An Analysis of Economic Factors Affecting First-Time Buyers; A case of the UK housing market.

Jordan de Silva
BA (Hons) Business and Management Studies with Finance
Cardiff Metropolitan University
May 2017
Declaration

“I, Jordan de Silva declare that this Dissertation has not already been accepted in substance for any degree and is not currently submitted in candidature for any degree. It is the result of my own independent research except where otherwise stated”

All sources have been acknowledged within the text, and a full reference list is appended.

Signed: Jordan de Silva

Date: 02 May 2017
Abstract

This dissertation presents a critical analysis of the key economic factors within the UK housing market, and how these affect first time buyer’s and their decision to invest. It looked at key macro-economic variables such as house prices, wages, inflation, interest, and mortgage availability to determine how these have changed over time and their subsequent effect on first time buyers. The main purpose of this dissertation was to determine the macro-economic factors that influence first time buyers the most, and how these have changed over time. The issue of the UK housing market, and how accessibility and affordability have all become much more difficult for first time buyers in recent years, is one that is regularly discussed in the media. This study looked to understand why and how accessibility has changed for first time buyers, and the key economic forces behind this.

A whole generation of millennials have been aptly dubbed ‘generation rent’. This is due to a lack of house building, soaring private rents, and the increasingly stringent criteria set by mortgage lenders. House prices are higher than ever, so are deposit requirements, and it has never been more difficult for a young person to buy his or her first home. This paper looked to see what has changed in the market, and in particular since the economic crash in 2008. By looking at the profile of first time buyers pre and post 2008 this research evaluated the main economic forces in the market, and their effect on people looking to take their first step on the property market.

The conclusions of this research are based around how house prices, deposit requirements and personal income are the key economic factors that affect first time buyers. By using the primary research data, we can see that an average first time buyer post 2008, will likely have a more expensive house and higher deposit percentage than that of a buyer from before 2008. They are also generally older, with a higher income, as people now need to work for longer and earn more in order to be suitable for the stringent lending criteria. The research analysed how an asset bubble in house prices, that was kept unsustainably high by irresponsible lending, burst in 2008 causing the crash and changing the market drastically. This bubble bursting is what has led to first time buyers post 2008 facing much harder economic times and much more stringent lending criteria.

Key Words – Housing Market, Economic Factors, First Time Buyers, Affordability, Accessibility, House Prices, Wages, Inflation, Mortgage Availability.

Word Count – 13,478
Research Objectives

- To determine the key economic factors that affect the housing market.

- To look into detail how at each one of these work, and how they affect the accessibility of first time buyers.

- To understand how these economic factors have changed over time, and in particular as a result of the global economic crisis.

- To link these economic changes with first time buyers and determine how and why accessibility to the housing market has become more difficult since the crisis.
Acknowledgements

I would like to thank Cardiff Metropolitan University for allowing me to return to finish my degree studies following the birth of my son, and Angela Joseph for helping to make this possible. A big thank-you goes to Mayo Win-Pe for all of his support; someone who has always been first in line to help whenever it was needed. Many thanks too, to Asif Zaman my supervisor who has overseen my work, and offered his time, guidance and feedback along the way.

Finally, a huge thankyou to my partner Katie Georgiou, for being so understanding in the time and commitment I have had to dedicate to my studies and this piece of work, and also for being such a great mother to our son Luca.
# Contents

Declaration .......................................................................................................................................................... II

Abstract.............................................................................................................................................................. III

Research Objectives ......................................................................................................................................... IV

Acknowledgements ........................................................................................................................................... V

List of Abbreviations ........................................................................................................................................ VII

List of Tables ....................................................................................................................................................... VIII

List of Figures .................................................................................................................................................... IX

Introduction ......................................................................................................................................................... 1

Literature Review ............................................................................................................................................... 4

  2.1 Wages and Inflation ........................................................................................................................................ 9

  2.2 House Prices .............................................................................................................................................. 16

  2.3 Mortgage Availability and Criteria ........................................................................................................... 24

  2.4 Interest Rates ............................................................................................................................................. 31

Methodology ..................................................................................................................................................... 36

Results and Discussion ..................................................................................................................................... 42

Summary ......................................................................................................................................................... 58

Conclusions and Recommendations ................................................................................................................ 59

Appendices ....................................................................................................................................................... 62

References ......................................................................................................................................................... 68
List of Abbreviations

**BOE**: Bank of England

**BTL**: Buy to Let

**CML**: Council of Mortgage Lenders

**FCA**: Financial Conduct Authority

**FTB**: First Time Buyers

**HMRC**: Her Majesty’s Revenue and Customs

**HTB**: Help to Buy

**IFS**: Institute for Fiscal Studies

**IMLA**: Intermediary Mortgage Lenders Association

**LTV**: Loan to Value

**MLAR**: Mortgage Lending and Administration Return

**OBR**: Office for Budget Responsibility

**ONS**: Office for National Statistics
## List of Tables

**Table 1:** When Did You Buy Your First Home? .................................................................................................................43

**Table 2:** Did respondents purchase alone or with a partner? ..........................................................................................50

**Table 3:** Total Interest Rates Paid By Respondents ........................................................................................................53
List of Figures

| Figure 1: UK Wages and Inflation 2001 – 2007 | ..........................................................10 |
| Figure 1.1: UK Wages and Inflation 2001 – 2014 | ..........................................................12 |
| Figure 1.2: FTB House Price vs Income 1969 - 2013 | ..........................................................14 |
| Figure 2: UK House Prices 1991-2015 | ..............................................................17 |
| Figure 2.1: UK House Price to Earnings Ratio | ............................................................20 |
| Figure 3 Total loan issuance, US Corporate Loans 2007-2008 | ..................................................24 |
| Figure 3.1: FTB Salary Shortfall | ..............................................................27 |
| Figure 3.2: Number of Mortgage Loans for First Time Buyers 1980 – 2015 | ..................................28 |
| Figure 4: UK Central Bank Base Rate 2000 – 2016 | ..........................................................33 |
| Figure 5: The Research Onion | .................................................................39 |
| Figure 6: Age of First Time Buyers (Primary Research) | ......................................................45 |
| Figure 6.1: Average Marriage Age UK 1980 – 2012 | .........................................................46 |
| Figure 6.2: Value of First House (Primary Research) | .........................................................47 |
| Figure 6.3: Deposit Size on First House (Primary Research) | ....................................................49 |
| Figure 6.4: Annual Income when Buying First Home (Primary Research) | ........................................51 |
| Figure 6.5: Interest Rates for First Time Buyers (Primary Research) | ........................................52 |
| Figure 6.6: Term of First Mortgage (Primary Research) | .......................................................54 |
| Figure 6.7: Fixed vs Variable Interest Rates (Primary Research) | ........................................55 |
| Figure 7: Primary Questionnaire Results 2000 – 2007 (See Appendix) | ....................................62 |
| Figure 7.1: Primary Questionnaire Results 2008 – 2017 (See Appendix) | ....................................63 |
| Figure 8: Ranking of Economic Factors by Respondents (See Appendix) | ........................................64 |
Introduction
The UK housing market is influenced by a number of different macro-economic factors that all play their part in affecting accessibility and affordability for potential first time buyers (FTB’s). These include things such as personal income, house prices, interest rates, deposit requirements and the availability of credit. As all of these factors change over time, so too does the landscape of the market, and the people investing in it.

For a long time the UK housing market was a great investment for a whole generation of people in this country. The baby boomers in the 90’s had easy to obtain mortgages and seemingly ever rising house values, meaning that for many years housing was seen as a no risk, win-win investment for homeowners. Since 2008 and the global economic crisis however, home ownership has become a pipe dream for many ‘millennials’ who are now aptly dubbed ‘Generation Rent’. A housing crisis in Britain has unfolded with a lack of social housing, soaring private sector rents, and the mortgage lending criteria set by banks much more stringent than in the past. Even once someone has been approved for a mortgage, low house building levels and the dominance of ‘Buy to Let’ mortgages has created a shortage in supply for any prospective first time buyers; driving prices up, and accessibility down.

This research looks to explore the key economic factors that affect private housing demand, but particularly with regard to first time buyers in the UK property market. It will explore how these economic factors have changed over time and in turn how this has affected accessibility for first time buyers. The literature review will act as a theoretical base by defining and reviewing the key macro-economics of the market and understanding how they are interdependent and interconnected. It will review existing data on all of the economic variables and how they have changed over time, particularly with regard to affecting access to the market for FTB’s. By exploring data from 2000-2017 the research will be able to compare how the market has changed for first time buyers pre and post the 2008 global economic crisis.
The primary data collection and research in this study will look specifically at first time buyers and evaluate their individual economic profiles at the time when they bought their first home. Was access to the housing market easier in 2001 than in 2011? And more importantly how? The research will assess the aforementioned macro-economic variables to see how the landscape has changed for a prospective first time buyer since the economic crisis. My hypothesis at the beginning of the research is that access to the housing market will have become much more difficult since 2008 and the global economic crisis. What the research will aim to do though, is be able to quantify these changes with numerical data and statistical analysis based on the results of an online survey of around 70 participants. It will also look to assess how changes in some economic variables have been offset by others and vice versa. By the end of the study, the research will be able to make conclusive statements about how FTB’s profile, with regards to age and income among other things has changed due to a decrease in accessibility and affordability because of changes in house prices, deposit requirements, credit availability and interest rates.
Literature Review
# Literature Review Table of Contents

- **Literature Review** .......................................................... 6
- **2.1 Wages and Inflation** .................................................. 9  
  Summary.................................................................................... 15
- **2.2 House Prices** ........................................................... 16  
  Summary.................................................................................... 22
- **2.3 Mortgage Availability and Criteria** ............................. 24  
  Summary.................................................................................... 29
- **2.4 Interest Rates** ............................................................ 31  
  Summary.................................................................................... 34
First time buyers are still facing huge difficulties- many young people are being forced to postpone homeownership until their thirties’ Grant Shapps, Housing Minister 24 March 2011 (Pannell, 2011)

It is generally accepted that access to the housing market for first time buyers has become more difficult since the 2008 global economic crisis. (Chandler & Disney, 2014, Pannell, 2011 & Shelter, 2015) It is an issue that has, and is, affecting a whole generation of people in the UK and there are many economic factors that have led to this being the case. The following section will critically review the existing literature available on the subject, looking at the economic factors affecting housing market accessibility for first time buyers, and more specifically how these have changed since 2008. (See Council Mortgage Lenders (CML), 2005 & Office National Statistics (ONS): Housing Affordability 2017)

Lots of the economic issues surrounding the economic crash, the housing market, and first time buyers are recent and ever changing, and as such the majority of the information will be sourced from newspaper articles, online reports and statistical information. To conduct an efficient literature review I will look at the key economic factors of house prices, real wage growth, mortgage availability and interest rates and how these compare in the periods 2000-2008 and 2008-2016. (Nationwide House Price Index, 2017. Guardian Money, 2017. Machin, 2015 & Bank of England (BoE) 2017). This will then allow me to make conclusions as to how the landscape has changed for first time buyers after the global economic crisis and why. Much of the data will be sourced from government departments such as the Office for National Statistics (ONS), Her Majesties Revenue Service, (HMRC) and the Bank of England (BoE) among others.

Initially the review will focus on individuals economic circumstances and in particular their income or affordability with regard to taking on a large financial commitment such as a
mortgage. The review will look at key indicators such as UK average income levels, inflation and employment statistics to see how they correlate to transactions made by first time buyers in the same period. (ONS 2015, Inflation.eu 2017, & Data.gov.uk, 2017.) The primary research will build on this by looking for patterns in income levels among the individuals who bought homes from the same periods, pre or post 2008. (SurveyMonkey.co.uk) House prices are closely related to income in the market, and the review will look at how the house price to income ratio has increased over the years – making affordability more difficult and housing a less desirable investment. (Nationwide, 2017). It will also look at why this ratio has increased and the forces behind it such as a lack of supply, and the major increase in buy to let mortgages. (Intermediary Mortgage Lenders Association (IMLA), 2014)

The next theme during the literature review will be house prices; how these have changed over the years and how this has affected first time buyers. The ever rising nature of house prices between 2000-2008 meant that people were keen to buy properties, and the intermediaries were keen to loan money to make this possible. (Baker, D. 2008 & Demyany, K. 2008.) Since the economic crash though, purse strings have tightened, and the banks want to avoid repeating their mistakes, making accessibility an uphill battle for most. This is most evident with LTV (Loan to Value) levels dropping, mortgage payments as a percentage of income increasing, and interest-only lending all but disappearing. (Pannell, 2011)

The research will then move on to the availability, cost, and flexibility of debt finance to individuals looking to join the housing market. Banks are the key intermediary and their willingness to lend plays a massive part in influencing a FTB’s decision to borrow. Since the crash in 2008 bank lending criteria and checks have become stricter than ever. (Momentum, 2014, Mccafferty, 2015) Even individuals with a secure income, whilst house prices are low, may not be able to invest in their first property if deposit requirements or interest repayments are
deemed too high. Average deposits have proved to be the main obstacle to FTB’s in recent years and have been reported as twice the average person’s earnings in the UK at £42,000. (Denton, 2015)

We will also review secondary data analyzing the availability and affordability of debt financing pre and post 2008, focusing on how these too have shaped the market. This factor will then be linked with interest payments and the effect these have on mortgages and how these have changed over time as well. Part of this aspect of the research will include looking at UK Government monetary policy, and in particular the manipulation of the base rate in order to encourage intermediaries to lend by lowering their cost of capital. (BOE, 2017)
2.1 Wages and Inflation

Wages in the UK paid in GBP are known as nominal wages. Inflation means that a given nominal wage becomes worth less and less over time in terms of the goods and services that it buys. Real wages on the other hand are the value of wages once adjusted for inflation and allow us to compare how living standards have changed over time. (Cooper & John, 2017)

If wages increased over a period by 4% but inflation was 6%, the net effect would actually be a 2% decrease in spending power. The level of real wages is arguably the most important single measure of workers material welfare, assuming they remain in employment. (Sawyer, 2001) Real wages determine an individual’s standard of living and purchasing power. Between 1971 and 2004, the overall standard of living has doubled in the UK, meaning more money than ever before passed through UK households. What is interesting though, was there was also an increase in inequality during this period, meaning living standards did not improve as much for the poor as for the rich. (Social Trends, 2010)

Inflation is an important aspect of economics, and influences every actor within the UK housing market. It is the rate at which the prices of goods and services increase over time and is seen as a viable thermostat for an economy. (The Economist, 2015) The aim of the UK Central Bank is to maintain inflation at 2% with the use of monetary policy. If it believes inflation will rise above 2% it may increase interest rates to try to subdue it and vice versa. (BoE Inflation, 2017) This is why inflation is a crucial factor in determining the rates banks offer for mortgages and it has a direct impact on people’s incomes and the value of their money. (BBC, 2014) For a long time in economics it was assumed that demand relied on relative prices, and therefore inflation, which
altered the price level, had little effect. However, Follain, J. (1982) argued two instances in which he believed inflation affected demand in the housing market;

i) Inflation and the standard fixed payment mortgage combine to reduce the size of mortgage loans available.

ii) Rises in inflation reduces the after-tax cost of housing, increasing the demand for housing and homeownership.

As mentioned before, personal economic circumstances are one of the first factors that any prospective buyer would need to consider before applying for a mortgage. To put it quite simply, if they didn’t earn enough they couldn’t afford to buy a house. By looking at changes in real wages and inflation, we can start to gauge how accessibility to the housing market has changed over the years. The graph in Figure 1 from the ONS shows inflation levels and wages since 2000, allowing us to compare how individual’s affordability has changed over time.

![UK Wages and Inflation](image)

**Figure 1.** UK Wages and Inflation 2001-2007 (Office National Statistics)
In theory, with all things equal, at times when real wages were highest, mortgages would be most affordable. This does not take into account important factors such as mortgage availability, interest rates and house prices that will be explored later; but it is a good starting point to gain an overview of affordability.

The CPI, represented by the blue line in the graph, is the UK Consumer Price Index. This index is a measure of the price of goods and services that is used to estimate inflation. As the price of these goods change over time, it allows us to measure changes in the value of our money. (FT, 2017) As you can see from March 2001 to November 2007 average wage growth fluctuated, but it always remained above the blue line of inflation. This period, which actually runs from 1993-2007 is known as the ‘Great Moderation’. This was a time where the UK enjoyed the most stable macroeconomic environment in its recorded history, and inflation was systematically lower than for any of the previous monetary regimes/historical periods since the metallic standards era. (Benati, L. 2007) During this time, average wage growth was always above inflation, meaning people in employment benefitted from a sustained period of rising living standards. In theory, this means that during this period people’s money was becoming more valuable; boosting the economic growth and consumer confidence that is so important to the housing market and the economy as whole. As mentioned before, a house is often the biggest single investment an individual will make in their lifetime, and therefore real wages, and consumer confidence with regard to things such as job security are important economic, and also psychological factors that affect activity in the market. (See Halifax Housing Market Confidence Tracker)

Moving on to Figure 1.1, this new graph incorporates data from 2007 onwards in order to show how the global economic crisis in 2008 changed UK real wages:
We can see from Figure 1.1 above that following the crash, real wage changes plummeted far below the level of inflation and below zero, meaning there was negative wage growth. Machin S, (2008) in ‘Understanding the Great Recession’ says that were three main drivers of the real wage falls seen during this period:

i) Rises in unemployment for the period exerted large downward pressure on wages.

ii) Poor productivity through the recession and recovery didn’t create room for wage rises.

iii) Wages of typical UK workers have not kept up with productivity gains made in the economy.

What is clear from the graph is that from 2009-2014 wage growth has almost constantly been below that of inflation, and is yet to return to pre-2008 levels. When wage growth falls below inflation it puts pressure on the Bank of England to pursue a loosening of monetary policy. Later in the research we will see how the sharp decline in wage growth in March 2009 was matched...
by one in the base rate charged by the UK central bank, in order to try and counteract its effect on the economy. (BBC Business, 2009)

From the two Figures, 1 and 1.1, we can see that buyers who purchased their home between 2000 and 2008 would have benefitted on average from higher real wages, and a higher standard of living than those post the financial crisis. This in theory means that without taking other factors into account, mortgages would have been more affordable to first time buyers pre 2008 who benefitted from a higher value of money than those after it. What the primary research will look to determine later though, is just how much this benefitted first time buyers, and how much of this perceived advantage was offset by other factors such as interest rates and mortgage availability. As mentioned before, we know that in difficult economic times, the UK Central Bank can take action by lowering interest rates in order to stimulate the economy like it did in 2009, but how much did this benefit first time buyers? It is the mortgage providers and banks who benefit from this decrease in cost of capital, and the primary research will help to see how much of this cost saving was then passed onto consumers.

By looking at secondary data available on the actual monetary income of first time buyers, it is unsurprising to find that wages mirror the data in Figure 1 and 1.1. FTB’s before 2008, on average, had much lower incomes than those who purchased their homes between 2008 and 2016. In 2015, people taking their first step on to the property ladder earned an average of £38,997 – a staggering 41% more than the average UK income of £27,645. (Zoopla, 2016) The gulf is more than double the 17% difference seen between the salaries of first-time buyers and average earners in 2000. (Burridge, 2016) The higher level of income now needed to gain a mortgage reflect well how real wages have dropped over time and how this had affected affordability.
Figure 1.2, also from the Office for National Statistics, shows the ever increasing gap between income and house prices which has accelerated since the turn of the Millennium:

![First Time Buyer House Prices and Income](image)

**Figure 1.2. FTB House Price vs Income 1969 - 2013 (Office National Statistics)**

Whilst the trend of house prices increasing much faster than income is apparent nationwide, the most stark disparity is in London (Guardian, 2016). As housing became less affordable in the late 90’s, buyers simply saved larger deposits. However, as house prices and incomes diverged even further, they were forced to borrow more and more and between 2001 and 2007, the loan to income ratio increased by nearly a third. (Shelter, 2015) The time needed to save a deposit has dramatically increased too. The Telegraph (2012) reporting on a survey by Yorkshire Building Society, found that would-be first-time buyers in 2012 were typically putting aside £248 a month towards their goal, meaning it would take them more than eight years to raise the 20% deposit often demanded by mortgage lenders.
Due to this increasing gulf between house prices and income, the profile of first time buyers is changing too. FTB’s are now older than before as they need more time to save deposits, whilst also needing higher incomes to repay larger mortgages (Ough, 2015). Aldermore (2016) surveyed 1,196 potential FTB’s finding those aged 25-34 are the most confident age group, with more than one in five (21%) saying they are planning on buying a home in the next three to five years. There was a fall quarter-on-quarter for prospective FTBs aged between 18 and 24 planning to buy their first home in the next 10 years, from 83% in Q3 to 78% in Q4.

To Summarise: we know that rising inflation has a negative impact on the value of our wages known as ‘real wages’. Before the crisis in 2008 wage growth remained above inflation, until falling into negative growth following the crash. This means that FTB’s before the crash benefitted from a higher level of wages than after it. This is backed up by statistics showing how FTB’s now on average need a much higher nominal wage to qualify for a mortgage than before; a negative change in the level of affordability. Also, house prices are increasing much faster than income which has caused individuals to not only borrow more, but also save much larger deposits too. Both of these changes have caused the average profile of a FTB nowadays to be much older, due to the time needed to save, and also to be in higher paid employment.
2.2 House Prices

To many people, in everyday talk, ‘cost’ and ‘price’ are interchangeable words that mean the same thing. In economics however, and in the case of the housing market, these have subtle differences in their meaning, and a large difference to a potential homeowner.

The ‘Labour Theory of Value’ distinguishes between cost as ‘the quantity of value required to produce’ something, and ‘price’ as the quantity of labour that its possessor will take in exchange. (Ruskin, J. 1894) Market theorists regard cost as the cost of production of goods or services available for sale and price as the ‘exchange value’ that has to be paid to acquire it. (Garnett 2015) In the property market, house prices reflect what current owners deem to be the resale value of the property in the current market. But due to the necessity for most first time buyers to take out large mortgages on these properties, house prices don’t always paint a clear picture of the final price these individuals actually pay.

One of the key differences of housing to many other assets is its high level of inelasticity of supply. This is due to the fixed supply of land and the rate at which it is released for development (planning permission), and the long lead times in the construction of housing. (Shelter, 2012). Expectations of capital gains from housing investments affect prices by increasing demand, which then causes high volatility in housing prices (Selim, 2009) The rise in house prices is caused due to the inability of supply to match the increase in demand in the short run.

Housing is for most, the biggest single investment or purchase that an individual will ever make, and as mentioned is reliant on the availability of finance from creditors often in the forms of banks or building societies. (Abdullah & Co. 2012) The terms of the mortgages supplied by these institutions have a great effect on the price paid by an individual and must be considered when
researching the accessibility to the market for any prospective first time buyer. In Figure 2 below, we can gain an insight into the UK market by studying house price volatility over recent years, however we must understand that this only gives a general overview of accessibility without the context of inflation, wages and interest rates.

![UK House Prices 1991-2015](image)

**Figure 2.** UK House Prices 1991-2015 (Nationwide)

What is clear from the graph in Figure 2 above is from the year 2000 in which our primary research will begin, until the economic crash in 2008, average house prices in general rose year on year from around £80,000 in 2000 to over £180,000 in 2007. This regular increase in value of thousands of pounds each year, whilst good news for existing homeowners, in theory makes mortgages in general more expensive, and therefore less obtainable for potential first time buyers.

Rising house prices through the 2000’s seem to have caused, at least in part, a decline in homeownership, with the proportion of households in England and Wales that owned their own home falling from 69% to 64% between 2001 and 2011. (*Chandler, 2014*)
Although in theory, rising house prices should make mortgages less obtainable for potential FTB’s who’s income isn’t increasing at the same rate, this is not what happened from 2000-2007 before the global economic crisis. Bankers and Brokers alike sold thousands of sub-prime mortgages to families who couldn’t afford them in this period on the basis that the rising house prices counteracted the extra risk they were taking. The inability of the markets, and its actors to foresee the housing bubble, and also maybe their unwillingness (they were making lots of money selling the loans), led to a huge property bust in the United States, that eventually affected the whole world’s economy. (See Dowd, K. 2009)

The seemingly ever increasing nature of house prices between 2000 and 2008 meant mortgages were often seen as risk free for bankers and brokers alike. After all, ‘who stops paying their mortgage?’ The answer is people who can no longer afford to, because they’ve been mis-sold a very expensive financial product and the cost is too high. (Foster, 2016) Many home-owners had been issued various Variable Interest Rate Mortgages, which tied the size of their monthly payments to the value of their homes. When house values dropped the interest rates reacted inversely causing many people to no longer be able to afford the repayments. As these people defaulted on their mortgages, house prices dropped further still. (Scanlon, K & Co. 2011) This is seen in the graph in Figure 2 between 2007 and 2009.

As the market crashed and banks lost billions in worthless real estate and unpaid loans, a lack of moral hazard and due diligence in selling mortgages was found to be largely to blame. (Dowd, K 2009) Lehman Brothers was one of the first large institutions to go under, and after it’s default in 2008, the financial crisis deepened, leading to some European countries suffering a sovereign
debt crisis in 2010. (Agnello and Schuknecht, 2011) Following the crash, mortgage credit and banking activity became more regulated and harder to obtain, with much more stringent lending criteria such as the Dodd Frank reform. (IMF, 2014, Caprio, 2013, & FT, 2015) Part of the primary research questionnaire in this study will look to see how these changes affected FTB’s accessibility following the crash compared to those pre 2008.

Since 2009, UK house prices have been back on the rise and as seen in Figure 2, in 2015 they increased higher than the pre-crash level. An increase in demand and a lack-lustre level of supply associated with the UK government’s housing polices has been the main factor behind this, pushing house prices to a record high. The Government’s Help to Buy has been blamed by some for contributing to this by increasing the level of demand for houses without any substantial increase in house building to match. (FT. 2015) The increase in Buy to Let (BTL) mortgages is another factor that has been attributed to consistent high house prices. Robert Owen, managing director – mortgages & bridging – at United Trust Bank, says that tax relief on BTL’s allowed them to outbid their home buying competition, then once bought they were effectively taken out of circulation. This is because they were generally bought and held in portfolios rather than brought back to the market every few years.

The rise in house prices and deposit requirements has had an effect on the demographics of homeowners too. While older people are more likely to own a home outright than they were 25 years ago, younger people have to wait much longer than their elders did to buy their first house. (Ough, 2015)

The seemingly continual rise in house prices is an important initial factor to consider when looking to analyse first time buyers and changes to their accessibility to the market. It is however more important to correlate this data in relation to the UK average wages at the same
time. After all, if house prices increased 10% in a year, but wages did too, then the affordability or price as a percentage of income would be unchanged. Unfortunately, though, this is far from the case. Average earnings fell 9 per cent in the UK between 2008 and 2013 as wages failed to keep pace with inflation. *(FT, 2016)* Before Brexit the OBR (Office for Budget Responsibility) expected average wages to return to their 2008 level by 2020, but have since revised this, forecasting that real wage growth will stall next year and even by 2021 average earnings will be below their 2008 level. *(FT, 2016)*

In Figure 2.1, we can see the disparity in house price vs real wages; a more in depth look at market accessibility.

The **House Prices vs Real Wages** shown in Figure 2.1 goes a step further than just analysing house price trends by actually correlating them with changes in wages over the same period.
The ratio is calculated by dividing the median house price (middle house price) by the median household income. (Cox, W. 2015)

This measure gives you a good understanding of just how much individuals are stretching themselves financially in order to get onto the housing ladder – a gauge of affordability, not just price changes. If the price of housing increases relative to income, there will be a loss in housing affordability. If income increases relative to housing prices, housing affordability will be improved. Simple references to house prices without comparing them to household incomes do not measure housing affordability. (Cox, W. 2015) So, by looking at house prices in conjunction with incomes it allows us to compare how access to the housing market has changed in terms of affordability. It is essentially a gauge of how much FTB’s have to stretch their earnings in order to afford a house. We can now compare how the ratio has changed over our research period 2000 – 2017 and begin to understand how much more difficult it has become for first time buyers since the economic crash.

From Figure 2.1 taken from The Telegraph, we can see that between 2000 and the crash in 2008, house prices were increasing much faster than UK wages. An average UK house in 2000 would cost a first time buyer close to 3 years’ annual wage, whereas in the peak towards the last quarter of 2007 it was 5.4. When the market crashed and corrected what we now know was an unsustainable asset price bubble, the ratio dropped down to almost 4 by 2009. From this graph, with no other input, we could assume that a mortgage for a FTB’s first home on average in our date range, would be cheapest in comparison to wages in 2000, and most expensive at the end of 2007.

However, one drawback to this ratio is that the graph lacks key information regarding interest rates and other criteria such as deposit requirements set by lenders at the time. Government
monetary policy could be used to stimulate lending in particular by lowering the Central Bank interest rate, helping to counteract rises in barriers to the market for First Time Buyers by making credit and mortgages cheaper. This is an aspect that the primary research questionnaire will look to explore, researching just how much house prices and earnings influence FTB’s or if maybe, individuals have less concern over the price of the house, but instead other economic factors such as the availability of credit and the actual monthly repayments and interest. One of the primary research questions will ask respondents to rank these factors in order of their importance and influence in their opinion. For e.g. increases in the house price to earnings ratio may in fact have been offset by other factors such as the drop in interest rates in 2009. (*Bank of England, 2017*)

As mentioned before, Government and Monetary Policy can affect the housing market in different ways – affecting supply (construction levels), and also levels of demand. Also, as with any asset, house prices are always comparable with the potential financial returns associated with other alternatives. Elbourne (2005) says that if the return available from holding bonds increases (interest rates rise), asset holders will transfer some of their portfolio into bonds and away from other assets including housing. This will lower house prices until the returns from holding the different asset classes is equalized after accounting for differing risks. Any drop in house prices such as this whilst interest rates are high may affect first time buyer’s decision to invest before prices increase again.

**To Summarise:** From 2000 up until the economic crash in 2008 house prices generally rose year on year in what we now know was an unsustainable asset price bubble. Banks relaxed lending, particularly to sub-prime debtors relying on the continual increase in house prices to negate the risk of them defaulting on their loans. When variable interest rates attached to these loans changed, thousands of people in the US defaulted on their mortgages sending the market into
freefall. Even since the crash, the house price to income ratio has remained very high. When accompanied by banks new risk adverse attitude to lending, it has made accessibility to the housing market for millennials much more difficult in comparison. Government intervention such as lowering the UK base rate has helped to stimulate the market and encourage mortgage providers to lend. But the inelasticity of supply due to planning permission and lead times in construction, still remains an issue, keeping prices high.
2.3 Mortgage Availability and Criteria

As seen in Figure 2, at the turn of the millennium house prices were on an upward steady curve. In the early 2000’s, banks were confident the boom would continue and relaxed mortgage lending in order to capitalize on the market. (Ivashina, V & Scharfstein, D 2009) Mortgages became more accessible for potential homeowners, and with house prices continuing to rise, lenders started issuing 100% mortgages. The percentage of new lower-quality subprime mortgages rose from the historical 8% or lower range, to approximately 20% from 2004 to 2006, with much higher ratios in some parts of the U.S. (US Department of Statistics, 2008) Figure 3 below shows how the level of loans dropped drastically following the crisis;

![Figure 3](image)

Lenders were confident the increase in house price would nullify any risk of people missing their repayments, and began issuing mortgages without the need for a deposit. (CreditChoices, 2010) Also, other loans were made available to people with poor credit history or a low income who
would normally struggle to be accepted by the banks. These were known as sub-prime mortgages, and were largely responsible for the global economic crash in 2008. (Dowd, K 2009, Katalina M & Bianco, J.D. 2008) There was a classic boom and bust cycle where the explosive growth from 2001 – 2006 was unsustainable. In her research on the sub-prime crisis in the United States, Demyanyk, Y. (2008) said during that time quality loans deteriorated year after year, and the underwriter criteria loosened, but high house price appreciation from 2003-2005 masked the true riskiness of the lending.

In 2005 the sub-prime mortgage market in the UK was estimated to be worth between £25bn and £30bn. Sub-prime mortgage lending rose in 2004 by almost double the rate of the mainstream mortgage market. (BBC News, 2007) Despite the risk of sub-prime loans they increased in popularity as people were willing to accept high repayments to get on the property ladder, and mortgage brokers and banks were making huge profits from selling them. Brokers also often failed to fully explain the variable rates attached to these mortgages, that would become active normally within a couple of years. Because mortgage brokers do not lend their own money, there was no direct correlation between loan performance and compensation for them. (Bianco, K.2008) Many have since described the world economy at the time as a ticking time bomb, and eventually in 2008, it went off. As millions of people defaulted on their expensive sub-prime mortgages, the banks who had been greedily lining their pockets selling them paid the price. Mass repossessions of homes that were no longer worth the value of the initial loan sent the economy into free fall. (See Dowd,K 2009, Scanlon, K & Co. 2011)

‘In 2008, the IMF said that falling U.S. housing prices and rising delinquencies on the residential mortgage market could lead to losses of $565 billion dollars. When combining these factors with losses from other categories of loans originated and securities issued in the United States
related to commercial real estate, IMF puts potential losses at about $945 billion’ (Bianco, K 2008)

Following the aftermath of the crash, regulation and vetting of mortgage providers became much more stringent, as well as the criteria for potential customers too. In April 2008, Abbey National withdrew the last 100% mortgage from the market. (Scanlon, K & Whitehead, C. 2011)

In the UK, since the beginning of 2007, around 300 regulated mortgage lenders and administrators have been required to submit a Mortgage Lending and Administration Return (MLAR) each quarter, providing data on their mortgage lending activities. (FCA, 2016) The implications for first time buyers of this stricter regulation meant higher incomes and deposits were needed in order to obtain a mortgage, making accessibility more difficult for people on a lower income.

This is backed up by statistics from an English Housing Survey ‘First Time Buyers and Potential Home Owners Report’ (2015) conducted by the government showing how the profile of first time buyers has changed in the last 20 years. Some key findings from the data concluded;

- The average age of first time buyers increased from 30 to 33 over the past 20 years. In 2014-15, the majority of first time buyers were aged 25-34 years (61%).
- 80% of all first time buyers in 2014-2015 were couple households, compared to 62% in 2004-05. This may be due to an increasing need for two incomes to be able to buy.
- In 2014-15, 73% of households considering a mortgage application did not apply. The reasons for not applying included not thinking their deposit was large enough (49%) and thinking that their application would not be approved (24%)
These changes in the profile of first time buyers are certainly a reflection of changes to the market and to the criteria set by lenders with regards to mortgage financing. An increase in the average age of first time buyers can be directly linked to the higher deposits and earnings needed to secure a mortgage. Banks need more collateral and peace of mind with regards to their lending post 2008, and it seems young people have paid the price for this when it comes to the property market.

Figure 3.1 from HMRC and the Office for National Statistics illustrates the shortfall in income of the average person in the UK even after deposits have been taken into account. Again this is due to the ever increasing gap between wages and house prices that needs to be addressed in the UK. It also shows why first time buyers are getting older, and why so many are now joint applicants. This is also using an average figure of 17% for a deposit, something that many people would struggle to ever save. Previous research from Shelter (2015) on housing affordability estimated that a couple with a child would have to save for over 12 years for a large enough deposit to buy their own home, whilst a single person needs to save for over 13 years.

According to the Council of Mortgage Lenders, (CML, 2005) assistance for first time buyers (such as the so-called ‘bank of mum and dad’) is now far more common, increasing from 31% in June quarter 2005 to 66% in June quarter 2011. The increase in assistance for first time buyers under the Council of Mortgage Lenders, (CML, 2005).
30 was even stronger, with 77% buying a home with some form of assistance in 2011. (Clarke, 2013)

Figure 3.2 shows the number of mortgage loans each year in the UK, and backs up the findings from HMRC and ONS in Figure 3.1 of how affordability is changing. With there being such a shortfall in income for the average UK citizen looking to buy a home, it is no surprise that the number of mortgage loans for first time buyers has pretty much halved from 2000 – 2015.

![Graph showing number of mortgage loans for first time buyers, UK, 1980 to 2015.](image)

**Figure 3.2.** Number of Mortgage Loans for FTB’s (ONS.gov.uk)

The increase in mortgage loans seen on the graph from 2013 are likely due to the introduction of the UK Government’s Help To Buy Scheme announced in March 2013’s budget. This scheme was rolled out as an attempt by the Government to tackle the housing crisis and help first time buyers onto the property ladder. There are two distinct components to the scheme:

- ‘Help to Buy: equity loan’ provides interest-free government loans of up to 20% to purchasers of newly-built homes. It was launched in April 2013.
‘Help to Buy: mortgage guarantee’ provides mortgage lenders the option of purchasing insurance for high loan-to-value (LTV) mortgages on all new and existing properties. Participating lenders have been able to offer eligible mortgages since October 2013, though government guarantees have only been in place since January 2014. (HelpToBuy.gov.uk, 2017)

Both schemes will make it easier to buy a home with just a 5% deposit, whilst people could also benefit from Help To Buy ISA’s that matched savings with a 25% deposit contribution in order to overcome the issue of high deposits in the market.

The Mortgage Guarantee Scheme helped increased lending by the government guaranteeing up to 15% of an individual’s mortgage, decreasing the risk of default to mortgage providers. The government also provided Equity Loans to people looking to buy new build homes. All of these scheme increased mortgage applicants during this period, by tackling the issue of high deposit requirements. (Mortgage Advice Bureau, 2017)

To Summarise: there has been a large shift from liberal and risky lending from banks and building societies to a much more risk adverse attitude taken in recent years. Whereas before the crisis sub-prime mortgages were actively promoted and sold, the banks now have much stricter lending criteria and regulation by government. These changes are most apparent in the large increase in deposit rates, (alongside the death of the 100% mortgage) and also in the change in profile of FTB’s to older individuals with a much higher income. The UK Government’s Help To Buy scheme has aimed to tackle these obstacles and encourage lenders to approve more mortgages by helping young people with their deposit requirements and also by guaranteeing some of their debt. This has seen the number of mortgage approvals increase, but not yet to the level of the early 2000’s. Lessons do seem to have been learnt from the sub-prime
crisis and the lack of moral hazard that led to it. But it is at the expense of the next generation of young people who face many more obstacles to home ownership than their parents did before them.
2.4 Interest Rates

Interest rates are an important factor for any potential home buyer to consider because mortgage repayments are usually the biggest part of a homeowners monthly spending. Your mortgage is a loan made up of capital – the amount of cash you have borrowed, and the interest charged on the loan. With most mortgages you pay back the capital and interest monthly for a period of what is generally 25-30 years. In general, the best interest rates are available to those who put down a large deposit and have the highest income. These individuals are deemed as the lowest risk of default to the mortgage provider and therefore pay less for their loan.

However, interest rates also fluctuate over time and can be influenced by the Bank of England (BOE) base rate. The base rate is the rate at which interest is charged by the BOE to large scale institutions such as banks and building societies. As mentioned before, the BOE can choose to lower the base rate, and therefore the bank’s cost of capital, in order to stimulate the economy. (BoE Base Rate, 2017) By providing cash to the banks at a lower rate, in theory the banks can supply cheaper mortgages to consumers – passing on the savings. Interest rates can significantly affect the monthly repayments of first time buyers, so we looked how the base rate had changed over time, and how this has affected First Time Buyers.

As mentioned before one of the Bank of England’s roles is to attempt to control inflation and keep it below the target of 2%. The monetary policy committee have met regularly since 1997 when they were given control of the base rate to determine how best to utilize it to benefit the economy. (House of Commons, 2007) Historically the base rate has always remained above the rate of inflation, so that when the economy takes a downturn, the BoE can reduce the base rate to increase consumer spending. As the financial crisis hit full force in 2008 though, the Base Rate began to be hacked away at. It was chased down from 5 per cent in September 2008 to just 0.5
In August 2016, Mark Carney and the Monetary Policy Committee MPC dropped the base rate to 0.25% following Britain’s decision to leave the EU and the effect this had on the nation’s financial outlook and forecasts.  

Roughly half of the UK’s 11 million mortgage borrowers are on tracker, standard variable or discounted rates.  

This makes the market very volatile and subjective to change in line with interest rates. Those homeowners with a tracker mortgage have their interest repayments pegged directly to the UK base rate. Variable rate mortgages are also affected by fluctuations in the base rate, but this instead is down to the loan providers discretion. In the UK, around 1.5 million borrowers have Bank Rate trackers and another 3.5 million have other types of variable-rate mortgage whose rates may move in line with Bank Rate, according to the Council of Mortgage Lenders.  

A cut in the Bank Rate to 0.25pc means a borrower with a tracker mortgage should see their monthly payment fall by £24.16 on a 25-year, £200,000 loan on a repayment basis, or £41.66 if it’s interest only.  

The proportion of income spent on mortgage payments is heavily influenced by interest rates. Low interest rates have two countervailing effects on mortgage payments, which typically balance each other out: while they directly reduce interest payments on a given loan, they may induce households to borrow larger amounts, therefore increasing their total monthly payments.  

From the graph in Figure 4 we can see how the base rate has moved over time.
What is immediately apparent is just how high the base rate was in 2000 when our research starts, at 6%. Having already determined that first time buyers back then had higher real wages, and lower house prices, this factor may play a significant role in increasing the costs to first time buyers. Increases in costs associated with high interest rates may make mortgages unaffordable or unattractive to consumers, whilst also improving the attractiveness of renting. As seen with the sharp slumps in house prices and wages, interest rates dropped to 0.5% in 2009 following the global economic crisis. This was an attempt by the BoE to stimulate the economy and nullify the effects of the crash. Rates remained there until 2016 when they were further reduced to 0.25% - an historic low. The base rate during the period 2000-2008 in general fluctuated between 4-6% (dropping slightly lower in 2003). This in comparison is much higher than the 0.5% maximum rate that has been there post 2008. In the primary research, respondents will be asked how much interest they paid on their first mortgage, to see how much of an influence this factor had on their decision to buy.
What is apparent, is while a cut in interest rates are normally good news for current homeowners, first time buyers don’t always see the benefits. As has been mentioned numerous times throughout this study, several economic factors affect the conditions for first time buyers, and despite low interest rates, a supply shortage in the property market and high prices mean many people still can’t afford their first mortgage, despite record lows in interest rates.

According to a study by Nationwide, between 2013 - 2016 house prices rose by 20%, whilst the average wage increased by only 6%. However, a low interest rate maintained by the Bank of England meant that the affordability of houses has been less affected. (Denton, 2016)

"The steady decline in borrowing costs over the same period has helped to lessen the impact on affordability for home buyers," (AOL, 2016)

This quote from Robert Gardner, Nationwide's chief economist, shows the importance of interest rates in relation to the other economic factors we have researched in this study. They are all interconnected and interdependent, and rises in one can be offset in drops in another and vice versa. This is what makes the property market so interesting, yet sometimes difficult to analyse. The primary research questionnaire will hopefully take into account all of the economic factors and conditions for first time buyers, and be able to create a profile that can then be compared within two date ranges, pre and post 2008.

To Summarise: Interest rates are a measure of risk, and the best rates are afforded to those with the best credit ratings, incomes and deposit levels. The Bank of England controls the Base Rate at which it lends to banks and other financial institutions, so often a low base rate means cheaper mortgages for borrowers. This is because banks can pass on the discount in their cost of capital to consumers. The Base Rate since the crash has been at all-time lows, dropping from 0.5% to 0.25% in 2017. When compared to its high of 6% it shows how despite mortgages being
harder to obtain now, the government has been able to counteract this to some extent with the substantial discount to the Base Rate.
Methodology
The justification for conducting this research can be looked at from an economic perspective or a personal one. Its aim was to collect, analyse and summarize the data on the key economic factors within the UK housing market and how they affect the financial profile or requirements of first time buyers. This data whilst useful for individuals such as myself who wish to join the housing ladder in the near future, could also be used by policymakers to look at the key macro-economic issues young people face in the market and consider how they can combat them.

During the Literature Review, the research looked at the main economic factors that affect buyers when purchasing their first home. It explored how income, house prices, interest rates and credit availability all influence the housing market and the decisions of potential buyers. From this theoretical base, the primary research looks to survey homeowners about the economics of their first house purchase. The data collection aims to analyse what economic factors were the most influential in the first time buyer’s decision-making process, and/or mortgage suitability and how these may be different for house buyers pre and post 2008. It will seek to determine how the economic conditions for first time buyers have changed since the global economic crisis, and in what ways access to the housing market has become more difficult.

The advantage of using primary data is that the research could collect information that was tailored specifically for the study (Bryman, 2012) This would save time that might’ve been spent finding relevant secondary data, whilst also improving the quality of the results and subsequent discussion. It would also mean the data collected was up to date and relevant at time of writing. Secondary data was used though during the literature review, especially from reports by organizations such as the Institute for Fiscal Studies, Bank of England, Financial Conduct Authority and the Office of National Statistics. This was accompanied with newspaper articles,
other pieces of research and books in order to present a well-rounded overview of the UK’s housing market economics and first time buyers.

Primary data was collected through a 10 minute online questionnaire using the positivistic philosophical approach focusing on the judgement characteristics of participants when buying their first home. (See Appendix) The questions aimed to explore the key economic factors involved in the process, and how much influence each one had. The questions focused on retrieving numerical data, regarding things such as deposit size, interest rate and house prices regarding to the participants first mortgage. When the data from the survey is correlated and grouped into time periods, it should give an indication as to how the market has changed over time for first time buyers. These conclusions will be drawn by conducting statistical analysis of the quantitative data in the forms of graphs, charts and other comparative techniques. This method of quantitative research has been selected due to its relatively low cost and time compared with other methods such as paper based questionnaires, focus groups and interviews. If the research period had been longer, then these other primary research methods may have been utilized too to further increase the reliability of the study. Again due to time restraints the sample size was 70 respondents.
The Research Onion in Figure 5 above, was developed by Saunders et al (2007) showing the different layers or stages that must be covered when looking to develop a research strategy. Each layer moving centrally from the outside shows a different stage of the research process. (Saunders et al., 2007). The research onion provides an effective progression through which a research methodology can be designed. Its usefulness lies in its adaptability for almost any type of research methodology and can be used in a variety of contexts (Bryman, 2012) The 5 layers consist of the;

**Research Philosophy** (the outermost layer) – Positivism was used for this study, which assumes that meaning of phenomena is consistent even between different research subjects. (Newman, 1998)
**Research Approaches** – The deductive approach was used where research data was already available on changes in the housing market and the national economy. The deductive approach suits the positivist approach, which permits the formulation of hypotheses and the statistical testing of expected results to an accepted level of probability (*Snieder & Larner, 2009*).

**Research Strategies** – An online survey was chosen to be the main strategy to use to obtain quantitative data for empirical analysis. This method suited the limited time frame for the research and also saved in costs associated with paper based methods. An archival research strategy was also adopted during the Literature Review in order to analyse the existing data and findings on First Time Buyers and access to the UK property market.

**Time Horizons** – A cross-sectional time horizon was used whereby a set time frame was adhered to for data collection. This was necessary due to the deadlines of the research results. (*Flick, 2011*)

**Data Collection Methods** – Primary data was collected and analysed to create statistical findings from the results of the surveys. Whereas secondary data was obtained from Government Agencies, Charities, Reports, Journals and Articles in order to gain a knowledge base and understanding for the research to compliment.

Participants for the research were obtained primarily through social media and email requests that directed them to the questionnaire on SurveyMonkey.co.uk. Using this external software helped to save time and also could be linked seamlessly to social media in order to gain participants. The quick nature of this data collection helped improve the validity of the study as there was a short time between data collection and the publishing of the results; one of the benefits of the time constraints. The software on SurveyMonkey allowed for the data to be analysed effectively and quickly in the forms of graphs and tables which will appear in the
results section. Any statistical findings or graphs and tables created from the primary research data will be labelled and referenced to SurveyMonkey.co.uk.

All participants were made fully aware of the objectives of the research and signed permission sheets before undertaking the questionnaire. The subject’s confidentiality and security was protected and they were also made aware of this prior to undertaking the study. There was no information included in the questionnaire that would identify the participants, and their personal details (for e.g. the signature section of the consent form) were kept in secure locations by the research team. Once the study had concluded and the information had been analysed, all documentation used to gather the data was destroyed.

As mentioned limitations of the study include the short time frame, and also the one method of data collection of Social Media requests. A larger number of respondents would have improved the reliability of the data and its conclusions, whilst various methods of data collection would have as well, by accessing different groups of people from different sources. In hindsight, and with more time the data would be collected into individual years instead of two time periods 2000-2007 and 2008-2017. This would again improve the findings of the study and its overall reliability. This improvement could’ve been made to other questions too such as Question 6 which asked the income of FTB’s; allowing respondents to input a numerical figure, as opposed to the pre-selected categories I had chosen. Financial constraints involved with accessing a larger audience also played a part in the relatively small sample size of 70, along with time constraints.
Results and Discussion
The aim of this research was to initially identify the key economic factors that affect first time buyers and the UK housing market as a whole. The Literature review identified house prices, personal income, mortgage availability and interest rates as these key components, and looked how they worked and affected the market. The primary data then looked to identify how these changes affected the economic profile of a first time buyer from two time frames, pre and post 2008.

Now that the data has been collected, this section will look to make conclusions based on statistical analysis of the primary results – showing how the accessibility and economic profile of first time buyers has changed as a result of the factors discussed in the literature review. The questionnaire was made up of ten questions, and we will cover each one and any conclusions they may have made, as well as any limitation or unexpected results. The data was collected through an online questionnaire of 62 respondents who had all purchased their first home since the turn of the millennium.

Question 1 asked respondents in what date category they bought their first home;

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: 2000 - 2007</td>
<td>0.00%</td>
<td>100.00%</td>
<td>0.00%</td>
<td>38.57%</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>27</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>Q1: 2008-2017</td>
<td>0.00%</td>
<td>0.00%</td>
<td>100.00%</td>
<td>61.43%</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>43</td>
<td>43</td>
</tr>
<tr>
<td>Total Respondents</td>
<td>0</td>
<td>27</td>
<td>43</td>
<td>70</td>
</tr>
</tbody>
</table>

Table 1. When Did You Buy Your First Home? (SurveyMonkey.co.uk)

An important issue to highlight from the result of Question 1, is the high percentage of respondents who bought their house between 2008-2017 (43 out of 70 respondents). The reason this is the case is due to the nature of the data collection. As the lead researcher, my
personal social media accounts were used to contact potential respondents. The majority of these people would have been of a similar age to myself at 24, meaning they wouldn’t have been purchasing houses over 10 years ago. The short time frame was one limitation of the study, and given more time, a higher number of respondents would certainly add to the reliability of the results. Also, in hindsight, using single year answers, would have increased the accuracy of the data, as the research could’ve looked in detail at data for each year, and any reasons for spikes or troughs in first time buyers joining the market. For e.g. we would expect a spike in first time buyer transactions in 2013 when the UK Government’s Help to Buy Scheme launched; something that wouldn’t be as obvious in the data for the date range 2008-2017. For the time scale of the study though, 70 respondents is a good number to begin to draw conclusions and look for trends regarding their economic circumstances when buying their first home.

Question 2 identified the age of respondents when they bought their first home, allowing us to look at changes in the housing market with regard to the demographic of homeowners. (See Figure 6, below)
It is often reported that first time buyers are getting older and the data on the whole reflects this. The majority of homeowners surveyed were 21-25 when they bought their first home in both date categories since 2000, but the percentage between 2008-2017 was 65% compared to 41% before 2007. One of the reasons there were less 21-25 answers in 2000-2007 was because 22% of buyers were under 21, compared to under 10% after 2008.

Overall there was a much more even spread of ages in the data from 2000-2007, which may reflect easier access to the housing market at the time. As mentioned before, almost a quarter of respondents buying a house before their 21st birthday is a good reflection of this. People during that period may also have been in less of a rush to join the housing ladder if they weren’t as concerned about how difficult accessibility would become – shown by the variety of ages, and 7% of respondents buying between 35-40. At the time the housing market was highly profitable and not many people foresaw the upcoming crash, something that could’ve affected people’s
mindsets. If access was easier, people may have been more happy to wait instead of rushing to buy in their twenties.

The changes in buying age could also be linked to cultural and social changes. Things such as the compulsory school leaving age being made higher and people getting married later could affect when people are ready to buy a house. Figure 6.1 (below) shows the increase in the average marriage age in the UK over the last 40 years.

![Figure 6.1. UK Average Marriage Age (Office National Statistics)](image)

This was an aspect that wasn’t covered in the literature review as a non-economic factor, but changes such as this can be responsible for changes in buyer behavior too, particularly with regard to the average age of homeowners.

The UK Governments Help to Buy scheme that started in 2013 would also be responsible for affecting this data. Many 21-25 year olds between 2008-2017 would have benefitted from Help To Buy and joined the housing ladder using one of its benefits that increased accessibility. If the date range had in fact been 2008-2012, I believe the data would be more conclusive in showing
that the average age of home owners has increased since 2000-2007 as it wouldn’t be inclusive of the individuals who used the scheme. In hindsight this could also have been nullified by using individual years, instead of two date ranges. Without the introduction of Help To Buy scheme I believe we would seem much more conclusive data, with more buyers being older than 25 since the economic crisis.

The primary data from Question 3 looking at how house values had changed for first time buyers over the years was much more clear cut and reflective of the changes to the housing market that were apparent in the literature review. (See Figure 6.2)

We know that house prices grew exponentially year on year before the crash and so would expect houses bought more recently to be more expensive, even despite a drop in 2007 as the housing bubble burst and prices reverted back to a sustainable level.
None of the 43 respondents bought a house for less than £50,000 between 2008-2017. This was compared to 15% of people in the earlier date range. This is unsurprising really as houses in that price range are extremely rare nowadays except for cheap projects for renovation.

The majority of homeowners from 2000-2007 paid between £50,000 - £100,000 for their first home (52%). The majority of people post 2008 paid between £151,000-£200,000 (42%). This is in line with the national average house price for a first time buyer in 2012 of £173,185. (Guardian, 2012)

Also no respondents from 2000-2007 reported paying over £200,000 for their first home, as opposed to 21% after 2008 who fell into the largest two price categories of £201,000 - £250,000 and £250,000+.

These trends are something we would expect to find and reflect the trends in the market of properties becoming more and more expensive over time. Some economists would even argue that there is an asset bubble in the current market, with house prices set to take a massive downturn in the near future. Harry Dent, economist and financial author, says that in 2017 property prices will collapse, not just in the UK, but all around the world, with China expected to have the biggest bust. (FT Adviser, 2016) If this is true then the current bubble is the driving force behind current high house prices, and we should expect them return to a more manageable level once the bubbles has burst. This data also has a large impact on the other economic factors and results from the other questions in the study. House prices increasing will influence deposit requirements, interest rates and the size of loans, which all in general come under the umbrella of accessibility.

One of the key issues highlighted in the literature review as the cause of the banking crisis in 2008 was the sub-prime mortgage lending market, particularly in the United States. This led to
many more regulations in the mortgage market, and the banks requiring more peace of mind when lending. This change since before the crisis is no more evident than in the increase in mortgage deposits. Question 4 investigated just how much these changes had changed deposit requirements for the respondents. (Figure 6.3, below.)

Figure 6.3. Deposit Size for First Home (SurveyMonkey.co.uk)

63% of respondents who bought between 2000-2007 put down a deposit of 5% or less. With only 2 out of 27 people in that date range putting down more than 10%. This was a time when 100% mortgages were still being sold by the banks, and deposit requirements were much less strict as long as you could provide proof of income. The literature review explored how irresponsible lending caused the crash and these low deposits, accompanied with large mortgages were part of that. Since 2008 though, mortgage requirements have changed drastically;

Almost a quarter of people post 2008 put down a deposit of 5% or less, with most people putting down 6-10% (35%). Over half of respondents fell into the 2 categories; 6-10% and 11-
15% a similar percentage of those pre 2008 who put down 5% or less. When this data is looked at in regard to house prices, it is clear why accessibility has become much more difficult in recent years.

The most common answer for Question 3 regarding house prices was £50,000-£100,000 for 2001-2007, whilst the most common deposit was 5% or less.

When you compare that to 2008-2017 where the majority of respondents answered £151,000-£200,000 with a deposit of 6-10% you can begin to see how accessibility has become much more difficult.

This data can also be linked to the ages of first time buyers and how this is increasing. With people needing more time to save larger deposits, and also needing to earn more (seen later in Question 6,) they will inevitably be older when they are finally ready to buy their first home.

Question 5 compounds this conclusion by showing the large increase in first time buyers in 2008-2017 buying jointly with a partner as opposed to on their own. (Table 2, below)

<table>
<thead>
<tr>
<th></th>
<th>Purchased alone</th>
<th>Purchased with a partner</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q1: 2000 - 2007</strong></td>
<td>59.26% 16</td>
<td>40.74% 11</td>
<td>38.57% 27</td>
</tr>
<tr>
<td><strong>Q1: 2008-2017</strong></td>
<td>16.28% 7</td>
<td>83.72% 38</td>
<td>61.43% 43</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>23</td>
<td>47</td>
<td>70</td>
</tr>
</tbody>
</table>

Table 2. Did you purchase alone or with a partner? (SurveyMonkey.co.uk)

The results from this question seen in Table 2, again link directly to the rise in house prices, deposit requirements and overall mortgage availability looked at in the literature. Affordability is a major factor when looking to buy a house, and between 2000-2007 it was much easier than it
is now. That is reflected in the number of people (59%) who purchased their home alone in 2000-2007, compared to just 16% from 2008-2017. This data is one of the most conclusive results so far showing one of the major changes that the economic crash has had on homeownership. Buying a house on a single wage nowadays is a relatively rare occurrence and is directly linked to the increase in house prices, and deposit requirements mentioned above. Also we know from the data that the average age of first time buyers has increased over time, and therefore so too has the likelihood of first time buyers being in relationships or married.

Question 6 looked at the approximate annual income of respondents to see how requirements have changed since the crash. (Figure 6.4 below)

As you can see from the graph, an overwhelming majority of people who bought their home before the crash earned between £21,000-£30,000. (56%) After 2008 the most common answer
was £31,000-£40,000. (35%) Also, in 2008-2017 42% of respondents reported their wages (combined if purchased as a pair) was over £40,000, compared to just 7% of people 2000-2008.

This trend in income, again correlates with the economic changes highlighted in the literature review, and also changes observed in data from the previous questions. As mortgage availability has become more difficult, and deposit requirements risen, so too has the level of earnings needed to buy a house. This data should also be looked at with the context that 84% of respondents who bought post 2008 bought with a partner, compared to 41% of people before.

Next, in Question 7 the survey looked to compare the duration of the mortgages, to see if there were any trends between the two date ranges. (Figure 6.5, below) What is immediately apparent from the data is the big shift from traditional 25 year mortgages, to ones that are longer.

![Figure 6.5 Term of First Mortgage (SurveyMonkey.co.uk)](image)

For many years, 25 year mortgages were the traditional terms set by the bank and what most
people between 2000-2007 (74%) took out. However with the problems with affordability since the crash, new 35 year mortgages are becoming much more popular for first time buyers. As seen in Question 2, most first time buyers post 2008 were between 21-25 meaning they would be eligible for these longer mortgages. The longer terms would mean the monthly repayments would be cheaper, as they are spread over more months. Although on the flipside, individuals would pay back more interest in total. A quarter of mortgages in 2016 were for a 35 year term, up from 16% in 2007. (thisismoney.co.uk, 2016) The longer mortgage terms are beneficial to first time buyers, not only for cost saving, but also by improving their likelihood of being accepted for a mortgage. Bank lending criteria is stricter than before the crash, and often changing from a 25 year to a 35 year mortgage is the difference between being accepted and rejected. Also indicative of the change in trends, is the 19% of people pre 2008 who opted for a 16-20 year mortgage, compared to just 2% after.

Question 8 looked at the interest rates that respondents received when securing the mortgage on their first home. 60 of the 70 respondents answered, with 5 skipping and 5 saying that they could not remember. The sum of all interest rates for the 2000-2007 category was 41.54% (of 27 respondents ) compared to 58.46% between 2008-2017 (of 38).

<table>
<thead>
<tr>
<th>What was the initial interest rate % on your first mortgage?</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: 2000 - 2007</td>
<td>100.00%</td>
</tr>
<tr>
<td>Responses</td>
<td>27</td>
</tr>
<tr>
<td>Q1: 2008-2017</td>
<td>100.00%</td>
</tr>
<tr>
<td>Responses</td>
<td>38</td>
</tr>
<tr>
<td>Total Respondents</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>65</td>
</tr>
</tbody>
</table>

Table 3. Total Interest Rate Paid by Respondents. (SurveyMonkey.co.uk)

In order to make the results easier to analyse I categorized them into their 2 date categories and created a graph. (See Figure 6.6 below)
The rates for respondents in the 2000-2007 period ranged from 2.3% - 4.5%.

This changed in 2008 – 2017, the smallest answer being 1.7% and the largest 16.5%.

The average answer for all for the results pre 2008 was 3.43%, compared to 4.2% post 2008.

The interest rates charged by individual mortgage providers vary greatly based on the circumstances of individuals applying for the loan. Individual’s credit history and deposit size play a role in determining the rate as it is effectively a measure of the risk that the creditor believes it is taking. Borrowers deemed higher risk, will pay a higher rate of interest. So although the data from the research shows an increase of 0.77% on average in interest rates, it is difficult to make any definitive judgements on why this may be the case. We know from the literature review that the base rate has been at 0.5% or less since the crash and therefore may have expected the interest charged by loan providers to have dropped too. Instead though, loan providers may have decided not to pass on this decrease in their cost of capital to their
customers. Without individual data from the bank or building society involved in every single transaction it would be hard to determine how much the economic crisis really affected the specific interest rate for an individual. Also, again, we must analyse the data in the context that only 27 people answered for 2000 – 2007 and 38 for 2008-2017. As mentioned in the methodology this sample size is one limitation of the study.

What is interesting from the results though, is the two extremely high rates post-2008 of 14.9% and 16.5%, compared to the highest rate before the crisis of only 4.5%. This could be indicative of the more stringent, and risk adverse attitude taken by lenders, meaning people who would fall into the ‘sub-prime’ category are now being charged extremely high interest rates. In order to analyse how interest rates have changed since the crisis I created two tables containing the data from the two date ranges, and ordered them from low to high regarding the interest rate (See Figure 7 and 7.1 in Appendix) One of the most immediately apparent differences is the number of fixed rate mortgages post 2008 compared to before the crash, as shown from the results from Question 9 in Figure 6.7 below;
As seen in Figure 6.7, 93% of people after the crash had a fixed rate mortgage compared to 56% before. This is a significant change which would have been initiated by lenders in order to decrease the number of defaults caused by rises in interest rates a few years after taking out a mortgage. In the literature review it discussed how rises in rates and the dominance of variable interest rate mortgages are what caused the sub-prime market to fail. This is much less likely with more fixed rate mortgages where consumers can budget and calculate their affordability much more effectively.

Finally, the last question in the survey asked respondents to rank in order of importance the economic factors that influenced their decision the most when buying their first home. (See Figure 8, Appendix) In 2000-2007 81% of respondents said that house price was the most important issue to consider when they were looking to join the property ladder. This dropped to 56% after the crisis, but was still the answer given number one rank the most. Interestingly, only 15% of people in the earlier date range said that the deposit requirement was the most important factor in their decision, this rose to 34% for people post 2008. What this shows is a change in trend in people’s perceptions and in access to the housing market as a whole. House prices have become so high over the years, that more emphasis is put on the deposit requirement now than before the crisis. People are likely to be willing to buy a more expensive house nowadays, if the deposit requirements are lower than on a more expensive one. Gone are the days of 100% easy to obtain mortgages, and ‘millennials’ often now spend years saving, and live at home with mum and dad much longer just to save the high deposits that are now needed. People who said that their income was the most important factor also rose from 4% pre 2008 to 13% after. With deposit requirements being the main obstacle people face nowadays, it is unsurprising that people deem their income to be a very important factor when buying a house.
As touched on in the literature review, regulations have become much more stringent from lenders since the crash and a good, regular income is more important nowadays, than maybe during 2000-2007 where lending criteria was more lenient. Interest rates came in 4th most often before the crisis, and in last place for 2008-2017. This may well be linked to the switch from variable rates to fixed that we saw from Question 9. With almost all of the mortgages since 2008 being on a fixed rate of interest this is less of a worry for people who know how much they will be paying. Buyers before the crisis would have been much more wary of their variable rates and rightly so, as we now know it was rises in these rates which caused the default of millions of households and the collapse of so many financial institutions worldwide. Most respondents placed the term of their mortgage last when ranking these factors in order of importance; 81% in 2000-2007 and 55% post 2008. This was surprising as I expected more people in the 2008-2017 category to stress the importance of the term of their mortgage, especially with the introduction of new 30 year and 35 year terms recently to help with affordability. Despite it becoming more relevant in recent times (shown in the drop in people ranking it last from 81% to 55%), it still falls in 5th for the majority people behind the other factors in both date ranges.
Summary

To summarise, the research found from 2000-2007 to 2008-2016;

First time buyers under 21 are becoming increasingly rare. The majority of FTB’s are still 21-25, but there was no Help to Buy scheme for young people in the earlier date range.

The average cost of a first home has risen from £50,000-£100,000 to £100,000-£200,000.

Average deposits have increased from mostly 5% or less, to 5-10%

People buying their first home on their own has dropped from 59% to just 16%.

FTB’s income has increased from mostly £21,000-£30,000 up to £31,000-£40,000.

The standard 25 year mortgage is now being extended to 30, or 35 years for young FTBs.

The average interest rate paid has risen from 2.3% to 4.55% despite major reductions to the base rate.

The number of fixed rate interest mortgages has almost doubled.

House prices have become less of a priority concern for FTB’s who now are more concerned with high deposit requirements than before.

Concerns over income levels now rank more highly for people looking to buy a house.

Concerns over interest rates have decreased, synonymous with the rise in number of fixed rate mortgages.
Conclusions and Recommendations
Overall the data correlates well with the literature review in understanding how changes in the housing market, and the theory behind this, affects people day to day who are looking to buy their first home. The primary research gives an insight into how global and national economic changes filter down to individuals and their access to finance and to housing. The research identified the key macro-economic issues that affected the housing market and gained insight from respondents into how these affected their own experience, requirements and overall decision making process. Most of the findings from the primary researched mirrored that of the literature review compounding on national trends such as increases in house prices and deposit levels. The data did however build on the literature review by providing numerical data for analysis and also evaluating how people’s perceptions of these had changed too. This was shown well in the switch in emphasis of FTB’s pre 2008 who were primarily concerned with the overall price paid for a house, to a lot more individuals focusing on the deposit requirement post 2008.

Two of the most conclusive answers found from the research is the switch in emphasis for potential buyers from house prices to deposit requirements, and also the change in tactic from loan providers, with most respondents now being on fixed rate interest payments. The research also highlights the high number of first time buyers now having to purchase as a pair to help with affordability, and the subsequent increase of required income for first time buyers that has caused this. We know that deposit requirements have become the main issue for young people recently, but the data helps to illustrate how this is the case, and provides the numerical data from which some conclusions can be made. The data highlights the increase in house prices between the two date ranges with 50% of the transactions in 2000-2007 being for houses in the £50,000 - £100,000 category, with only 3% in the later date range. The disparity in income requirements is also highlighted well from the findings, with 60% from 2000-2007 earning
£21,000 - £30,000 compared to 24% afterwards; the most common income bracket for first time buyers in 2008-2017 was in fact £31,000 - £40,000 at 32%.

Given more time the research would incorporate a larger pool of respondents with a wider variety of geographical location, and age. It would also group the results from the data into individual years to add to the specificity of the findings, and be able to highlight certain things such as policy changes and the effect they had. It would also incorporate some other means of data collection such as focus groups or interviews to better understand how first time buyers face different economic barriers now to before the crisis, and how they manage to deal with them. The addition of this type of qualitative data would improve the current research but could also be added and used in conjunction with the findings at a later date. Future research could use a larger respondent size, from a more varied demographic and include more detailed qualitative interviews to get an in depth understanding of the ramifications of macro-economic issues in the housing market for first-time buyers. A third data set of respondents who purchased their first home before 2000 could also be analysed, so that three time periods could be compared to assess how the accessibility to the market has changed from the 1990’s all the way to 2017.
### Appendices

<table>
<thead>
<tr>
<th>Date Range</th>
<th>House Value</th>
<th>Income</th>
<th>Deposit Size</th>
<th>Interest Rate</th>
<th>Fixed/Variable Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000 - 2007</td>
<td>£151,000 - £200,000</td>
<td>£61,000 - £70,000</td>
<td>6 – 10%</td>
<td>2.30%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£50,000 - £100,000</td>
<td>£21,000 - £30,000</td>
<td>5% or less</td>
<td>2.50%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£50,000 - £100,000</td>
<td>£21,000 - £30,000</td>
<td>6 – 10%</td>
<td>2.60%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£101,000 - £150,000</td>
<td>£31,000 - £40,000</td>
<td>5% or less</td>
<td>2.80%</td>
<td>Variable</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£50,000 - £100,000</td>
<td>£31,000 - £40,000</td>
<td>5% or less</td>
<td>2.80%</td>
<td>Variable</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£50,000 - £100,000</td>
<td>£21,000 - £30,000</td>
<td>5% or less</td>
<td>2.90%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£101,000 - £150,000</td>
<td>£21,000 - £30,000</td>
<td>5% or less</td>
<td>3%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£50,000 - £100,000</td>
<td>£21,000 - £30,000</td>
<td>5% or less</td>
<td>3%</td>
<td>Variable</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£50,000 - £100,000</td>
<td>£21,000 - £30,000</td>
<td>5% or less</td>
<td>3%</td>
<td>Variable</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£50,000 - £100,000</td>
<td>£21,000 - £30,000</td>
<td>5% or less</td>
<td>3.20%</td>
<td>Variable</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>Less than £50,000</td>
<td>£21,000 - £30,000</td>
<td>5% or less</td>
<td>3.40%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£50,000 - £100,000</td>
<td>£31,000 - £40,000</td>
<td>6 – 10%</td>
<td>3.50%</td>
<td>Variable</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£50,000 - £100,000</td>
<td>£10,000 - £20,000</td>
<td>11 – 15%</td>
<td>3.50%</td>
<td>Variable</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£50,000 - £100,000</td>
<td>£21,000 - £30,000</td>
<td>5% or less</td>
<td>3.50%</td>
<td>Variable</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>Less than £50,000</td>
<td>£21,000 - £30,000</td>
<td>6 – 10%</td>
<td>3.50%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£101,000 - £150,000</td>
<td>£31,000 - £40,000</td>
<td>5% or less</td>
<td>3.60%</td>
<td>Variable</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£101,000 - £150,000</td>
<td>£31,000 - £40,000</td>
<td>5% or less</td>
<td>4%</td>
<td>Variable</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£50,000 - £100,000</td>
<td>£21,000 - £30,000</td>
<td>5% or less</td>
<td>4%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£50,000 - £100,000</td>
<td>£21,000 - £30,000</td>
<td>5% or less</td>
<td>4%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£50,000 - £100,000</td>
<td>£61,000 - £70,000</td>
<td>6 – 10%</td>
<td>4.26%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£101,000 - £150,000</td>
<td>£31,000 - £40,000</td>
<td>6 – 10%</td>
<td>4.50%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£101,000 - £150,000</td>
<td>£21,000 - £30,000</td>
<td>5% or less</td>
<td>4.50%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2000 - 2007</td>
<td>£101,000 - £150,000</td>
<td>£21,000 - £30,000</td>
<td>Over 25%</td>
<td>5%</td>
<td>Fixed</td>
</tr>
</tbody>
</table>

**Figure 7.** Respondents Key Economic Variables 2000-2007.
<table>
<thead>
<tr>
<th>Date Range</th>
<th>House Value</th>
<th>Income</th>
<th>Deposit Size</th>
<th>Interest Rate</th>
<th>Fixed/Variable Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008 - 2017</td>
<td>£151,000 - £200,000</td>
<td>£31,000 - £40,000</td>
<td>6 - 10%</td>
<td>1.70%</td>
<td>Variable</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£151,000 - £200,000</td>
<td>£21,000 - £30,000</td>
<td>11 - 15%</td>
<td>2%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£101,000 - £150,000</td>
<td>£21,000 - £30,000</td>
<td>16 - 20%</td>
<td>2.14%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£250,000+</td>
<td>£41,000 - £50,000</td>
<td>5% or less</td>
<td>2.40%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£250,000+</td>
<td>£71,000 - £80,000</td>
<td>6 - 10%</td>
<td>2.49%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£151,000 - £200,000</td>
<td>£51,000 - £60,000</td>
<td>6 - 10%</td>
<td>2.50%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£201,000 - £250,000</td>
<td>£31,000 - £40,000</td>
<td>Over 25%</td>
<td>2.58%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£101,000 - £150,000</td>
<td>£51,000 - £60,000</td>
<td>11 - 15%</td>
<td>2.60%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£101,000 - £150,000</td>
<td>£21,000 - £30,000</td>
<td>6 - 10%</td>
<td>2.69%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£201,000 - £250,000</td>
<td>£71,000 - £80,000</td>
<td>over 25%</td>
<td>2.90%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£151,000 - £200,000</td>
<td>£41,000 - £50,000</td>
<td>6 - 10%</td>
<td>2.90%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£250,000+</td>
<td>£41,000 - £50,000</td>
<td>11 - 15%</td>
<td>2.96%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£151,000 - £200,000</td>
<td>£31,000 - £40,000</td>
<td>21 - 25%</td>
<td>3%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£101,000 - £150,000</td>
<td>£21,000 - £30,000</td>
<td>6 - 10%</td>
<td>3.00%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£151,000 - £200,000</td>
<td>£41,000 - £50,000</td>
<td>11 - 15%</td>
<td>3.15%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£151,000 - £200,000</td>
<td>£31,000 - £40,000</td>
<td>6 - 10%</td>
<td>3.50%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£101,000 - £150,000</td>
<td>£51,000 - £60,000</td>
<td>16 - 20%</td>
<td>3.50%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£101,000 - £150,000</td>
<td>£21,000 - £30,000</td>
<td>6 - 10%</td>
<td>3.54%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£101,000 - £150,000</td>
<td>£21,000 - £30,000</td>
<td>5% or less</td>
<td>3.71%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£151,000 - £200,000</td>
<td>£41,000 - £50,000</td>
<td>16 - 20%</td>
<td>3.90%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£151,000 - £200,000</td>
<td>£31,000 - £40,000</td>
<td>6 - 10%</td>
<td>3.95%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£151,000 - £200,000</td>
<td>£41,000 - £50,000</td>
<td>Over 25%</td>
<td>4.00%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£151,000 - £200,000</td>
<td>£21,000 - £30,000</td>
<td>6 - 10%</td>
<td>4.20%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£201,000 - £250,000</td>
<td>£41,000 - £50,000</td>
<td>5% or less</td>
<td>4.20%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£151,000 - £200,000</td>
<td>£31,000 - £40,000</td>
<td>11 - 15%</td>
<td>4.50%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£101,000 - £150,000</td>
<td>£31,000 - £40,000</td>
<td>11 - 15%</td>
<td>4.50%</td>
<td>Variable</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£151,000 - £200,000</td>
<td>£31,000 - £40,000</td>
<td>5% or less</td>
<td>4.80%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£101,000 - £150,000</td>
<td>£51,000 - £60,000</td>
<td>16 - 20%</td>
<td>5%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£101,000 - £150,000</td>
<td>£51,000 - £60,000</td>
<td>5% or less</td>
<td>6.20%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£151,000 - £200,000</td>
<td>£41,000 - £50,000</td>
<td>6 - 10%</td>
<td>6.50%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£151,000 - £200,000</td>
<td>£31,000 - £40,000</td>
<td>6 - 10%</td>
<td>14.90%</td>
<td>Fixed</td>
</tr>
<tr>
<td>2008 - 2017</td>
<td>£201,000 - £250,000</td>
<td>£51,000 - £60,000</td>
<td>5% or less</td>
<td>16.50%</td>
<td>Fixed</td>
</tr>
</tbody>
</table>

**Figure 7.1.** Respondents Key Economic Variables 2008-2017
<table>
<thead>
<tr>
<th>Deposit Requirement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: 2000 - 2007</td>
<td>15.38%</td>
<td>57.69%</td>
<td>7.68%</td>
<td>11.54%</td>
<td>7.69%</td>
<td>38.24%</td>
<td>3.62</td>
</tr>
<tr>
<td>Q1: 2008 - 2017</td>
<td>34.29%</td>
<td>37.14%</td>
<td>8.57%</td>
<td>14.29%</td>
<td>5.71%</td>
<td>51.47%</td>
<td>3.80</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Interest Rate</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: 2000 - 2007</td>
<td>0.00%</td>
<td>7.69%</td>
<td>34.62%</td>
<td>57.69%</td>
<td>0.00%</td>
<td>38.24%</td>
<td>2.50</td>
</tr>
<tr>
<td>Q1: 2008 - 2017</td>
<td>2.70%</td>
<td>8.11%</td>
<td>36.14%</td>
<td>32.43%</td>
<td>21.62%</td>
<td>64.41%</td>
<td>2.38</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>House Price</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: 2000 - 2007</td>
<td>80.77%</td>
<td>11.54%</td>
<td>3.85%</td>
<td>0.00%</td>
<td>3.85%</td>
<td>38.24%</td>
<td>4.65</td>
</tr>
<tr>
<td>Q1: 2008 - 2017</td>
<td>55.26%</td>
<td>28.95%</td>
<td>7.89%</td>
<td>2.63%</td>
<td>5.26%</td>
<td>56.88%</td>
<td>4.26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal Income</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: 2000 - 2007</td>
<td>3.70%</td>
<td>22.22%</td>
<td>48.15%</td>
<td>22.22%</td>
<td>3.70%</td>
<td>39.71%</td>
<td>3.00</td>
</tr>
<tr>
<td>Q1: 2008 - 2017</td>
<td>12.60%</td>
<td>20.00%</td>
<td>30.00%</td>
<td>27.60%</td>
<td>10.00%</td>
<td>58.82%</td>
<td>2.98</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Term of Mortgage</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1: 2000 - 2007</td>
<td>3.85%</td>
<td>3.85%</td>
<td>3.85%</td>
<td>7.69%</td>
<td>80.77%</td>
<td>38.24%</td>
<td>1.42</td>
</tr>
<tr>
<td>Q1: 2008 - 2017</td>
<td>2.50%</td>
<td>5.00%</td>
<td>17.60%</td>
<td>20.00%</td>
<td>56.00%</td>
<td>58.82%</td>
<td>1.80</td>
</tr>
</tbody>
</table>

Figure 8. Ranking of Economic Factors. (SurveyMonkey.co.uk)
**Participant Information Sheet**

‘An analysis of economic factors affecting the first time buyer market; A case of the UK housing market.’

Ethics Reference Number: 2016D0297

The purpose of this research is to analyze the key economic factors that affected First Time Buyers when taking their first step onto the UK property ladder. It aims to analyze First Time Buyer’s pre and post the 2008 economic crisis and compare how the market conditions were different, and in turn how this affected their decision making process.

Your participation will enable the collection of data which will form part of a study being undertaken at Cardiff Metropolitan University.

Why we need you: You have been asked to participate because you fit the profile of the population being studied; that is, you have purchased your first home since the year 2000.

We would like to invite you to complete a short online questionnaire put together by the main researcher Jordan de Silva that will gather information about your experience when buying your first home. The questionnaire should only take around 5 minutes to complete, and the questions will focus primarily on financial and economic circumstances regarding things such as income, house prices, and interest rates at the time.

What if you change your mind? If you decide to join the study you can change your mind at any time. You do not have to give a reason why, and your decision will be respected. There are absolutely no penalties and your privacy will be protected.

What happens if I join the study? Once you have completed the 5-minute questionnaire we will keep your results to be analyzed and create statistical data to illustrate any findings. There are no risks to yourselves from participating and your rights will not be affected in any way. Your privacy will be respected at all times, with all data collected being confidential and only used for the stated research purposes. We will not pass any of your information on to third parties whatsoever, or share with other participants.

We have taken careful steps to make sure that you cannot be directly identified from the questionnaire form; there is no information on these questionnaires that will identify you. Your personal details (e.g. signature on the consent form) and your questionnaire will be kept in secure locations by the research team. When we have finished the study and analyzed all the information, all the documentation used to gather the data will be destroyed.

YOU WILL BE OFFERED A COPY OF THIS INFORMATION SHEET TO KEEP

If you require any further information about this project, then please contact:

Jordan de Silva, Cardiff Metropolitan University, Tel: 07867124636 Email: st20015878@outlook.cardifmet.ac.uk
**Questionnaire:**

In what year did you purchase your first home?
- Before 2000
- 2000-2007
- 2008-2017

How old were you when you purchased your first home?
- Under 21
- 21-25
- 26-30
- 31-35
- 36-40
- 41-45
- Over 45

What was the value of your house when you bought it?
- Less than £50,000
- £50,000 - £100,000
- £101,000 - £150,000
- £151,000 - £200,000
- £201,000 - £250,000

What size deposit did you put down for your mortgage?
- 5% or less
- 6-10%
- 11-15%
- 16-20%
- 21-25%
- over 25%

Did you buy your first home alone or with a partner?
- Purchased alone
- Purchased with a partner
What was your approximate annual income when you bought your first home? (Combined income if with a partner)

- £10,000 - £20,000
- £21,000 - £30,000
- £31,000 - £40,000
- £41,000 - £50,000
- £51,000 - £60,000
- £61,000 - £70,000
- £71,000 - £80,000
- £81,000 - £90,000
- £91,000 - £100,000
- Over £100,000

What was the term of your mortgage?
Less than 10 years
10 – 15 years
16 – 20 years
21 – 25 years
over 25 years

What was the initial interest rate % on your first mortgage?

..........................................

Did the mortgage on your first home have a fixed or variable interest rate?
Fixed
Variable

Please rank in order of importance, the economic factors that affected your decision the most, when looking to purchase your first home. (1 being most influential)
Deposit Requirement
Interest Rate
Personal Income
Term of Mortgage
House Price
References

Abdullah, L. Jumadi, N. Nor, L & Arshad, H. (2012) ‘First Time Buyers, Factors Influencing Decision Making’ Department of Estate Management Faculty of Architecture, Planning and Surveying Universiti Teknologi MARA, Perak, Malaysia


BBC Business (2009) ‘UK Interest Rate Lowered to 0.5%’ (Online) Available at: http://news.bbc.co.uk/1/hi/business/7925620.stm (Accessed 20/04/2017)


BoE (2017) (Online) Available at: http://www.bankofengland.co.uk/Pages/home.aspx (Accessed 02/02/2017)

BoE Base Rate (2017) Statistical Interactive Database - official Bank Rate history (Online) Available at: http://www.bankofengland.co.uk/boeapps/idadb/Repo.asp (Accessed 01/04/2017)
BoE Inflation (2017) ‘Inflation Tools’ (Online) Available at: http://www.bankofengland.co.uk/education/Pages/resources/inflationtools/default.aspx (Accessed 20/03/2017)


Clarke, B (2013)‘Helping the bank of Mum and Dad’ (Online) Available at: https://www.cml.org.uk/news/news-and-views/533/ (Accessed 27/03/2017)


Credit Choices. (2010) ‘100% Mortgages – What Are the Alternatives?. (Online) Available at: http://www.creditchoices.co.uk/partner-lp_100-mortgages/100-mortgages.html (Accessed 24/03/2017)

Data.gov.uk (2017) ‘Regional Household Income’ (Online) Available at: https://data.gov.uk/dataset/regional_household_income (Accessed 20/02/2017)


Economics Online (2017) ‘House Prices’ (Online) Available at: http://www.economicsonline.co.uk/Competitive_markets/House_prices.html (Accessed 01/03/2017)


FT.com (2015) ‘Help to Buy Has Pushed House Prices Up’ (Online) Available at: https://www.ft.com/content/fdbb8a00-5dfe-11e5-9846-de406cbb37f2 (Accessed 12/02/2017)

FT.com (2015) ‘US tightens mortgage lending regulations’ (Online) Available at: https://www.ft.com/content/36498e9e-6845-11e5-97d0-1456a776a4f5 (Accessed 20/04/2017)

FT.com (2016) ‘British workers face worst decade for pay in 70 years’ (Online) Available at: https://www.ft.com/content/d56b46f6-b237-11e6-9c37-5787335499a0 (Accessed 01/02/2017)


HelpToBuy.gov.uk (2017) ‘How Does It Work?’ (Online) Available at: https://www.helptobuy.gov.uk/equity-loan/equity-loans/ (Accessed 20/02/2017)


Independent.co.uk (2016) ‘The one chart that shows how UK houses are now even more unaffordable’ (Online) Available at: http://www.independent.co.uk/news/business/news/the-one-chart-that-shows-how-uk-houses-are-now-even-more-unaffordable-a7004796.html (Accessed 04/04/2017)


International journal of housing policy , 11 (1). pp. 23-49. ISSN 1461-6718


Momentum.co.uk (2014) Mortgage affordability: what lenders check, and how to prepare (Online) Available at: https://www.momentum.co.uk/mortgages/mortgage-affordability-checks/ (Accessed 20/03/2017)

Mortgage Advice Bureau (2017) Help To Buy – Mortgage Guarantee’ (Online) Available at: https://www.mortgageadvicebureau.com/helpobuymortgageguarantee (Accessed 20/03/2017)

Nationwide (2017) ‘First Time Buyer House Price Earnings Ratio’ (Online) Historical Data Spreadsheet Available at: http://www.nationwide.co.uk/~/media/MainSite/documents/about/house-price-index/downloads/ftb-hper.xls (Accessed 02/03/2017)

Nationwide (2017) ‘UK House Price Index’ (Online) Available at: http://www.nationwide.co.uk/about/house-price-index/download-data (Accessed 22/02/2017)


Pannell, B. (2011) ‘Access to Finance For First Time Buyers’ Council of Mortgage Lenders(Online) Available at: 

Poirer, A. (2016) ‘Why are Brits so obsessed with buying their own homes?’ (Online) Available at: 


Savills (2015) ‘First Time Buyers Affordability’ (Online) Available at: 
http://www.savills.co.uk/research_articles/186866/1870940 (Accessed 05/03/2017)


Shelter (2012) Understanding Supply constraints in the Housing Market’ (Online) FTI Consulting. Available at: 

Shelter (2015) ‘Housing affordability for first time buyers - March 2015’ (Online) Available at: 


Social Trends (2010) no.40, Basingstoke and New York, Palgrave Macmillan for the Office for National Statistics (ONS)

Strutt, A. (2016) How many people on standard variable rate mortgages?(Online) Available at: 
http://www.trinityfinancialgroup.co.uk/article/how-many-people-on-standard-variable-rate-mortgages (Accessed 20/02/2017)
SurveyMonkey.co.uk (2017) Participant Questionnaire (Online) Available at: https://www.surveymonkey.co.uk/r/6JSMLLW

Telegraph (2012) ‘First Time Buyers have to save for 8 years for a deposit’ (Online) Available at: http://www.telegraph.co.uk/finance/personalfinance/borrowing/mortgages/9614484/First-time-buyers-have-to-save-for-eight-years-for-a-deposit.html (Accessed 28/03/2017)


Thisismoney (2013) ‘Base rate vs inflation: The chart that will show when things have really got better’ (Online) Available at: http://www.thisismoney.co.uk/money/news/article-2387744/Base-rate-vs-inflation-chart-How-tell-things-really-got-better.html (Accessed 03/02/2017)

Thisismoney (2016) House prices stall for the first time in 15 months, but Nationwide warns that the average home now costs SIX times wages (Online) Available at: http://www.thisismoney.co.uk/money/mortgageshome/article-3896564/House-prices-stall-time-15-months-says-Nationwide.html (Accessed 01/04/2017)

Thisismoney (2016) The rise of the 35-year mortgage: First-time buyers extend their home loans, but is better cash flow now really worth the £9,000 in extra interest? (Online) Available at: http://www.thisismoney.co.uk/money/mortgageshome/article-3397746/The-rise-35-year-mortgage.html (Accessed 07/04/2017)

