between slightly agree and agree

v. Group 3 (Undergraduate) and Group 4 (Postgraduate) only slightly agreed that their retail bank will provide them with sufficient information to make informed decisions

vi. The group with the highest level of education has the lowest level of confidence that their retail bank will provide them with sufficient information to make informed decisions. This is discussed in more detail in Section 4.3.9.

This is graphically represented in Figure 4.14 overleaf.
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

Figure 4.14: I have confidence that my retail bank will provide me with sufficient information to make informed decisions: education level

**Income level:** A one-way between-group analysis of variance was conducted to explore the impact of income on levels of confidence. Participants were divided into five groups according to their annual income: Group 1: £13,500 or less; Group 2: £13,501-£27,600; Group 3: £27,601-£43,000; Group 4: £43,001-£150,000; Group 5: £150,001 and above. There was a statistically significant difference at the p < 0.5 level in confidence scores between the five groups: $F(4, 427) = 4.787$, $p = 0.001$. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 4.48$, $SD = 1.050$) was significantly different to Group 3 ($M = 3.92$, $SD = 1.184$). Group 2 ($M = 4.17$, $SD = 1.155$), Group 4 ($M = 4.10$, $SD = 1.097$) and Group 5 ($M = 3.33$, $SD = 1.211$) did not differ significantly from any other group.

A Kruskal-Wallis Test revealed a statistically significant difference in levels of confidence across five different income groups (Group 1, $n = 128$: <£13,500, Group 2, $n = 122$: £13,501-£27,600, Group 3, $n = 114$: £27,601-£43,000, Group 4, $n = 62$: £43,001-£150,000, Group 5, $n = 6$: £150,001+, $x^2(4, n = 432) = 21.91$, $p = <0.001$. 

*Claire Lynne McCaffery PhD April 2020*
The lowest earning group (£<13,500) recorded the highest median score (Md = 5.00), Groups 2, 3 and 4 recorded median values of 4.00, and the highest earning Group (£150,001+) recorded the lowest median score (Md = 3.50). Dunn’s pairwise comparisons with adjusted p-values (Bonferroni correction) revealed that Group 1 (£<13,500) was statistically different to Group 3 (£27,601-£43,000), \( p < 0.001, r = 0.266 \). None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to differing levels of income.

Parametric and non-parametric tests revealed the same findings:

i. There is a statistically significant difference in confidence across the five groups

ii. The lowest earning group (£<13,500) recorded the highest level of confidence; they agree with the statement, ‘I have confidence that my retail bank will provide me with sufficient information to make informed decisions’

iii. The highest earning group (£150,001+) recorded the lowest level of confidence; their confidence score falls between slightly disagree and slightly agree

iv. Groups 2, 3 and 4 slightly agree with the statement

v. There is a statistically significant difference in confidence between groups one and three (£27,601-£43,000)

vi. The level of confidence is lowest for the highest income group and confidence is highest for the lowest income group. This is discussed in more detail in Section 4.3.9.

This is graphically represented in Figure 4.15 overleaf.
4.3.3 Moral Hazard arising from the Principal-Agent problem.

‘I have confidence that my retail bank will do the right thing’.

One of the problems that arise when the externalities market failure is corrected is the emergence of moral hazard. Krugman (2008, p.63) describes moral hazard as “any situation in which one person makes the decision about how much risk to take, while someone else bears the cost if things go badly”. This is based on the theory that greater risks are taken if a party is “insulated” and therefore does not have to fully realise the consequences of their actions (Buckley, 2011, p.58).

By creating systems in which the consumer deposits are protected it may induce a bank to take greater risks (Hellman et al, 2000), perhaps even provide an incentive to intentionally take on the risk of failure (Boyd and De Nicolo, 2005), and so is not viable without regulation (Keeley, 1990). The introduction of ring fencing in the UK has reduced this risk in retail banking somewhat, since the level of risk that can now
be taken by ring fenced banks has been reduced significantly. Ring fencing was introduced as a post-crisis regulatory response to the moral hazard problem surrounding ‘Too Big To Fail’ banks (Hardie and Macartney, 2016). Moral hazard can undermine the effectiveness of schemes such as LOLR, and magnify costs for the government providing it (Allen, Carletti, Goldstein and Leonello, 2015). The positive effects of ring fencing are two-fold: it reduces the firms' ability to take excessive risk; and the firm is no longer able to ‘blackmail’ the state into a bailout (Lehmann, 2014).

Moral hazard also arises due to the existence of the principal-agent problem. The consumer frequently requires advice when purchasing financial products and the quality of the product cannot be ascertained at the point of purchase (Llewellyn and the FSA, 1999). The existence of asymmetric information between the principal (the consumer) and the agent can lead to exploitation of the consumer where the agent is motivated by self-interest. Certainly, the mis-selling of PPI and packaged bank accounts was primarily due to incentive structures which encouraged high volume sales of these products by frontline staff in exchange for monetary reward. Thus these products were often sold with little consideration of whether this was the most suitable product for the consumer.

The rationale for regulation is to remove the probability that the moral hazard (caused by schemes such as LOLR and deposit insurance) and the principal-agent problem will be exploited (Llewellyn, 1998). If the consumer is confident that their retail bank will do the right thing and there is sufficient regulation in place to ensure that firms do, then it could be argued that regulation has corrected this market failure.

The fourth market failure addressed above is that of moral hazard. The FCA conduct of business regulations set out how a firm must behave in its day-to-day dealing with consumers and has published guidance on staff incentives and remuneration. Therefore as part of this investigation, the confidence levels of consumers will be measured to assess the success of conduct of business regulations in combatting moral hazard and maintaining consumer confidence in their retail bank.
Currently employed in the FS sector: An independent-samples t-test was conducted to compare the confidence scores of those employed in the financial services sector and those who are not employed in the financial services sector. There is no statistically significant difference in the scores for FS employees \((M = 3.83, SD = 1.34)\) and non-FS employees \((M = 3.88, SD = 1.21; t(430) = 0.157, p = 0.876,\) two-tailed).\)

A Mann-Whitney U Test was used as a robustness test and also revealed no significant difference in the confidence levels of FS employees \((Md = 4.00, n = 18)\) and non-FS employees \((Md = 4.00, n = 414), U = 3581, z = -0.290, p = 0.772, r = -0.14.\)

Both the parametric and non-parametric tests reveal the same findings:

i. There is no statistically significant difference in the levels of confidence of the two groups

ii. Both groups slightly agree with the statement ‘I have confidence that my retail bank will do the right thing’.

This is graphically represented in Figure 4.16 overleaf.
Figure 4.16: I have confidence that my retail bank will do the right thing: employment in sector vs. non-employment in sector

Gender: An independent-samples t-test was conducted to compare the confidence scores of males and females. There was no significant difference in scores for males ($M = 3.97, SD = 1.27$) and females ($M = 3.84, SD = 1.18; t(427) = 1.103, p = 0.271$, two-tailed).

A Mann-Whitney U Test was used as a robustness test and also revealed no significant difference in the confidence levels of males ($Md = 4.00, n = 147$) and females ($Md = 4.00, n = 282$), $U = 19,104.5, z = -1.382, p = 0.167, r = -0.067$.

Both the parametric and non-parametric tests reveal the same findings:

i. There is no statistically significant difference in the levels of confidence of the two groups.
ii. Males and females both \textit{slightly agree} with the statement ‘I have confidence that my retail bank will do the right thing’.

This is graphically represented in Figure 4.17 below.

\textbf{Figure 4.17: I have confidence that my retail bank will do the right thing: males vs. females}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure4.17}
\caption{I have confidence that my retail bank will do the right thing: males vs. females}
\end{figure}

\textbf{Age:} A one-way between-group analysis of variance was conducted to explore the impact of age on levels of confidence. Participants were divided into four groups according to their age (Group 1: 18-29 years; Group 2: 30-44 years; Group 3: 45-59 years; Group 4: 60 years and above). There was a statistically significant difference at the $p < 0.05$ level in the confidence scores for the four age groups: $F(3, 428) = 10.5$, $p = <0.001$. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 4.465$, $SD = 1.03$) was statistically different from Group 2 ($M = 3.524$, $SD = 1.28$) and Group 3 ($M = 3.80$, $SD = 1.16$). Group 2 ($M = 3.80$)
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

3.524, $SD = 1.28$) was also statistically different from Group 4 ($M = 3.88, SD = 1.22$). There was no statistical difference between Groups 1 and 4, Groups 2 and 3, or Groups 3 and 4.

A Kruskal-Wallis Test was used as a robustness test and also revealed a statistical difference in levels of confidence across four different age groups (Group 1, $n = 71$: 18-29 years, Group 2, $n = 126$: 30-44 years, Group 3, $n = 149$: 45-59 years, Group 4, $n = 86$: 60+ years). $x^2 (3, n = 432) = 32.23, p = <0.001$. Groups 2, 3 and 4 all recorded a lower median score ($Md = 4.00$) than the youngest age Group (18-29yrs), which recorded a median value of 5.00. Dunn's pairwise comparisons with adjusted $p$-values (Bonferroni correction) revealed that Group 1 (18-29yrs) was statistically different to Group 2 (30-44yrs), $p = < 0.001, r = 0.386$. Group 1 was also statistically different to Group 3 (45-59yrs), $p = < 0.001, r = 0.274$. Group 2 was statistically different to Group 4 (60+yrs), $p = 0.008, r = -0.220$. None of the other specific comparisons between Groups indicate a significant difference in levels of confidence due to difference in age.

Both the parametric and non-parametric tests reveal the same findings:

i. There is a statistically significant difference in the confidence levels across the four groups

ii. The youngest group (18-29 years) recorded the highest level of confidence; they agreed with the statement ‘I have confidence that my retail bank will do the right thing’

iii. The other age groups slightly agreed with the statement

iv. There was a statistical difference in levels of confidence across the four groups

v. There was a statistical difference in levels of confidence between Group 1 (18-29 years) and Group 2 (30-44 years), Group 1 and Group 3 (45-59 years), and Group 2 and Group 4 (60+ years). This is discussed in more detail in Section 4.3.9.

This is graphically represented in Figure 4.18 overleaf.
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

Figure 4.18: I have confidence that my retail bank will do the right thing: age groups

**Education level:** A one-way between-group analysis of variance was conducted to explore the impact of education on levels of confidence. Participants were divided into four groups according to their level of educational attainment (Group 1: Secondary School; Group 2: College; Group 3: Undergraduate; Group 4: Postgraduate). There was a statistically significant difference at the $p < .05$ level in confidence scores for the four education Groups: $F(3, 428) = 7.2, p = .001$. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 4.1, SD = 1.07$) and Group 3 ($M = 3.83, SD = 1.31$) and Group 4 ($M = 3.54, SD = 1.19$). Group 2 ($M = 3.89, SD = 1.18$) did not differ significantly from any of the groups.

A Kruskal-Wallis Test was used as a robustness test and also revealed a statistically significant difference in levels of confidence across four different levels of education (Group 1, $n = 98$: Secondary School, Group 2, $n = 114$: College, Group 3, $n = 108$:...
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Undergraduate, Group 4, \( n = 112 \): Postgraduate, \( x^2 (3, n = 432) = 24.55, p < 0.001 \). Group 1 (Secondary School education) recorded the highest median score (\( Md = 5.00 \)), the other three groups all recorded median values of 4.00. Dunn's pairwise comparisons with adjusted \( p \)-values (Bonferroni correction) revealed that Group 1 (Secondary School) was statistically different to Group 2 (College), \( p = 0.033, r = 0.191 \). Group 1 was also statistically different to Group 3 (Undergraduate), \( p = 0.027, r = 0.198 \). Group 1 was also statistically different to Group 4 (Postgraduate), \( p < 0.001, r = 0.341 \). None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to differing levels of education.

Parametric and non-parametric tests revealed the same findings:

i. There is a statistically significant different level of confidence across the four groups

ii. Group 1 (Secondary School) recorded the highest level of confidence; they agree with the statement ‘I have confidence that my retail bank will do the right thing’

iii. Group 2 (College education), Group 3 (Undergraduate) and Group 4 (Postgraduate) all slightly agree with the statement

iv. There is a statistically different level of confidence between Group 1 and all the other groups

v. This is discussed in more detail in Section 4.3.9.

This is graphically represented in Figure 4.19 overleaf.
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

Figure 4.19: I have confidence that my retail bank will do the right thing: education levels

Income level: A one-way between-group analysis of variance was conducted to explore the impact of income on levels of confidence. Participants were divided into five groups according to their annual income: Group 1: £13,500 or less; Group 2: £13,501-£27,600; Group 3: £27,601-£43,000; Group 4: £43,001-£150,000; Group 5: £150,001 and above. There was a statistically significant difference at the $p < 0.5$ level in confidence scores between the five groups: $F(4, 427) = 5.262$, $p = <0.001$. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 4.21$, $SD = 1.050$) was significantly different to Group 3 ($M = 3.75$, $SD = 1.149$), Group 4 ($M = 3.53$, $SD = 1.264$), and Group 5 ($M = 2.83$, $SD = 1.169$). However, there was no statistical difference recorded between Group 2 ($M = 3.87$, $SD = 1.206$) and any other groups.

A Kruskal-Wallis Test was used as a robustness test and also revealed a statistically significant difference in levels of confidence across five different income groups (Group 1, $n = 128$: <£13,500, Group 2, $n = 122$: £13,501-£27,600, Group 3, $n = 114$: £27,601-£43,000, Group 4, $n = 115$: £43,001-£150,000, Group 5, $n = 116$: £150,001 and above).
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£27,601-£43,000, Group 4, n = 62: £43,001-£150,000, Group 5, n = 6: £150,001+, x² (4, n = 432) = 23.86, p = <0.001. The lowest earning group (<£13,500) recorded the highest median score (Md = 5.00), Groups 2 and 3 recorded a median value of 4.00, Group 4 (£43,001-£150,000) recorded a median value of 3.50, and the highest earning group (£150,001+) recorded the highest median score (Md = 3.00). Dunn's pairwise comparisons with adjusted p-values (Bonferroni correction) revealed that Group 1 (<£13,500) was statistically different to Group 3 (£27,601-£43,000), p = 0.008, r = 0.216. Group 1 was also statistically different to Group 4 (£43,001-£150,000), p = 0.001, r = 285. None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to differing levels of income.

Parametric and non-parametric tests revealed the same findings:

i. There is a statistically significant difference in the confidence levels across the income groups

ii. The parametric test recorded a significant difference between the lowest and highest earners

iii. The lowest income group recorded the highest level of confidence, agreeing with the statement that their retail bank will do the right thing.

iv. The highest earners recorded the lowest level of confidence, slightly disagreeing with the statement.

v. The non-parametric test did not record a significant difference between the lowest and highest earners, however, this is likely due to the small sample size of Group 5 (n = 6)

vi. Although the level of confidence recorded lowered as earnings increased, overall, the participants slightly agreed that their retail bank will do the right thing.

This is graphically represented in Figure 4.20 overleaf.
4.3.4 Fraudulent Activities

‘I have confidence that I am protected from retail bank misconduct’.

Fraudulent activity is linked to moral hazard and as discussed in the Literature Review, the examples of the banks taking excessive risks when the costs are borne by others are plentiful. The steps taken to restructure the regulatory framework and separate the retail side of banks’ business from riskier operations does address some of the causes of fraudulent activity that have been experienced in banking in recent times. The FCA conduct of business regulations set out how a firm must behave in its day-to-day dealing with consumers and the regulator monitors this through using tools such as Economics for Effective Regulation (discussed in Section 2.4.6).
Currently employed in the FS sector: An independent-samples t-test was conducted to compare the confidence scores of those employed in the financial services sector and those who are not employed in the financial services sector. There is no statistically significant difference in the scores for FS employees ($M = 4.06, SD = 1.16$) and non-FS employees ($M = 4.03, SD = 1.17$; $t(430) = -0.077, p = 0.939$, two-tailed).

A Mann-Whitney U Test was used as a robustness test and also revealed no significant difference in the confidence levels of FS employees ($Md = 4.00, n = 18$) and non-FS employees ($Md = 4.00, n = 414$), $U = 3741.5, z = 0.031, p = 0.975, r = 0.002$.

Both the parametric and non-parametric tests reveal the same findings:

i. There was no statistically significant difference in the levels of confidence recorded between those who work in the financial sector and those who don’t

ii. Both groups *slightly* agree with the statement ‘*I have confidence that I am protected from retail bank misconduct.*’

This is graphically represented in Figure 4.21 overleaf.
Gender: An independent-samples t-test was conducted to compare the confidence scores of males and females. There was no significant difference in scores for males ($M = 4.102, SD = 1.25$) and females ($M = 4.01, SD = 1.18$; $t(268) = 0.743, p = 0.458$, two-tailed).

A Mann-Whitney U Test was used as a robustness test and also revealed no significant difference in the confidence levels of males ($Md = 4.00, n = 147$) and females ($Md = 4.00, n = 282$), $U = 19,362.5$, $z = -1.169$, $p = 0.242$, $r = -0.056$.

Both the parametric and non-parametric tests reveal the same findings:

i. There was no statistically significant difference in the levels of confidence recorded between males and females.
ii. Both groups *slightly* agree with the statement ‘I have confidence that I am protected from retail bank misconduct’.

This is graphically represented in Figure 4.22 below.

**Figure 4.22: I have confidence that I am protected from retail bank misconduct: males vs. females**

![Independent-Samples Median Test diagram]

**Age:** A one-way between-group analysis of variance was conducted to explore the impact of age on levels of confidence. Participants were divided into four groups according to their age (Group 1: 18-29 years; Group 2: 30-44 years; Group 3: 45-59 years; Group 4: 60 years and above). There was a statistically significant difference at the $p < 0.05$ level in the confidence scores for the four age groups: $F (3, 428) = 3.721$, $p = 0.012$. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 4.408$, $SD = .99$) was statistically different from
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Group 2 \((M = 3.905, \ SD = 1.26)\) and Group 3 \((M = 3.913, \ SD = 1.10)\). Group 4 \((M = 4.128, \ SD = 1.23)\) did not differ statistically from Groups 1, 2 or 3.

A Kruskal-Wallis Test was used to test robustness and also revealed a statistically difference in levels of confidence across four different age groups (Group 1, \(n = 71\): 18-29 years, Group 2, \(n = 126\): 30-44 years, Group 3, \(n = 149\): 45-59 years, Group 4, \(n = 86\): 60+ years, \(x^2 (3, n = 432) = 11.60, p = 0.009\). Groups 2, 3 and 4 all recorded a lower median score \((Md = 4.00)\) than the youngest age group (18-29 years), which recorded a median value of 5.00. Dunn's pairwise comparisons with adjusted \(p\)-values (Bonferroni correction) revealed that Group 1 (18-29 years) was statistically different to Group 2 (30-44 years), \(p = 0.038, r = 0.195\). Group 1 was also statistically different to Group 3 (45-59 years), \(p = 0.012, r = 0.208\). None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to difference in age.

Both the parametric and non-parametric tests reveal the same findings:

i. There was a statistically significant difference in the levels of confidence recorded across the four age groups

ii. The youngest group (18-29 years) recorded the highest confidence score; they agree with the statement ‘I have confidence that I am protected from retail bank misconduct’

iii. The three other age groups all slightly agree with the statement

iv. There was a statistical difference in levels of confidence between Group 1 and Group 2 (30-44 years), and Group 1 and Group 3 (45-59 years). This is discussed in more detail in Section 5.3.9.

This is graphically represented in Figure 4.23 overleaf.
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

Figure 4.23: I have confidence that I am protected from retail bank misconduct: age groups

**Education level:** A one-way between-group analysis of variance was conducted to explore the impact of education on levels of confidence. Participants were divided into four groups according to their level of educational attainment (Group 1: Secondary School; Group 2: College; Group 3: Undergraduate; Group 4: Postgraduate). There was a statistically significant difference at the $p < 0.05$ level in confidence scores across the four education groups: $F(3, 428) = 3.8, p = 0.01$. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 4.33, SD = 1.12$) was statistically different from Group 4 ($M = 3.79, SD = 1.18$). Group 2 ($M = 3.97, SD = 1.16$) and Group 3 ($M = 4.08, SD = 1.17$) did not differ significantly from any of the groups.

A Kruskal-Wallis Test was used to test robustness and also revealed a statistically significant difference in levels of confidence across the four different levels of education (Group 1, $n = 98$: Secondary School, Group 2, $n = 114$: College, Group 3, $n = 108$: Undergraduate, Group 4, $n = 112$: Postgraduate, $x^2(3, n = 432) = 14.85, p$
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= .002. Group 1 (Secondary School education) recorded the highest median score ($Md = 5.00$), the other three groups all recorded median values of 4.00. Dunn's pairwise comparisons with adjusted $p$-values (Bonferroni correction) revealed that Group 1 (Secondary School) was statistically different to Group 2 (College), $p = 0.049$, $r = 0.182$. Group 1 was also statistically different to Group 4 (Postgraduate), $p = 0.001$, $r = 0.275$. None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to differing levels of education.

Both the parametric and non-parametric tests reveal the same findings:

i. There is a statistically significant difference in the levels of confidence across the levels of education

ii. Between groups, both tests revealed a significant difference between the lowest (*agree*) and highest education groups (*slightly agree*).

iii. The non-parametric test also recorded a significant difference between Groups 1 and 2 which was not recorded in the parametric test

iv. All groups *slightly agreed* they are protected from retail bank misconduct.

This is graphically represented in Figure 4.24 overleaf.
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

Figure 4.24: I have confidence that I am protected from retail bank misconduct: education levels

**Income level:** A one-way between-group analysis of variance was conducted to explore the impact of income on levels of confidence. Participants were divided into five groups according to their annual income: Group 1: £13,500 or less \((M = 4.20, SD = 1.23)\); Group 2: £13,501-£27,600 \((M = 4.01, SD = 1.09)\); Group 3: £27,601-£43,000 \((M = 4.01, SD = 1.15)\); Group 4: £43,001-£150,000 \((M = 3.89, SD = 1.23)\); Group 5: £150,001 and above \((M = 3.17, SD = 0.98)\). There was no statistically significant difference at the \(p < 0.5\) level in confidence scores between the five groups: \(F(4, 427) = 1.715, p = 0.146\). Post-hoc comparisons using the Tukey HSD test indicated no statistical differences in the means between groups.

A Kruskal-Wallis Test was used as a robustness test and revealed a statistically significant difference in levels of confidence across five different income groups (Group 1, \(n = 128\): <£13,500, Group 2, \(n = 122\): £13,501-£27,600, Group 3, \(n = 114\): £27,601-£43,000, Group 4, \(n = 62\): £43,001-£150,000, Group 5, \(n = 6\): £150,001+, \(x^2(4, n = 432) = 9.78, p = 0.044\). The highest earning group (£150,001+) recorded
the lowest median score \((Md = 3.50)\), Groups 2, 3 and 4 recorded median values of 4.00, and the lowest earning group (<£13,500) recorded the highest median score \((Md = 5.00)\). Dunn's pairwise comparisons with adjusted \(p\)-values (Bonferroni correction) revealed that despite the significant overall difference, none of the specific comparisons between groups indicate a significant difference in levels of confidence due to differing levels of income.

There was a difference in the findings reported by the parametric and non-parametric tests:

i. The parametric tests found no statistically significant differences across or between the income groups

ii. The non-parametric tests revealed a statistically significant difference across the groups but not between the groups

iii. Overall, the levels of confidence recorded fell as income increased

iv. Across the income groups the median recorded they \(\textit{slightly agree}\) they have confidence they are protected from retail bank misconduct. This is discussed in more detail in Section 4.3.9.

This is graphically represented in Figure 4.25 overleaf.
The above has described the findings for the economic rationales for regulation. The non-economic rationales, specifically social rationales, are arguments for regulatory intervention to protect the social values of a group of individuals. Where economic rationales seek to address market failures which could ultimately damage the economy, social rationales arise due to the very nature of the UK’s highly developed and market-oriented economy.

SOCIAL RATIONALES

4.3.5 Paternalism (opposite of freedom of choice)

“I have confidence that I can trust the expertise of my retail bank”

Paternalism can exist in the form of interventions in the interests of another, against their will, such as the FCA’s Mortgage Market Review directions. Behavioural economics has been referred to as ‘light’ paternalism (Thaler and Sunstein, 2008).
Since coming into power the FCA has developed a keen interest in the use of behavioural economics to choose the right interventions, secure better outcomes for consumers and promote effective competition (Erta et al, 2013). In particular, retail bank consumers should be able to trust that their retail bank will, through their expertise, help them avoid making decisions which are detrimental to their welfare.

**Currently employed in the FS sector:** An independent-samples t-test was conducted to compare the confidence scores of those employed in the financial services sector and those who are not employed in the financial services sector. There is no statistically significant difference in the scores for FS employees ($M = 3.83, SD = 1.51$) and non-FS employees ($M = 3.94, SD = 1.17$; $t (17.91) = 0.282, p = 0.781$, two-tailed).

A Mann-Whitney U Test was used as a robustness test and also revealed no significant difference in the confidence levels of FS employees ($Md = 4.00, n = 18$) and non-FS employees ($Md = 4.00, n = 414$), $U = 3649.5$, $z = -0.153$, $p = 0.878$, $r = -0.007$.

Both the parametric and non-parametric tests reveal the same findings:

i. There was no statistically significant difference in the levels of confidence recorded between those who work in the financial sector and those who don’t

ii. Both groups *slightly* agree with the statement ‘I have confidence that I can trust the expertise of my retail bank’.

This is graphically represented in Figure 4.26 overleaf.
Figure 4.26: I have confidence that I can trust the expertise of my retail bank: employment in sector vs. non-employment in sector

**Independent-Samples Median Test**

![Median Test Diagram]

**Gender:** An independent-samples t-test was conducted to compare the confidence scores of males and females. There was no significant difference in scores for males ($M = 3.93, SD = 1.29$) and females ($M = 3.94, SD = 1.13$; $t(427) = -0.035, p = 0.972$, two-tailed).

A Mann-Whitney U Test was used as a robustness test and also revealed no significant difference in the confidence levels of males ($Md = 4.00, n = 147$) and females ($Md = 4.00, n = 282$), $U = 20,337.5 z = -0.332, p = 0.740, r = -0.016$.

Both the parametric and non-parametric tests reveal the same findings:

i. There was no statistically significant difference in the levels of confidence recorded between males and females.
ii. Both groups slightly agree with the statement ‘I have confidence that I can trust the expertise of my retail bank’.

This is graphically represented in Figure 4.27 below.

**Figure 4.27: I have confidence that I can trust the expertise of my retail bank: males vs. females**

<table>
<thead>
<tr>
<th>Independent-Samples Median Test</th>
</tr>
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<tbody>
<tr>
<td><img src="chart.png" alt="Chart showing confidence levels for males and females" /></td>
</tr>
</tbody>
</table>

**Age:** A one-way between-group analysis of variance was conducted to explore the impact of age on levels of confidence. Participants were divided into four groups according to their age (Group 1: 18-29 years; Group 2: 30-44 years; Group 3: 45-59 years; Group 4: 60 years and above). There was a statistically significant difference at the $p < 0.05$ level in the confidence scores for the four age groups: $F(3, 428) = 10.955$, $p = <0.001$. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 4.606, SD = .978$) was statistically different from Group 2 ($M = 3.690, SD = 1.26$), Group 3 ($M= 3.779, SD = 1.11$) and Group 4 ($M = 3.294, SD = 1.44$).
3.988, $SD = 1.18$). Group 2 did not differ statistically from Groups 3 or 4, and Group 3 did not differ statistically from Group 4.

A Kruskal-Wallis Test was used to test robustness and also revealed a statistically difference in levels of confidence across four different age groups (Group 1, $n = 71$: 18-29 years, Group 2, $n = 126$: 30-44 years, Group 3, $n = 149$: 45-59 years, Group 4, $n = 86$: 60+ years, $\chi^2 (3, n = 432) = 35.17, p = <0.001$. Groups 2, 3 and 4 all recorded a lower median score ($Md = 4.00$) than the youngest age group (18-29 years), which recorded a median value of 5.00. Dunn's pairwise comparisons with adjusted $p$-values (Bonferroni correction) revealed that Group 1 (18-29 years) was statistically different to Group 2 (30-44 years), $p = <0.001, r = 0.389$. Group 1 was also statistically different to Group 3 (45-59 years), $p = <0.001, r = 0.357$. Group 1 was statistically different to Group 4 (60+ years), $p = 0.002, r = 0.284$. None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to difference in age.

Both the parametric and non-parametric tests reveal the same findings:

i. There is a statistically significant difference in the levels of confidence recorded across the groups

ii. The youngest Group (18-29 years) recorded the highest level of confidence; they agree with the statement ‘I have confidence that I can trust the expertise of my retail bank’

iii. Group 2 (30-44 years), Group 3 (45-59 years) and Group 4 (60+ years) all slightly agreed with the statement

iv. There is a statistically significant difference in the levels of confidence recorded between Group 1 and Groups 2, 3 and 4. This is discussed in more detail in Section 4.3.9.

This is graphically represented in Figure 4.28 overleaf.
Figure 4.28: I have confidence that I can trust the expertise of my retail bank: age groups

**Education level:** A one-way between-group analysis of variance was conducted to explore the impact of education on levels of confidence. Participants were divided into four groups according to their level of educational attainment (Group 1: Secondary School; Group 2: College; Group 3: Undergraduate; Group 4: Postgraduate). There was a statistically significant difference at the $p<0.05$ level in confidence scores for the four education groups: $F(3, 428) = 4.91, p = 0.002$. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 4.18, SD = 1.19$) was statistically different from Group 4 ($M = 3.63, SD = 1.16$). Group 2 ($M = 4.09, SD = 1.07$) was also statistically different from Group 4. Group 3 ($M = 3.85, SD = 1.27$) did not differ significantly from any of the groups.

A Kruskal-Wallis Test was used to test robustness and also revealed a statistically significant difference in levels of confidence across four different levels of education (Group 1, $n = 98$: Secondary School, Group 2, $n = 114$: College, Group 3, $n = 108$: Undergraduate, Group 4, $n = 112$: Postgraduate, $x^2 (3, n = 432) = 19.95, p = .000$.
Group 1 (Secondary School education) recorded the highest median score \((Md = 5.00)\), the other three groups all recorded median values of 4.00. Dunn's pairwise comparisons with adjusted \(p\)-values (Bonferroni correction) revealed that Group 1 (Secondary School) was statistically different to Group 4 (Postgraduate), \(p = <0.001\), \(r = .275\). Group 2 was also statistically different to Group 4 (Postgraduate), \(p = 0.012\), \(r = 0.206\). None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to differing levels of education.

Parametric and non-parametric tests revealed the same findings:

i. There is a statistically significant difference in confidence scores across the four groups.

ii. The group with the lowest level of education (Secondary School) recorded the highest level of confidence; they agreed with the statement ‘I have confidence that I can trust the expertise of my retail bank’.

iii. Group 2 (College), Group 3 (Undergraduate) and Group 4 (Postgraduate) all slightly agreed with the statement.

iv. There is a statistically significant difference in confidence scores between Group 1 and Group 4, and Group 2 and Group 4. This is discussed in more detail in Section 4.3.9.

This is graphically represented in Figure 4.29 overleaf.
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Figure 4.29: I have confidence that I can trust the expertise of my retail bank: education levels

Income level: A one-way between-group analysis of variance was conducted to explore the impact of income on levels of confidence. Participants were divided into five groups according to their annual income: Group 1: £13,500 or less; Group 2: £13,501-£27,600; Group 3: £27,601-£43,000; Group 4: £43,001-£150,000; Group 5: £150,001 and above. There was a statistically significant difference at the $p < 0.5$ level in confidence scores for the five income groups: $F(4, 427) = 5.052, p = 0.001$. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 4.21, SD = 1.141$) was significantly different from Group 3 ($M = 3.76, SD = 1.192$), Group 4 ($M = 3.61, SD = 1.150$) and Group 5 ($M = 2.83, SD = 1.329$). Group 2 ($M = 4.01, SD = 1.168$) did not differ significantly from any other groups.

A Kruskal-Wallis Test was used to test robustness and also revealed a statistically significant difference in levels of confidence across five different income groups (Group 1, $n = 128$: £13,500, Group 2, $n = 122$: £13,501-£27,600, Group 3, $n = 114$: £27,601-£43,000, Group 4, $n = 62$: £43,001-£150,000, Group 5, $n = 6$: £150,001+,
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\[ \chi^2 (4, n = 432) = 22.70, p < .001. \] The lowest earning group (<£13,500) recorded the highest median score (Md = 5.00), Groups 2 and 3 recorded median values of 4.00, and Groups 4 and 5 recorded median values of 3.00. Dunn’s pairwise comparisons with adjusted p-values (Bonferroni correction) revealed that Group 1 (<£13,500) was statistically different to Group 3 (£27,601-£43,000), \( p = 0.015, r = 0.205 \). Group 1 was also statistically different to Group 4 (£43,001-£150,000), \( p = 0.002, r = 0.274 \). None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to differing levels of income.

Both the parametric and non-parametric tests revealed the same findings:

i. Both tests revealed a significant difference in levels of confidence across the income groups

ii. Between groups, the parametric test revealed a significant difference between Groups 1, 3, 4 and 5

iii. The non-parametric test did not record a significant difference between Groups 1 and 5, however, this can be explained by the small sample size of Group 5 (\( n = 6 \))

iv. The level of confidence recorded reduced as earnings increased

v. Overall, the participants slightly agreed they could trust the expertise of their retail bank

vi. The findings are discussed in more detail in Section 4.3.9.

This is graphically represented in Figure 4.30 overleaf.
4.3.6 Distributive Justice (moral guidance)

‘I have confidence that the price of retail banking products is fair’.

Distributive justice is concerned with distributing resources on the basis of what is fair, and when applied to the regulatory system it is concerned with the protection of consumers (Cartwright, 2004). A common problem encountered by the vulnerable groups identified by the FCA, and discussed in the Literature Review, is access to affordable products (Coppack et al, 2015).

Currently employed in the FS sector: An independent-samples t-test was conducted to compare the confidence scores of those employed in the financial services sector and those who are not employed in the financial services sector. There is no statistically significant difference in the scores for FS employees (M =
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

3.61, \(SD = 1.46\) and non-FS employees \((M = 3.57, SD = 1.24; t (430) = -0.128, p = 0.898, \) two-tailed).\)

A Mann-Whitney U Test was used as a robustness test and also revealed no significant difference in the confidence levels of FS employees \((Md = 4.00, n = 18)\) and non-FS employees \((Md = 4.00, n = 414), U = 3751, z = 0.050, p = 0.960, r = 0.002.\)

Both the parametric and non-parametric tests reveal the same findings:

i. There was no statistically significant difference in the levels of confidence recorded between those who work in the financial sector and those who don’t.

ii. Both groups *slightly* agree with the statement ‘*I have confidence that the price of retail banking products is fair*’.

This is graphically represented in Figure 4.31 overleaf.
Figure 4.31: I have confidence that the price of retail banking products is fair: employment in sector vs. non-employment in sector

**Gender:** An independent-samples t-test was conducted to compare the confidence scores of males and females. There was no significant difference in scores for males ($M = 3.66$, $SD = 1.36$) and females ($M = 3.53$, $SD = 1.20$; $t(427) = 1.002$, $p = 0.317$, two-tailed).

A Mann-Whitney U Test was used as a robustness test and also revealed no significant difference in the confidence levels of males ($Md = 4.00$, $n = 147$) and females ($Md = 4.00$, $n = 282$), $U = 19,406$, $z = -1.114$, $p = .265$, $r = -0.054$.

Both the parametric and non-parametric tests reveal the same findings:

i. There was no statistically significant difference in the levels of confidence recorded between males and females.
ii. Both groups *slightly* agree with the statement ‘I have confidence that I can trust the expertise of my retail bank’.

This is graphically represented in Figure 4.32 below.

**Figure 4.32: I have confidence that the price of retail banking products is fair: males vs. females**

![Bar chart showing confidence levels by gender](chart.png)

**Age:** A one-way between-group analysis of variance was conducted to explore the impact of age on levels of confidence. Participants were divided into four groups according to their age (Group 1: 18-29 years; Group 2: 30-44 years; Group 3: 45-59 years; Group 4: 60 years and above). There was a statistically significant difference at the $p < .05$ level in the confidence scores for the four age groups: $F (3, 428) = 10.936, p = .000$. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 4.296, SD = 1.11$) was statistically different from Group 2 ($M = 3.365, SD = 1.29$), Group 3 ($M = 3.383, SD = 1.13$) and Group 4 ($M = 3.383, SD = 1.13$).
3.616, $SD = 1.29$). Group 2 did not differ statistically from Groups 3 or 4, and Group 3 did not differ statistically from Group 4.

A Kruskal-Wallis Test was used to test robustness and also revealed a statistically difference in levels of confidence across four different age groups (Group 1, $n = 71$: 18-29 years, Group 2, $n = 126$: 30-44 years, Group 3, $n = 149$: 45-59 years, Group 4, $n = 86$: 60+ years, $x^2 (3, n = 432) = 32.28$, $p < 0.001$. The youngest age group (18-29 years) recorded the highest median score ($Md = 5.00$), the oldest age group (60+ years) recorded a median value of 4.00, and Groups 2 and 3 both recorded the lowest median score ($Md = 3.00$). Dunn's pairwise comparisons with adjusted $p$-values (Bonferroni correction) revealed that Group 1 (18-29 years) was statistically different to Group 2 (30-44 years), $p < 0.001$, $r = 0.362$. Group 1 was also statistically different to Group 3 (45-59 years), $p < 0.001$, $r = 0.352$. Group 1 was statistically different to Group 4 (60+ yrs), $p = 0.005$, $r = 0.267$. None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to difference in age.

Both the parametric and non-parametric tests reveal the same findings:

i. There is a statistically significant difference in confidence scores across the groups.

ii. The youngest group (18-29 years) recorded the highest level of confidence; they agree with the statement ‘I have confidence that the price of retail banking products is fair’

iii. The oldest group (60+) slightly agree with the statement.

iv. Group 2 (30-44 years) and Group 3 (45-59 years) recorded the lowest levels of confidence; they slightly disagree with the statement.

v. There is a statistically significant difference between Group 1 and Groups 2, 3 and 4. This is discussed in more detail in Section 4.3.9.

This is graphically represented in Figure 4.33 overleaf.
Figure 4.33: I have confidence that the price of retail banking products is fair: age groups

Education level: A one-way between-group analysis of variance was conducted to explore the impact of education on levels of confidence. Participants were divided into four groups according to their level of educational attainment (Group 1: Secondary School; Group 2: College; Group 3: Undergraduate; Group 4: Postgraduate). There was a statistically significant difference at the $p<0.05$ level in confidence scores for the four education groups: $F(3, 428) = 3.95, p = 0.008$. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 3.90, SD = 1.17$) was statistically different from Group 4 ($M = 3.32, SD = 1.22$). Group 2 ($M = 3.61, SD = 1.27$) and Group 3 ($M = 3.50, SD = 1.28$) did not differ significantly from any of the groups.

A Kruskal-Wallis Test was used as a robustness test and revealed a statistically significant difference in levels of confidence across four different levels of education (Group 1, $n = 98$: Secondary School, Group 2, $n = 114$: College, Group 3, $n = 108$: Undergraduate, Group 4, $n = 112$: Postgraduate, $x^2(3, n = 432) = 12.61, p = 0.006.$
Group 4 (Postgraduate education) recorded the lowest median score ($Md = 3.00$), the other three groups all recorded median values of 4.00. Dunn’s pairwise comparisons with adjusted $p$-values (Bonferroni correction) revealed that Group 1 (Secondary School) was statistically different to Group 4 (Postgraduate), $p = 0.003$, $r = 0.239$. None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to differing levels of education.

Parametric and non-parametric tests revealed the same findings:

i. There is a statistically significant difference in confidence scores across the groups

ii. The group with the highest level of education attainment (Postgraduate) recorded the lowest confidence score; they *slightly disagree* with the statement ‘*I have confidence that the price of retail banking products is fair*’

iii. The other three groups *slightly agree* with the statement

iv. There is a statistically significant difference between Group 1 and Group 4. This is discussed in more detail in Section 4.3.9.

This is graphically represented in Figure 4.34 overleaf.
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

Figure 4.34: I have confidence that the price of retail banking products is fair: education levels

Income level: A one-way between-group analysis of variance was conducted to explore the impact of income on levels of confidence. Participants were divided into five groups according to their annual income: Group 1: £13,500 or less; Group 2: £13,501-£27,600; Group 3: £27,601-£43,000; Group 4: £43,001-£150,000; Group 5: £150,001 and above. There was a statistically significant difference at the $p < 0.5$ level in confidence scores for the five income groups: $F(4, 427) = 5.425, p = <0.001$. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 3.98, SD = 1.204$) was significantly different from Group 2 ($M = 3.44, SD = 1.220$), Group 3 ($M = 3.45, SD = 1.198$) and Group 4 ($M = 3.24, SD = 1.302$). Group 5 ($M = 3.33, SD = 1.633$) did not differ significantly from any other groups.

A Kruskal-Wallis Test was used as a robustness test and also revealed a statistically significant difference in levels of confidence across five different income groups (Group 1, $n = 128$: £13,500, Group 2, $n = 122$: £13,501-£27,600, Group 3, $n = 114$: £27,601-£43,000, Group 4, $n = 62$: £43,001-£150,000, Group 5, $n = 6$: £150,001+).
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

χ² (4, n = 432) = 22.04, p = <0.001. The lowest earning group (<£13,500) recorded the highest median score (Md = 4.00), Groups 2 and 4 recorded median values of 3.00, and Groups 3 and 5 recorded median values of 3.50. Dunn's pairwise comparisons with adjusted p-values (Bonferroni correction) revealed that Group 1 (<£13,500) was statistically different to Group 2 (£13,501-£27,600), p = 0.004, r = 0.225. Group 1 was also statistically different from Group 3 (£27,601-£43,000), p = 0.004, r = 0.228, and Group 1 was also statistically different from Group 4 (£43,001-£150,000), p = 0.001, r = 0.280. None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to differing levels of income.

Parametric and non-parametric tests revealed the same findings:

i. There is a statistically significant difference in confidence scores across the groups

ii. The group with the lowest level of income (<£13,500) recorded the highest confidence score; they slighty agree with the statement ‘I have confidence that the price of retail banking products is fair’

iii. Group 2 (£13,501-£27,600) and Group 4 (£43,001-£150,000) recorded the lowest confidence scores; they slighty disagree with the statement

iv. There is a statistically significant difference between Group 1 and Groups 2, 3, and 4

v. The highest income group is not statistically significantly different from the other groups.

This is graphically represented in Figure 4.35 overleaf.
Figure 4.35: I have confidence that the price of retail banking products is fair: income levels

### 4.3.7 Community Values (core values of society)

‘I have confidence that I will not be unlawfully discriminated against by my retail bank’.

Community values are the values which society holds and wish regulation to protect and promote; such as trust, honesty and fair dealing (Cartwright, 2004). Due to market failures such as asymmetric information, trust is paramount in retail financial services, as without trust demand for products and services may decrease (Llewellyn, 2005). One of the FCA’s statutory objectives is to ‘maintain confidence in the UK financial system’ under the terms of the Financial Services and Markets Act 2000. This is particularly important for vulnerable groups who could find they are discriminated against but may lack a voice.
Currently employed in the FS sector: An independent-samples t-test was conducted to compare the confidence scores of those employed in the financial services sector and those who are not employed in the financial services sector. There is no statistically significant difference in the scores for FS employees \((M = 4.44, SD = 1.46)\) and non-FS employees \((M = 4.43, SD = 1.05; t(430) = -0.047, p = 0.963, \text{two-tailed})\).

A Mann-Whitney U Test was used as a robustness test and also revealed no significant difference in the confidence levels of FS employees \((Md = 5.00, n = 18)\) and non-FS employees \((Md = 5.00, n = 414), U = 4114, z = 0.802, p = 0.422, r = 0.039.\)

Both the parametric and non-parametric tests reveal the same findings:

i. There was no statistically significant difference in the levels of confidence recorded between those who work in the financial sector and those who don’t

ii. Both groups agree with the statement ‘I have confidence that will not be unlawfully discriminated against by my retail bank’

This is graphically represented in Figure 4.36 overleaf.
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

Figure 4.36: I have confidence that I will not be unlawfully discriminated against by my retail bank: employment in sector vs. non-employment in sector

**Independent-Samples Median Test**

<table>
<thead>
<tr>
<th></th>
<th>I have confidence that I will not be unlawfully discriminated against by my retail bank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grand Median</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Gender: An independent-samples t-test was conducted to compare the confidence scores of males and females. There was no significant difference in scores for males ($M = 4.47$, $SD = 1.14$) and females ($M = 4.42$, $SD = 1.03$; $t(427) = 0.436$, $p = 0.663$, two-tailed).

A Mann-Whitney U Test was used as a robustness test and also revealed no significant difference in the confidence levels of males ($Md = 5.00$, $n = 147$) and females ($Md = 5.00$, $n = 282$), $U = 19,554$, $z = -1.032$, $p = 0.302$ $r = -0.05$.

Both the parametric and non-parametric tests reveal the same findings:
i. There was no statistically significant difference in the levels of confidence recorded between males and females.

ii. Both groups agree with the statement ‘I have confidence that I will not be unlawfully discriminated against by my retail bank’.

The mean recorded was slightly lower, however, this can be explained by the outliers. 1.4% (N=6) of the participants strongly disagreed with the statement and 4.7% (N=20) of the participants disagreed with the statement. As discussed previously, the 5% trimmed mean, where the lowest 5% and highest 5% of the data is excluded, for each question was very close to the mean so did not require further investigation (Pallant, 2016).

This is graphically represented Figure 4.37 below.

Figure 4.37: I have confidence that I will not be unlawfully discriminated against by my retail: males vs. females
Age: A one-way between-group analysis of variance was conducted to explore the impact of age on levels of confidence. Participants were divided into four groups according to their age (Group 1: 18-29 years; Group 2: 30-44 years; Group 3: 45-59 years; Group 4: 60 years and above). There was no statistically significant difference at the $p < 0.05$ level in confidence scores for the four age groups: $F(3, 428) = 2.35, p = 0.071$.

A Kruskal-Wallis Test was used as a robustness test and also revealed no significant difference in levels of confidence across four different age groups (Group 1, $n = 71$: 18-29 years, Group 2, $n = 126$: 30-44 years, Group 3, $n = 149$: 45-59 years, Group 4, $n = 86$: 60+ years, $x^2(3, n = 432) = 6.35, p = 0.096$, all groups recorded median values of 5.00.

Both the parametric and non-parametric tests reveal the same findings:

i. There is no statistically significant difference in confidence scores across the groups

ii. All age groups agree with the statement ‘I have confidence that I will not be unlawfully discriminated against by my retail bank’.

This is graphically represented in Figure 4.38 overleaf.
**Figure 4.38: I have confidence that I will not be unlawfully discriminated against by my retail bank: age groups**

**Education level:** A one-way between-group analysis of variance was conducted to explore the impact of education on levels of confidence. Participants were divided into four groups according to their level of educational attainment (Group 1: Secondary School; Group 2: College; Group 3: Undergraduate; Group 4: Postgraduate). There was no statistically significant difference at the \(p< .05\) level in confidence scores for the four education Groups: \(F(3, 428) = 1.4, p = 0.248\). The mean score for the groups was: Group 1 \((M = 4.56, SD = .942)\), Group 2 \((M = 4.51, SD = 1.07)\), Group 3 \((M = 4.38, SD = 1.08)\) and Group 4 \((M = 4.29, SD = 1.15)\).

A Kruskal-Wallis Test was used as a robustness test and also revealed no significant difference in levels of confidence across four different levels of education (Group 1, \(n = 98\): Secondary School, Group 2, \(n = 114\): College, Group 3, \(n = 108\): Undergraduate, Group 4, \(n = 112\): Postgraduate, \(x^2(3, n = 432) = 4.05, p = 0.257\), all groups recorded a median value of 5.00.
Parametric and non-parametric tests revealed the same findings:

i. There is no statistically significant difference in confidence scores across the groups

ii. All education levels agree with the statement ‘I have confidence that I will not be unlawfully discriminated against by my retail bank’.

This is graphically represented in Figure 4.39 below.

Figure 4.39: I have confidence that I will not be unlawfully discriminated against by my retail bank: education levels

Income level: A one-way between-group analysis of variance was conducted to explore the impact of income on levels of confidence. Participants were divided into five groups according to their annual income: Group 1: £13,500 or less; Group 2: £13,501-£27,600; Group 3: £27,601-£43,000; Group 4: £43,001-£150,000; Group 5: £150,001 and above. There was a statistically significant difference at the p< 0.05 level in confidence scores for the five income groups: $F(4,427) = 3.507, p = 0.008.$
Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 4.69$, $SD = 0.945$) was significantly different from Group 2 ($M = 4.32$, $SD = 1.054$) and Group 4 ($M = 4.13$, $SD = 1.235$). Group 3 ($M = 4.44$, $SD = 1.081$) and Group 5 ($M = 4.33$, $SD = 0.816$) did not differ significantly from any other groups.

A Kruskal-Wallis Test was used as a robustness test and also revealed a statistically significant difference in levels of confidence across five different income groups (Group 1, $n = 128$: <£13,500, Group 2, $n = 122$: £13,501-£27,600, Group 3, $n = 114$: £27,601-£43,000, Group 4, $n = 62$: £43,001-£150,000, Group 5, $n = 6$: £150,001+, $x^2 (4, n = 432) = 14.22$, $p = .007$. Groups 1, 2 and 3 recorded the higher median score ($Md = 5.00$). Group 4 (£43,001-£150,000) recorded the lowest median value of 4.00; the highest earners (£150,001+) recorded a median value of 4.50. Dunn's pairwise comparisons with adjusted $p$-values (Bonferroni correction) revealed that Group 1 (<£13,500) was statistically different to Group 2 (£13,501-£27,600), $p = .037$, $r = .183$. Group 1 was also statistically different to Group 4 (£43,001-£150,000), $p = .009$, $r = .241$. None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to differing levels of income.

Parametric and non-parametric tests revealed the same findings:

i. There is a statistically significant difference in confidence scores across the groups

ii. Group 4 (£43,001-£150,000) recorded the lowest confidence score; they slightly agree with the statement ‘I have confidence I will not be unlawfully discriminated against by my retail bank’

iii. The other income groups agree with the statement

iv. There is a statistically significant difference between Group 1 and Groups 2 and 4. This is discussed in more detail in Section 4.3.9.

This is graphically represented in Figure 4.40 overleaf.
Figure 4.40: I have confidence that I will not be unlawfully discriminated against by my retail bank: income levels

4.3.8 Protection

‘In general, I have confidence that as a retail bank customer I am adequately protected’.

The final question in the consumer survey tested overall confidence that consumers felt they were protected by retail banking regulation

**Currently employed in the FS sector:** An independent-samples t-test was conducted to compare the confidence scores of those employed in the financial services sector and those who are not employed in the financial services sector. There is no statistically significant difference in the scores for FS employees ($M = 4.28$, $SD = 1.045$) and non-FS employees ($M = 4.44$, $SD = 1.097$; $t (430) = -0.661$, $p = 0.509$, two-tailed).
A Mann-Whitney U Test was used as a robustness test and also revealed no significant difference in the confidence levels of FS employees ($Md = 5.00, n = 18$) and non-FS employees ($Md = 4.50, n = 414$), $U = 4152.5, z = 0.876, p = 0.381, r = -0.042$.

Both the parametric and non-parametric tests reveal the same findings:

i. There was no statistically significant difference in the levels of confidence recorded between those who work in the financial sector and those who don’t

ii. Those who work in financial services agree with the statement ‘I have confidence that as a retail bank customer I am adequately protected’

iii. Those who do not work in the sector recorded a confidence level between slightly agree and agree

This is graphically represented in Figure 4.41 below.

**Figure 4.41:** I have confidence that I as a retail bank customer I am adequately protected: employment in sector vs. non-employment in sector
**Gender:** An independent-samples t-test was conducted to compare the confidence scores of males and females. There was no significant difference in scores for males ($M = 4.41$, $SD = 1.046$) and females ($M = 4.22$, $SD = 1.038$; $t(427) = 1.809$, $p = 0.071$, two-tailed).

A Mann-Whitney U Test was used as a robustness test and also revealed no significant difference in the confidence levels of males ($Md = 5.00$, $n = 147$) and females ($Md = 4.00$, $n = 282$), $U = 18,467$, $z = -1.976$, $p = 0.048$, $r = -0.095$.

Both the parametric and non-parametric tests reveal the same findings:

i. There was no statistically significant difference in the levels of confidence recorded between males and females

ii. Males agree with the statement ‘I have confidence that that as a retail bank customer I am adequately protected’

iii. Females *slightly agree* with the statement.

This is graphically represented in Figure 4.42 overleaf.
Figure 4.42: I have confidence that I as a retail bank customer I am adequately protected: males vs. females

**Independent-Samples Median Test**

![Median Test Chart]

**Age:** A one-way between-group analysis of variance was conducted to explore the impact of age on levels of confidence. Participants were divided into four groups according to their age (Group 1: 18-29 years; Group 2: 30-44 years; Group 3: 45-59 years; Group 4: 60 years and above). There was a statistically significant difference at the \( p < 0.05 \) level in the confidence scores for the four age groups: \( F(3, 428) = 4.671, p = 0.003 \). Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 (\( M = 4.606, SD = .95 \)) was statistically different from Group 2 (\( M = 4.063, SD = 1.15 \)). Groups 3 and 4 did not differ significantly from any other groups.

A Kruskal-Wallis Test was used to test robustness and also revealed a statistically significant difference in levels of confidence across four different age groups (Group 1, \( n = 71 \): 18-29 years, Group 2, \( n = 126 \): 30-44 years, Group 3, \( n = 149 \): 45-59 years).
years, Group 4, \( n = 86 \): 60+ years, \( \chi^2 (3, n = 432) = 11.73, p = 0.008 \). Groups 2 and 3 both recorded a lower median score (\( Md = 4.00 \)) than Groups 1 and 4, which both recorded median values of 5.00. Dunn’s pairwise comparisons with adjusted \( p \)-values (Bonferroni correction) revealed that Group 1 (18-29 years) was statistically different to Group 2 (30-44 years), \( p = 0.011, r = 0.221 \). None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to difference in age.

Both the parametric and non-parametric tests reveal the same findings:

i. There was a statistically significant difference in confidence scores across the groups

ii. The lowest age group (18-29 years) and the highest age group (60 years and above) both agree with the statement ‘I have confidence that that as a retail bank customer I am adequately protected’

iii. The other two groups slightly agree with the statement

iv. There is a statistically significant difference between Group 1 and Group 2 (30-44 years). This is discussed in more detail in Section 4.3.9.

This is graphically represented in Figure 4.43 overleaf.
Figure 4.43: I have confidence that I as a retail bank customer I am adequately protected: age groups

**Education level:** A one-way between-group analysis of variance was conducted to explore the impact of education on levels of confidence. Participants were divided into four groups according to their level of educational attainment (Group 1: Secondary School; Group 2: College; Group 3: Undergraduate; Group 4: Postgraduate). There was a statistically significant difference at the $p < 0.05$ level in confidence scores for the four education groups: $F(3, 428) = 4.7, p = 0.003$. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Group 1 ($M = 4.57, SD = .908$) was statistically different from Group 4 ($M = 4.04, SD = 1.15$). Group 2 ($M = 4.26, SD = 1.06$) and Group 3 ($M = 4.31, SD = 0.990$) did not differ significantly from any of the groups.

A Kruskal-Wallis Test was used as a robustness test and also revealed a statistically significant difference in levels of confidence across four different levels of education (Group 1, $n = 98$: Secondary School, Group 2, $n = 114$: College, Group 3, $n = 108$: Undergraduate, Group 4, $n = 112$: Postgraduate, $x^2(3, n = 432) = 15.27, p = 0.002$. 

Claire Lynne McCafferty  PhD April 2020
Group 1 (Secondary School education) recorded the highest median score \((Md = 5.00)\), the other three groups all recorded median values of 4.00. Dunn's pairwise comparisons with adjusted \(p\)-values (Bonferroni correction) revealed that Group 1 (Secondary School) was statistically different to Group 4 (Postgraduate), \(p = 0.001, r = 0.266\). None of the other specific comparisons between groups indicate a significant difference in levels of confidence due to differing levels of education.

Parametric and non-parametric tests revealed the same findings:

i. There is a statistically significant difference in confidence scores across the groups
ii. The group with the lowest level of education (Secondary School) recorded the highest confidence score; they agree with the statement ‘I have confidence that I as a retail bank customer I am adequately protected’
iii. The other three groups slightly agree with the statement
iv. There is a statistically significant difference between Group 1 (Secondary School) and Group 4 (Postgraduate).

This is graphically represented in Figure 4.44 overleaf.
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

Figure 4.44 I have confidence that I as a retail bank customer I am adequately protected: education levels

![Bar chart showing education levels and confidence scores](chart.png)

**Income level**: A one-way between-group analysis of variance was conducted to explore the impact of income on levels of confidence. Participants were divided into five groups according to their annual income: Group 1: £13,500 or less; Group 2: £13,501-£27,600; Group 3: £27,601-£43,000; Group 4: £43,001-£150,000; Group 5: £150,001 and above. There was no statistically significant difference at the \( p < 0.05 \) level in confidence scores for the five income groups: \( F(4,427) = 1.261, p = 0.285 \).

A Kruskal-Wallis Test was used as a robustness test and also revealed no significant difference in levels of confidence across five different income groups (Group 1, \( n = 128 \): <£13,500, Group 2, \( n = 122 \): £13,501-£27,600, Group 3, \( n = 114 \): £27,601-£43,000, Group 4, \( n = 62 \): £43,001-£150,000, Group 5, \( n = 6 \): £150,001+, \( x^2(4, n = 432) = 7.52, p = 0.111 \).
Parametric and non-parametric tests revealed the same findings:

i. There is no statistically significant difference in confidence scores across the groups

ii. The lowest income group (£13,500 or less) recorded the highest confidence score; they agree with the statement ‘I have confidence that I as a retail bank customer I am adequately protected’

iii. Groups 2 (£13,501-£27,600), Group 3 (£27,601-£43,000) and Group 4 (£43,001-£150,000) slightly agree with the statement

iv. The highest earning group (£150,001+) recorded a confidence level between slightly agree and agree.

This is graphically represented in Figure 4.45 below.

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**Figure 4.45 I have confidence that I as a retail bank customer I am adequately protected: income levels**

![Graph showing income levels and confidence scores](image-url)
4.3.9 Summary of Descriptive Statistics

There is a pattern of findings within the demographic groups. First of all, the youngest group tended to record the highest levels of confidence. For example, in:

i. ‘I have confidence that my retail bank will do the right thing’
ii. ‘I have confidence that I am protected from retail bank misconduct’
iii. ‘I have confidence that the price of retail banking products is fair’
iv. ‘I have confidence that that as a retail bank customer I am adequately protected’.

The oldest age group also recorded higher levels of confidence in the last two statements above. In 2011, Blanchflower and Oswald conducted an international study that found that the most happy, confident and satisfied people are disproportionately the young and old (not middle-aged). Their findings also produced the U-curve found in the results of this study for the areas mentioned above.

Secondly, in terms of levels of educational attainment the group with the lowest level (Secondary School) tended to record the highest levels of confidence. For example, in:

i. ‘I have confidence that my retail bank will provide them with sufficient information to make informed decisions’
ii. ‘I have confidence that my retail bank will do the right thing’
iii. ‘I have confidence that I can trust the expertise of my retail bank’.

The group with the highest level of education attainment (Postgraduate) recorded the lowest confidence score:

i. ‘I have confidence that the price of retail banking products is fair’.

It is important to question why those who are educated to a higher level have less confidence in retail banking regulation. Although it is beyond the scope of this research to answer the ‘why’ questions, some possible explanations for the findings are presented in Chapter 6.
The last demographic group was that of income. Again, some interesting and unexpected findings were recorded. The levels of confidence recorded tended to decrease as levels of income increased. For example:

i. 'I have confidence that my retail bank will provide me with sufficient information to make informed decisions'
ii. 'I have confidence that I can trust the expertise of my retail bank'
iii. 'I have confidence I will not be unlawfully discriminated against by my retail bank'.

This finding is important as higher income consumers tend to purchase products and services which generate a higher income for banks. Although these products may not fall into the category of 'retail' products as they may be investments or other wealth products, loyal current account customers provide an opportunity for cross-selling. Therefore, it is vital that these consumers are confident that they can trust their retail bank and have confidence in the regulation that is in place to protect them. As mentioned above, it is beyond the scope of this research to answer the 'why' questions, some possible explanations for the findings are presented in Chapter 6. Table 4.4 overleaf outlines the findings presented above:
Table 4.4: Summary of Findings from First Stage of Analysis

<table>
<thead>
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<th>WORK IN FS</th>
<th>GENDER</th>
<th>AGE</th>
<th>EDUCATION LEVEL</th>
<th>INCOME LEVEL</th>
<th>RELATED SECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Yes: Agree</td>
<td>Both: Slightly agree</td>
<td>All: Slightly agree</td>
<td>All: Slightly agree</td>
<td>5.3.1</td>
</tr>
<tr>
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<td>No: Slightly agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H2</td>
<td>Both: Agree</td>
<td>Both: Agree</td>
<td>All: Agree</td>
<td>All: Agree</td>
<td>5.3.1</td>
</tr>
<tr>
<td>H3</td>
<td>Both: Slightly agree</td>
<td>Both: Slightly agree</td>
<td>Youngest: Agree</td>
<td>Lowest: Agree</td>
<td>5.3.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rest: Slightly agree</td>
<td></td>
<td>Highest: Slightly agree</td>
<td></td>
</tr>
<tr>
<td>H4</td>
<td>Both: Slightly agree</td>
<td>Both: Slightly agree</td>
<td>Youngest: Agree</td>
<td>Lowest: Agree</td>
<td>5.3.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rest: Slightly agree</td>
<td></td>
<td>Highest: Slightly disagree</td>
<td></td>
</tr>
<tr>
<td>H5</td>
<td>Both: Slightly agree</td>
<td>Both: Slightly agree</td>
<td>Youngest: Agree</td>
<td>Lowest: Agree</td>
<td>5.3.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rest: Slightly agree</td>
<td></td>
<td>Highest: Slightly agree</td>
<td></td>
</tr>
<tr>
<td>H6</td>
<td>Both: Slightly agree</td>
<td>Both: Slightly agree</td>
<td>Youngest: Agree</td>
<td>Lowest: Agree</td>
<td>5.3.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rest: Slightly agree</td>
<td></td>
<td>Rest: Slightly disagree</td>
<td></td>
</tr>
<tr>
<td>H7</td>
<td>Both: Slightly agree</td>
<td>Both: Slightly agree</td>
<td>Youngest: Agree</td>
<td>Lowest: Slightly agree</td>
<td>5.3.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Oldest: Slightly agree</td>
<td></td>
<td>Highest: Slightly disagree</td>
<td></td>
</tr>
<tr>
<td>H8</td>
<td>Both: Agree</td>
<td>Both: Agree</td>
<td>All: Agree</td>
<td>All: Agree</td>
<td>5.3.7</td>
</tr>
<tr>
<td>H9</td>
<td>Both: Agree</td>
<td>Both: Agree</td>
<td>Youngest: Agree</td>
<td>Lowest: Agree</td>
<td>5.3.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mid-age: Slightly agree</td>
<td></td>
<td>Highest: Slightly agree</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>All: Agree</td>
<td></td>
</tr>
</tbody>
</table>
The table on the previous page reveals the following:

i. There is an overwhelming response of *slightly agree* to most statements

ii. There doesn’t appear to be any difference in the levels of confidence of those employed and not employed in the sector

iii. There doesn’t appear to be any difference in the levels of confidence between the genders

iv. The younger group tends to be most confident of the age groups

v. The lowest education group tends to be most confident of the education groups

vi. The lowest income group tends to be the most confident of the income groups.

From an academic/theorist perspective a number of significant differences have been found from the hypothesis tests when examining the influence of certain demographic factors on certain hypothesis statements. The data is now analysed using correlations to identify if any such patterns exist.

### 4.4 Correlations

In this section the relationship between variables will be explored using correlation analysis. To detect and describe the relationship among variables and explore the association between pairs of variables, correlation analysis was used. Correlation analysis was calculated on the independent variables described as ‘ordinal’ in Table 3.2, page 101, Section 3.3.1.

Pearson product-moment correlation coefficient (r) was used to describe the strength and direction of the linear relationship between an independent variable and dependent variable. Further, Spearman Rank Order Correlation (rho), the non-parametric alternative, was used as a robustness test. There were no differences in the findings of the parametric and non-parametric tests and therefore only the parametric tests are recorded below. The tabulated data can be found in Appendix E.
4.4.1 Age

Question six tested the social rationale for regulation, paternalism. Specifically, that retail bank consumer’s should be able to trust that their retail bank will, through their expertise, help them avoid making decisions which are detrimental to their welfare. The question asked consumers how confident they were that they ‘can trust the expertise of their (my) retail bank’. A Pearson product-moment correlation coefficient was computed to assess the relationship between age and confidence in their bank’s expertise. There was a weak negative correlation between these two variables, \( r = -0.120, n = 432, p = 0.012 \). That is, older consumers tended to be less confident that they could trust the expertise of their retail bank.

Question seven tested the social rationale for regulation, distributive justice. This relates to the perceived fairness of outcomes. Explicitly, how confident consumers are ‘that the price of retail banking products is fair’. There was a moderate negative correlation between these two variables, \( r = -0.136, n = 432, p = 0.005 \). That is, older consumers tended to be less confident that the price of retail banking products is fair. This differs to the ANOVA test, where a U-shaped curve was found. The other variables did not establish a correlation; they did not tend to either increase or decrease.

4.4.2 Education

Question one concerned the risk of contagion, or systemic risk. That is, the failure of one institution could cause the collapse of other, solvent institutions. The statement participants were asked to consider was, “I have confidence the UK retail banking system is stable and secure”. A Pearson product-moment correlation coefficient was computed to assess the relationship between education levels and levels of confidence that consumers are protected against the market failure, contagion. There was a weak negative correlation between these two variables, \( r = -0.098, n = 432, p = 0.042 \). That is, a higher level of education tended to decrease confidence that the banking system is stable and secure.
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Question three tested the economic rationale for regulation, asymmetric information. Particularly that the seller of a financial product or service has greater knowledge than the consumer. The consumer frequently requires advice when purchasing financial products and the quality of the product cannot be ascertained at the point of purchase (Llewellyn, 1999). The question asked consumers how confident they were that their retail bank will provide them ‘sufficient information to make informed decision’. A Pearson product-moment correlation coefficient was computed to assess the relationship between education levels and levels of confidence that consumers are protected against the market failure, asymmetric information. There was a weak negative correlation between these two variables, \( r = -0.211, n = 432, p = < 0.001 \). That is, a higher level of education tended to decrease confidence that their retail bank will provide them with sufficient information to make informed decisions.

Question four tested the economic rationale for regulation, moral hazard. One of the problems that arise when the externalities market failure is corrected is the emergence of moral hazard. Krugman (2008, p.63) describes moral hazard as “any situation in which one person makes the decision about how much risk to take, while someone else bears the cost if things go badly”. This is based on the theory that greater risks are taken if a party is “insulated” and therefore does not have to fully realise the consequences of their actions (Buckley, 2011, p.58).

By creating systems in which the consumer deposits are protected it may induce a bank to take greater risks (Hellman et al, 2000), perhaps even provide an incentive to intentionally take on the risk of failure (Boyd and De Nicolo, 2005), and so is not viable without regulation (Keeley, 1990). The survey asked consumers how confident they were that ‘retail bank will do the right thing’. A Pearson product-moment correlation coefficient was computed to assess the relationship between education levels and levels of confidence that consumers are protected against the market failure, moral hazard. There was a weak negative correlation between these two variables, \( r = -0.211, n = 432, p = < 0.001 \). That is, a higher level of education tended to decrease confidence that their retail bank will do the right thing.
Question five tested the economic rationale for regulation, fraudulent activity. Dishonest or fraudulent behaviour by those in power has become something of a norm in modern banking. LIBOR and foreign exchange market rate manipulation was essentially collusive, collaborative and collegial (Skinner, 2016) between the largest of the world's banks. It had become industry accepted practice and gave rise to significant social and economic costs. Add to this the ubiquitous mis-selling of Payment Protection Insurance and subprime mortgages for no reason other than profit. Baker (2010) wrote that in the aftermath of the Global Financial Crisis many commentators cited regulatory capture of public bodies and public policy by leading banks as one of the main causal factors. Fraudulent activity is linked to moral hazard and examples of the banks taking excessive risks when the costs are borne by others are plentiful.

The survey asked consumers how confident they are ‘that they are protected from retail bank misconduct’. A Pearson product-moment correlation coefficient was computed to assess the relationship between education levels and levels of confidence that consumers are protected from retail bank misconduct. There was a weak negative correlation between these two variables, $r = -0.138$, $n = 432$, $p = 0.004$. That is, a higher level of education tended to decrease confidence that fraudulent activity was reduced.

Question six tested the social rationale for regulation, paternalism. Specifically, that retail bank consumer’s should be able to trust that their retail bank will, through their expertise, help them avoid making decisions which are detrimental to their welfare. The question asked consumers how confident they were that they ‘can trust the expertise of their (my) retail bank’. A Pearson product-moment correlation coefficient was computed to assess the relationship between education levels and levels of confidence that the expertise of their retail bank could be trusted. There was a weak negative correlation between these two variables, $r = -0.180$, $n = 432$, $p < 0.001$. That is, a higher level of education tended to decrease confidence that positive paternalism (that is decisions that are detrimental to consumer's welfare are avoided) is increased by regulation.
Question seven tested the social rationale for regulation, distributive justice. This relates to the perceived fairness of outcomes. Explicitly, how confident consumers are that ‘the price of retail banking products is fair’. A Pearson product-moment correlation coefficient was computed to assess the relationship between education levels and levels of confidence that the price of retail banking products is fair. There was a weak negative correlation between these two variables, \( r = -0.161, n = 432, p = 0.001 \). That is, a higher level of education tended to decrease confidence that distributive justice was maintained by regulation.

Question eight tested the social rationale for regulation, community values. Community values are the values which society holds and wish regulation to protect and promote; such as trust, honesty and fair dealing (Cartwright, 2004). Due to market failures such as asymmetric information, trust is paramount in retail financial services, as without trust demand for products and services may decrease (Llewellyn, 2005). This is particularly important for vulnerable groups who could find they are discriminated against but may lack a voice. The survey asked consumers how confident they are ‘that they will not be unlawfully discriminated against by their retail bank’. A Pearson product-moment correlation coefficient was computed to assess the relationship between education levels and levels of confidence that they will not be unlawfully discriminated against by their retail bank. There was a weak negative correlation between these two variables, \( r = -0.097, n = 432, p = 0.044 \). That is, a higher level of education tended to decrease confidence that community values were protected by regulation.

The final question tested overall confidence that consumers felt they were protected by retail banking regulation, ‘In general, I have confidence that as a retail bank customer I am adequately protected’. A Pearson product-moment correlation coefficient was computed to assess the relationship between education levels and levels of confidence that they were adequately protected. There was a weak negative correlation between these two variables, \( r = -0.164, n = 432, p = 0.001 \). That is, consumers with a higher level of education tended to be less confident that, in general, they were adequately protected.
The only variable which did not establish a correlation, that did not tend to either increase or decrease, was the second survey question that focused on the rationale that consumer deposits should be protected if a bank becomes insolvent, ‘I have confidence that the money in my retail bank account(s) is protected should my bank fail’.

4.4.3 Income

Question two focused on the rationale that consumer deposits should be protected if a bank becomes insolvent, “I have confidence that the money in my retail bank account(s) is protected should my bank fail”. A Pearson product-moment correlation coefficient was computed to assess the relationship between income levels and levels of confidence that the system was stable and secure. There was a weak positive correlation between these two variables, $r = 0.153$, $n = 432$, $p = 0.001$. That is, the higher the level of income the higher the level of confidence that deposits were protected should the bank fail.

Question three tested the economic rationale for regulation, asymmetric information. Particularly that the seller of a financial product or service has greater knowledge than the consumer. A Pearson product-moment correlation coefficient was computed to assess the relationship between income levels and levels of confidence that consumers are protected against the market failure, asymmetric information. There was a weak negative correlation between these two variables, $r = -0.175$, $n = 432$, $p < 0.001$. That is, a higher level of income tended to decrease confidence that their retail bank will provide them with sufficient information to make informed decisions.

Question four tested the economic rationale for regulation, moral hazard. The survey asked consumers how confident they were that ‘retail bank will do the right thing’. A Pearson product-moment correlation coefficient was computed to assess the relationship between income levels and levels of confidence that consumers are protected against the market failure, moral hazard. There was a weak negative correlation between these two variables, $r = -0.208$, $n = 432$, $p < 0.001$. That is,
a higher level of income tended to decrease confidence that their retail bank will do the right thing.

Question five tested the economic rationale for regulation, fraudulent activity. The survey asked consumers how confident they are ‘that they are protected from retail bank misconduct’. A Pearson product-moment correlation coefficient was computed to assess the relationship between income levels and levels of confidence that consumers are protected from retail bank misconduct. There was a weak negative correlation between these two variables, \( r = -0.105, n = 432, p = 0.029 \). That is, a higher level of income tended to decrease confidence that fraudulent activity was reduced.

Question six tested the social rationale for regulation, paternalism. The question asked consumers how confident they were that they ‘can trust the expertise of their (my) retail bank’. A Pearson product-moment correlation coefficient was computed to assess the relationship between income levels and levels of confidence that the expertise of their retail bank could be trusted. There was a weak negative correlation between these two variables, \( r = -0.206, n = 432, p < 0.001 \). That is, a higher level of income tended to decrease confidence that positive paternalism (that is decisions that are detrimental to consumer’s welfare are avoided) is increased by regulation.

Question seven tested the social rationale for regulation, distributive justice. This relates to the perceived fairness of outcomes. Explicitly, how confident consumers are ‘that the price of retail banking products is fair’. A Pearson product-moment correlation coefficient was computed to assess the relationship between income levels and levels of confidence that the price of retail banking products is fair. There was a weak negative correlation between these two variables, \( r = -0.192, n = 432, p < 0.001 \). That is, a higher level of income tended to decrease confidence that distributive justice was maintained by regulation.

Question eight tested the social rationale for regulation, community values. The survey asked consumers how confident they are ‘that they will not be unlawfully
discriminated against by their retail bank’. A Pearson product-moment correlation coefficient was computed to assess the relationship between income levels and levels of confidence that they will not be unlawfully discriminated against by their retail bank. There was a weak negative correlation between these two variables, \( r = -0.143, n = 432, p = 0.003 \). That is, a higher level of income tended to decrease confidence that community values were protected by regulation.

There were two hypotheses which did not establish a correlation; they did not tend to either increase or decrease:

i. ‘I have confidence the UK retail banking system is stable and secure’

ii. ‘In general, I have confidence that as a retail bank customer I am adequately protected’.

From the industry/practitioner perspective not only have the relationships between demographic factors and the research hypotheses been confirmed, but now the direction of these relationships have been identified. This can be used to inform the sector of these consumer behaviours, e.g. young; low education; low income people have higher confidence, so old; well-educated; high income people need to be the focus of industry advertising and education.

4.4.4 Summary of Correlation Analysis Findings

Below is a summary of the main findings grouped by demographic:

i. Age: Older customers tended to be less confident that they could trust the expertise of their retail bank and that the price of retail products was fair.

ii. Education: The higher the level of educational attainment the lower the confidence level that the banking system is stable and secure; that their retail bank will provide them with sufficient information to make informed decisions; that their retail bank will do the right thing; that they were protected from retail bank misconduct; that they can trust the expertise of their retail bank; that the price of retail banking products is fair; that they will not be unlawfully
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discriminated against by their retail bank; and that they were adequately protected overall.

iii. Income: The higher the level of income, the higher the level of confidence that deposits are protected should their retail bank fail. However, the lower the level of confidence that their retail bank will provide them with sufficient information to make informed decisions; that their retail bank will do the right thing; that they are protected from retail bank misconduct; that they can trust the expertise of their retail bank; that the price of retail banking products is fair; and that they will not be unlawfully discriminated against by their retail bank.

In this chapter, the survey data was analysed using two different approaches. In the first instance, and with reference to an academic/theorist standpoint, parametric and non-parametric tests were used to identify if there are any statistically significant differences in the hypotheses results based on an underlying demographic factor(s). It was established that for many of the research hypotheses there were indeed different responses based on groupings established within the demographic factors.

There were no recorded differences in the levels of confidence in the economic rationales for regulation or the social rationales for regulation. The economic rationales for regulation measured as slightly agree, as did the social rationales. Only one economic rationale recorded higher, consumers agree, that the money in their retail bank account(s) is protected should their bank fail. The regulation that is in place to correct the market failure of systemic risk at a micro-prudential level is the Financial Services Compensation Scheme (FSCS). During the Global Financial Crisis this particular area of regulation gained considerable exposure due to the bank run on Northern Rock. This may explain the higher level of confidence recorded.

Only one social rationale recorded higher, consumers agreed, that they will not be unlawfully discriminated against by their retail bank. The Equality Act (2010) is the UK anti-discrimination law. Given the current climate for diversity and inclusion, both at organisational and societal levels, it would be surprising to find that consumers
did feel discriminated against. However, as discussed earlier, the Financial Ombudsman Service (FOS) did find cases in a study in 2015.

The second analysis approach then attempted to identify the direction of these relationships. This was achieved using correlation analysis and the ordinal demographic factors, namely, age; education level and income level. The results from this analysis therefore provide industry/practitioners with a key insight into the nature of the differences to responses that can then be used to inform education, customer support, and even marketing initiatives to address any issues pertinent to the focus of this study area. In particular, older respondents; those with relatively high income levels; and those with higher educational attainment had broadly lower trust and satisfaction levels for many of the key hypotheses.

In the next chapter, the final analysis using multiple linear regressions focuses on the end-user/consumer. This analysis will determine which of the behavioural factors, in terms of the key demographics, are ultimately relevant in the overall appraisal of trust and satisfaction in the industry and regulator as they relate to the consumers own bank experiences.
CHAPTER 5 REGRESSION ANALYSIS AND RESEARCH FINDINGS

5.1 Introduction

The correlation analysis in Chapter 4 looked at each independent variable (demographic data) in turn and its relationship with each dependent variable (levels of confidence measured by the hypotheses). The limitation of correlation analysis is that it only looks at the relationship between two variables at a time. Regression analysis helps to overcome this limitation by looking at the relationship between more than one variable. In this chapter, stepwise multiple regression analysis is used to identify the combination of independent (demographic) variables that would be used to predict the levels of confidence in the dependent variable (rationales for regulation).

5.2 Demographic Groups

Below is a table which presents the groupings used for each demographic variable.

Table 5.1: Demographic Groupings

<table>
<thead>
<tr>
<th>Demographic Variable</th>
<th>Group 1</th>
<th>Group 2</th>
<th>Group 3</th>
<th>Group 4</th>
<th>Group 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work in financial services</td>
<td>No</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>Female</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Age</td>
<td>18-29</td>
<td>30-44</td>
<td>45-59</td>
<td>60+</td>
<td>-</td>
</tr>
<tr>
<td>Education</td>
<td>Secondary School</td>
<td>College</td>
<td>Undergraduate</td>
<td>Postgraduate</td>
<td>-</td>
</tr>
<tr>
<td>Income</td>
<td>£13,500 &amp; £27,600</td>
<td>£27,601 - £43,000</td>
<td>£43,001 - £150,000</td>
<td>£150,001+</td>
<td>-</td>
</tr>
</tbody>
</table>
5.3 Levels of Confidence in the Rationales for Regulation

In this section the significant demographic factors that predict the level of confidence in each rationale for regulation will be presented. Although regression will tell us which independent variables influence the dependent variable, it will not tell us the reasons why. Nonetheless, as the factors that are not important are removed, future studies can be carried out to understand the underlying qualitative reasons.

In order to assess the impact of demographics on confidence levels a multiple regression model must be adopted. Logistic regression is not suitable in this study as the dependent variable of interest is not categorical (Pallant, 2016). Multiple stepwise regressions were used in an attempt to find the best regression model. This analysis tool adds or deletes variables one at a time using the $p$ value as a predictor for each step (Frey, 2018). There is criticism of this method; however, it is useful for exploratory research such as this (Field, 2013). Stepwise regression simply allows the data to reveal potential predictors; in this research there were no theoretical predictions based on the demographics of the participants. Stepwise regression was selected in order to explore avenues for future research and not to test hypotheses (Field, 2013). Had the aim of the research been to predict, or determine the order of prediction, a standard or hierarchical regression model may have been more appropriate since a major limitation of stepwise regression is the increased likelihood of committing a type 1 error (Pandit and Khairullah, 2015), i.e. rejecting a true null hypothesis, due to a sampling error. However, sampling error is less of an issue with a larger sample size (Thompson, 1995). Stepwise regression has the advantage over hierarchical regression of the software algorithm selecting the order of the variables, rather than the researcher having to determine this based on previous theory and research (Lewis, 2007). In addition, stepwise regression has been recommended for exploratory and predictive research (Menard, 1995); although Lewis (2007) advises that it should only be used for preliminary research, such as this. The purpose of this research was to determine if there was a relationship between demographic variables and consumer confidence in retail banking regulation and the findings are that there is a negative correlation between
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

certainty and income and education levels, and a positive correlation between
certainty and age.

5.3.1 Macro externalities: ‘I have confidence the UK retail banking system is stable and secure’

When certainty the UK retail banking system is stable and secure was predicted it was found that working in financial services (Beta = -1.0456, p <0.001), level of education (Beta = 0.397, p = 0.003), and age (Beta = 0.376, p = 0.013) were significant predictors. The overall model fit was $R^2 = 0.059$. See Appendix F for the tabulated data.

\[
\text{Confidence} = b_0 + b_{\text{work in FS}} + b_{\text{education}} + b_{\text{age}}
\]

\[
= 4.745 + (-1.045 \text{ work in FS}) + (0.397 \text{ education}) + (0.376 \text{ age})
\]

The demographic variables that increase confidence in this area are:

- Being aged between 18-29
- Secondary education being the highest level completed

The demographic variables that decrease confidence in this area are:

- Not being employed in financial services

This confirms the independent sample t-test in Section 4.3.1, where mean of workers in Financial Services sector is 4.83 and non-workers is 3.86.
The first dependent variable concerns the capital requirement regulations that ensure banks hold sufficient capital. These regulations are in place to avoid systemic risk, in particular contagion. Those who are not employed in the financial services industry have lower levels of confidence in this intervention. This could be expected since those working in the banking sector would perhaps be more aware of these regulations. The second dependent variable relates to the age group. The youngest age group (18-29) recorded the higher levels of confidence. The FCA (2015) identified being young as a risk factor for vulnerability. They justified this as this group are associated with having less experience. The increased confidence could perhaps be explained by naivety rather than proficiency. The third dependent variable concerns the education level of the consumer. The lowest level of educational attainment group (Secondary School) recorded higher levels of confidence in this intervention. The FCA (2015) identified low literacy, numeracy and financial capability skills as a risk factor for vulnerability. Possibly, a lack of understanding of the issues and risks in the financial system may result in a higher level of confidence being recorded.

5.3.2 Micro externalities: ‘I have confidence that the money in my retail bank account(s) is protected should my bank fail’

When confidence that the money in my retail banks account(s) is protected should my bank fail was predicted it was found that working in financial services (Beta =
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0.598, p = 0.023), level of income\(_2\) (Beta = -0.369, p = 0.002), and age\(_1\) (Beta = -0.324, p = 0.022) were significant predictors. The overall model fit was \(R^2 = 0.049\). See Appendix F for the tabulated data.

\[
\text{Confidence} = b_0 + b_1 \text{work in FS}_2 + b_2 \text{income}_2 - b_3 \text{age}_1
\]

\[
= 4.609 + (0.598 \text{ work in FS}_2) + (-0.369 \text{ income}_2) + (-0.324 \text{ age}_1)
\]

The demographic variables that increase confidence in this area are:

- Being employed in financial services

The demographic variables that decrease confidence in this area are:

- Being aged between 18-29
- Having an annual income between £13,501-£27,600

Table 5.3: Hypothesis Test 2

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>The consumer is confident that the money in their retail bank account(s) is protected should their bank fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variable</td>
<td>Works in the Financial Services Industry</td>
</tr>
<tr>
<td>Confidence</td>
<td>↑</td>
</tr>
</tbody>
</table>

The second dependent variable concerns depositor insurance regulations that ensure consumer deposits are guaranteed should a bank fail. These regulations are in place to avoid a bank panic and ultimately contagion. Those who are employed in the financial services industry have higher levels of confidence in this intervention.
This could be expected since those working in the banking sector would perhaps be more aware of these regulations. Certainly in retail banking the customer-facing staff would be well-versed in this type of protection. The second dependent variable relates to the age group, this has been discussed above. The third dependent variable concerns the income level of the consumer. Although not the lowest income group, this income bracket is below the national average. The FCA (2015) identified low income as a risk factor for vulnerability. Possibly, a lack of understanding of the issues and risks in the financial system may result in a higher level of confidence being recorded, or conversely, the lack of high value savings imply they are not exposed to this risk.

5.3.3 Asymmetric information: ‘I have confidence that my retail bank will provide me with sufficient information to make informed decisions’

When confidence that my retail bank will provide me with sufficient information to make informed decisions was predicted it was found that level of education\textsubscript{1} (Beta = 0.313, p = 0.015), level of income\textsubscript{3} (Beta = -0.243, p = 0.050), and age\textsubscript{1} (Beta = 0.557, p <0.001) were significant predictors. The overall model fit was \( R^2 = 0.061 \). See Appendix F for the tabulated data.

\[
\text{Confidence} = b_0 + b_1\text{education}_1 - b_2\text{income}_3 + b_3\text{age}_1 \\
= 4.077 + (0.313 \text{ education}_1) - (0.243 \text{ income}_3) + (0.557 \text{ age}_1)
\]

The demographic variables that increase confidence in this area are:

- Being aged between 18-29
- Secondary education being the highest level completed

The demographic variables that decrease confidence in this area are:

- Having income between £27,601- £43,000
The third dependent variable concerns the market failure, asymmetric information. The problem of asymmetric information occurs as the consumer has less information than the ‘expert’ supplying the financial product and/or advice. Consumers are unable to inform themselves adequately so as to avoid making decisions which may disadvantage them (Wood, 2001). The individual consumer does not have the time or the resources to sufficiently source information on ‘good’ and ‘bad’ products and providers (Llewellyn, 1995). The FCA conduct of business regulations set out how a firm must behave in its day-to-day dealing with consumers including how it markets products and services and the literature provided to consumers. Those in the youngest age group and with the lowest levels of education have higher levels of confidence in this intervention. This could be due to a combination of naivety and better quality information being available for basic products, or as a result of the extensive initiatives the regulator has run for this classification of consumers. The third dependent variable concerns the income level of the consumer. The middle income group (between national average and higher-rate tax payers) have lower levels of confidence that their retail bank will provide them with sufficient information. This income level group could find themselves in need of advice for more complex products, but priced out of the market for independent advice.

Table 5.4: Hypothesis Test 3

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>The consumer is confident that their retail bank will provide them with sufficient information to make informed decisions</td>
<td>Aged between 18-29</td>
<td>↑</td>
</tr>
<tr>
<td></td>
<td>Educated to Secondary School level</td>
<td>↑</td>
</tr>
<tr>
<td></td>
<td>Income between £27,601-£43,000</td>
<td>↓</td>
</tr>
</tbody>
</table>
5.3.4 Moral hazard: ‘I have confidence that my retail bank will do the right thing’

When confidence that my retail bank will do the right thing was predicted it was found that level of education ($\beta = 0.562, p < 0.001$) and age ($\beta = 0.723, p < 0.001$) were significant predictors. The overall model fit was $R^2 = 0.084$. See Appendix F for the tabulated data.

$$Confidence = b_0 + b_1 education_1 + b_2 age_1$$

$$= 3.631 + (0.562 \text{ education}_1) + (0.723 \text{ age}_1)$$

The demographic variables that increase confidence in this area are:

- Being aged between 18-29
- Secondary education being the highest level completed

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>The consumer is confident that their retail bank will do the right thing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variable</td>
<td>Aged between 18-29</td>
</tr>
<tr>
<td>Confidence</td>
<td>↑</td>
</tr>
</tbody>
</table>

The fourth dependent variable concerns the market failure moral hazard. One of the problems that arise when the externalities market failure is corrected is the emergence of moral hazard. By creating systems in which the consumer deposits are protected it may induce a bank to take greater risks (Hellman et al., 2000),...
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

perhaps even provide an incentive to intentionally take on the risk of failure (Boyd and De Nicolo, 2005), and so is not viable without regulation (Keeley, 1990). The rationale for regulation is to remove the probability that the moral hazard (caused by schemes such as LOLR and deposit insurance) and the principal-agent problem will be exploited (Llewellyn, 1998). The independent variables of lowest age and lowest education level presented higher levels of confidence that they are protected against these risks. The possible reasons behind this have been discussed above.

5.3.5 Fraudulent activities: ‘I have confidence that I am protected from retail bank misconduct’

When confidence that I am protected from retail bank misconduct was predicted it was found that level of education\(_1\) (Beta = 0.390, p = 0.003) and age\(_1\) (Beta = 0.461, p = 0.002) were significant predictors. The overall model fit was R\(^2\) = 0.040. See Appendix F for the tabulated data.

\[
Confidence = b_0 + b_1education_1 + b_2age_1
\]

\[
= 3.870 + (0.390 \text{education}_1) + (0.461 \text{age}_1)
\]

The demographic variables that increase confidence in this area are:

- Being aged between 18-29
- Secondary education being the highest level completed
The fifth dependent variable concerns protecting consumers against the fraudulent activities of retail banks. Fraudulent activity is linked to moral hazard and examples of the banks taking excessive risks when the costs are borne by others are plentiful, and are discussed in the Literature Review chapter. Fraudulent activity was not limited to the practices of a few banks competing with each other. LIBOR and foreign exchange market rate manipulation was essentially collusive, collaborative and collegial (Skinner, 2016) between the largest of the world’s banks. It had become industry accepted practice, and gave rise to significant social and economic costs. The steps taken to restructure the regulatory framework and separate the retail side of banks' business from riskier operations does address some of the causes of fraudulent activity that have been experienced in banking in recent times. The independent variables of lowest age and lowest education level presented higher levels of confidence that they are protected against these risks. The possible reasons behind this have been discussed above.

5.3.6 Paternalism: ‘I have confidence that I can trust the expertise of my retail bank’

When confidence that I can trust the expertise of my retail bank was predicted it was found that level of education₁ (Beta = 0.464, p = 0.001), education₂ (Beta = 0.349, p = 0.008), age₁ (Beta = 0.801, p = <0.001) and income₅ (Beta = -0.975, p = 0.037)
were significant predictors. The overall model fit was $R^2 = 0.103$. See Appendix F for the tabulated data.

$$\text{Confidence} = b_0 + b_{1\text{education}} + b_{2\text{education}} + b_{1\text{age}} - b_{5\text{income}}$$

$$= 3.615 + (0.464 \text{ education}_1) + (0.349 \text{ education}_2) + (0.801 \text{ age}_1) - (0.975 \text{ income}_5)$$

The demographic variables that increase confidence in this area are:

- Being aged between 18-29
- Secondary education being the highest level completed
- College education being the highest level completed

The demographic variables that decrease confidence in this area are:

- Having income of £150K+

<table>
<thead>
<tr>
<th>Table 5.7: Hypothesis Test 6</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
</tr>
<tr>
<td><strong>Independent Variable</strong></td>
</tr>
<tr>
<td>Confidence</td>
</tr>
</tbody>
</table>

The sixth dependent variable concerns the social justification for intervention by the regulator of protectiveness. An example of paternalistic regulation is the FCA’s Mortgage Market Review directions. Since coming into power the FCA has
developed a keen interest in the use of behavioural economics to choose the right interventions, secure better outcomes for consumers and promote effective competition (Ertu et al, 2013). The lowest age and education groups presented higher levels of confidence in this area. The speculative reasons have been discussed above. Interestingly, the highest income group reported lower levels of confidence in this area of regulation. This could perhaps be explained by the fact that they potentially have a much greater need for specialist advice, the type they cannot perhaps access via their retail bank, and are likely to have access to an Independent Financial Adviser.

5.3.7 Distributive justice: ‘I have confidence that the price of retail banking products is fair’

When confidence that the price of retail banking products is fair was predicted it was found that level of education\(_1\) (Beta = 0.378, \(p = 0.008\)), income\(_1\) (Beta = .0294, \(p = 0.035\)) and age\(_1\) (Beta = 0.744, \(p <0.001\)) were significant predictors. The overall model fit was \(R^2 = 0.097\). See Appendix F for the tabulated data.

\[
\text{Confidence} = b_0 + b_{1\text{education}} + b_{2\text{income}} + b_{3\text{age}} \\
= 3.279 + (0.378 \text{ education}) + (0.294 \text{ income}) + (0.744 \text{ age})
\]

The demographic variables that increase confidence in this area are:

- Being aged between 18-29
- Secondary education being the highest level completed
- Having income of <£13,500
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

Table 5.8: Hypothesis Test 7

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>The consumer is confident that the price of retail banking products is fair</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent Variable</td>
<td>Aged between 18-29</td>
</tr>
<tr>
<td>Confidence</td>
<td>↑</td>
</tr>
</tbody>
</table>

The seventh dependent variable is concerned with distributing resources on the basis of what is fair, and when applied to the regulatory system it is concerned with the protection of consumers (Cartwright, 2004). Examples of regulatory protection of the most vulnerable financial services consumers are policies of financial inclusion and the FCA investigation into payday lenders which resulted in extra rules for firms providing high-cost, short-term credit which took effect on 1 July 2014 (FCA, 2014a). A common problem encountered by each of these groups is access to affordable products (Coppack et al, 2015). The three independent variables groups (young, low income, low educational attainment) have been identified by the FCA (2015) as at risk for vulnerability. These groups have recorded higher levels of confidence in this particular area. This could be due to the significant number of regulator initiatives aimed at protecting and informing these groups, or, it could be that the basic products these groups have access to do not attract high fees (possibly due to regulator interventions to create basic accounts and reduce fees, charges and interest).

5.3.8 Community values: ‘I have confidence that I will not be unlawfully discriminated against by my retail bank’

When confidence that I will not be unlawfully discriminated against was predicted it was found that level of income (Beta = 0.362, p = 0.001) was the only significant predictor. The overall model fit was $R^2 = 0.024$. See Appendix F for the tabulated data.
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

\[ \text{Confidence} = b_0 + b_1 \text{income}_1 \]

\[ = 4.207 + (0.143 \text{ income}_1) \]

The demographic variables that increase confidence in this area are:

- Having income of <£13,500

**Table 5.9: Hypothesis Test 8**

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>The consumer is confident that they will not be unlawfully discriminated against by their retail bank</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent Variable</strong></td>
<td>Income less than £13,500</td>
</tr>
<tr>
<td><strong>Confidence</strong></td>
<td>↑</td>
</tr>
</tbody>
</table>

The eighth dependent variable relates to the values which society holds and wish regulation to protect and promote; such as trust, honesty and fair dealing (Cartwright, 2004). There is UK legislation in place to protect all citizens, not only consumers of financial services. However, the Financial Ombudsman Service is also available to banking consumers as an independent arbitrator for no fee where they feel they have been mistreated by their retail bank (banks are subject to fees for cases brought before them). The lowest income group reported higher levels of confidence that they are protected. The potential reasons have been discussed above.
5.3.9 Overall confidence: ‘In general, I have confidence that as a retail bank customer I am adequately protected’

When overall confidence that as a retail bank customer I am adequately protected was predicted it was found that level of education (Beta = 0.382, p = 0.001) and age (Beta = 0.398, p = 0.003) was the only significant predictor. The overall model fit was $R^2 = 0.042$. See Appendix F for the tabulated data.

$$Confidence = b_0 + b_1\text{education}_1 + b_2\text{age}_1$$

$$= 4.133 + (0.382 \text{ education}_1) + (0.398 \text{ age}_1)$$

The demographic variables that increase confidence in this area are:

- Secondary education being the highest level completed
- Being aged between 18-29

Table 5.10: Hypothesis Test 9

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>The consumer is confident that as a retail bank customer they are adequately protected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence</td>
<td>Aged between 18-29</td>
<td>↑</td>
</tr>
<tr>
<td></td>
<td>Educated to Secondary School level</td>
<td>↑</td>
</tr>
</tbody>
</table>

The final dependent variable measured levels of confidence that the consumer feels adequately protected overall. The lowest age and education level groups recorded
higher levels of confidence, possible reasons why these particular groups may have higher levels of confidence have been discussed above.

### 5.4 Summary of Regression Analysis Findings

As can be seen in Table 5.11 below, age, education and income are the most important demographic variables when predicting levels of confidence in the rationales for regulation.

**Table 5.11: Summary of Regression Analysis Findings**

<table>
<thead>
<tr>
<th>Work in FS</th>
<th>Gender</th>
<th>Age</th>
<th>Education</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>The UK retail banking system is stable and secure</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>The money in my retail bank account(s) is protected should my bank fail</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>My retail bank will provide me with sufficient information to make informed decisions</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>My retail bank will do the right thing</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>I am protected from retail bank misconduct</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>I can trust the expertise of my retail bank</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>The price of retail banking products is fair</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>I will not be unlawfully discriminated against by my retail bank</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>As a retail bank customer I am adequately protected</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
This chapter of the thesis has set out what the best combination of independent (demographic) variables would be to predict the levels of confidence in the dependent variable (rationales for regulation). The significant demographic factors that predict the level of confidence in each rationale for regulation has been presented. Although regression has identified which independent variables influence the dependent variable, it has not revealed the underlying reasons; although hypothetical explanations have been presented.

Being young, earning a low income and having a low level of educational attainment are clearly important factors in the level of confidence the consumer has in retail banking regulation. Future qualitative studies should be undertaken to determine the causes behind this. This would be of particular interest to Consumer Groups, the regulator and the retail banks.

The next, and final chapter, will revisit the research question, methodology, hypotheses and analysis. The overall findings will be presented along with the contributions, limitations and recommendations.
CHAPTER 6: OVERALL FINDINGS AND CONCLUSIONS

6.1 Introduction

In this final chapter, the aim and objectives of the research will be revisited and the findings and limitations will be discussed. The contributions to theory, practical implications and recommendations for future research will also be presented.

6.2 Background

Confidence in the banking system is critical to the health of households, businesses and the overall economy. Hence, government intervention in the financial services sector and the strict regulation of the banking industry is rationalised by the need to minimise the occurrence of events that could undermine the reputation of banks and threaten the stability of the system. The purpose of this research was to answer the question, ‘Are Scottish consumers confident in retail banking regulation?’. This question is important for the reasons mentioned above, confidence in the banking system is critical to the health of households, businesses and the overall economy. This research has taken a unique approach to answering this question by measuring the levels of confidence in each of the specific rationales for regulating the retail banking system. This is the first of three significant contributions this study has made and is discussed further in Section 6.3 below.

6.3 Theory

The first objective of this research was to undertake a critical review of the existing theory of financial regulation literature to determine the specific rationales for monitoring and supervision. The justifications for regulating the banking system largely fall into two categories: correcting economic market failures and preventing social detriment. The economic rationales identified were:

i. Externalities: systemic risk caused by problems in the wider system and contagion caused by events such as a bank run

ii. Asymmetric Information: the inequality of information between bank and consumer
iii. Moral Hazard: incentives for banks to take greater risks, created by interventions into the market (such as lender of last resort and deposit insurance)

iv. Fraudulent Activities: misconduct and mis-selling scandals which have plagued the industry over recent decades.

The social rationales identified were:

i. Paternalism: to avoid less well-informed consumers making decisions which are detrimental to their welfare

ii. Distributive Justice: ensuring fair outcomes for, the less powerful, consumers

iii. Community Values: protecting and promoting trust, honesty and fair dealing, particularly those who may lack a voice.

6.4 Method

The second objective of this research was to contextualise the above and develop a set of key research questions. Each question would be designed to measure the level of confidence in the outcome of the corrective or protective intervention. The researcher approach to survey design was original, at least in the financial regulation research context, as all three stakeholders played a crucial role in modelling the questions. Three stages of survey design were undertaken to develop a consumer survey from the theoretical model established in Chapter 2. At each stage, empirical testing was undertaken with three distinct participant groups, and in a logical order that considered theory, practice and end-users, see Figure 6.1 overleaf.
The rationale for separating the groups was due to the different levels of knowledge; theory traditionally informs practice (academics and practitioners often collaborate to improve standards). Additionally, corrections and amendments could be made before ‘testing’ on the next group. The final group of end-users were consumers who would not be included in the final study and could feedback on the suitability and validity of the questions whilst understanding the context behind them. There are numerous studies, in particular those undertaken by the current regulator, where there is participation from either industry or consumer. However, the researcher couldn’t find any specific studies were theorists, practitioners and end-users had direct input into the design of the study. At each stage of the empirical testing of the
survey, recommendations for change to the questions were made and acted upon (see Tables 3.4 and 3.5 in Chapter 3).

6.5 Data Collection

The researcher employed a mixed data collection, whereby 71% of responses were achieved via an online survey, with 29% paper surveys attained to ensure the views of non-internet users were represented. The research was limited to Scotland and therefore the adult population (18+ years) residing in Scotland was the target population (since almost all adults in Scotland are ‘banked’) CAB Scotland (2010). According to the 2016 Scottish government data (National Records of Scotland, 2017) the adult population was 4,372,939. Previous FCA research (Coppack et al, 2015) had found the differences in results between UK regions to be marginal so it could be argued that a survey undertaken in Scotland would produce results that can be applied to the UK as a whole. The sample was inspected in terms of its reliability to represent the wider Scottish population and validity with respect to the appropriateness of the data being gathered in this study. It was concluded that the sample of data collected in this study was representative is terms of:

i. Size

ii. Income distribution of participants

iii. Education levels of participants

iv. Participants employed in the financial services sector

The survey consisted of two parts; the first section was comprised of demographic questions such as gender, age, education level, and income. These were considered important variables owing to the research conducted by the regulators into consumer vulnerability (Coppack et al, 2015), access to financial services (Collard et al, 2016) and ageing populations (McLoughlin et al, 2017).

The second section of the survey covered the main theoretical questions which have been developed from the rationales highlighted in Section 6.3 above.
6.6 Analysis

The third objective of the research was to analyse and evaluate the data to determine:

i. differences in the hypotheses results based on underlying demographic factors
ii. the direction of the relationship between each demographic and each rationale for regulation
iii. which of the demographic factors have the most impact on confidence in each of the hypotheses.

The second contribution this research has made is in respect of the continued debate into the use of parametric methods of data analysis when using Likert scales. As discussed in Chapter 3, having considered the assumptions that must be met to perform parametric tests the researcher was confident that their use would be statistically sound. To verify this, non-parametric tests were used as robustness checks. As Table 4.3 in Chapter 4 illustrates, no meaningful differences were found. Therefore, this study also contributes to this field of the literature.

In summary, the first method of analysis looked at each theoretical question based on the individual demographic factors in turn. The second method of analysis looked at correlations between certain demographic variables. The third method of analysis used multiple stepwise regressions to assess which demographics had the biggest influence on each theoretical question. Lastly, which factors had the biggest influence across the whole range of questions was evaluated.

6.7 Findings

In this section, each hypothesis and a summary of the findings from each of the statistical data analysis methods will be presented in turn.
6.7.1 The consumer is confident that the UK retail banking system is stable and secure

i. Results of individual demographic factors:
   a. Those employed in the sector *agreed*, those not employed in the sector *slightly agreed*
   b. Both males and females *slightly agree*
   c. All age groups *slightly agree*
   d. Participants with different levels of education *slightly agree*
   e. Participants at all levels of income *slightly agree*

ii. Results of correlation analysis:
   a. Working in the financial services sector tended to increase confidence that the banking system is stable and secure
   b. The higher the level of education, the lower the confidence that the banking system is stable and secure

iii. Regression analysis:
   a. The demographic variables that increase confidence in this area are:
      - Being aged between 18-29
      - Secondary education being the highest level completed
   b. The demographic variables that decrease confidence in this area are:
      - Not being employed in financial services

Overall, consumers *slightly agree* that the UK retail banking sector is stable and secure. The correlation and regression analysis results concur, however, the regression analysis also identified the youngest age group as an impact factor in confidence levels.

The main implication of consumers from all demographic backgrounds only *slightly agreeing* that they are confident that the retail banking system is stable and secure is the threat to the stability of the financial system itself. As discussed in the Literature Review, when levels of trust and confidence are high banks can rely on stable funding. However, when levels of trust and confidence are low, systemic risk is higher. Younger consumers with low levels of education tended to present higher
levels of confidence, yet traditionally these demographics are not likely to hold the majority of the wealth in the system. Therefore, if already low levels of confidence were to be impacted by yet another scandal, this could cause significant stress to the system.

6.7.2 The consumer is confident that the money in their retail bank account(s) is protected should their bank fail

i. Results of individual demographic factors:
   a. Both those employed in the sector, and those not employed in the sector agreed
   b. Both males and females agree
   c. All age groups agree
   d. Overall, all education levels agree
   e. Those earning above the minimum wage but below the national average, slightly agree
   f. Those earning above the national average, and those earning above the higher rate agree

ii. Results of correlation analysis:
   a. Working in financial services tended to increase confidence that deposits were protected should the bank fail
   b. The higher the level of income, the higher the level of confidence that deposits were protected should the bank fail

iii. Regression analysis:
   a. The demographic variables that increase confidence in this area are:
      • Being employed in financial services
   b. The demographic variables that decrease confidence in this area are:
      • Being aged between 18-29
      • Having an annual income between £13,501-£27,600

The correlation and regression analysis results concur, however, the regression analysis also identified the youngest age group as an impact factor in confidence
levels and detected the specific income range which had the lowest level of confidence; the group earning between minimum wage and the UK national average. Overall, consumers *agreed* they are confident that the money in their retail bank account(s) is protected should their bank fail. Even so, those with higher levels of income tended to record lower levels of confidence. The main implication of this is the risk of bank runs. This could cause significant stress to individual banks if higher-net-worth consumers suddenly withdrew their funds. Conversely but predictably, those working in financial services, which are most likely to be well-versed in the Financial Services Compensation Scheme, tended to record higher levels of confidence.

6.7.3 The consumer is confident that their retail bank will provide them with sufficient information to make informed decisions

i. Results of individual demographic factors:
   a. Both those employed in the sector, and those not employed in the sector *slightly agreed*
   b. Males *agreed* and females *slightly agreed* although there was no statistical difference between the groups
   c. The youngest and oldest age groups *agreed*, however, the two age groups between *slightly agreed*
   d. The group with the highest level of education has the lowest level of confidence, *slightly agree*
   e. The level of confidence is lowest, between *slightly disagree* and *slightly agree*, for the highest income group, and highest, *agree*, for the lowest income group

ii. Results of correlation analysis:
   a. A higher level of education tended to decrease confidence that their retail bank will do the right thing
   b. A higher level of income tended to decrease confidence that their retail banks will provide them with sufficient information to make informed decisions
iii. Regression analysis:
   a. The demographic variables that increase confidence in this area are:
      - Being aged between 18-29
      - Secondary education being the highest level completed
   b. The demographic variables that decrease confidence in this area are:
      - Having income between £27,601 - £43,000

The correlation and regression analysis results concur, however, the regression analysis also detected the youngest age group as an impact factor in confidence levels. Additionally, the income group earning over the national average but under the higher-rate tax band was also identified as a significant factor.

Overall, consumers only slightly agreed that their retail bank will provide them with sufficient information to make informed decisions. The main implication of those earning above the UK national having the lowest levels of confidence is the potential for loss of business for the retail banks. There is a risk that these consumers could turn to alternative providers to assist them with financial matters. This could indirectly impact other consumers since a loss of profit for the retail banks may see a rise in fees and charges in other areas to ‘balance the books’.

6.7.4 The consumer is confident that their retail bank will do the right thing
i. Results of individual demographic factors:
   a. Both those employed in the sector, and those not employed in the sector slightly agree
   b. Both males and females slightly agree
   c. The youngest age group recorded the highest level of confidence, agree, however, the other age groups slightly agree
   d. The group with the lowest level of education recorded the highest level of confidence, agree
   e. The highest earners recorded the lowest level of confidence, slightly disagree, however, the lowest earners recorded the highest level of confidence, agree
ii. Results of correlation analysis:
   a. A higher level of education tended to decrease confidence that their retail bank will do the right thing
   b. A higher level of income tended to decrease confidence that their retail bank will do the right thing

iii. Regression analysis:
   a. The demographic variables that increase confidence in this area are:
      • Being aged between 18-29
      • Secondary education being the highest level completed

The correlation analysis identified a relationship with income that is not considered to be a significant impact factor. Regression analysis also identified the youngest age group as an impact factor in confidence levels.

Overall, consumers only *slightly agreed* they were confident that their retail bank will do the right thing. Education and income were significant factors, with increased levels of these factors having a negative correlation with levels of confidence. The main implication of this is the potential for consumer detriment if they do not buy suitable financial products due to the belief that their retail bank will not behave in their best interests.

### 6.7.5 The consumer is confident that they are protected from retail bank misconduct

i. Results of individual demographic factors:
   a. Both those employed in the sector, and those not employed in the sector *slightly agree*
   b. Both males and females *slightly agree*
   c. The youngest group recorded the highest level of confidence, *agree*
   d. The group with the lowest level of education recorded the highest level of confidence, *agree*
   e. The lowest earners recorded the highest level of confidence, *agree*

ii. Results of correlation analysis:
a. A higher level of education tended to decrease confidence that fraudulent activity was reduced
b. A higher level of income tended to decrease confidence that fraudulent activity was reduced

iii. Regression analysis:
   b. The demographic variables that increase confidence in this area are:
      - Being aged between 18-29
      - Secondary education being the highest level completed

A relationship with income was detected in the correlation analysis which is not considered to be a significant impact factor; again age was a significant impact factor in confidence levels, however, there doesn’t appear to be a directional relationship. Overall, consumers only *slightly agreed* they are confident that they are protected against retail bank misconduct. The financial crises and numerous mis-selling scandals caused a substantial deterioration in the reputation of the banking industry, which even after more than a decade, is still recovering. The main implications of this include those discussed above, namely, unstable funding, increased risk of bank runs, loss of business for retail banks and reduction in consumer welfare. There is again a negative correlation with levels of confidence and levels of income and educational attainment. The youngest age group recorded the highest levels of confidence which may be a result of being too young to remember the crisis; at least for some.

6.7.6 The consumer is confident that they can trust the expertise of their retail bank
i. Results of individual demographic factors:
   a. Both those employed in the sector, and those not employed in the sector *slightly agree*
   b. Both males and females *slightly agree*
   c. The youngest age group recorded the highest level of confidence, *agree*, however, the other age groups *slightly agree*
d. The group with the lowest level of education recorded the highest level of confidence, *agree*

e. The highest earners recorded the lowest level of confidence, *slightly disagree*, however, the lowest earners recorded the highest level of confidence, *agree*

ii. Results of correlation analysis:

a. Older consumers tended to be less confident that they could trust the expertise of their retail bank

b. A higher level of education tended to decrease confidence that they could trust the expertise of their retail bank

c. A higher level of income tended to decrease confidence that they could trust the expertise of their retail bank

i. Regression analysis:

a. The demographic variables that increase confidence in this area are:
   i. Being aged between 18-29
   ii. Secondary education being the highest level completed
   iii. College education being the highest level completed

b. The demographic variables that decrease confidence in this area are:
   - Having income of £150K+

The correlation and regression analysis results concur; however, the regression analysis also identified the highest earning group, the additional tax rate band, is a significant impact factor in confidence levels.

Overall, consumers only *slightly agreed* they are confident that they can trust the expertise of their retail bank. There is, again, a negative correlation with levels of confidence and levels of income and educational attainment. Also, age was found to be negatively correlated. The highest level of income, the additional rate band, was a significant impact factor for decreased confidence. The highest earners responded that they *slightly disagree* that they are confident that they can trust the expertise of their retail bank. As discussed above the implications of this include
unstable funding, increased risk of bank runs, loss of business for retail banks and reduction in consumer welfare.

6.7.7 The consumer is confident that the price of retail banking products is fair

i. Results of individual demographic factors:
   a. Both those employed in the sector, and those not employed in the sector *slightly agree*
   b. Both males and females *slightly agree*
   c. The youngest group recorded the highest level of confidence, *agree*
   d. The group with the highest level of education recorded the lowest level of confidence, slightly *disagree*
   e. The lowest earners recorded the highest level of confidence, *slightly agree*

ii. Results of correlation analysis:
   a. Older consumers tended to be less confident that the price of retail banking products was fair
   b. A higher level of education tended to decrease confidence that distributive justice was maintained by regulation
   c. A higher level of income tended to decrease confidence that distributive justice was maintained by regulation

iii. Regression analysis:
   a. The demographic variables that increase confidence in this area are:
      - Being aged between 18-29
      - Secondary education being the highest level completed
      - Having income of <£13,500

The correlation and regression analysis results concur, however, the correlation analysis also demonstrates the negative relationship between the independent and dependent variables.

Overall, consumers only *slightly agreed* they are confident that the price of retail banking products is fair. There is, again, a negative correlation with levels of
confident and levels of income, educational attainment and age. Ernst and Young (2014) found that 66% of consumers who had switched in the past 12 months had done so due to fees and charges. The main implication of this is that the big four could lose some of their market share to the ‘Challenger Banks’.

6.7.8 The consumer is confident that they will not be unlawfully discriminated against by their retail bank

i. Results of individual demographic factors:
   a. Both those employed in the sector, and those not employed in the sector agree
   b. Both males and females agree
   c. All age groups agree
   d. All education groups agree
   e. The higher rate - additional rate income group recorded the lowest level of confidence, slightly agree

ii. Results of correlation analysis:
   a. A higher level of education tended to decrease confidence that they will not be unlawfully discriminated against by their retail bank
   b. A higher level of income tended to decrease confidence that community values were protected by regulation

iii. Regression analysis:
   a. The demographic variables that increase confidence in this area are:
      - Having income of <£13,500

Education was detected in the correlation analysis as having a negative relationship; however, this has not been identified as a significant impact factor for confidence in the regression analysis.

Overall, consumers agreed they are confident that they will not be unlawfully discriminated against by their retail bank. This is particularly important for vulnerable groups who could find they are discriminated against but may lack a voice. Income was a significant factor, with those on the lowest income having the highest levels of
confidence, the additional rate taxpayer *slightly agreed* that they are confident that they will not be unlawfully discriminate against by their retail bank. All other demographic groups, and categories within the groups, *agreed* with the statement. The UK has legislation in place to protect all citizens, not only consumers of financial services. The Financial Ombudsman Service (2004; 2015) has found examples of discrimination of consumers at the hands of their retail banks. The main implication of this is that if any particular bank appears to repeatedly fall short of expectations and the law they could suffer both reputational and financial loss, leading to unstable funding, increased risk of bank runs, and loss of business and increased consumer detriment.

6.7.9 **In general, I have confidence that as a retail bank customer I am adequately protected**

i. Results of individual demographic factors:
   
a. Both those employed in the sector, and those not employed in the sector *agree*

b. Males *agree* and females slightly *agree*, although there was no statistical difference in the results

c. The lowest age group and the highest age group *agree*, the other two groups slightly agree

d. The lowest level of education group, *agree*, has a higher level of confidence than the other groups

e. The lowest income group recorded the highest level of confidence, *agree*

ii. Results of correlation analysis:

   a. A higher level of education tended to decrease confidence that, in general, they were adequately protected

iii. Regression analysis:

   a. The demographic variables that increase confidence in this area are:
      
      • Secondary education being the highest level completed
      
      • Being aged between 18-29
Age was identified as a significant impact factor for overall confidence levels, however, no directional relationship was found.

This is the third contribution of this study. The three methods of analysis inform the three key stakeholders of certain phenomena discovered in this research:

i. Hypothesis tests. These examined the differences in levels of confidence between each demographic group. This would be of interest to a range of consumer groups who may support consumers of different ages, and those who have require specific support due to lower literacy and numeracy skills, or those facing financial difficulties. An interesting finding, however, is that higher education and income consumers reported lower levels of confidence. This is discussed further in Section 6.11.

ii. Correlation analysis. The regulator would potentially be very interested to understand the demographic factors that determine whether confidence is increased or decreased in a specific area of regulation. Particularly as they tend to focus initiatives based on targeting demographic factors such as age, education and income. This is discussed in more detail in Section 6.9.

iii. Regression analysis. This analysis determined which demographic factors have the most impact on levels of confidence in specific areas of regulation. This would be of particular interest to banks who are taking a more holistic approach to consumer segmentation. This is discussed in more detail in Section 6.10

6.7.10 Structure

As discussed in the Literature Review, the structure of an organisation can influence consumer confidence levels. With levels of confidence across almost all areas low, consideration should be given to Llewellyn’s (2014) argument that a more diversified financial system would bring economic, systemic and welfare benefits. Indeed, it could lead to a reduction in some of the market failures that regulation seeks to address. For example, as mutual firms focus on their members the agency problem is better addressed and consumers can be more confident that they will be provided with sufficient information to make informed decisions. This was the third hypothesis
tested in the study and consumers only slightly agreed they felt confident in this area. Additionally, the Competition Commission (2002) found that the complex monopoly that is currently operating in the UK has led to consumer detriment due to reduced competition and through exploitative practices such as excessive pricing. Diversification of the market could lead to fairer pricing practices. Confidence that the price of retail banking products is fair was tested under hypothesis seven in the study; again consumers were only slightly confident that this was the case.

6.7.11 Culture

As discussed in the Literature Review, Spicer (2014) found that retail bank culture was to blame for widespread bad practices and failures. Specifically, aggressive sales techniques were encouraged, if not a direct result of, incentive structures which were designed to reward maximum sales with uncapped bonuses; the ultimate goal being shareholder wealth maximisation (due to the shareholder value model structure). All the while that the sales culture in retail banking was growing, the FSA was trying, with limited success, to embed ‘Treating Customer's Fairly’ (TCF) into product and remuneration design. The FSA undertook substantial work to improve the culture of regulated firms, including their TCF initiative which is discussed in detail in Chapter 2. Following their demise in 2013 the FCA published an update of their thematic review, ‘Risks to customers from financial incentives’ (2014c). This report promoted the need for firms to develop a culture that focuses on customers, rather than maximising profits and bonuses for sales staff. The correlation between poorly designed incentive structures and numerous mis-selling scandals could not be denied. The FSA’s previous investigations had revealed that incentive schemes were likely to lead staff to mis-sell to meet targets and gain bonuses. As discussed in Chapter 2, this prompted Barclays, the Cooperative Bank and HSBC to remove sales targets from frontline staff. The FCA have continued to promote the need for cultural change within the industry, a recent publication, ‘FCA Mission: Approach to Supervision’ (2019), details how they expect both the individual and the firm to behave and the roles they play with respect organisational culture. In particular senior managers, who ‘lead and shape’ the culture of the organisation, are subject
to minimum standards checks and must be approved by the regulator as ‘fit and proper’ to perform their role. The Senior Managers and Certification Regime (SM&CR) introduced a statutory duty of responsibility in March 2017 and is discussed in more detail in the next section. Even the financial crisis did not appear to have provided sufficient lessons. Spicer (2014) found that sales targets had simply been rebranded ‘customer needs’ or ‘customer outcomes’ in some cases. He predicted it would be a whole generation before a marked change would be realised.

Hypothesis four tested how confident the consumer was that their retail bank will do the right thing. Consumers slightly agreed that they were confident in this area. Doing the right thing may come down to an individual’s moral compass. However, when taken in an organisational context, it broadly comes down to the culture of the company, their ethical code. Yet, as discussed in the Literature Review there is no mandatory ethical code for the banking industry. Hypothesis five tested how confident the consumer was that they were protected against retail bank misconduct. Consumers only slightly agreed that they were confident in this area. Interestingly, Vigeo-Eiris (2017) found that a strong ethical culture decreased a bank’s vulnerability to misconduct. Hypothesis six tested how confident the consumer was that they can trust the expertise of their retail bank. The FCA has published several papers (2014; 2015; 2018) which identify the groups that are most likely to depend on this expertise. Yet again, consumers recorded that they only slightly agreed they were confident in this question. It would appear that the issue of culture cannot be successfully addressed without considering the ethics of the organisation. This is discussed in more detail in the next section.

6.7.12 Organisational Ethics

As discussed in the Literature Review, there are questions about who is accountable and responsible for a firm’s ethical, or otherwise, decisions. Since the financial crisis there have been reforms within the industry to increase the accountability of the board, and of senior managers, of financial institutions. In March 2017, the SM&CR introduced a statutory duty of responsibility. Each senior manager must have an agreed Statement of Responsibility which sets out in detail the areas of the business
they are accountable for. The aims of the regime are twofold: to foster a culture where staff at all levels take personal responsibility for their actions; and to ensure firms and their staff can clearly demonstrate where the responsibility lies. Senior managers are also responsible for ensuring that employees - who do not have to be approved by the FCA, but whose roles could cause significant detriment to the firm or consumers – undergo an annual fit and proper check for their role. The FCA intend to pursue individual responsibility rigorously (FCA, 2019a).

However, there is a general consensus that regulation should not be expected to ensure an ethical industry (Jackman, 2012; Black and Anderson, 2013); rather the institutions themselves should be striving to create a visibly ethical culture from the ‘top-down’. Every regulated firm must adhere to the FCA Principles for Business, which set out ‘fundamental obligations’. Additionally, an industry-wide ethical group, the Banking Standards Board, shares best practice across the industry and conducts an annual survey, the last three years results of which have been somewhat mixed (BSB, 2018). Nonetheless, the use of ethical codes within an organisation has been found to lead to more ethical responses to common business dilemmas (McKinney, Emerson and Neubert, 2010); each of the ‘Big 4’ subscribe to such codes. Such codes should seek to address some of the market failures; however, the results of this research reveal that levels of confidence in these areas are low. For example, taking advantage of the consumer’s lack of knowledge (H3), actions that are not in the best interests of the consumer (H4), protection against misconduct (H5); protection of vulnerable consumers (H6); and protection against unfair pricing (H7). Hypothesis three tested how confident consumers were that their retail bank will provide them with sufficient information to make informed decisions. It is clear that there is some overlap between regulation, culture and ethics and that the industry still has some way to go to find the right balance and repair the reputation and trustworthiness of the sector.

6.8 Limitations
The main limitations of the study are:
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

i. Firstly the location. Data was collected from residents of Scotland only, and therefore the results are specific to Scotland (although previous studies in this field have found differences between UK regions were marginal).

ii. Secondly, a survey can only report the relationships between variables and cannot claim cause and effect, that is, the research can answer the ‘what’ but not the ‘why’.

iii. Lastly, a major limitation of stepwise regression is the increased likelihood of committing a type 1 error (Pandit and Khairullah, 2015), i.e. rejecting a true null hypothesis, due to a sampling error. However, sampling error is less of an issue with a larger sample size (Thompson, 1995).

6.9 Practical Implications

The hypothesis tests revealed that those with higher incomes and those with higher educational attainment recorded the lowest confidence scores. Given that Consumer Groups are mainly, although not always, targeted at vulnerable consumers such as those on low incomes and facing financial difficulties, or those with lower literacy and numeracy skills this may indicate that some of these more vulnerable consumers are not accessing these specialist services due to a misplaced confidence. Consumer Groups may be interested to find out the reasons why there is this disparity so that they can target their interest groups accordingly.

The correlation analysis revealed a negative correlation between level of confidence in retail banking regulation and educational attainment and levels of confidence in retail banking and income levels. The FCA’s Consumer Protection Objective should address issues which cause consumer’s detriment. The FCA has stated that this is their most important objective. Perhaps then, their targeted initiatives for improving financial education and ensuring that those who face financial problems are dealt with fairly by their retail bank are having a positive impact. However, this does indicate that higher income and higher educational attainment groups may have needs that are not currently being met. The regulator may be interested to find out the reasons why they have low confidence in these areas of regulation.
The regression analysis revealed that age, income and education were significant factors when measuring confidence in retail banking regulation. Older consumers, higher income and more highly educated consumers were less confident than their younger, lower income, lower educational attainment counterparts. Banks now use big data to understand their consumers and are interested in where their segments, such as age, gender, income, education, channel usage, loyalty, life stage etc., overlap. This research demonstrates that some of the banks’ potentially most profitable consumers are the least confident in them. In today’s challenging and highly competitive market, addressing this could be a significant differentiator.

The stability of the economy depends on confidence in the banking system. Indeed, the root of government intervention stems from the need to ensure households and businesses are healthy and the threat of destabilising events is reduced. The low levels of confidence that the banking system is stable and secure, and marginally higher levels of confidence that consumer money is protected should their bank fail should indicate to government that the schemes they have in place are perhaps not common knowledge for consumers and could be better promoted to raise awareness; particularly to avoid a future bank run.

One of the most interesting findings in this research is that consumers who have a higher level of income and a higher level of educational attainment have lower levels of confidence in retail banking regulation. Clearly, if these groups do not feel their interests are protected there is a potential loss of custom from the segment of consumers that are likely to be highly profitable. Targeted marketing for these groups should be more focused on building trust and confidence in the institution and its products and services. Focusing on the double bottom line, pursuing social objectives in addition to financial objectives, is one method that would improve the image of some of the larger institutions.

Those with lower education levels and young consumers consistently recorded higher levels of confidence in each of the areas that regulation seeks to address. This research cannot answer why this is. However, this could be due to naivety or the implicit trust that these groups tend to have towards others they may feel have
a greater understanding or experience. The regulator should approach this with caution, as many of the past mis-selling and misconduct scandals of recent decades have occurred due to the belief that banks were working in the consumers best interests when clearly this wasn’t the case.

Cultural and regulatory reforms have gone some way to address this; however, as proposed by Llewellyn (2014) a restructure of the financial system to increase the number of mutuals could reduce the imbalance of powerful shareholder value model institutions which dominate the UK retail banking market. This would reduce the complex monopoly structure and the lack of personal responsibility for decisions which has been partially blamed for the Global Financial Crisis.

The Government should also take appropriate steps to reduce the risk of regulatory capture by addressing the revolving door practice in the financial sector. This would reduce the conflicts of interest and reduce another factor in public distrust; the belief that there is corruption or collusion at the top of these institutions. These beliefs were reinforced by events such as price-fixing and market-rigging. Complex products, such as protection and retirement products, may be avoided due to mistrust which increases both individual consumer detriment and overall society as the government has to support those who cannot support themselves during illness and/or old-age. Therefore, increased transparency should be enforced by the government. The introduction of a compulsory ethical code would go some way to improve this.

Overall, consumers *slightly agree* that they have confidence in retail banking regulation. Undoubtedly there is still a long way to go to improve the image of the industry and ensure that consumers are accessing appropriate products and receiving a service that is beneficial to their welfare.

### 6.10 Contributions to Theory

There are four main contributions to the theory and literature that this study makes:
i. The finding that those with a higher income and higher educational attainment have less confidence in retail banking regulation

ii. The use of theorists, practitioners and end-users in the stages of survey design, from theoretical model to empirical testing of the consumer survey

iii. The finding that the use of parametric tests for the analysis of Likert scale data is robust

iv. The use of three stages of analysis to inform which considered, individual demographics in relation to levels of confidence; the direction of confidence in relation to these demographics; and the combined demographic factors that have the greatest impact on the levels of confidence. Each of these stages of analysis would be of interest to different stakeholders as discussed above.

6.11 Recommendations for Future Research

Potentially, future research should be undertaken to encompass a wider participation in terms of location and examine the ‘why’ questions that this research uncovers.

i. Why are those employed in the sector no more confident than the general public?

ii. Why do the youngest consumers have the most confidence?

iii. Why do those who have a higher level of educational attainment have less confidence in the system?

iv. Why do those who earn a higher income have less confidence in the system?

Additionally, there is likely to be a strong relationship between educational attainment and income level. This has not been tested for in this study, but may be crucial to understanding the ‘whys’ for these demographic groups.

Answering the above questions could improve the effectiveness of regulation, confidence in the financial system and the profitability of financial institutions. Most importantly, it could reduce consumer detriment and increase confidence in managing day-to-day their retail banking affairs.
REFERENCES


The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers


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The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers


The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers


The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers


Harford, T. (2009, September 19). To Nudge Is One Thing, To Nanny Quite Another: The Undercover Economist. *The Financial Times.* Retrieved from: [https://www.ft.com/content/ac77105a-a0f5-11de-a88d-00144feabdc0](https://www.ft.com/content/ac77105a-a0f5-11de-a88d-00144feabdc0)


The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers


The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers


The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers


The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers


Ormerod, P. (2010, September 16). A network is as good as a nudge for a Big Society. *The Financial Times*. Retrieved from: [https://www.ft.com/content/3143e5f0-c0fe-11df-99c4-00144feab49a](https://www.ft.com/content/3143e5f0-c0fe-11df-99c4-00144feab49a)


The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers


The central limit theorem remains a key concept in probability theory. Quality
Progress, Statistics Highlight. Retrieved from: http://asq.org/quality-
progress/2018/02/statistics-spotlight/staying-relevant.html


Oxford: Oxford University Press.


Spicer, A., Gond, J. P., Patel, K., Lindley, D., Fleming, P., Mosonvi, S., Benoit, C.,


Authority. (2018). Price discrimination in financial services. How should we deal
with questions of fairness? (FCA Research Note). Retrieved from:
https://www.fca.org.uk/publication/research/price_discrimination_in_financial_services.pdf

growth in the United Kingdom (UK) from 2000 to 2018. Retrieved from:
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers


The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers


http://sru.soc.surrey.ac.uk/SRU35.html


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APPENDIX A: EXAMPLE CONSENT FORM AND EMAIL COMMUNICATION

(i) Example Consent Form

Edinburgh Napier University requires that all individuals who participate in research studies give their formal consent to do so. Please read the following and sign below to confirm you understand and agree to participate in the study.

1. I freely and voluntarily consent to be a participant in the pilot study of the research project on the topic of 'Consumer confidence in Retail banking regulation' conducted by Claire McCafferty, a PhD student at Edinburgh Napier University.

2. The main aim of this research is to measure consumer confidence in the different areas that regulation seeks to address.

3. I understand that no data will be collected at this stage. The purpose of this group session is to test the validity of the consumer survey. Unless agreed*, my organisation will not be linked with the research materials, and I will not be identified or identifiable in any report subsequently produced by the researcher.

4. I also understand that if, at any time, during the pilot group session I feel unable or unwilling to continue, I am free to leave. That is, my participation in the study is completely voluntary, and I may withdraw from it without negative consequences.

5. Additionally, should I not wish to answer any particular question or questions, I am free to decline.

6. In addition to the researcher, two more individuals will be present; the transcriber and recorder. Neither of these individuals are taking part in the study.

7. I have read and understood the above and consent to participate in this pilot study. My approval is not a waiver of my legal rights. Furthermore, I understand that I will be able to keep a copy of the informed consent form for my records upon request.

Signed ___________________ Date ___________________

*I agree for the name of my organisation to be included so gratitude for participation can be expressed in the thesis.

YES/NO

Signed _____________ (Answer must be selected and signed if YES).
(ii) Example email to participate in the research design

Dear John,

Thank you for agreeing to take part in my pilot study.

To ensure clarity and ease of completion I have provided the following instructions:
1. Read attached consent form
2. Read background to study (see below)
3. Read consumer survey questions on page 3 of survey (only page 3 is being tested)
4. Answer pilot questions (see below)
5. Return feedback and completed consent form

Background to the study

Is the retail banking regulator failing the consumer?

Despite being one of the most heavily regulated industries in the world there have been many recent, and indeed historic, cases of consumer detriment at the hands of retail banks in the UK. Given the nature of financial services there are many economic and social rationales for regulation (Llewellyn, 1995, Carberry, 2004, Goodhart et al, 2013). Conversely, there are economists who believe market solutions are preferable to government intervention (Dowol, 1998, Benson, 1999). Though most academics and industry experts agree that some degree of regulation is required, just what level and type of regulation is appropriate is widely debated. An interesting finding from the literature review was the consensus, from both sides of the debate, that the need for consumer confidence is grounds for regulating the banking industry. Indeed, a statutory objective of one of the retail banking regulators, the Financial Conduct Authority (FCA), is to ‘maintain confidence in the UK financial system’ under the terms of the Financial Services and Markets Act 2000.

A quantitative approach to data collection is employed in the research. Pilot studies will be undertaken with industry experts, academics and consumers to test the survey questions. A survey of 400 consumers will then be conducted.

A stratified sample of the Scottish adult (18+ years) population will be used.

This study will measure whether UK retail banking regulation is ‘fit for purpose’ by measuring consumer confidence levels in the achievement of each of the rationales for regulation. Seven key rationales for regulation were identified in the literature: externalities (secure), asymmetric information (transparent), moral hazard (just), paternalism (professional), distributive justice (fair), community values (equitable) and corruption (honest). The researcher could find no other studies which have captured this data.

Key references


Pilot questions

1. Do you believe other people may have difficulty in answering the questionnaire? If so, which question may pose a problem?
2. Given the purpose of my study outlined in the introduction section, would you suggest a question, may perhaps be added or removed to enhance the study?
3. How long did it take you to answer the questionnaire?
4. Did you read the instructions?
5. Were the instructions clear?
6. Did you object to answering any of the questions?
7. Was the layout of the questionnaire clear and logical?
8. Is there any question that the wording could be enhanced to clarity?

I would be grateful if you could complete and return the feedback and consent form by Sunday 25 June.

Again, thank you for agreeing to take part and I would reiterate that no part(s) of the study should be shared with others.

Kind regards

 Claire Lynne McCafferty PhD April 2020
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APPENDIX B: EXAMPLE SURVEY

Claire McCafferty

Consent

Edinburgh Napier University requires that all individuals who participate in research studies give their formal consent to do so. Please read the following and tick the box to confirm you understand and agree to participate in the study.

1. I freely consent to be a participant in the research project on the topic of 'Consumer confidence in Retail banking regulation’ conducted by Claire McCafferty, a PhD student at Edinburgh Napier University.

2. The main aim of this research is to measure consumer confidence in the different areas that regulation seeks to address and should take no longer than 20 minutes to complete.

3. I understand that my answers are anonymous and confidential. My name will not be linked with the research materials, and I will not be identified or identifiable in anything published by the researcher.

4. I also understand that if, at any time, during the survey I feel unable or unwilling to continue, I am free to leave. That is, my participation in the study is completely voluntary, and I may withdraw from it without negative consequences. However, after data has been collected it will not be possible for my data to be removed.

5. Additionally, should I not wish to answer any particular question or questions, I am free to decline. A partial completion will indicate a wish to withdraw. Partial completions will not be included in the research and will be void.

6. I have read and understood the above and consent to participate in this study. My approval is not a waiver of my legal rights. Furthermore, I understand that I will be able to acquire a copy of the informed consent form for my records upon request.

Please tick this box to confirm that you have read the consent information above and agree to participate in this study.

☐ I agree
Introduction

My name is Claire McCafferty and I am a PhD student at Edinburgh Napier University.

As part of my research I am collecting data on consumer confidence in retail banking regulation.

For the purposes of this study, **retail banking** is defined as personal or individual accounts held at a high street or online bank. The type of accounts this includes are: current accounts (with or without overdrafts), savings accounts, personal loans, credit cards and mortgages.

It does **not** include investments, pensions or other specialised products.

In total there are **three** pages of questions in this survey. The first page has a total of **eight** demographic questions. The second and third page have a combined total of **ten** questions which ask you to rate to what extent you agree with a particular statement. The scale runs from strongly agree to strongly disagree.

Please select the option that most reflects your individual view. Whether you agree or disagree with a statement, and how strongly you feel about this, will depend on your personal experience and therefore there are no right or wrong answers.

If you would like to be informed of the findings of this research, please contact me on the details on the last page of this survey.

*Please note this survey is only open to participants living in Scotland.*

Thank you for participating!
Demographic questions

1. Gender
   - Male
   - Female
   - Prefer not to say
   - Other

2. Age range

   | 19 | 24 | 29 | 34 | 39 | 44 | 49 | 54 | 59 | 64 | 69 | 74 | 79 | 84 | 89 | + |

3. Do you currently have a UK bank account?
   - Yes
   - No

4. Do you currently live in Scotland?
   - Yes
   **This survey is only open to participants living in Scotland**

5. Highest qualification held
   - Secondary school
   - College
   - Undergraduate
   - Postgraduate

6. Employment status
   - Working full-time
   - Working part-time
   - Student
   - Not currently working

7. Income range
   - £13,500
   - £27,600
   - £43,000
   - £150,000
   - £150,001+

   | <£13,500 | £13,501-£27,600 | £27,601-£43,000 | £43,001-£150,000 | £150,001+ |

8. Do you currently work in the financial services sector?
   - Yes
   - No
Core questions

1. I have confidence the UK retail banking system is stable and secure
   - Strongly agree
   - Agree
   - Slightly agree
   - Slightly disagree
   - Disagree
   - Strongly disagree

2. I have confidence that the money in my retail bank account(s) is protected should my bank fail
   - Strongly agree
   - Agree
   - Slightly agree
   - Slightly disagree
   - Disagree
   - Strongly disagree

3. I have confidence that my retail bank will provide me with sufficient information to make informed decisions
   - Strongly agree
   - Agree
   - Slightly agree
   - Slightly disagree
   - Disagree
   - Strongly disagree

4. I have confidence that my retail bank will do the right thing
   - Strongly agree
   - Agree
   - Slightly agree
   - Slightly disagree
   - Disagree
   - Strongly disagree

5. I have confidence that I am protected from retail bank misconduct
   - Strongly agree
   - Agree
   - Slightly agree
   - Slightly disagree
   - Disagree
   - Strongly disagree

6. I have confidence that I can trust the expertise of my retail bank
   - Strongly agree
   - Agree
   - Slightly agree
   - Slightly disagree
   - Disagree
   - Strongly disagree
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7. I have confidence that the price of retail banking products is fair
   - [ ] Strongly agree
   - [ ] Agree
   - [ ] Slightly agree
   - [ ] Slightly disagree
   - [ ] Disagree
   - [ ] Strongly disagree

8. I have confidence that I will not be unlawfully discriminated against by my retail bank
   - [ ] Strongly agree
   - [ ] Agree
   - [ ] Slightly agree
   - [ ] Slightly disagree
   - [ ] Disagree
   - [ ] Strongly disagree

9. In general, I have confidence that as a retail bank customer I am adequately protected
   - [ ] Strongly agree
   - [ ] Agree
   - [ ] Slightly agree
   - [ ] Slightly disagree
   - [ ] Disagree
   - [ ] Strongly disagree

10. I have confidence that adequate protection is provided by:
    - [ ] The retail banking regulator
    - [ ] Consumer Protection laws
    - [ ] Both of the above
    - [ ] Neither of the above
    - [ ] Don’t know
Thank you

Thank you for taking the time to complete this survey.

If you wish to contact me you can do so at the following addresses:

email: c.mccafferty@napier.ac.uk

post: Room 3/45, Edinburgh Napier University Business School, Craiglockhart Campus, 219 Colinton Road, Edinburgh, EH14 1DJ
APPENDIX C: SHAPIRO-WILK TEST OF NORMALITY

(i) Shapiro-Wilk: Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Statistic</th>
<th>df</th>
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</tr>
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<td>H1: I have confidence the UK retail banking system is stable and secure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>.884</td>
<td>71</td>
<td>.000</td>
</tr>
<tr>
<td>30-44</td>
<td>.893</td>
<td>126</td>
<td>.000</td>
</tr>
<tr>
<td>45-59</td>
<td>.874</td>
<td>149</td>
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<tr>
<td>60+</td>
<td>.896</td>
<td>86</td>
<td>.000</td>
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<td>H2: I have confidence that the money in my retail bank account(s) is protected should my bank fail</td>
<td></td>
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<tr>
<td>18-29</td>
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<tr>
<td>60+</td>
<td>.814</td>
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<td>H3: I have confidence that my retail bank will provide me with sufficient information to make informed decisions</td>
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<td>60+</td>
<td>.809</td>
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<td>H5: I have confidence that I am protected from retail bank misconduct</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>.866</td>
<td>71</td>
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</tr>
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</table>
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

<table>
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<th>60+</th>
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<td>18-29</td>
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<tr>
<td>60+</td>
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<td>.000</td>
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**H6:** I have confidence that I can trust the expertise of my retail bank

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<td>.894</td>
<td>.905</td>
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**H7:** I have confidence that the price of retail banking products is fair

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<td>60+</td>
<td>.876</td>
<td>.929</td>
<td>.915</td>
<td>.908</td>
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**H8:** I have confidence that I will not be unlawfully discriminated against by my retail bank

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<td>.871</td>
<td>.865</td>
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**H9:** In general, I have confidence that as a retail bank customer I am adequately protected

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### (ii) Shapiro-Wilk: Education

<table>
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<tr>
<th>Highest Qualification Held</th>
<th>Shapiro-Wilk</th>
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<th>df</th>
<th>Sig.</th>
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<tr>
<td><strong>H1:</strong> I have confidence the UK retail banking system is stable and secure</td>
<td>Secondary School</td>
<td>.825</td>
<td>98</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>College</td>
<td>.902</td>
<td>114</td>
<td>.000</td>
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<tr>
<td></td>
<td>Undergraduate</td>
<td>.907</td>
<td>108</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td>.906</td>
<td>112</td>
<td>.000</td>
</tr>
<tr>
<td><strong>H2:</strong> I have confidence that the money in my retail bank account(s) is protected should my bank fail</td>
<td>Secondary School</td>
<td>.761</td>
<td>98</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>College</td>
<td>.879</td>
<td>114</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Undergraduate</td>
<td>.893</td>
<td>108</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Postgraduate</td>
<td>.852</td>
<td>112</td>
<td>.000</td>
</tr>
<tr>
<td><strong>H3:</strong> I have confidence that my retail bank will provide me with sufficient information to make informed decisions</td>
<td>Secondary School</td>
<td>.773</td>
<td>98</td>
<td>.000</td>
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<tr>
<td></td>
<td>College</td>
<td>.882</td>
<td>114</td>
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<tr>
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<td>Undergraduate</td>
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<td>Postgraduate</td>
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<tr>
<td><strong>H4:</strong> I have confidence that my retail bank will do the right thing</td>
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<tr>
<td></td>
<td>College</td>
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<td>.000</td>
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<td></td>
<td>Undergraduate</td>
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<td>108</td>
<td>.000</td>
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<td></td>
<td>Postgraduate</td>
<td>.913</td>
<td>112</td>
<td>.000</td>
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</table>
### H5: I have confidence that I am protected from retail bank misconduct

<table>
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<tr>
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<th>Secondary School</th>
<th>College</th>
<th>Undergraduate</th>
<th>Postgraduate</th>
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<tr>
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<td>.899</td>
<td>.911</td>
<td>.873</td>
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<td>98</td>
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<tr>
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<td>.000</td>
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### H6: I have confidence that I can trust the expertise of my retail bank

<table>
<thead>
<tr>
<th></th>
<th>Secondary School</th>
<th>College</th>
<th>Undergraduate</th>
<th>Postgraduate</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>.823</td>
<td>.890</td>
<td>.902</td>
<td>.928</td>
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<tr>
<td></td>
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<td>.000</td>
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### H7: I have confidence that the price of retail banking products is fair

<table>
<thead>
<tr>
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<th>College</th>
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<th>Postgraduate</th>
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<tbody>
<tr>
<td></td>
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<td>.920</td>
<td>.934</td>
<td>.930</td>
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<tr>
<td></td>
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</table>

### H8: I have confidence that I will not be unlawfully discriminated against by my retail bank

<table>
<thead>
<tr>
<th></th>
<th>Secondary School</th>
<th>College</th>
<th>Undergraduate</th>
<th>Postgraduate</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>.794</td>
<td>.835</td>
<td>.875</td>
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</tr>
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### H9: In general, I have confidence that as a retail bank customer I am adequately protected

<table>
<thead>
<tr>
<th></th>
<th>Secondary School</th>
<th>College</th>
<th>Undergraduate</th>
<th>Postgraduate</th>
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<tbody>
<tr>
<td></td>
<td>.730</td>
<td>.878</td>
<td>.866</td>
<td>.883</td>
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<td>98</td>
<td>114</td>
<td>108</td>
<td>112</td>
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<td></td>
<td>.000</td>
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<td>.000</td>
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</table>
(iii) Shapiro-Wilk: Income

<table>
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<tr>
<td>&lt;£13,500</td>
<td>.820</td>
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<tr>
<td>£13,501-£27,600</td>
<td>.900</td>
</tr>
<tr>
<td>£27,601-£43,000</td>
<td>.917</td>
</tr>
<tr>
<td>£43,001-£150,000</td>
<td>.925</td>
</tr>
<tr>
<td>£150,001+</td>
<td>.640</td>
</tr>
<tr>
<td>H2: I have confidence that the money in my retail bank account(s) is protected should my bank fail</td>
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<tr>
<td>&lt;£13,500</td>
<td>.822</td>
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</tr>
<tr>
<td>£27,601-£43,000</td>
<td>.838</td>
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<tr>
<td>£43,001-£150,000</td>
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<tr>
<td>£150,001+</td>
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<tr>
<td>H3: I have confidence that my retail bank will provide me with sufficient information to make informed decisions</td>
<td></td>
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<tr>
<td>&lt;£13,500</td>
<td>.809</td>
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<tr>
<td>£13,501-£27,600</td>
<td>.862</td>
</tr>
<tr>
<td>£27,601-£43,000</td>
<td>.897</td>
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<td>£43,001-£150,000</td>
<td>.917</td>
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<tr>
<td>£150,001+</td>
<td>.907</td>
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The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

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<th>Significance</th>
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</thead>
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<td>£13,501-£27,600</td>
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<td>122</td>
</tr>
<tr>
<td></td>
<td>£27,601-£43,000</td>
<td>.907</td>
<td>114</td>
</tr>
<tr>
<td></td>
<td>£43,001-£150,000</td>
<td>.937</td>
<td>62</td>
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<td></td>
<td>£150,001+</td>
<td>.908</td>
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<th>Significance</th>
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<td><strong>H5:</strong> I have confidence that I am protected from retail bank misconduct</td>
<td>&lt;£13,500</td>
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</tr>
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<td>£27,601-£43,000</td>
<td>.879</td>
<td>114</td>
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<td>£27,601-£43,000</td>
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### H8: I have confidence that I will not be unlawfully discriminated against by my retail bank

<table>
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<th>t-value</th>
<th>Significance</th>
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<tr>
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<td>.863</td>
<td>122</td>
<td>.000</td>
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<td>£27,601-£43,000</td>
<td>.851</td>
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<td>£43,001-£150,000</td>
<td>.916</td>
<td>62</td>
<td>.000</td>
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<tr>
<td>£150,001+</td>
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<td>.091</td>
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### H9: In general, I have confidence that as a retail bank customer I am adequately protected

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<th>Income Range</th>
<th>P-value</th>
<th>t-value</th>
<th>Significance</th>
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<tbody>
<tr>
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<td>.000</td>
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<tr>
<td>£13,501-£27,600</td>
<td>.866</td>
<td>122</td>
<td>.000</td>
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<td>£27,601-£43,000</td>
<td>.832</td>
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<td>£43,001-£150,000</td>
<td>.907</td>
<td>62</td>
<td>.000</td>
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<tr>
<td>£150,001+</td>
<td>.822</td>
<td>6</td>
<td>.091</td>
</tr>
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</table>
APPENDIX D: DESCRIPTIVE STATISTICS

(i) T-tests: Employed in the financial services sector

<table>
<thead>
<tr>
<th>T-Test</th>
<th>Work in FS</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>t</th>
<th>df</th>
<th>Sig (2-tailed)</th>
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<tr>
<td>H1: I have confidence the UK retail banking system is stable and secure</td>
<td>Yes</td>
<td>18</td>
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## (ii) Mann-Whitney U tests: Employed in the financial services sector

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The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

(iii) T-tests: Gender

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<th>Std. Deviation</th>
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<th>df</th>
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(iv) Mann-Whitney U tests: Gender

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The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

(v) ANOVA and Tukey HSD test: Age

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Claire Lynne McCafferty  PhD April 2020  Page 324
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

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(vi) Kruskal-Wallis and pairwise comparison test: Age

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The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

(vii) ANOVA and Tukey HSD test: Education

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The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

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Claire Lynne McCafferty  PhD April 2020
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

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Claire Lynne McCafferty  
PhD April 2020  
Page 331
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

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The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

(ix) ANOVA and Tukey HSD test: Income

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The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

| protected should my bank fail | £150,001+       | - .962  |
|                              | <£13,500        | .234    |
|                              | £13,501-£27,600 | .435*   |
|                              | £43,001-£150,000 | -.150  |
|                              | £150,001+       | -.526   |
|                              | <£13,500        | .384    |
|                              | £13,501-£27,600 | .585*   |
|                              | £27,601-£43,000 | .150    |
|                              | £150,001+       | -.376   |
|                              | <£13,500        | .760    |
|                              | £13,501-£27,600 | .962    |
|                              | £27,601-£43,000 | .526    |
|                              | £43,001-£150,000 | .376  |
| H3: I have confidence that my retail bank will provide me with sufficient information to make informed decisions | £13,501-£27,600 | .312    |
|                              | <£13,500        | .563*   |
|                              | £27,601-£43,000 | .526    |
|                              | £43,001-£150,000 | .388  |
|                              | £150,001+       | 1.151   |
|                              | <£13,500        | -.312   |
|                              | £27,601-£43,000 | .251    |
|                              | £43,001-£150,000 | .075  |
|                              | £150,001+       | .839    |
|                              | <£13,500        | -.563*  |
|                              | £13,501-£27,600 | -.251   |
|                              | £43,001-£150,000 | -.176 |
|                              | £150,001+       | .588    |
|                              | <£13,500        | -.388   |
|                              | £13,501-£27,600 | -.075   |
|                              | £27,601-£43,000 | .176    |
|                              | £150,001+       | .763    |
|                              | <£13,500        | -1.151  |
|                              | £13,501-£27,600 | -.839   |
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

| £150,001+ | £27,601-£43,000 | -.588 |
| £27,601-£43,000 | -.763 |
| £43,001-£150,000 | .114 |

H4: I have confidence that my retail bank will do the right thing

| <£13,500 | £13,501-£27,600 | .342 |
| £27,601-£43,000 | .457* |
| £43,001-£150,000 | .679* |
| £150,001+ | 1.378* |

| £13,501-£27,600 | <£13,500 | 4 |
| 427 | .000 |

| £27,601-£43,000 | 5.262 |
| £43,001-£150,000 | .337 |
| £150,001+ | .921 |
| <£13,500 | -.679* |

| £13,501-£27,600 | £13,501-£27,600 | .187 |
| £27,601-£43,000 | .187 |
| £43,001-£150,000 | .308 |
| £150,001+ | 1.029 |
| <£13,500 | -.187 |

| £27,601-£43,000 | £43,001-£150,000 | .121 |
| £43,001-£150,000 | .146 |
| £150,001+ | .699 |
| <£13,500 | -.337 |

| £13,501-£27,600 | £13,501-£27,600 | .187 |
| £27,601-£43,000 | .187 |
| £43,001-£150,000 | .308 |
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<p>| £27,601-£43,000 | £43,001-£150,000 | .121 |</p>
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<th>£43,001-£150,000</th>
<th>£27,601-£43,000</th>
<th>£13,501+ £150,000</th>
<th>£43,001-£27,600</th>
<th>£13,501+ £27,600</th>
<th>£13,501+ £43,000</th>
<th>£150,001+ £150,000</th>
<th>£13,501+ £27,600</th>
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</thead>
<tbody>
<tr>
<td>£27,601-£43,000</td>
<td>4</td>
<td>427</td>
<td>1.261</td>
<td>.285</td>
<td></td>
<td></td>
<td></td>
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<td>£43,001-£150,000</td>
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H9: In general, I have confidence that as a retail bank customer I am adequately protected

<table>
<thead>
<tr>
<th>&lt;£13,500</th>
<th>£13,500-£27,600</th>
<th>£43,001-£150,000</th>
<th>£13,501-£27,600</th>
<th>£27,601-£43,000</th>
<th>£150,001+ £150,000</th>
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</thead>
<tbody>
<tr>
<td>£13,501-£27,600</td>
<td>4</td>
<td>427</td>
<td>1.261</td>
<td>.285</td>
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<tr>
<td>£27,601-£43,000</td>
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<td></td>
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<tr>
<td>£13,501+ £150,000</td>
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<td></td>
</tr>
</tbody>
</table>

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The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

| £150,001+ | £27,601-£43,000 | .061 |
| £43,001-£150,000 | .269 |
(x) Kruskal-Wallis test and pairwise comparison test: Income

<table>
<thead>
<tr>
<th>Kruskal-Wallis</th>
<th>Income</th>
<th>Md</th>
<th>df</th>
<th>N</th>
<th>Sig (2-sided)</th>
<th>Income</th>
<th>Adj. Sig</th>
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<td>H1: I have confidence the UK retail banking system is stable and secure</td>
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<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>£43,001-£150,000</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td></td>
<td>£150,001+</td>
<td>4</td>
<td>4</td>
<td></td>
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<td>5</td>
<td></td>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>£13,501-£27,600</td>
<td>4</td>
<td>4</td>
<td>432</td>
<td>.001</td>
<td>£27,601-£43,000</td>
<td>.029</td>
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<td></td>
<td></td>
<td></td>
<td>£43,001-£150,000</td>
<td>.009</td>
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<td>£27,601-£43,000</td>
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<td>N/A</td>
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<td></td>
<td></td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td></td>
<td>£150,001+</td>
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<td>N/A</td>
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<td></td>
<td>&lt;£13,500</td>
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### H3: I have confidence that my retail bank will provide me with sufficient information to make informed decisions

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<th>N/A</th>
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<td>432</td>
<td>.000</td>
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<tr>
<td>£150,001+</td>
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### H4: I have confidence that my retail bank will do the right thing

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<th>Significance</th>
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<th>N/A</th>
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</thead>
<tbody>
<tr>
<td>&lt;£13,500</td>
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<td>N/A</td>
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<td>N/A</td>
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<td>N/A</td>
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### H5: I have confidence that I am protected from retail bank misconduct

<table>
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<th>N/A</th>
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<td>N/A</td>
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<tr>
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<td>4</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>£43,001-£150,000</td>
<td>3.5</td>
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<td>N/A</td>
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<tr>
<td>£150,001+</td>
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<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>&lt;£13,500</td>
<td>5</td>
<td>N/A</td>
<td>N/A</td>
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The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

<table>
<thead>
<tr>
<th>H6: I have confidence that I can trust the expertise of my retail bank</th>
<th>£13,501-£27,600</th>
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<th>0.000</th>
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<th>N/A</th>
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<td>432</td>
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<td>N/A</td>
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<td>£150,001+</td>
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<td>432</td>
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<table>
<thead>
<tr>
<th>H7: I have confidence that the price of retail banking products is fair</th>
<th>&lt;£13,500</th>
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<th>0.001</th>
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<th>N/A</th>
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</thead>
<tbody>
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<td>N/A</td>
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<td>0.004</td>
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<td>N/A</td>
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<tr>
<td>£43,001-£150,000</td>
<td>3</td>
<td>432</td>
<td>&lt;£13,500</td>
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<td>N/A</td>
</tr>
<tr>
<td>£150,001+</td>
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<td>432</td>
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<td>N/A</td>
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<table>
<thead>
<tr>
<th>H8: I have confidence that I will not be unlawfully discriminated against by my retail bank</th>
<th>&lt;£13,500</th>
<th>5</th>
<th>0.111</th>
<th>N/A</th>
<th>N/A</th>
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<tbody>
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<td>0.007</td>
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<td>N/A</td>
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<tr>
<td>£43,001-£150,000</td>
<td>4</td>
<td>432</td>
<td>&lt;£13,500</td>
<td>N/A</td>
<td>N/A</td>
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<tr>
<td>£150,001+</td>
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<td>432</td>
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<td>N/A</td>
<td>N/A</td>
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<table>
<thead>
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<th>H9: In general, I have confidence that as a retail bank</th>
<th>&lt;£13,500</th>
<th>5</th>
<th>0.111</th>
<th>N/A</th>
<th>N/A</th>
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</thead>
<tbody>
<tr>
<td>£13,501-£27,600</td>
<td>4</td>
<td>432</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>£27,601-£43,000</td>
<td>4</td>
<td>432</td>
<td>N/A</td>
<td>N/A</td>
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</table>

Claire Lynne McCafferty  PhD April 2020
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

<table>
<thead>
<tr>
<th>customer I am adequately protected</th>
<th>£43,001-£150,000</th>
<th>4</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>£150,001+</td>
<td>4.5</td>
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</table>
APPENDIX E: CORRELATION ANALYSIS

(i) Pearson product-moment correlation coefficient: Age

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
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<td>0.005</td>
<td>432</td>
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</table>

(ii) Pearson product-moment correlation coefficient: Education

<table>
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<th>Hypothesis</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
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</thead>
<tbody>
<tr>
<td>H1: I have confidence the UK retail banking system is stable and secure</td>
<td>-0.098</td>
<td>0.042</td>
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<tr>
<td>H3: I have confidence that my retail bank will provide me with sufficient information to make informed decisions</td>
<td>-0.152</td>
<td>0.001</td>
<td>432</td>
</tr>
<tr>
<td>H4: I have confidence that my retail bank will do the right thing</td>
<td>-0.211</td>
<td>0.000</td>
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</tr>
<tr>
<td>H5: I have confidence that I am protected from retail bank misconduct</td>
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<td>0.004</td>
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<td>0.001</td>
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<tr>
<td>H8: I have confidence that I will not be unlawfully discriminated against by my retail bank</td>
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<td>0.044</td>
<td>432</td>
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<td>H9: In general, I have confidence that as a retail bank customer I am adequately protected</td>
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<td>0.001</td>
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</table>
The relationship between demographic variables and consumer confidence levels in the rationales for regulation: A quantitative study of Scottish retail banking consumers

(ii) Pearson product-moment correlation coefficient: Income

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
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</thead>
<tbody>
<tr>
<td>H2: I have confidence that the money in my retail bank account(s) is protected should my bank fail</td>
<td>.153</td>
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<td>432</td>
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<td>.029</td>
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<td>.003</td>
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APPENDIX F: STEPWISE REGRESSION ANALYSIS

(i) H1: I have confidence the UK retail banking system is stable and secure

<table>
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<td>.059</td>
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<tr>
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<tr>
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<td>.013</td>
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(ii) H2: I have confidence that the money in my retail bank account(s) is protected should my bank fail

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<th>Sig.</th>
<th>R square</th>
</tr>
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<td>Income (£13,501-£27,600)</td>
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<td>.002</td>
<td>.049</td>
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<td>Work In FS (Yes)</td>
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(iii) H3: I have confidence that my retail bank will provide me with sufficient information to make informed decisions

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(iv) I have confidence that my retail bank will do the right thing

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(v) I have confidence that I am protected from retail bank misconduct

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(vi) I have confidence that I can trust the expertise of my retail bank

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<td>.103</td>
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<td>.001</td>
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<td>Education (College)</td>
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(vii) I have confidence that the price of retail banking products is fair

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<td>.378</td>
<td>.008</td>
<td></td>
</tr>
<tr>
<td>Income (&lt;£13,500)</td>
<td>.294</td>
<td>.035</td>
<td></td>
</tr>
</tbody>
</table>

(viii) I have confidence that I will not be unlawfully discriminated against by my retail bank

<table>
<thead>
<tr>
<th>H1</th>
<th>B</th>
<th>Sig.</th>
<th>R square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income (&lt;£13,500)</td>
<td>.362</td>
<td>.001</td>
<td>.024</td>
</tr>
</tbody>
</table>

(ix) In general, I have confidence that as a retail bank customer I am adequately protected

<table>
<thead>
<tr>
<th>H1</th>
<th>B</th>
<th>Sig.</th>
<th>R square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (18-29)</td>
<td>.382</td>
<td>.001</td>
<td>.042</td>
</tr>
<tr>
<td>Education (Secondary School)</td>
<td>.398</td>
<td>.003</td>
<td></td>
</tr>
</tbody>
</table>