Ireland’s National Debt - Is the debt sustainable?

This dissertation is submitted in part fulfilment of the requirements of the Master in Business Administration at Dublin Business School

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Master in Business Administration (Finance)  August 2016
Declaration:

I, Liam McFadden, declare that this research is my original work and that it has never been presented to any institution or university for the award of Degree or Diploma. In addition, I have referenced correctly all literature and sources used in this work and this work is fully compliant with Dublin Business School’s academic honesty policy.

Signed: Liam McFadden

Date: 22nd August 2016
Acknowledgments

I wish to take this opportunity to acknowledge and thank a number of people. Without their help, this dissertation would not have been possible.

I wish to sincerely thank my supervisor, Andrew Quinn at Dublin Business School who has provided constant guidance, direction and support along the way, and indeed for the incredible range of advice, knowledge and information that he has provided in previous semesters. Andrew has an expert knowledge of the world of finance, economics and markets and how they fit together. He can practically explain how these complex topics interact with each other and how they impact on my subject of choice – Ireland’s national debt.

I’d like to say a belated thank you to all my previous lecturers and the staff of Dublin Business School, who have increased my knowledge and understanding of the business and finance world exponentially.

I’d also like to thank and acknowledge all the information and support provided by my fellow students in the MBA class, not only during the dissertation but throughout the entire two years of the MBA programme. Their support, input and contributions have kept me motivated and engaged right throughout the course. Best wishes to you all.

Finally, I’d like to thank and dedicate this dissertation and my MBA to my brother Charley and father William who have always been there for me.
Abstract

The national debt of Ireland is enormous. At the end of Q1 2016, the amount owed by the country stood at €206.8bn or €43,453 for every person in Ireland. As a measure of GDP, Ireland’s debt now stands at 80.4%. The debt soared after the global financial crisis began in 2008. From a long standing level of approx. €40bn, Ireland’s debt jumped to over €215bn by Q2 2013.

This happened because Ireland was forced to pump over €70bn to bail out the banking sector, at the same time the economy crashed, causing a massive collapse in budget finances.

Led by its political leaders and the banking hierarchy, Ireland now finds itself living on debt through cheap rates of credit – largely a result of global quantitative easing. Interest on the national debt costs €7bn per year, and whilst falling, is an enormous burden on the Irish people. Irish issued government bonds from the crisis have maturities out past 2050, so future generations of Irish people will be paying this part of the national debt for years.

And though the debt is quoted as a % of GDP, and may appear to be falling, it’s only because our GDP is growing. Ireland’s nominal debt has only decreased from €215.0bn in 2013 to €206.8bn presently. In GDP terms our debt has fallen from 124% to 80.4%. This somewhat false sense of achievement gets brought into sharp focus with the reality that the debt would inevitably spike back up again in the event of an economic downturn. In any downturn, there’s a double whammy effect – more debt needs to be issued to finance the country’s activities and GDP naturally falls as a result of reduced economic activity.

A cautionary note of warning needs to be made in terms of our debt’s sustainability – financing debt today is much cheaper because of the vast amounts of liquidity in the market and ultra-low interest rates. With Ireland achieving strong economic growth over the past 2 years, this should not be taken that manging the national debt is straight forward or painless. Ireland is susceptible to a debt crisis should there be another economic downturn, credit crunch or any one of a long list of economic pitfalls – such are the consequences of being a heavily indebted small open economy.

* On 13th July 2016, the CSO released Ireland’s finalized GDP data for 2015. Previous estimates put growth at 7.8%; however the finalized data showed Ireland’s economy grew by an incredible 26.3%. This unprecedented growth was a consequence of a new accounting standard, ESA 2010, which required EU statistical bodies to update their method for recording the financial value of multinationals, aircraft leasing companies and pharmaceutical companies in particular, of which there was many in Ireland. Tax inversion deals for companies that have inverted here, mostly through acquisitions, had a big impact. Examples include companies such as Perrigo and Jazz Pharmaceuticals who had assets of €523bn in Ireland in 2015 compared to €391bn in 2014. This greatly increased GDP number instantly reduced Ireland’s 2015 year end debt from 93.8% to 78.7%. Many subsequent reports referenced in this dissertation, including the 2015 NTMA Annual Financial Statements, published on 23July2016, didn’t have time to amend their numbers for this dramatic amendment to GDP.
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Chapter 1  Introduction

1.1  Ireland’s national debt

Ireland’s national debt currently stands at €206.8bn or 80.4% of GDP. And though the debt is quoted as a % of GDP, and has been falling significantly, it’s only because our GDP is growing. Ireland’s nominal debt has only decreased from €215.0bn in 2013 to €206.8bn presently. The cost in terms of annual interest on the debt is now €7bn. Estimates from the Central Bank of Ireland (CBI) and International Monetary Fund (IMF) show that the debt will still increase nominally in the coming years.

Data from Bloomberg – retrieved 17Aug2016: Ireland’s national debt since 1990

A key issue is that Ireland may be in jeopardy of falling into a false sense of security on two fronts in terms of its national debt. (1)

Firstly, the debt level (the %) is only decreasing because GDP is increasing. If the GDP hadn’t increased since 2013, and the 2015 spike was just an accounting anomaly, then the debt level would still be almost 120%. Would the sense of crisis not still exist? The concern with GDP is that in Ireland’s case it is largely influenced by the level of activity of multinational companies operating here. Anecdotally, most Irish respondents would say the economy is only marginally recovering – eight years after the start of the financial crisis.

Secondly, the interest rates (or bond yields) being priced in the bond markets for Irish debt continue to hit record lows through the summer of 2016. Some reporting of this phenomenon in the media seems
to give the sense that Ireland is to credit for this achievement. These record low yields are surely just a consequence of years of quantitative easing and a wider flight to safety in world stock markets. (2) Granted, order has been restored to Ireland’s public finances and on the ground the economy is starting to recover. Unemployment is falling steady and stability is being restored. (3)

Data from Bloomberg – retrieved 17Aug2016: Yields on Irish 10-year bonds

1.2 Aims of this Research

The aim of this dissertation is to research Ireland’s national debt and to look at how sustainable it is for the country to pay off the debt. An overview will be presented on the background to the current level of indebtedness and the events of recent years. This will entail a review of the events leading up to the collapse of the Irish economy, the Irish banking crisis, the global financial crisis of 2008-2009, the impact on credit markets and the wider economic fallout. All of these events led to a dramatic deterioration of the Irish fiscal landscape and the requirement of the government to pump billions into the Irish banking sector. The events of this short period of time led to the ballooning of Ireland’s national debt and with it the requirement of years of austerity.

This dissertation will discuss in detail the amount of debt now facing the country, the maturity profile of the debt, the interest rates being charged and the amount of interest alone needed to service the debt on an annual basis.

This dissertation will discuss and refer to a number of Irish institutions that are central to the management of the national debt. Arguably of most significance is the National Treasury Management Agency (NTMA) (4) which is the State body that operates on a commercial mandate to manage the national debt and related services for the Irish government. The Central Bank of Ireland
(5), the Department of Finance (6) and the Central Statistics Office (7) are the other key bodies that connect the Irish government, the regulator, the official provider of statistics and crucially the Irish people to the national debt.

1.3 Rationale for completing this Research

Ireland has a huge national debt and paying this back will take a very long time and will affect every citizen in the country. The debt will negatively impact many generations of Irish people to come.

As a result of the recent global economic and banking crisis, Ireland’s national debt has increased dramatically. This is in large part due to the vast amounts pumped into the Irish banking system. Whilst managing the crisis and its consequences is now reasonably well structured, the vast sums of debt taken on by Ireland required huge annual payments on interest alone, over €7.0bn in 2015 (8) Servicing the debt will be a long-term struggle.

The country’s current economic recovery in terms of GDP growth, reduction in unemployment and budgetary stability have been very welcome. Against the backdrop of the current ultra-low interest rate environment, the vast levels of debt and amounts required to just service the debt may have lost some of the media spotlight, none the less this is an acute medium to long-term problem. Most media reports simply value the debt as a percentage of GDP, which is falling; however in nominal terms the debt continues to grow; standing at €206.8bn at the end of Q1 2016. (8)

This dissertation will look at the composition of Ireland’s debt, the maturity profile and how realistic and sustainable is it for Ireland to continue paying off this debt. Some of the challenges that Ireland will face will be examined.

What makes this an important dissertation topic is the financial enormity and timespan of Ireland’s debt and that it affects everyone in the country.

1.4 Recipients of Research identified

There is a varied audience for this body of research. From a personal perspective, this is an area that is of great personal interest and something that I wish to learn much more about. The research and findings will greatly help achieve that aim. From a career perspective, and for someone in corporate banking, I would be keen to work directly in the area of the national debt. From talking to my fellow MBA class and lecturers in Dublin Business School, this is an area many have expressed a keen interest in and concern at the long term implications for Ireland.

In terms of the targeted interview participants, all of whom work directly or indirectly in the national debt area, this dissertation will be of significant interest.

Other recipients of this research will include:

- Researchers and academics involved in this area
Future students with an interest in this aspect of Irish economics

Irish and International politicians and their advisors wishing to gain a better understanding of Ireland’s national debt

Financial and Economic journalists and writers

Regulatory professionals, including those within the CBI, and possibly the ECB

Industry participants, including those working in the Irish primary dealer network (the financial organizations who underwrite the issuance of Irish debt) (9)

Department of Finance staff

CSO and Economic & Social Research Institute (ESRI) staff

1.5 New and Relevant Research

The subject matter under review is a continuous and ever changing market driven phenomenon. The national debt will not be paid off for arguably many generations time, if ever. The amount keeps changing as new debt is issued and old amounts are either repaid or rolled over. The ongoing state of Ireland’s public finances impacts the amounts being repaid. For this reason, as new events in this landscape unfold, these will provide new and relevant research for this dissertation.

The debt professionals at the NTMA work to manage the country’s debt. Because such a large portion of Irish debt is held by large investment institutions, Ireland’s credit rating and quality is traded on a daily basis in the world’s financial markets.

The events in the global market place and geo–political arena impact Ireland on a daily basis. For example, a political event in or outside of Ireland could very quickly impact our attractiveness in terms of foreign direct investment (FDI) or ability to retain multinational organizations. A change in tax policy in Ireland would very quickly deter new and existing investors.

This dissertation will look at and present findings in these areas and what downstream effects this would have on the national debt.
Chapter 2 Literature Review

2.1 Literature introduction & overview

In researching for literature and information on this topic, it has been found that available literature and information essentially falls into two categories.

This first is the predominantly numerical information that is made available by the Irish debt and financial management bodies including the NTMA, CBI, CSO and Dept. of Finance. As this topic is financially centred, the information held by these bodies is invaluable to completing a comprehensive dissertation. Having an Accountancy and Finance background, academically and professionally, will aid a thorough and professional dissemination of this complex data.

The second area of literature is the written papers and texts, both from institutions in the debt management area and also the academic writers. These materials are of immense value in aiding a more comprehensive understanding of the context and rationale for why debts arise and what are the theoretically most appropriate ways that governments can manage their debts.

2.2 Sources of secondary data, including critical analysis

The following section outlines and discusses a number of highly valuable texts that have been written on the area of national debt, including research papers from respected academics. These texts provide both a factual narrative of national debt, along with its causes, experiences in other countries, levels of sustainability and alternative strategies for dealing with debt. These sources, coupled with the more numerical data in the subsequent section have provided an invaluable combination of fact and understanding for this topic.

2.2.1 Texts / Research Papers published on National Debt

Financial Statements and Annual Report 2015 - National Treasury Management Agency (10)

As the body with responsibility for managing Ireland’s national debt, the NTMA produced their Financial Statements and Annual Report in July 2016, covering the fiscal year ended December 31st, 2015. This report outlines the business activities carried out by the NTMA, not just the funding and debt management function, but other functions such as managing Ireland’s Strategic Investment Fund, NewERA, and the State Claims Agency.
The NTMA’s annual report is audited and signed by Ireland’s Comptroller and Auditor General, Seamus McCarthy. The key findings from the 2015 report include specific details on all aspects of Ireland debt across the year including:

- The NTMA issued €13bn of bonds in 2015, at an average yield of 1.5% and a weighted average of 18 years in duration
- That over €18bn of IMF loans, lent to Ireland as part of the 2010 troika bailout were repaid to the IMF (over the period from Q4 2014 to Q4 2015) and replaced with cheaper market sourced bonds – with an estimated €1.5bn in interest savings
- Interest paid during the year was €7bn, down from €7.5bn paid in 2014
- Irish bond yields remained very low during the year, reaching a high of just 1.78% in June, falling to 1.15% at the end of December. The report tells us this was due to a number of factors, including increased investor confidence in Ireland’s ability to repay, falling yields on other benchmark European government bonds (Germany, Netherlands etc.) and the continuing impact of QE (Quantitative Easing)
It’s important to note that this report is produced by the NTMA and understandably looks to present its findings and the position of the national debt in an arguably corporate type manner. The report does not directly address theoretical issues such as the degree of debt sustainability, if debts could have been renegotiated or restructured or indeed the difficult choices that Ireland will need to continue making for years to come in terms of sacrificing public services in order to meet debt and interest repayments.

**Stability Programme Update (April 2016) – Department of Finance (11)**

This report is the Irish government’s official national medium term fiscal plan. It is a European Commission requirement that each member state submit such a document. This Update was debated and approved by the Irish parliament and the Irish Fiscal Advisory Council. The headline economic estimates from this report include those presented below.

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<td>Real GDP</td>
<td>7.8</td>
<td>4.9</td>
<td>3.9</td>
<td>3.9</td>
<td>3.3</td>
<td>3.1</td>
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<tr>
<td>Real GNP</td>
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<td>4.1</td>
<td>3.7</td>
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<td>2.8</td>
<td>2.6</td>
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<td>HICP</td>
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<td>1.7</td>
<td>1.9</td>
<td>1.9</td>
<td>1.9</td>
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<tr>
<td>GDP deflator</td>
<td>5.3</td>
<td>2.6</td>
<td>1.2</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
</tr>
<tr>
<td>Total employment (000’s)</td>
<td>1,965</td>
<td>2,015</td>
<td>2,060</td>
<td>2,105</td>
<td>2,140</td>
<td>2,175</td>
<td>2,205</td>
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<tr>
<td>Unemployment %</td>
<td>9.5</td>
<td>8.4</td>
<td>7.8</td>
<td>7.0</td>
<td>6.6</td>
<td>6.3</td>
<td>6.0</td>
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<td>GG balance %</td>
<td>-2.3</td>
<td>-1.1</td>
<td>-0.4</td>
<td>0.4</td>
<td>1.2</td>
<td>2.0</td>
<td>2.8</td>
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<td>Structural balance</td>
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<td>-0.8</td>
<td>0.1</td>
<td>1.0</td>
<td>2.0</td>
<td>2.8</td>
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<td>Debt ratio (year-end)</td>
<td>93.8</td>
<td>88.2</td>
<td>85.5</td>
<td>81.3</td>
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<td>68.9</td>
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This report presents a very bright prognosis of Ireland’s immediate economic future, with growth set to average 3.6% over the next six years, and 240,000 jobs to be created. One of the more concerning aspects of this report is its differences with the NTMA projections for the same period. In particular, the NTMA projects debt to be at €217.1bn by 2021, whereas the Dept. of Finance estimates €200.6bn. This report, in addition to predicting higher economic growth also sees the debt level being lower and budget surpluses being higher.

However it is in one of the final chapters that this report raises a long term and significant issue. In regards to demographics, we are told that whilst Ireland currently has one of the youngest working populations in the EU, an unfavourable change will occur in coming decades, with a deteriorating impact on public finances and the debt. Over the years 2013-2050, Ireland’s over 65 populations will
double! Additionally the portion of the population made up of workers is expected to fall from 60% in 2013 to 50% in 2050 resulting in a large rise in the old-age dependency ratio.

We are told that this will result in a situation where, in 2013 three and a half people were employed for every person over 65, though in 2050 there will only be one and a half. This will inevitably have a major impact on public finances and the ability of Ireland to meet debt repayments as this ratio continues on a downward spiral.

Ireland: Staff Concluding Statement of the 2016 Article IV Consultation and Fifth Post-Program Monitoring (July 2016) – International Monetary Fund (12)

The Article IV Consultation reports are effectively the IMF’s annual report on Ireland. They have become much more important since Ireland signed up to the troika bailout in 2010. Despite Ireland essentially repaying all its IMF loans by late 2015, the IMF still requires Ireland, and indeed all its members to essentially go through an annual audit. Failing to adhere to these requirements would be a major black mark against Ireland plc.

The main findings from the IMF for Ireland, as of July 2016 are:

- Ireland’s economic outlook remains strong but vulnerable to external shocks, particularly as a small open economy
- Growth is projected at 5% for this year and 3% on average in coming years
- Domestic demand is projected to remain the main driver with robust private consumption on the back of continuously improving labour market conditions and vibrant investment activity
- The budget deficit for 2016 is likely to be <1%, noting over runs in health expenditure
- Ireland has established a remarkable track record of fiscal rectitude and exited the Excessive Deficit Procedure in 2015 (the EDP is a more demanding set of reporting requirements enforced by the EU for member States that run budget deficits)
- Ireland should be able to achieve the MTO (medium term objective), an EU Growth & Stability Pact rule, of having a structural deficit of less than 0.5% of GDP by 2018

As in previous reports, the IMF does have a number of caveats for Ireland. Whilst these are now likened to advice, if Ireland was still in the bailout programme, it’s fair to say that they would have to be taken as orders.
• Fiscal policy should be more supportive of job-rich growth, with the aim of a wider tax base
• Making Irish-owned firms more dynamic and productive would foster robust and sustainable growth over the long term
• Addressing structural impediments would strengthen job creation, especially amongst youth and long-term unemployed groups

On the macro financial side of things, the IMF state that:

• Ireland’s financial regulatory framework has been much strengthened since the crisis. The Single Supervisory Mechanism (SSM) where the ECB are responsible for direct supervision of the significant institutions that make up the bulk of the Irish banking system, is working well
• The financial soundness of banks, households, and corporates has improved in recent years. However, sensitivity analyses under the FSAP’s adverse macroeconomic scenario point to vulnerabilities amplified by crisis legacies, which need to be addressed
• Recovery in the banking system is progressing, yet challenges persist. Banks’ pre-provision profitability, albeit increasing, remains modest and prospects for further improvement are clouded by several factors, including continued deleveraging, the prevalence of low-yield tracker mortgages and unresolved distressed loans
• Household indebtedness is still high by international standards

Whilst the overall assessment of Ireland by the IMF is very positive, one could be allowed of for being a critical in their thoughts when reading through this report’s main findings.

Not for the first time, we see is a country heralded when it has achieved sound financial performance, in particular short term success. Ireland was still receiving very positive reports from the IMF right up until the last financial crisis hit!

Today, Ireland is still running substantial budget deficits each year, public services are creaking and the debt is not reducing by any real amounts, nominally. We are hugely dependent on the performance of the global economy and whilst we are generating a positive GDP performance, empirical evidence shows that it is not been felt on the ground in the real economy.

Debt and austerity: Post-crisis lessons from Ireland – Patrick Honohan (13)

This paper by the CBI’s former governor states that the Irish economy’s heavy pre-crisis dependence on a credit fuelled property sector bubble meant that it suffered more financial instability than most countries in the downturn of 2008–2012. With the failure of the bulk of the banking system, this resulted in heavy official and private debt and a severe employment decline. Faced with a sudden stop of international market funding, the Irish government was forced into an EU/EC/IMF financial support programme at the end of 2010. Reviewing the broad parameters of the programme, Honohan’s report argues that, while a sharp fiscal adjustment was necessary, adverse distributional
consequences were partly mitigated by the government. But the programme should have embodied better international risk-sharing through financial engineering. Ireland’s experience in financial crisis management and crisis resolution points to the importance of building and maintaining trust. This been said, when Ireland did look to burden share, there were very few partners willing to share. The best that Ireland received was the bailout programme and that it can be argued was lending nations forcing a deal on Ireland that meant they’d get their existing loans repaid.

**Maximum Sustainable Level of National Debt – Arvind Jadhav (14)**

This is a technical paper on the theoretical maximum level of indebtedness that a country can sustain. A comprehensive overview is given on what national debt is. The authors, based at the University of Dallas and Hofstra, New York talk about the current levels and approaches to national indebtedness in both developing and developed economies, including Ireland. They discuss the political and economic factors that feed into government approaches to debt. An *Indifference Curve* is calculated to show the point at which taking on more debt to maintain economic activity is outweighed by the interest and service costs of that same debt.

One of the most alarming findings presented in this report, citing an IMF study, is that in 40 developed economies, a debt level of between 30-90% (of GDP) limits economic growth to a median of just 3% per annum. Debts above 90% see growth limited to just 1.9% per annum. Furthermore the report states that for every 10% increase in a country’s debt level, there is a 0.15% fall in GDP growth, a 0.4% drop in investment and a 2% increase in the yield of the country’s 10 year bonds. The report cites the widely held IMF standard thresholds of debt for developed economies at 60% (and 40% for emerging economies). For Ireland’s national debt, the message is clear that getting debt back down to at least the 60% level is crucial. The report also discusses the IMF fiscal adjustment model, stating that:

\[
\Delta dt = -pbt + \frac{(rb-g)}{1+g} (dt - 1)
\]

Where \( dt \) is gross debt to GDP ratio in period \( t \); \( pbt \) represents the fiscal deficit plus net interest payments in period \( r \); \( rD \) is nominal interest rate on gross debt; \( g \) stands for nominal GDP growth rate and \( d(t-1) \) denotes the gross debt in the prior period.

Arguably the main criticism that one can level at such a report is the incredible difficulty of enacting a theoretical economic model onto a national economy with its almost infinite number of variables.
The Irish Fiscal Advisory Council’s November 2015 report was published in response to the Irish government’s Annual budget for 2016. This report criticised the government for increasing spending in the new budget, saying it was "a deviation from prudent economic and budget management". Whilst stating that Budget 2016 complied with all the fiscal rules, the fiscal projections for the next five years were not realistic as they do not fully take the cost of an ageing population or inflation into account. In particular the extra €1.5bn in spending announced on the eve of the budget was “inappropriate”. Combined with an earlier spending increase announced in spring 2015, the council said spending this year (2016) will have grown by 4% and will be funded by an unexpected increase in corporation tax, which the council says is a volatile revenue source. It said this has worrying echoes of past fiscal policy errors. The clear message from the IFAC was that short term gains in one aspect of the economy (corporation tax) was been filtered away on gaining votes ahead of a Spring 2016 General Election – when it should be used in a more constructive long term method such as addressing the level of national indebtedness.

Endgame – the end of the debt supercycle – Mauldin & Tepper (16)

This 2011 text was written in the aftermath of the global finance crisis and a few years into the massive bailout and quantitative easing programmes undertaken around the world. The key themes are the long term implications that governments will have to face for overloading their economies with debt. The book looks at some well-known cases where poor debt management has had devastating consequences on the economy. From an EU perspective, the situation in Greece is examined. Here we are told that if governments don’t design, implement and manage a properly functioning taxation system then problems will inevitably arise in terms of funding public services.

Mauldin & Tepper also highlight the problem that low inflation has on heavily indebted countries and then the problem of high and hyperinflation.

The concluding chapter is a very cautionary lesson for central bankers and economic leaders in regards to unintended consequences. Here we are warned of the problems of all the liquidity that has been introduced to developed economies, as a mechanism to reinvigorate their ailing economies. The main problem pointed out is that the debt built up locally doesn’t funnel to the high street as was intended, and instead goes into the stock markets and emerging markets. This then creates bubbles that damage both developing and developed economies and causes various types and financial bubbles.
Ireland’s Sovereign debt crisis – Karl Whelan (17)

Karl Whelan has written extensively on Ireland’s economic and debt crisis. This paper tells us that among the countries currently experiencing sovereign debt crises, Ireland’s case is perhaps the most dramatic. As recently as 2007, Ireland was seen by many as superior in the European class in its economic achievements. Ireland had combined a long period of high economic growth and low unemployment with budget surpluses. The country appeared to be well placed to cope with any economic slowdown as it had a gross debt to GDP ratio in 2007 of just 24% and a pension reserve fund of almost €25bn.

Whelan outlines how the banking crisis required billions in emergency funding, and coupled with the collapse in government finances, the national debt spiralled. Like many reports, we are told how Irish banks where struggling to source eligible collateral in 2010 and that the ECB allowed the CBI to provide “emergency liquidity assistance to them. This was a major contributory factor in the resulting bailout. Interestingly, Ireland was required to complete a “sustainability analysis” under the European Stability Mechanism when it was feared its solvency would run out in 2013.

Ireland’s Economic Crisis: the good, the bad and the ugly – Karl Whelan (18)

Another Karl Whelan paper provides an overview of Ireland’s macroeconomic performance over the past decade. Facts about the boom, bust and current recovery are presented. The paper discusses some common fallacies and misrepresentations of events in Ireland. These include that economic growth was balanced and sustainable, that spiralling public sector expenditure was been matched by productivity gains, that Ireland’s productivity overall wasn’t been eroded and that the economy wasn’t overheating. Broader lessons from the Irish experience, for a Eurozone economic policy and perspective are discussed.

A critical assessment is presented of the role that the EMU and the ECB played in Ireland’s crisis and the impact that has had on the Irish economy and subsequent increases in the national debt. We are told how Irish investors were able to access interest rates considerably below what they should have been for our economy, because these rates were being set for the EU as a whole, with little consideration given to Ireland’s overheating economy.

The removal of monetary policy, an overvalued Irish currency entering EMU and the consequences of a distant regulator (the idea that the central banker was now in Frankfurt, not Dublin) are all highlighted as contributing to Ireland’s economy getting out of control.

Not just the luck of the Irish: a contractual solution to the problems of sovereign debt restructuring – Katherine Crispi (19)

This text outlines that the European sovereign debt crisis that began in October 2009 when Greece announced that its previous administration had inaccurately reported the country’s 2009 fiscal
statistics to the EU. Following this revelation, investors panicked as they became increasingly concerned about their investments in Greece, as well as other countries in the EU with large amounts of debt, including Ireland. Subsequently, the three major credit rating agencies, namely Standard & Poor’s, Moody’s, and Fitch started to downgrade the credit ratings of Greece, Portugal, Spain, and Ireland, thus signalling the beginning of the European sovereign debt crisis.

This paper discusses the impact on the Irish economy, which had been booming for years. Although Ireland experienced tremendous economic growth from 1995 onwards, economic conditions had declined sharply when the Irish property bubble burst in 2007. Banks began scrambling for enough cash to stay solvent. Attempting to solve this problem domestically, the Irish government guaranteed the banks’ loans.

Ireland was eventually forced into a troika bailout, led by the IMF, EC and ECB. After months of global speculation, Ireland signed up to a bailout package on December 7, 2010. The final rescue package included €22.5 billion coming from the IMF. In order to receive periodic instalments from the sovereign debt restructuring agreement, Ireland was forced to implement a strict austerity program, which included cuts in social programs. Such costs came alongside the negative publicity Ireland had endured surrounding the bailout request and negotiations.

**Debt of a Gaelsman: Ireland’s sovereign debt crisis, national and international responses – James Croke (20)**

This paper discusses the recent global financial crisis, tracing back to the collapse of Lehman Brothers in September 2008, which drastically impacted the global interbank and credit markets. For several nations on the periphery of the EU, the crisis exposed real problems in their public finances. The most severely affected of these countries were Portugal, Italy, Ireland, Greece, and Spain (PIIGS). Of the European countries in most trouble, Ireland was perhaps both the most surprising and the most expected example of an economy in distress. The Irish economy’s fall was predictable for much the same reason as the US’s economy; it had become over exposed to a debt-fuelled property boom. This fall was to have alarming implications for Ireland’s national debt.

This paper also states that although Ireland’s economic downturn was inevitable, its fiscal crisis was, and continues to be, greatly exacerbated by ineffective regulation of the banking sector at a national level. As a small economy, Ireland will always be exposed to the economic shocks of larger nations, particularly the US and the UK. However, this is not to say that Ireland cannot mitigate the effects of future external economic crises and at least ensure that its fiscal house is in reasonable order.

**Some considerations on modern sovereign debt approaches – Liviu-Daniel Deceanu (21)**

This paper discusses national indebtedness and tells us that over the past number of years, economic analysis and discussion has progressed from an economic crisis to a sovereign debt crisis. It states
that the problems related to sovereign debt and sovereign default are not new. It happened in the past, and it will happen in the future it is claimed. The current discussion about sovereign debt started in the early 2010s with the problems in Greece. Shortly after Greece, it was found that the sovereign debt problem was much more widespread; with other countries, surprisingly many developed ones, being affected by massive indebtedness. This paper really helps provide a better understanding of sovereign debt and its features, along with a detailed assessment of sovereign debt sustainability.

2.2.2  Electronic databases relating to Ireland’s National Debt

The following sources have been uncovered as rich sources of secondary data relating to both quantitative and qualitative data along with theoretical material on the topic. Whilst these sites are by and large state funded, their reliability and credibility for accurate information is seen to be very high. Where possible, all quantitative and numerical data was verified by other independent sources.

http://www.ntma.ie/

The NTMA website contains the annual reports of the NTMA, including their Financial Statements and the most detailed analysis of Ireland’s debt, including maturity profiles, and interest amounts payable.

www.cso.ie (including the Government’s Financial Statistics section of this website)

The Irish Central Statistics Office is Ireland’s national statistical office and their mandate is “the collection, compilation, extraction and dissemination for statistical purposes of information relating to economic, social and general activities and conditions in the State”. The CSO is responsible for coordinating the official statistics of other public authorities and for developing the statistical potential of administrative records. The CSO is the official source for all statistics in relations to Ireland’s debt. Overleaf is a detailed presentation of the current Irish debt and how it is calculated. At the end of 2015, the debt level was 78.7%.

www.esri.ie (including their Quarterly Economic Commentary reports)

The ESRI is a largely state-funded body that produces research that contributes to the understanding of economic and social change with the aim of informing public policymaking and civil society in Ireland.

www.finance.gov.ie

The Irish Dept. of Finance website includes the financial details of Ireland’s national debt and Annual budgets.

http://ec.europa.eu/eurostat

Eurostat is the statistical office of the EU and its task is to provide the EU with statistics at European level that enable comparisons between countries and regions. It’s worth noting that due to the reporting requirements the CSO must fulfil, that the Eurostat website data will invariably replicate that of the CSO and vice versa. (22).
### Ireland’s National Debt

#### General Government Net Worth, Gross and Net Debt

<table>
<thead>
<tr>
<th>Description</th>
<th>2012 Q4</th>
<th>2013 Q4</th>
<th>2014 Q4</th>
<th>2015 Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Net worth at market value, excluding pension liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>equals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-financial assets at market value</td>
<td>-49,483</td>
<td>-56,116</td>
<td>-58,381</td>
<td>-54,825</td>
</tr>
<tr>
<td>plus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial net worth at market value, excluding pension liabilities</td>
<td>-136,778</td>
<td>-145,200</td>
<td>-153,081</td>
<td>-149,961</td>
</tr>
<tr>
<td>equals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial assets at market value</td>
<td>93,068</td>
<td>94,813</td>
<td>84,442</td>
<td>85,117</td>
</tr>
<tr>
<td>EDP debt instruments</td>
<td>58,718</td>
<td>54,597</td>
<td>36,738</td>
<td>29,902</td>
</tr>
<tr>
<td>Equity and Investment Fund Shares</td>
<td>25,098</td>
<td>30,795</td>
<td>38,445</td>
<td>45,618</td>
</tr>
<tr>
<td>Other financial assets</td>
<td>9,252</td>
<td>9,421</td>
<td>9,259</td>
<td>9,597</td>
</tr>
<tr>
<td>less</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liabilities at market value</td>
<td>229,846</td>
<td>240,013</td>
<td>237,523</td>
<td>235,078</td>
</tr>
<tr>
<td>EDP debt instruments</td>
<td>218,596</td>
<td>231,503</td>
<td>228,847</td>
<td>225,547</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>11,250</td>
<td>8,510</td>
<td>8,676</td>
<td>9,531</td>
</tr>
<tr>
<td><strong>Memo: Estimated pension liabilities of government</strong></td>
<td>98,000</td>
<td>98,000</td>
<td>98,000</td>
<td>98,000</td>
</tr>
<tr>
<td><strong>Memo: Net worth, including pension liabilities</strong></td>
<td>-147,483</td>
<td>-154,116</td>
<td>-156,381</td>
<td>-152,825</td>
</tr>
<tr>
<td><strong>Contingent liabilities</strong></td>
<td>119,131</td>
<td>59,723</td>
<td>29,219</td>
<td>16,678</td>
</tr>
<tr>
<td><strong>Memo: Net worth, including pension liabilities and contingent liabilities</strong></td>
<td>-266,613</td>
<td>-213,838</td>
<td>-185,600</td>
<td>-169,503</td>
</tr>
</tbody>
</table>

#### General Government net worth

<table>
<thead>
<tr>
<th>Description</th>
<th>2012 Q4</th>
<th>2013 Q4</th>
<th>2014 Q4</th>
<th>2015 Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Opening net worth</strong></td>
<td>-43,976</td>
<td>-58,766</td>
<td>-64,167</td>
<td>-58,636</td>
</tr>
<tr>
<td><strong>Change in net worth due to transactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net acquisition of non-financial assets</td>
<td>-2,554</td>
<td>-1,760</td>
<td>-470</td>
<td>-1,026</td>
</tr>
<tr>
<td>Net lending/net borrowing</td>
<td>-2,558</td>
<td>-2,079</td>
<td>-738</td>
<td>-1,749</td>
</tr>
<tr>
<td><strong>Change in net worth due to other economic flows</strong></td>
<td>-2,953</td>
<td>4,410</td>
<td>6,256</td>
<td>4,837</td>
</tr>
<tr>
<td>Other changes in non-financial assets</td>
<td>436</td>
<td>634</td>
<td>1,270</td>
<td>0</td>
</tr>
<tr>
<td>Other changes in financial assets</td>
<td>376</td>
<td>7,731</td>
<td>5,732</td>
<td>5,482</td>
</tr>
<tr>
<td>Other changes in liabilities</td>
<td>-3,765</td>
<td>-3,955</td>
<td>-746</td>
<td>-645</td>
</tr>
<tr>
<td><strong>Closing net worth</strong></td>
<td>-49,483</td>
<td>-56,116</td>
<td>-58,381</td>
<td>-54,825</td>
</tr>
</tbody>
</table>

#### General Government Debt (GGDebt)

<table>
<thead>
<tr>
<th>Description</th>
<th>2012 Q4</th>
<th>2013 Q4</th>
<th>2014 Q4</th>
<th>2015 Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt instrument liabilities at market value</td>
<td>218,596</td>
<td>231,503</td>
<td>228,847</td>
<td>225,547</td>
</tr>
<tr>
<td>+ Difference between EDP face value and market value</td>
<td>-8,610</td>
<td>-16,205</td>
<td>-25,552</td>
<td>-24,281</td>
</tr>
<tr>
<td><strong>Gross General Government Debt (EDP face value)</strong></td>
<td>209,986</td>
<td>215,298</td>
<td>203,295</td>
<td>201,266</td>
</tr>
<tr>
<td>less EDP debt instrument assets</td>
<td>-58,718</td>
<td>-54,597</td>
<td>-36,739</td>
<td>-29,901</td>
</tr>
<tr>
<td><strong>Net General Government Debt</strong></td>
<td>151,268</td>
<td>160,701</td>
<td>166,556</td>
<td>171,365</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>2012 Q4</th>
<th>2013 Q4</th>
<th>2014 Q4</th>
<th>2015 Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closing Net Worth (% of annualised GDP)</td>
<td>-28.2</td>
<td>-31.1</td>
<td>-30.2</td>
<td>-21.4</td>
</tr>
<tr>
<td>Gross General Government Debt (% of annualised GDP)</td>
<td>119.5</td>
<td>119.5</td>
<td>105.2</td>
<td>78.7</td>
</tr>
<tr>
<td><strong>Net General Government Debt (% of annualised GDP)</strong></td>
<td>86.1</td>
<td>89.2</td>
<td>86.2</td>
<td>67.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>2012 Q4</th>
<th>2013 Q4</th>
<th>2014 Q4</th>
<th>2015 Q4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annualised GDP</td>
<td>175,754</td>
<td>180,209</td>
<td>193,159</td>
<td>255,815</td>
</tr>
</tbody>
</table>
Chapter 3  Research Methodology

3.1 Research methodology introduction

In academia, research methodology has been defined as "the collection of methods or rules by which a particular piece of research is undertaken" and the "principles, theories and values that underpin a particular approach to research" Somekh and Lewin (23). The most common definitions suggest that methodology is the overall approach to research linked to the paradigm or theoretical framework while the method refers to systematic modes, procedures or tools used for collection and analysis of data (Mackenzie and Knipe) (24).

The intention of this research dissertation is to analyse Ireland’s national debt and assess how sustainable it is for Ireland to repay its debt. In times of strong economic performance, the debt will appear manageable; however in distressed economic times the debt will become problematic and potentially unsustainable. By discussing this aspect of Ireland’s economy with some of the leading experts in a number of different sectors, this research will look to present a reasoned case as to how sustainable the debt is and also the exact amounts involved. This section of the study details the methodology behind the research including the research design, data collection and analysis methods, as well as the associated dilemmas that research of this nature can encounter.

3.2 Research Questions

Saunders et al (25) describe the research questions as the key driver behind the research process. Therefore it is vital that the research questions are clearly defined in accordance with the objectives of the research. For the purposes of this research the following questions have been developed to anchor what Ireland’s debt is and how sustainable it is now and in the future:

1) What is national debt / how much are Ireland’s debt / who does Ireland owe / what are the annual servicing costs?
   o An examination of these issues along with a concise overview and background will be presented

2) How sustainable is it for Ireland to pay and keep paying its national debt?
   o A series of calculations will show just how much interest and debt is due for repayment and how much of Ireland’s income is required to just service the debt

3) Are there amounts that can be written off?
   o Since the recapitalization of the Irish banks, attempts have been made to write off some of that debt. The options and strategies the government has in managing its debt will be analysed

4) What’s involved in restructuring debts, and what are the costs and savings?
   o Data and calculations will be shown to demonstrate the amounts involved.
3.3 Proposed Methodology

Using the research onion, as presented below in Figure 1, this will map and develop the research methodology for this study. This will include selecting a suitable research approach, relevant strategies and philosophies as well as the techniques involved in the collection and analysis of the data.

Figure 1: The research ‘onion’

Source: Saunders et al (2007, p.102)

3.4 Research Philosophy

The first layer of the onion deals with the philosophical approach to conducting research. The research philosophy according to Saunders et al, (28) “contains important assumptions, these assumptions will underpin your research strategy and the methods you choose as part of the strategy.”
Developing a philosophical perspective requires that the researcher make several core assumptions concerning two dimensions: the nature of society and the nature of science (Burrell and Morgan) (29). Society is viewed as unified and cohesive, whereas the sociology of radical change views society as in constant conflict as humans struggle to free themselves from the domination of societal structures. The other dimension, science, involves either a subjective or an objective approach to research, and these two major philosophical approaches are delineated by several core assumptions concerning ontology (reality), epistemology (knowledge), human nature (pre-determined or not), and methodology (Holden and Lynch) (30).

Ontology is concerned with the nature of reality and assumptions researchers have about the way the world operates and the commitment held to a particular view (Saunders et al) (31).

Epistemology is concerned with the study of knowledge and what we accept as being valid knowledge (Collis and Hussey) (32). An epistemological issue concerns the question of what is or should be regarded as acceptable knowledge in a discipline (Bryman) (33). According to Saunders et al, 2007 there are three epistemological approaches to research philosophy: Positivism, Realism and Interpretivism.

*Positivism*

The positivism approach is normally adopted by researchers that prefer to seek facts or causes of social or business phenomena using logical reasoning such as precision and objectivity as methods of investigation.

The positivism approach is normally adopted by a researcher that prefers to work with an observable social reality in order to come up with law-like generalizations similar to those produced by the physical and natural scientists (Remenyi) (34), and in this tradition, the researcher becomes an objective analyst, coolly making detached interpretations about those data that have been collected in an apparently value-free manner (Saunders et al). Furthermore, the emphasis is on a highly structured methodology to facilitate replication (Gill & Johnson) (35) and on quantifiable observations that lend themselves to statistical analysis (Saunders et al). The assumption is that the researcher is independent of and neither affects nor is affected by the subject of the research (Remenyi).

*Realism*

Realism states that real objects exist independent of human consciousness, but that knowledge is socially created (Saunders et al, 2007).

According to Blaikie (36), whilst realism is concerned with what kinds of things there are, and how these things behave, it accepts that reality may exist in spite of science or observation, and so there is validity in recognising realities that are simply claimed to exist or act, whether proven or not. Similar to interpretive, realism distinguishes that natural and social sciences are different.
From an organisational perspective, Hatch and Cunliffe (37) describe the realist researcher as enquiring into the mechanisms and structures that underlie institutional forms and practices, how these emerge over time, how they might empower and constrain social actors, and how such forms may be critiqued and changed. Realists take the view that researching from different angles and at multiple levels will all contribute to understanding since reality can exist on multiple levels (Chia) (38).

*Interpretivism*

There have been many criticisms on positivism which define “laws” in the same way as physical sciences in the complex social world of business and management. This led many researchers to argue for an interpretivistic approach. Interpretivist studies are characterized by the prioritization of subjective meanings and social-political as well as symbolic action in the process through which humans construct and reconstruct their reality. Interpretivist approach focuses on diverse cultures, socioeconomic conditions, and the experiences and perceptions of the actors involved (Avgerou and Walsham) (39), which emphasises on conducting research among people rather than objects.

For the purpose of this study which involves gathering, collating and measuring expert opinions on the subject matter, the researcher adapts an Interpretative philosophy. The research involves a level of social world interpretation of experiences and perceptions around the national debt subject area. Therefore this philosophy is suitable to the study as “Interpretivism is an epistemology that advocates that it is necessary for the researcher to understand differences between humans in their role as social actors.” (Saunders et al, 2007)

In terms of research ontology (nature of reality) the research will involve a subjective approach to the study because the research will involve analysis of the debt, how it built up over time and attitudes of those manages the debt. The role of the researcher according to Saunders et al (2007 p.109) is to, “seek to understand the subjective reality of the customers in order to be able to make sense of and understand their motives, actions and intentions in a way that is meaningful”.

3.5 Research Approach

The next element or layer of the onion is the type of approach the study will utilize. There are two types of research approaches namely inductive and deductive research.

*Inductive approach*

Saunders et al (2007) state that inductive approach is undertaken in order to lead to the development of a theory. This theory is arrived at as a result of the observations of empirical data. Qualitative research strategy is regarded as inductive. According to Rocco et al. (40), inductive logic and
qualitative methods are generally employed with the goal of understanding a particular phenomenon of interest within its social context.

**Deductive approach**

Bryman (2004) states that a deductive approach is the relationship between theory and research in which the latter is conducted with reference to hypotheses and ideas inferred from the former. Quantitative research strategy is regarded as inductive. The theory used in the research becomes a framework for the whole study, and an organizing model for the research questions or hypotheses and a procedure for data collection. (Creswell) (41)

Researchers adopting the inductive approach focus on understanding the meanings and interpretations of ‘social actors’ (finance and banking experts) and to understand their world from their point of view. It is important to understand the context and setting of these participants and to avoid unnecessary generalizations (Saunders et al, 2007). For the purpose of this study the approach favoured is the inductive approach.

Including what and how type questions, the focus of this study means the induction approach is more suitable for this case study analysis. Flexibility in building theories and a flexible structure is another characteristic of the study that aligns itself more favourably with an inductive approach. Saunders et al (2007), describe the inductive approach as an emphasis on “gaining an understanding of the meanings humans attach to events, a more flexible structure to permit changes of research emphasis as the research progresses”.

**3.6 Research Strategy**

The next level of the research onion is the research strategy. Saunders et al, (2003) describes the research strategy as a generic plan guiding the way for the researcher to answer the research questions set out above. Each type of research strategy could be used for all three purposes: Exploratory, descriptive and explanatory (Yin) (42). According to Collis and Hussey (2003), the types of research strategy available are: cross sectional studies, experimental studies, longitudinal studies, surveys, action research, case studies, ethnography, grounded theory, hermeneutics, and participative enquiry. The claim that one research strategy is better than the other research strategy is a myth (Saunders et al, 2007).

Elements of the research strategy for the analysis and better understanding of Ireland’s national debt will effectively involve a case study of the sector and grounded theory strategies. According to Saunders et al (2007), “the case study strategy also has considerable ability to generate answers to the question ‘why?’ as well as the ‘what?’ and ‘how?’ questions. For this reason the case study strategy is most often used in explanatory and exploratory research.” With this study seeking to answer ‘why’ and ‘how’ questions on service quality, this is an appropriate strategy to employ.
Again due to the explanatory and exploratory nature of the topic, Grounded Theory is another strategy that can be implemented. Saunders et al (2007) “A grounded theory strategy is, according to Goulding (43), particularly helpful for research to predict and explain behaviour, the emphasis being upon developing and building theory. As much of business and management is about people’s behaviours, for example consumers’ or employees’, a grounded theory strategy can be used to explore a wide range of business and management issues. In grounded theory, data collection starts without the formation of an initial theoretical framework. Theory is developed from data generated by a series of observations”.

3.7 Research Choice

The next element or layer of the onion is research choices which refer to the methods used for quantitative and qualitative research.

Qualitative research

Qualitative research is one in which the researcher usually makes knowledge claims based on constructivist perspectives (Creswell, 2003). Strategies used in this research design involve participative inquiry, phenomenologies, ethnographies, grounded theory studies, or case studies. Qualitative research normally emphasizes words rather than quantification in the collection and analysis of data (Bryman, 2004).

Quantitative research

Quantitative research is one in which the researcher primarily uses post positivist claims for developing knowledge for example; cause and effect thinking, reduction to specific variables and hypotheses and questions, use of measurements and observations, and the test of the theories (Creswell, 2003). Strategies normally used in this research design are experimental studies, surveys, and predetermined instruments used in data. In addition, Bryman (2004) states that quantitative research usually emphasizes quantification in the collection and analysis of data.

For the purpose of this paper, the research will adopt a qualitative case study type of research. Given the nature of the case study, the researcher believes a single data collection technique, in other words a mono method is to be employed for the data collection. A number of in-depth interviews will be carried out with industry experts as a mono-method to seek qualitative information from those participants.

“In-depth interviews are a useful qualitative data collection technique that can be used for a variety of purposes, including needs assessment, program refinement, issue identification, and strategic planning. In-depth interviews are most appropriate for situations in which you want to ask open-ended questions that elicit depth of information from relatively few people (as opposed to surveys, which tend to be more quantitative and are conducted with larger numbers of people)” Guion L, Diehl D, and
McDonald D, (44). Therefore the structure of the in-depth interview will be semi-structured (allowing room for follow up questions where suitable) with a programme of questions that seek depth of information from respondents. Depth is required from the responses so the researcher can fully evaluate an exploratory study of Ireland’s national debt and its many nuances. The interviews will be recorded to allow the researcher to adequately scrutinise and evaluate the data.

Seven in-depth interviews were carried out between June and July 2016 with two senior staff from the NTMA (an economist and a risk expert), one CBI official, one CSO official, one Dept. of Finance official and two academic experts. Further details on the background and contributions of these participants are presented in Chapter 4.

3.8 Time Horizon

The next layer of the research onion refers to the time horizon of the research. There are two types of time horizons, cross-sectional studies and longitudinal studies. Longitudinal research involves study over longer periods of time and is typically involved in measuring change during this time period which is not suited to projects with short-term time restrictions whereas cross-sectional studies are noted as snapshots of a particular phenomenon at a particular time (Saunders et al, 2007).

Due to time limitations on this research, the study is cross-sectional. A cross-sectional study engages the collection of data on more than one case at one specific time in order to collect quantitative or quantifiable data when more than one variable is considered (Bryman and Bell) (45). Therefore the investigation into the national debt is a panoramic view of where the subject matter is today, how has the current situation come about and where the national debt may go in the future depending on economic events. Similarly described by Saunders et al (2007) as “the study of a particular phenomenon (or phenomena) at a particular time.”

Data Collection Method

As the research topic is investigative and exploratory in nature (investigating opinions and attitudes to the debt and how it could be managed), the research method is qualitative. Also as the research techniques used are in some instances based on attitudes and expert opinion, coupled with quantitative research. “Qualitative is used predominantly as a synonym for any data collection technique (such as an interview) or data analysis procedure (such as categorising data) that generates or uses non-numerical data.” Saunders, Lewis, and Thornhill (2007)
Therefore as in-depth interviews have been selected as the primary data collection method across the Irish national debt area, the technique collates qualitative data. After the researcher’s interpretation of this qualitative data on service quality, the researcher then develops theories and opinion relating to the topic, and where relevant backed with quantitative or numerical examples.

Where appropriate the researcher makes use of existing sources of data that are publicly available, also known as secondary sources of data. Secondary sources of data collection are used in the form of company and industry specific organisational websites (internal secondary data), as well as any previous and relevant research papers or journal articles (external secondary data).

3.9 Sampling Selection

Sampling and selection are principles and procedures used to identify, choose, and gain access to relevant data sources. A sample is “a smaller, but hopefully representative collection of units from a population used to determine truths about that population” (Field) (46). There are two types of sampling techniques: probability or representative sampling and non-probability or judgmental sampling (Saunders et al, 2007).

Non-probability sampling is used for this research into Ireland’s national debt. In light of the numerous parties that are involved in the debt it is would not be practical or barely possible to interview them all, considering the time and budgetary constraints of this dissertation. None the less, the participants selected were not selected at random and were selected as the leading expert available from their company.

“Non-probability sampling, or non-random sampling provides a range of alternative techniques to select samples based on your subjective judgement. In the exploratory stages of some research projects, a non-probability sample may be the most practical.” (Saunders et al, 2007)
Therefore suitable selective samples are chosen within the overall national debt sector as follows:

Two participants were selected from the NTMA because as the company managing the national debt, their input would arguably be the most important as they are the closest to the debt in terms of its management, characteristics (maturity profile, lender type), background and overall process of raising funds to meet pending debt redemptions. As Chief Economist and one of the most high profile officials within the NTMA, Rossa White can be considered as the foremost voice on Ireland’s debt. His colleague, and Chair of the Risk Committee, Mary Walsh was selected as someone who could speak on the risks that the company face in managing the debt and how these are managed. As the NTMA has responsibility for both the issuance and of new debt and the repayment of maturing debt, in addition to managing the interest rate and maturity profile of the debt, clearly managing risk is a key area of the business.

Similarly the participants selected from the CBI, Dept. of Finance and CSO were all highly visible officials and leaders in the debt and national accounts area. All participants were selected after wide ranging discussions within known contacts in the industry and from speaking and after conducting detailed research on the organisations in question.

The two academic participants in the research sample were selected based on discussions with the dissertation supervisors and from preliminary secondary research. For such a wide topic area, it was important to interview these academic experts who would be able to give a holistic and wide ranging overview of the topic, how events leading up to and throughout the financial crisis contributed to the debt and the impact future events might have on the debt.

Criticisms exist with convenience sampling based on the premise that there is bias in the samples which are not representative of the complete picture. “Although this technique is used widely, it is prone to bias and influences that are beyond your control, as the cases appear in the sample only because of the ease of obtaining them. (Saunders et al, 2007)

3.10 Research Ethics

Throughout this research project, ethical issues have been serious consideration. Given the short and long term importance and huge financial impact on the Irish population, it was essential that this research was sensitive to the inputs of the participants and their efforts to manage the debt in a professional manner. In some media reporting of the debt (crisis), there has been a tendency to use hyperbole and sensationalist headings, many of which would not tell the full and proper story of the debt.

“In the context of research, ethics refers to the appropriateness of your behaviour in relation to the rights of those who become the subject of your work, or are affected by it.” (Saunders et al, 2007) Therefore the purpose of the research being undertaken is clearly communicated to all participants.
before any research took place allowing them time for consideration. No research took place on any organisations without prior consent and understanding of the nature of the research. The organisations in question were also informed prior to the interview of the topics under research. This allowed organisations further deliberation time.

According to Gray (47) it is important that “we approach our subjects of study as participants in our research not as ‘objects’ to be investigated.” As well as detailed background and rationale for conducting this research were sent and participants were only selected when they were completely satisfied as to the purpose of their involvement. Anonymity of the participants was also made available as a feature of the data collection. During the course of the in-depth interviews, participants weren’t obliged or required to answer any questions which they deem unsuitable.

3.11 Research Limitations

By anticipating and trying to identify research limitations in advance, the researcher planned around these issues trying to minimise the effect of these limitations. The most common limitation a short term research project faces is time management. Research was conducted over a three month time frame in the summer of 2016.

In light of the researcher’s own full time work commitments and those of the research participants, interviews were all conducted either during or just after the working day. None the less and with the commitment and flexible time management of the participants, the primary research was efficiently planned and carried out.

In terms of research validity, qualitative analysis with subjective opinions can be prone to the bias of the researcher. According to Creswell (48), “Qualitative research often depends on the individual judgment of the researcher and is heavily dependent on the researcher’s interpretation (for example, in the analysis of interview data or case study information).” Due to the researchers experience within the banking and funds industry, vigilance with personal bias was maintained during the study.

Reliability of data/information is another potential limitation of the research. The sincerity of responses from interviews can be tainted due to corporate policies of the organisation and confidentiality constraints. Also with the researchers professional employment within banking and wider financial service sector means the confidentiality factor could be exacerbated as well as any personal bias. The researcher encouraged confidence in the participant and worked to make them feel at ease with the overall process.
Chapter 4  Data analysis and findings

4.1  Introduction to the primary research

In this chapter, the findings of the primary research carried out on Ireland’s national debt will be presented and discussed. These findings are a result of both qualitative and quantitative research.

As outlined in Chapter 3, a series of in-depth interviews were conducted with seven professionals with expert knowledge of Ireland’s national debt, both from industry and academia. Those interviewed all have an expert knowledge of the debt and wider Irish economy. From a research point of view, it was vital to engage with these participants to ensure a comprehensive mix of experts from different disciplines of the national debt. The rationale for interviews was to further build up the story and be able to understand how the debt came about, who is managing it, the financial amounts involved, the actions being taken on a daily basis, what is likely to happen in the coming years and the long term implications.

Whilst all interviews started with an introductory discussion, the following section details the key questions asked and responses provided.

4.2  Interview with Rossa White, Chief Economist, National Treasury Management Agency

- How is Ireland’s national debt managed?

RW: Ireland’s national debt has been managed by the NTMA since 1990; the NTMA being setup as an independent body, working at arm’s length to the Irish government on a commercial basis. Our role is to pay debts as they fall due or secure refinancing. The CEO of the NTMA reports to the Minister of Finance, otherwise the body operates as an independent, professional debt management company. One of the key responsibilities of the NTMA is to work closely with the debt markets and keep them briefed on any material changes in Ireland’s debt requirements. RW cited the importance of achieving and maintaining a smooth maturity profile to Ireland’s debt and not having large amounts of debt nearing immediate maturity.

- What are the biggest challenges facing Ireland with its debt?

RW stated the debt is now stable and meeting the annual interest payments is the biggest strain, amounting to €7bn per annum. There is a strong environment for raising debt, with very high demand for new Irish issuances. RW believes this is because Irish debt is now much more stable, owing to the recovery in Ireland’s public finances and because of the increased demand generated by QE. There is huge market uncertainty driving investors to safe haven assets – the “flight to safety”. Irish debt is now seen almost as safe as its German or Dutch equivalent, though paying a much higher yield.
In regards to inflation, RW outlined that a period of increased inflation would diminish our debt burden in that it would diminish the value of what we owe, though increased inflation would push up bond yields and therefore make issuing new debt more expensive. Inflation is always on our radar.

- Was an Irish default likely during the height of the recent crisis?

In a word, no!

The attitude of the Irish government was that Ireland would not be defaulting. The cost of servicing the national debt would still be much less than the long term costs and implications of defaulting. Defaulting would have sent very negative signals to the markets and the corporate world. RW was particularly frank on this aspect.

Defaulting would have had a very negative impact on the level of multi-national companies that operate here, especially US companies. For a country in default, many Corporate Treasurers would restrict their companies from operating in that jurisdiction. RW cited the problems that Argentina and Greece have had in raising debt, and the high interest rates they've had to pay for debt in recent times.

- And what about the bailout?

Successfully existing the bailout programme has greatly improved Ireland's FDI prospects. The bailout was actually very likely to be required once the true cost of Ireland's bank guarantee scheme became apparent, especially the amount needed for Anglo.

- What is the key debt risks facing Ireland in the short term?

RW states that amongst the risks that would impact Ireland is a global economic slowdown, most likely triggered by China, another drawn out sovereign debt crisis in Europe, starting with Greece and spreading to other larger nations (Italy, Spain), a US economic slowdown, a specific industry crisis such as a slowdown in IT or a global health crisis.

- Would a change in Government impact our debt management or debt sustainability?

No, realistically not. Such are the confines of the debt process and implications of breaking with the current financing rules. Breaking with these rules would jeopardise Ireland's standing in terms of raising new debt, the yield priced by the market and the credit ratings assigned by the agencies (S&P, Moody's and Fitch). When asked about a possible Sinn Fein led government, RW was quick to cite how quickly they distanced themselves from the SYRIZA rhetoric. Once the reality of the austerity and bailout terms required by Greece were in order to secure continued EU led funding – their appeal as a model vanished.
The Irish government has signalled its intention to liquidate some of its holding in AIB and BOI in 2017, and this could potentially bring in significant cashflows, but only if stability returns to the banking sector. According to Euro rules these funds cannot be used for domestic purposes and therefore should be used for paying down debt. A change in government would be very unlikely to result in a different plan in this area.

- What is your opinion regarding the impact and long term implications of quantitative easing?

RW stated that central banks have been drawn into a prolonged cycle of QE, contrary to their original aims. That said, not initiating QE would have left government debt levels and yields at sky high levels. Not undertaking such a course of action would have had devastating long term consequences. Without QE certain countries, even possibly Ireland would have been a lot closer to defaulting. RW isn’t overly concerned with national debt levels in the main Euro countries.

**4.3 Interview with Mary Walsh, Chair of the Risk Committee, National Treasury Management Agency**

- What are the key issues affecting Ireland’s national debt?

The main factor now is that budgetary deficits are getting smaller each year, so the need for new borrowing is falling. The improving government finances mean it’s easier to manage ongoing interest payments.

New and existing rules from the EU are making it more difficult for governments to run up large budget deficits. The Growth & Stability Pact rules are being better enforced, or at least focused upon again. The EU is requiring countries to set a maximum structural budget deficit of 0.5% by 2019 (that is the deficit not caused by the business cycle). MW stated that the strongest argument against the idea that a new government (say Sinn Fein) gaining power and coming in and “changing everything” is due to the power that EU authorities now have over Ireland.

- What are the key risks faced by the NTMA and by extension Ireland’s national debt

MW outlined the standard business risks that they face and that the NTMA, similar to those faced by any private company include market risk, credit risk, counterparty risk and economic risk.

- What alternatives are there to the existing debt financing methods?

Some alternative approaches would be to issue inflation linked bonds or promote more retail buying/investing in Irish debt. There could be more issues made in non-Euro currencies. The CBI is
managing the sale of the remaining (Anglo) notes to the NTMA. MW outlined how these notes are an asset in the books of the CBI and a liability in the books of the NTMA. The coupon rate that the CBI receives also requires the CBI to pay an annual dividend to the Government. This somewhat complicated and circular process could possibly be avoided if those notes were cancelled.

- Could Ireland raise more debt funds at home, like the Japanese and therefore minimise the strength and exposure we have to external debt holders?

Yes, Ireland could, but this is not a policy that Ireland has pursued and doesn’t appear to have any intention of. Only around 10% of Irish debt is held by the Irish retail market, and MW stated that countries like Belgium and Japan’s domestic markets have a much higher holding of their own national debt. MW outlined that different governments promote to their domestic investors the value of investing in their own national debt. However in Ireland, a domestic investor in Irish debt would have to pay PRSI and other taxes on the debt. MW outlined that if the Irish government promoted investing in Irish debt it would draw funds away from saving in the Irish banking system and perhaps more worryingly investing in the Irish economy.

4.4 Interview with Linda Kane, Economist, Fiscal Policy Division, Central Bank of Ireland

- What is the CBI’s function in the national debt? Is the bank under the government’s control?

The CBI is a self-funded group and manages a substantial asset portfolio – last year they made a profit of almost €2bn. The bank can hold up to 10% of profits to fund future business activity; the balance in theory goes to the exchequer. The CBI is an independent body and LK confirmed they while they have a working relationship with the government; a new government would have minimal power to dictate new terms of business to them.

- Does Ireland have too much debt?

We’re highly indebted as a country, but it is falling. Because we’re such a small open economy, and sharing the guidance from the OECD / IMF that suggests we should cap our debt at 40% whereas structurally more sound economies can support levels of 60%.

- As a regulator, are rules now being adhered to better since the era before the financial crisis began?

Yes, in certain areas, though it’s clear that breaches are still occurring. LK cited that Spain and Portugal breached the 3% max budget deficit ceiling in 2015 and only got minimal sanctions. LK lamented that this was due to the fact that numerous countries, including the core nations have
breached the Growth & Stability Pact in the past, so a precedent has been created. LK outlined that it would be very difficult, politically and otherwise to impose sanctions on countries with struggling economically. EU rules are being ramped up, Ireland actually has its own fiscal rules (they are enshrined in our Statutes)

- What has been the reaction to the recently revised GDP data for 2015?

This came as a complete surprise to the bank as well. The latest economic quarterly bulletin has just gone to the printers and when it’s released, all the estimates will be way off based on the new numbers. The spike in the 2015 GDP numbers is a function of newly adopted and enforced reporting rules that are now done in accordance to ESA 2010 – the new rules agreed in 2010 and only enacted and now been brought into practice.

- What are the most pressing factors impacting Ireland’s debt at present?

The bank estimates that Ireland’s GDP will be 0.4% to 0.7% lower as a result of Brexit. Parties will wish to have a smooth UK exit, though there may be a fear that other countries may follow if the exit was seen as too unduly easy on the UK! LK cited Hungary and the Czech Republic as possible next candidates. Ireland may gain business as a result of Brexit, after a period of uncertainty, though LK stated that London will continue to be a major financial centre.

- Anything to add on the bailout and the Anglo promissory notes?

Burning bond holders was never on the cards. In fact LK states that even when that might have been possible, such a plan would have generated little as only €5bn worth of bonds were left (once the
share prices in the Irish banks had all but zeroed out). If there was a downturn, even a significant downturn, and Ireland was struggling with refinancing its debt, it would have to go accept market rates!

Negotiating for some form on write down on funds used to recapitalise the banks is no longer been pursued.

4.5 Interview with Eoin Dorgan, Principal Officer, Department of Finance (former advisor to Finance Ministers Brian Lenihan and Michael Noonan)

- What is the Departments role in Ireland’s national debt?

The Department works with and relays the latest cash positions, revenues and funding requirements of the government to the NTMA – by formal monthly reporting, and also through updates between staff on a daily basis when relevant. The NTMA will query and need to know if government revenues or expenditures are accurate – the example Eoin gave was if it was reported that tax revenues were suddenly €500m ahead of target, the NTMA would need to know if that was due to a strong set of inflows or is there some underlying movement that would reverse in the coming months. Was there one-off settlements or prepayments? What are the true underlying trends in tax revenues and expenditures? Is there a Department that is going to materially run under or over budget? The example of what has happened in the HSE in recent years was discussed.

- What ways or events from the Dept. affect the debt?

Short term requirements for cash will have to be met either by the buffer of cash that the NTMA holds or short term demands may need them to go into the market. The NTMA will need both the figures from the DOF and their assessment as to future monthly trends. This was particularly important in times of volatile economic performances. The Dept. is required to provide constant updates so the NTMA doesn’t end up holding excessive levels cash because that wouldn’t earn much interest. There is a cost of carry issue now that interest rates are so low according to ED.

- Why are there often material differences between Department estimates on government finances and actual results?

ED stated that their estimates historically have been much more accurate in times of stable economic performance – whilst times of sharp rises or falls in GDP have led to significantly inaccurate forecasts. Ireland is a very open economy with lots of foreign investors and movements of fiscal balances. This affects government finances very quickly.

- Irish investors only hold a small portion of our debt – what is the government’s take on this?
This is how the national debt holdings have evolved over time. ED cites that in case of an economic downturn in Ireland, it would be far more difficult to refinance then from domestic investors, who would be less inclined to buy new issues. Diversification is always seen as the best approach. The Irish demographic profile doesn’t match that of Belgium or Japan where there’s an older more affluent investor base. The Irish personal tax structure doesn’t support investing in Irish debt.

- Has QE worked and should the ECB continue with its asset buying programme?

If countries didn’t have access to QE, many would now be in much worse shape! Inflation in the medium term is going to remain low – it won’t be a problem in the wider economy even in light of all the QE.

- What might Ireland do to reduce its debt?

The government is clearly committed to liquidating its bank holdings in the coming years. of most concern is the level of investment held in AIB. The government could raise more through increased taxation, however this isn’t something realistically they will pursue.

4.6 Interview with Cormac Lucey, Programme Director at the Irish Management Institute (and author of Plan B – How leaving the Euro can save Ireland) (49)

- Is Ireland’s debt sustainable?

Ireland’s debt is sustainable provided it remains at a level where national income can meet the interest repayments. The notional amount is still very high at over €200bn, though CL stated the key is that repayments can be met from current revenues. There is less austerity measures needed now.

- What may jeopardise our sustainability?

CL cited that there are many trigger events in the economy, many totally beyond Ireland’s control. Any one of these could have huge implications for our national debt. These events could include a fully blown debt crisis fuelled by the excessively high levels of debt in the market, not to mention the high levels of personal debt. CL is perhaps the most vocal on the issue of personal indebtedness levels. A collapse in the Chinese economy, an Italian banking crisis (which CL feels is much more likely than most think), a long and disruptive Brexit fallout or events that aren’t being thought of. Such is the immense level of interconnectedness in the global economy.

CL referred to the speed by which another global credit crisis could unfold – much like the ease by which an avalanche can start. The danger isn’t necessarily the amount of snow that has fallen today; it’s the vast build-up of snow already on the mountain from previous days.
Would a change in the Irish government make a difference? (Note, this question was particularly topical in early summer 2016, when the stability of the newly elected government was under constant scrutiny)

No, CL didn’t feel that a change in the Irish government would make any difference, even if Sinn Fein rose to prominence or even if they moved into a lead position. He stated how committed Ireland is to repaying its debt and how the political powers are tied into staying the current course. No party in opposition has put forward a credible agenda for renegotiating our debt and therefore wouldn’t have a mandate to push through a change agenda even if elected.

Could there be a restructuring of debts to ease the payment burdens? What practical actions could Ireland take to ease the debt levels?

CL stated there was no chance of a debt restructuring for the debts taken on by the Irish for recapitalising the banking system – that ship has long sailed! There is a widespread misconception about debt forgiveness and restructuring – debt restructuring is always sold as a deal to accommodate the borrower whereas in reality it’s initiated by the lender in order to secure continued payment of interest and to shore up getting the principle repaid.

Extending maturities is just kicking the can down the road and ultimately ends up costing the borrower more – it’s a way of improving the lender’s chances of getting their principle back. That’s the way restructuring is done today!

Could Ireland work a debt forgiveness case?

This would be very unlikely. CL stated that often larger lending powers don’t want to be seen to offer debt forgiveness because it would send mixed and potentially dangerous signals to other borrowers. Though there have been vast amounts of debt taken on, how would debt forgiveness work? Who would act as banker and who would make the first move? Debt forgiveness is always a tough sell because it means someone having to give away some of their own money!

4.7 Interview with name not disclosed (Manager, National Accounts-Government, Central Statistics Office)

Outline the function that the CSO performs in Ireland’s national debt

The CSO is the official calculator of Ireland’s national debt level.

Where does the data come from in order to generate these calculations?
The data comes from a number of sources – primarily from the NTMA in terms of debt issuances, holders of the debt, maturities of issuances, payment terms, issues cost, interest rates and current yields. The Dept. of Finance provide all the government income and expenditure data. They provide data (directly or indirectly) for other State bodies and local authorities. Data also comes from the CBI on their holdings of government bonds, including the bonds created from the old Anglo promissory notes, now amounting to over €25bn, which the CBI are slowly releasing/selling to the market.

- How is the debt calculated?

For official reporting purposes, the Irish national debt is bucketed into 3 categories – liabilities, bonds and loans/deposits, the required category classifications of Eurostat, as set out in the Maastricht Treaty. The assets held by the State, and the reason for the difference between the GGD (general government deficit) and the NGD (net government deficit) include items such as the small savings schemes, the National solidarity bonds and prize bonds. Those items count as a liability because the State owes that money back to the (predominately domestic) investors and savers.

- What amounts are not captured in the national debt?

ABC was keen to state that some large potential liabilities are not included in the national debt. Of most material significance is the deficit in the public sector pension fund. Other contingent liabilities are only booked when an actual cost becomes known. Revisions do occur and are caused by many reasons, including an entity (such as a local council or State body having to restate numbers in their financial statements). Timing differences are also a factor.

4.8 Interview with name not disclosed (Lecturer in Business and Management, Dublin based University)

For the meeting with ABC, it's worth pointing out that it took place a couple of days after the July announcement by the CSO of the finalized 2015 economic data. With our 2015 GDP growth confirmed at 26.3% and debt under now under 80%.

- What are the biggest challenges when looking at the level of Irish debt?

It's important when considering the debt level, that one questions the barometer against which you measure it. Measuring it against GNP or per capita would be more appropriate than against GDP. On a per capita basis, Ireland is still one of the highest indebted nations in the world, after Japan! ABC outlines the unique case of Japan where debt levels are even higher than Ireland. The debt % is now a very relative or even irrelevant level, considering how much movement there is in the GDP number.
Ireland’s National Debt

(Ireland’s GDP is €255bn). A big challenge for Ireland is the lack of control it has over the GDP number, resulting in our debt vs GDP being a very movable target.

Data from Bloomberg – retrieved 17Aug2016: The ever-growing debt of Japan

- Is the debt sustainable?

Sustainability is a matter of opinion and is largely subjective. If authorities or the markets suddenly thought we had an unsustainable debt, our yields could jump overnight. The structure of our economy is a major concern – our reliance on multi-national corporations and new industry is very high. These companies could easily pull out of Ireland, especially if (and when) our low corporation tax rate has to increase. Government finances could crumble and we’d be unsustainable very quickly.

- What steps could Ireland take to make managing its debt more sustainable?

ABC emphasises the importance and need for Ireland to have a much wider tax base – the USC was a powerful tool in that it raised €4bn annually, was reasonably equitable, and was simple and efficient to put in place. When thinking of how sustainable the debt is – perception is a huge factor. Studying and understanding the economy’s fundamentals can become a secondary concern. Liquidating our stake in the banks would help.

- What are your thoughts on the build-up of debt in Ireland and the wider global debt build-up?

The explosion in our debt was a consequence of the bank recapitalizations, having a very narrow tax base and the ballooning of the public sector expenditure. In the lead up to the bailout, Irish banks had
used up approximately 75% of the EU emergency short term bank liquidity funds. By the time the interbank markets froze up, which caused real alarm amongst EU leaders and hastened the EU to force Ireland into accepting a bailout. A real concern now and possibly the next big market event could be an Italian banking crisis. It’s also really disappointing that there still isn’t a banking resolution plan in place to deal with banking collapses. This is a problem for the EU, and considering that the financial crisis started 8 years ago, tells you how slow they are at acting.

- Long term, will QE lead to a build-up of inflation? Would that help Ireland?

There won’t be any rush to stop QE because doing so would put immediate pressure on (amongst other things) bank stocks and the ECB for one don’t want to exacerbate that problem.

In the real economy, at a micro level, there is a reluctance to take on more debt. QE hasn’t made it to the real economy. Inflation is still really low, and will remain so for the foreseeable future.

CMG stated that debt forgiveness has to be considered and put into action. How was QE ever going to work? Those that were indebted are always naturally more inclined to pay off existing debts, rather than take on more debt!

- Could debt forgiveness work – could Ireland benefit?

On debt forgiveness, ABC means for it to apply at the sovereign level, not necessarily at the individual level. It will and has to take place ultimately for debt levels to come back to workable levels, but getting a starting point is going to be the real task.
Chapter 5 Discussion

“I have long argued that paying down the national debt is beneficial for the economy: it keeps interest rates lower than they otherwise would be and frees savings to finance increases in the capital stock, thereby boosting productivity and real incomes”.

Alan Greenspan speech, April 27, 2001

5.1 Yes – the national debt is sustainable says Official Ireland

Throughout the primary research process a central recurring theme was the overwhelming confidence that our debt is sustainable. This confidence is a result of many things, cited by participants with very high levels of confidence. The key reasons why respondents felt the debt is sustainable are because:

- The economy is growing strongly again, with unemployment falling on a continual basis
- Our deficit levels in terms of annual budgets are falling back to a near zero deficit – Ireland generated a primary budget surplus in 2014. As a legacy requirement of the bailout programme, Ireland was required to get to within a maximum deficit of 3% of GDP by 2015. This was achieved after recording General Government deficits of -12.6% in 2011, -8.0% in 2012, -5.7% in 2013, -3.7% in 2014 and -1.8% in 2015 (50). The ultimate result of this is that we are almost back at a stage where our annual budgets are in balance.
- Unemployment is falling back to levels last seen before the start of the financial crisis. Respondents clearly correlate this with a strong economy and as cited by Walsh and Lucey, it put a reduced strain on government spending, whilst boosting tax revenue.
- Existing debts can be refinanced in the current market environment at very low rates. In 2016 the yields, that is the interest rates that the market demands to lend us money, have fallen to records lows of less than 0.4%. This compares to rates of almost 15% been priced at the height of the sovereign debt crisis in 2012.

Data from Bloomberg: Irish 10 year bond yields have fallen steady across 2015-2016
Quantitative easing has without doubt created a vast pool of liquidity in the debt market and volatile stock markets are pushing investors into bonds, even low yielding bonds. The NTMA were able to issue Ireland’s first ever 30year bond in 2015 and in March 2016 issued a 100 year bond, raising €100m at a rate of just 2.35% (51)

As cited by the CSO, a consequence of the growing influence and power being exerted by the EU, means Ireland will more and more be forced to keep any annual budget deficits to a max deficit of just 3% per annum (so dictates the Growth & Stability Pact). Rules on what can be borrowed for are becoming much more stringent.

5.2 Ireland is fully committed to repaying the national debt – no defaulting!

Even from before setting out to conduct the primary research, it was widely held that Ireland was very much committed to repaying and meeting its debt obligations. This was manifested through minimal objections from the politicians. Only a few smaller groups, such as Sinn Fein and some Independents objected to repaying, and arguably this was just being contrarian and for political gains. In the wider population, Irish people have largely accepted that the debt mountain, greatly added to by recapitalising the banks is something we’ll just have to repay.

This commitment to repaying and not defaulting was strongly supported by White, Walsh and Dorgan. They emphasized the damage of defaulting, including driving away multinational corporations, the loss of business to our exporters, the immediate difficulty we would face financing our ongoing budget
deficit and the impact such defaults have had in other developed economies – notably Argentina. White stated that funding would have become an immediate problem if a default was considered and that Ireland would have had to balance its budget almost immediately.

Lucey was one advocate for defaulting or at least considering a partial default, certainly on the ex-Anglo promissory notes. These were the IOU’s the government issued to Anglo in 2010 to keep it afloat – which have now been turned into Government bonds and held by the CBI.

Walsh was particularly vocal on the destabilizing impact, for both Ireland’s domestic and in particular internationally focused companies.

5.3 How sustainable is Ireland’s debt?

In their 2015 Article IV Consultation report on Ireland, the IMF (12) carried out a series of scenario calculations looking at the sustainability of Ireland’s national debt.
The key assumptions taken by the IMF is that Ireland's economy is set to grow strongly, that inflation will remain very low and that there will be a primary (budget) balance over the period to 2020 (bottom left graph). However a fall in economic growth would immediately impact debt levels. The key findings from the IMF were:

- **Growth shock.** If projected real GDP growth rates for 2015–16 are lowered by 0.5 standard deviations (implying annual growth about 2% lower at 1% in 2016 and 0.7% in 2017), the debt-to-GDP ratio peaks at 112% in 2017 (compared with 104% under the baseline) before declining

- **Interest rate shock.** In the medium term, Ireland is shielded from a rise in interest rates by its high level of fixed rate borrowings and by relatively low financing needs in the coming years. For example, a 200 basis point interest rate increase on new borrowing affects the debt trajectory only marginally

- **Macro-fiscal shock.** If slower growth in 2016–17 were compounded by a primary balance shock and by an increase in interest rates on new borrowing by 2%, the debt ratio rises to 113% of GDP in 2017 and falls to 103% by 2020. In this scenario, gross financing needs increase by 2.1% of GDP on average over the medium term, reaching 15% in 2020.

### 5.4 Perceived ability to repay trumps actual ability to repay

As discussed throughout this work, quantifying Ireland’s level of national debt is a function of knowing how much money is owed and what our GDP is. Some countries have higher debts than others and yet there is a completely different level of concern raised about them. In Ireland’s case, at the height of our debt crisis, there was real concern of an Irish default and ultimately Ireland was forced into a bailout programme. Whilst this was predominantly a liquidity crisis, at the same time other countries had just as much debt, such as Italy, Spain and Belgium, not to mention Japan. Perhaps a crucial difference was the speed with which our debt had grown and the ownership profile of our debt.
According to the NTMA, our funding requirements are virtually secure for 2016, with a modest €6bn needed for 2017. In their view, there are literally no short-term worries. The following period does present Ireland with a much larger block of debt redemptions, with €13.1bn due for payment in 2018, €16.2bn in 2019 and €22bn in 2020. (52) This period will be a real test of Ireland’s pedigree in the sovereign debt markets. Some have questioned why Ireland doesn’t refinance more of its debts today, considering yields are so low. However the caveat with that idea is that in order to redeem / buy this debt back from investors, Ireland would have to pay a significant premium above par for it. The consensus from the NTMA is that an optimum balance is being reached between securing new cheaper debt and redeeming existing debt above par.

![Maturity profile chart](chart.png)

The chart above shows the maturity profile and pressure points for Ireland’s debt. Clearly 2016 and 2017 are largely funded at this point, though significant amounts of debt fall due for repayment in 2018-2020. It’s worth noting that the vast majority of the long dated debt, namely that maturing after 2040 is the old Anglo promissory notes, which the government was able to convert to Irish government bonds in 2013. (53)

The net takeaway from this maturity profile is that the market clearly sees Ireland as a credible borrower and hence we have been able to achieve a long dated and relatively smooth maturity profile.

As a word of caution, it was highlighted by Lucey and the CSO official, if market conditions change, borrowers can suddenly find it really difficult to find buyers for their debt. Demand for bonds may fall and suddenly yields increase. Quickly a vicious cycle can kick in, where a borrower struggles to refinance their debt, yields increase, which increases annual interest payments, which decreases a governments available funds and causes larger budget deficits. This in turn affects market confidence, ability to access long term funding and even credit ratings, which in itself causes yields to increase, thus making it harder again to refinance. And so on the cycle can continue.
This constant struggle to refinance debt and just stay ahead of events is a battle that Greece has been in for a number of years. In such scenarios, sustainability becomes a real challenge.

<table>
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<th>Short-term</th>
<th>Outlook / Trend</th>
<th>Date of Update</th>
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<td>A+</td>
<td>A-1</td>
<td>Stable Outlook</td>
<td>5 Jun 2015</td>
</tr>
<tr>
<td>Fitch Ratings</td>
<td>A</td>
<td>F1</td>
<td>Stable Outlook</td>
<td>5 Feb 2016</td>
</tr>
<tr>
<td>Moody’s</td>
<td>A3</td>
<td>P-2</td>
<td>Positive Outlook</td>
<td>14 May 2016</td>
</tr>
<tr>
<td>DBRS</td>
<td>A (high)</td>
<td>R-1 (middle)</td>
<td>Stable Trend</td>
<td>11 Mar 2016</td>
</tr>
<tr>
<td>R&amp;I</td>
<td>A-</td>
<td>a-1</td>
<td>Positive Outlook</td>
<td>21 Dec 2015</td>
</tr>
</tbody>
</table>

Historically, Ireland has always enjoyed a strong credit rating from all the debt rating agencies, (54) something that the government would credit to sound fiscal management, a commitment that debts will be honoured in addition to the standard selling points that Ireland possesses. For the record these are well rehearsed selling points including our membership of the EU, young highly educated labour force, English speaking, business friendly government, an open economy, low corruption levels, longstanding and strong relationships with industrial powers such as the US, UK, Asia and continental Europe and low corporate tax regime to name a few.

A final reason for the strong belief the international market has in Ireland’s ability to repay is the messages communicated by the NTMA. Internationally, the NTMA are held in very high regard and seen as a very professional and component body. Their ability to manage the debt has been as successful as their ability to avoid the negative association often levied against literally every other banking body since the onset of the financial crisis. Their core strength as outlines by Walsh has been their ability to manage the risks they face, namely risks in liquidity, market, counterparty credit and operational risk.

5.5 Ireland is a small open economy – globally dependent for performance

A key question that was asked throughout the research was why Ireland had so steadfastly stuck to not defaulting or attempting to renegotiate some of its debts. An argument proposed is that Ireland had to bailout out its banks, who themselves were just players in a much larger banking industry that had allowed a build-up of far too much credit and lending. This exuberant and reckless lending in some cases, ultimately led to the US sub-prime property crash, which sent shock waves throughout the wider credit and banking world. The result was a freezing of credit markets and this over lending to the property sector ultimately put Irish banks into real liquidity and solvency trouble. Clearly the Irish banks were reckless themselves.

As an open economy, heavily dependent on foreign direct investment and multinational corporations for a significant portion of our employment and growth, the argument is strongly put forward by
Dorgan and Kane that Ireland had no other option than to meet its debts. Defaulting would have sent such a negative shock waves throughout the business sector and set off actions that would have jeopardised the continued investment of many multinationals in Ireland. Many investors would have automatically had to redeem their investment from Ireland simply due to a default; such is the rigidity of some investor’s investment criteria. (55)

By being such an open economy means that Ireland can benefit quickly from positive developments in both the local and global market place. However the opposite is also true. The immediate and longer term impact of the June 2016 vote by the UK to leave the EU is still to be seen – a July 2016 report by the NTMA stated that their vote may initially push the UK into recession. For every 1% drop in the UK’s GDP, Ireland’s GDP could drop by 0.3 – 0.8%. (56)

Another dramatic piece of economic news to reach Ireland recently was the finalised GDP results for 2015. With the CSO being required to implement new asset classification rules from Eurostat, particularly in the area of contract manufacturing, aircraft leasing and the activity of large pharmaceutical and IT companies and their tax inversion deals, Ireland’s GDP for 2015 was up 26.3% (GNP was up 18.7%).
This revision upwards had numerous knock on effects on debt dynamics, such that the year-end debt to GDP was 78.7% (versus a previous estimate of 93.8%). Whist industries such as pharmaceuticals, IT and corporate finance make a significant impact on the real economy in terms of jobs and tax revenue, their impact on the GDP is now clearly much more fluid and subject to the impact of accounting standards.

In light of these new and unfamiliar debt metrics, the NTMA cited the need to look at some other more established/fundamental barometers of our debt (57).

- Debt to general government revenue was 285%
- Interest on our debt is 9.9% of revenues
- The average interest rate on the debt is 3.4%
- Ireland has an A credit rating from the three main credit rating agencies - as of May 2016
- Unemployment continues to fall – now at 7.8% in July 2016, compared to a Euro Area average of 10.6%
- Private sector debt is falling and household disposable income is rising

### How big is Ireland’s national debt – it depends!

At a high level, Ireland’s debt is €206.8bn as at the end of Q1 2016. However upon closer inspection, it is clear that there are a number of other ways of looking at the debt, beyond the simplistic nominal amount. Whilst the debt was €206.8bn at the end of Q1 2016, it accounted for 80.4% of GDP (Ireland’s GDP was €255.8bn). That percentage was a substantial drop on the 93.8% it was estimated to be prior to the substantial increase in Ireland’s 2015 economic performances, as revealed by the CSO in July 2016. On this basis, Ireland’s indebtedness compares favourably to the largest industrial nations in the world. See G20 National Debt Map in Appendices.

In terms of GNP, the debt was 99.4% (GNP was €202.6bn). This considerable gap between Ireland’s GDP and GNP is a function of the large number and value of multinational corporations based in Ireland, whose profits are typically repatriated. Needless the say, which ratio is the more accurate reflection of our indebtedness is a key discussion point.

One could also look at the level of debt per capita and also per those in employment. With a growing population, increasing from 4,588,252 to 4,757,976 (from census 2011 to 2016) (58), the debt stood at €43,453. Perhaps the strongest rationale for using this metric is that a growing population should make it more feasible for Ireland to meet its debts.

An alternative method is to look at the debt in relation to the level of employment, the rationale being that employment levels dictate to a large extent the level of tax revenues and government expenditure. Or to be more accurate, the higher the level of employment the better it is for the government in terms of tax generation and minimising social transfers. On the basis of 1,976,500 in employment in Q1 2016, this results in a debt of €101,847 per person.
5.7 Ireland still owes €206.8bn – debt falling, GDP increasing

As highlighted throughout this research, the actual nominal (or cash) value of the debt is not necessarily the most important element. As the economy grows, so goes the theory that the country should be able to manage a higher (nominal) debt burden. Alternative approaches to measuring the debt to the level of GDP would be:

5.7.1 Debt to GNP – in Ireland, more so than many other countries, the gap between GDP and GNP is significant (€255bn vs €194bn). The difference is made up of net factor flows, which are the net profits repatriated by multinationals and interest on the foreign component of the national debt. In Ireland’s case, GDP is significantly larger than GNP because of the large multinational presence here. Assessing Ireland’s debt level using GNP as the denominator would arguably be better as it would be measuring Irish debt to the “Irish” value of the economy.

5.7.2 Debt interest to government revenues – the rationale for using tax revenues is simply that Ireland would be essentially comparing how many times its tax revenues were as a multiple of the interest payments required.

5.7.3 Debt per capita or debt per population of tax payers – these measures would specify comparing the debt to Ireland’s growing population, and in particular that Ireland has one of the largest cohorts of graduates in the 25-34 year age group in Europe.

5.7.4 The debt-inflation-economic growth relationship – debt in a moderate inflation economy is less of a problem due to the reducing effect inflation has on the debt. Whilst the rate of economic growth is important, it’s not just a case of worrying about the debt when there’s a recession.
5.8 Quantitative easing aids funding debt – the world is awash from credit

Quantitative easing is a process where central banks create money by buying securities, such as government bonds, with electronic cash that did not exist before. The new money swells the size of bank reserves in the economy by the quantity of assets purchased, hence "quantitative" easing. Like lowering interest rates, QE is supposed to stimulate the economy by encouraging banks to make more loans. According to The Economist, QE in theory is a method of sparking lacklustre economies back to life, and reducing unemployment after a downturn and is considered a quicker alternative to inflation boosting. (59)

One of the consequences that will long out live the financial crisis is the debt that has been taken on board by sovereign countries. This debt has been enabled in large part by central bankers and orchestrated QE programmes. The first round of QE, post financial crisis was the $600bn worth of bonds the US started buying in November 2008, in the wake of Lehman Brother’s collapse. This example has been followed by most other central banks around the world and has facilitated extraordinary liquidity in the wider markets. Since then the US Federal Reserve has bought $3.7tn worth of bonds, the UK £375bn and the EU almost €3bn. (60)

Quantitative Easing: The theory

The long term implications of this process are considerable. What was meant as a short term boost to regenerate economic activity and allow governments to run larger than normal budget deficits! It has arguably only generated modest economic growth – proponents argue it has prevented a global depression. However it has caused interest rates and yields on most debt securities to reach record lows and of course governments have been able to build huge debts on their books. QE doesn’t necessarily create debt, but it does allow governments to arguably avoid acting with fiscal discipline.
The most pressing concern for Ireland is that the national debt increased from €40bn to over €215bn in 5 years and consigns Ireland to having to pay billions in interest each year. In the event of a future economic downturn, Ireland will have to contend with meeting its interest payments and also refinancing any debts it cannot pay off. In an economically stressed time in the future, the decision to take on so much debt in this era will come into sharp focus. This is a point which Lucey has spoken of at length and has reiterated. Whilst we may be able to finance our debts today, this may not always be the case.

These are some of the issues with QE, though some of them are unintended consequences.

5.9 Each new EU rule on fiscal policy reduces Ireland’s economic sovereignty

Though there was considerable resentment and disappointment in certain circles to Ireland being forced into the bailout programme, though it should be noted that it did give a number of very important benefits to Ireland.

- It forced the Irish government to deal with the reality that the budgetary and debt situation was in perilous shape. Running incredibly high budgetary deficits was not sustainable. Also the national debt was increasing at an alarming rate.
- The fact that Ireland was in a situation where it was being forced into a bailout programme was alarming, however that such a financing group was orchestrating the bailout did offer up a reassuring message to the global business and investment world that corrective action would be taken.
- Ireland’s political leaders, vilified at home were seen abroad as having a good understanding of the corrective actions that had to be made. This would have been important when dealing with bodies such as the IMF/ EU/ECB. This does tie back to the story that official Ireland was on a different page to the version often presented to the Irish public?
- Ireland was able to source funds from a number of different sources. The bailout programme provided for €67.5bn made up of €22.5bn from the IMF Extended Fund Facility, €22.5bn from the EU via the European Financial Stabilisation Mechanism (EFSM), €17.7bn from the European Financial Stability Facility (EFSF) and some smaller bilateral loans from the UK (€3.8bn), Sweden (€0.6bn) and Denmark (€0.4bn) (62)

5.10 Debt and interest repayments

One of the key findings in the research, and expanded upon in detail with Kane and Lucey in particular, is the ability to pay and meet debt repayments. They cite the importance of having a higher economic growth rate over interest rate growth. The empirical evidence here is that borrowers who can keep this relationship in their favour will be able to finance their debts for the foreseeable future.

As depicted below by the NTMA report (63), the equation of \( i-g \) (average interest rate on debt less
nominal GDP growth) is crucial. In the below graph, the positive news since 2014 is that Ireland once again has an economic growth rate that exceeds the interest burden (the shaded areas in the graph).

5.11 **Is this the debt, the whole debt and nothing but the debt?**

As part of the primary research process, the academic participant spoke at length about a few key topics away from the normal sequence of questions and answers. Specifically these covered a number of key concerns:

- The national debt isn’t just the amount reflected in the national accounts, the €206.8bn owed at the end of Q1 2016. There are other amounts that in reality Ireland is very much “on the hook” for. One of the largest of these is the enormous deficit in the public pensions system, currently estimated at anywhere between €25-75bn (64) and even as high as €110bn (65).
- Similarly any deficits in private pension schemes invariably fall back on the state in the form of pension holders not having enough funds to meet their living standards. Industry estimates show that over half of Irish workers don’t have a pension. When these people come to retirement, there will clearly be a demand to obtain the state pension.
- Due to the ultra-low government and corporate bond yields, which are a key income component of most pensions, this is only increasing the near crisis state that Irish public pensions are in. As the Sunday Business Post reported “falling bond yields inflate the
liabilities of pension funds as those future liabilities are calculated by discounting them to a present value using the long-term yield on high-quality corporate debt”. (66)

- Another potentially material liability of the State would be any amounts due as a result of underperforming Public Private Partnership (PPP) deals. This is where the government teams up with the private sector, usually to deliver a major capital project such as motorways, hospitals or schools. Whilst the private partner may look after the maintenance of the project or asset, often the government is held liable if that company cannot generate sufficient returns due to under performance in the economy. A recent example was the penalty payment the government was forced to pay for the Limerick bypass, due to insufficient volumes of traffic going through the tolls (67)

- In coming years, the cost to Ireland in meeting climate change costs, including the requirement to meet certain limits in carbon emissions could run into billions of Euros. This could be in the form of having to invest in new technology and infrastructure and replacing older systems. The costs could be in the form of penalties for producing too much carbon or even the cost of lost output from sectors such as agriculture, which is one of the highest producers of carbon.

There is a fiscal risk, according to the Dept. of Finance’s Stability Programme Update, associated with a legally binding EU Effort Sharing Decision on climate change covering the period of 2013-2020. Ireland will be obliged to achieve a 20% reduction in its Greenhouse gas emissions over this period. The Programme Update from the EPA states that Ireland will not achieve these reductions and the costs incurred could run into hundreds of millions each year in the purchase of carbon credits until these targets on emissions are met. (68) An EU-funded Climate Cost project report 2014 estimated the climate change cost to European countries at 4% of GDP, representing an amount of €8bn a year! (69)

- A final area that could give rise to future costs is the State’s contingent liabilities, namely NAMA and the Eligible Liabilities Guarantee (ELG) Scheme. We are told that Ireland’s exposure to these has reduced significantly in recent years as the assets held by NAMA have been reduced and likelihood of finding any surprise toxic assets has minimised. In terms of the ELGs, this was the infamous bank guarantee scheme (closed to new liabilities on 28 March 2013) that provided for a state guarantee on holdings of certain bonds/commercial paper and deposits in Irish banks up to €100,000. The NTMA state that the total amount under guarantee at the end of 2015 was €3.2bn.

**5.12 National debts are essentially never paid off!**

A recurring theme from both the literature and primary research is the notion that national debts are never actually paid off – they are just refinanced. Whilst I was aware of this and the idea that taking on debt, even long term debt to finance capital projects that will serve the economy for years, should
there not be more disquiet about saddling future generations with debt from today. There may be no way of avoiding a build-up of debt, such as periods of economic recession or the real need to invest in capital infrastructure, however the almost universal acceptance and indifference at passing on debt should at least be less acceptable.

Admittedly this view of national debt is somewhat contrary to Alexander Hamilton’s (the first US Secretary of the Treasury) famous quote that “a national debt, if it is not excessive, will be to us a national blessing”. (70) But even Hamilton would have been alarmed at the debt build up in the US over the past decade!

*Data from Bloomberg – retrieved 17Aug2016: US national debt (above), Germany (below)*
5.13 Making future generations to pay for today’s debt is accepted

During these interviews, it became evidently clear the widespread acceptance of taking on debt today and knowing that it will require future generations to pay it back. Whilst White and Dorgan acknowledged the exceptional events that unfolded with the onset of the finance crisis, they cited that taking on national debt was traditionally for capital projects. The fact that we now have to borrow to meet interest payments on previous debt is a consequence of borrowing in the first place. On this topic, the answer continued to be that had we not borrowed as heavily as we did, the Irish economy would have been in much worse shape and would have taken years to recover – it is clear that those in the inner circle of Ireland’s public finances believe it’s better to have future generations deal with debt in the belief that they will also be inheriting a more structurally developed economy.

As former US President Hubert Hoover once stated, “Blessed are the young, for they shall inherit the national debt”. (71)

Lucy also reiterated that it is a widely held belief that national debt is never actually paid back, it’s just rolled over. This again raises questions of fairness and whether the economy is being properly managed today.

5.14 What we need now is a sustained period of inflation!

One of the aims of quantitative easing is to drive more liquidity to the so-called high street and reinvigorate the domestic economies of Europe. The ECB has a target of bring inflation back to “below but close to 2%”. Eurozone inflation for the year to May 2016 was -0.1%. There is the notion that QE was undertaken to bring some stability to the sovereign debt markets, considering the huge levels of government debt that Eurozone countries had to take on as a result of the financial crisis. At this time, QE has not achieved its objectives. Inflation has been below the targeted level for over 3 years (since Q1 2013) and despite the various stimulus programmes that has been introduced, the estimates are that inflation in the Eurozone will be 0.1% in 2016, 1.3% in 2017 and 1.6% in 2018.

The reason that moderate inflation is good for an indebted country is that it reduces the value of the debt, thus making repayments easier and improving manageability. (72)

However as can be seen from the below data, at no point in Ireland’s recent past has there been any real inflation, the highest increases being in 2001 of just over 5%. And at a Eurozone level, inflation has been even less across the last 20 years. Perhaps alarmingly, inflation has continued to fall despite the waves of QE.
5.15 Ireland’s debt in years to come - what if the economy doesn’t grow?

Whilst there is widespread expert belief that Ireland’s economy will continue to grow in the coming years, it’s worth considering the impact on Ireland debt level if such growth doesn’t materialise. Based on the latest projections from the NTMA in terms of nominal debt, the official projections show that the nominal value of Ireland’s outstanding debt is actually set to grow (the green shaded area in below table). (73)

Against the background of a growing economy, at least in nominal terms, the NTMA projects the debt will drop to a level of just 72.6% by the end of 2021. This fall, a substantial and highly impressive one

Data from Bloomberg – retrieved 17Aug2016: Irish and Eurozone inflation
will only be achieved by improvements on one side of the debt level formula – the denominator. In the below table, the green shaded data is that currently being presented by the NTMA. The amber shaded data is a number of “what if” scenarios added by the completing some quick calculations.

What would the debt look like at the end of 2021 if there was no change in GDP over the period – which isn’t an inconceivable scenario! In such a case, Ireland’s debt would increase to over 101% - almost 30% higher than current projections.

In a more challenging economic scenario where GDP falls 1% each year, or a cumulative fall of 6.15% over the six years, the debt would rise up to 107.5%. And needless to say that if either of these two scenarios occurred, there would be a decrease in government revenues, coupled with an increased in social transfers. There would also inevitably be an increase in Ireland borrowing costs and government bonds investors would demand higher interest for refinancing the €64bn of debt that is due to be refinanced between now and the end of 2021.

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<th>€bn</th>
<th>Implied GDP growth</th>
<th>Calculated GDP (€bn)</th>
<th>Implied No GDP (€bn)</th>
<th>Implied -1% GDP (€bn)</th>
<th>Implied debt level</th>
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<td>88.0%</td>
<td>203.6</td>
<td>7.8%</td>
<td>231.4</td>
<td>214.6</td>
<td>94.9%</td>
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<td>81.0%</td>
<td>209.0</td>
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<td>258.0</td>
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<td>97.4%</td>
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Chapter 6 Conclusions and Recommendations

Based on the research undertaken, both quantitative and qualitative, the following section outlines the conclusions and recommendations of this dissertation.

✓ A country’s national debt is the total amount of borrowings the country has accumulated from both internal and external investors. It is a mixture of both short and long term borrowings and the interest payable is a mix of fixed and floating rates.

✓ Ireland’s national debt had fallen to €40bn or 24% of GDP by the height of the Celtic tiger era in 2007. This resulted in Ireland having one of the lowest debt levels in Europe and was a phenomenal turnaround from the late 1980’s when the debt was almost 130% and Ireland was on the brink of national bankruptcy. However, the onset of the financial crisis and the subsequent actions required to re-capitalise the Irish banks saw the debt balloon to over €215bn or 124% in 2013. At the height of our financial crisis, Ireland was in a perilous debt position.

✓ The troika led bailout that was initiated in November 2010 led to billions of Euro being made available to Ireland and prevented the country having to borrow in the market at a time when yields on Irish debt were up to 15%. Any debt refinancing at that time would have been extraordinarily expensive and unsustainable.

✓ The debt at the end of Q1 2016 was €206.8bn or 80.4% of GDP. As the economy has recovered and returned to growth, and aided by the improvement in the public finances, the debt level has stabilized and fallen. The impact of the new calculation method (ESA 2010) on the national accounts has had a huge one off impact by spiking GDP to €255bn, with the consequential and statistical fall in debt levels. An unfortunate consequence of this accounting issue is that public confidence in the national Accounts has been eroded in light of this new standard and even international experts question our numbers (Krugman’s “leprechaun economics” quote).

✓ Official Ireland is fully committed to repaying the national debt. It is evidently clear from talking to all officials in the debt field that Irish policy on debt is that defaulting was not and is not being considered. The feedback from the Dept. of Finance and the NTMA was that both groups felt that the government’s management at the height of the crisis was inappropriate. There shouldn’t have been a blanket guarantee issued – certainly not without at least input from their respective bodies and proper due diligence conducted on the bank’s assets and liabilities.
An extension of this theme is that the most significant and wide ranging decisions on a country's fiscal wellbeing get made by politicians, who are primarily concerned with short term implications. In a sector where the correctness of major decisions will only become apparent when the economic cycle corrects itself, it’s surely a problem that the decision makers are usually more focused on the short term. This is something that has hampered the management of virtually all economies and the EU in particular.

The feedback received from Dorgan and White is that the government should focus on getting the debt down to the IMF’s recommended threshold level of 60% of GDP, and getting fiscal budget balanced. These objectives should be pursued even if it takes more austerity. However such action is going to struggle to find a Minister for Finance or Taoiseach to support such politically unpopular initiatives. Politicians are often only too happy to trumpet prudence and sound fiscal management when in opposition, only to run a deficit when faced with the reality of managing the national finances. The results and consequences are inevitable. Budgets don’t balance and debts are taken on and refinanced for future generations to pay.

Taking on debt today for future generations to pay is widely accepted. Perhaps this was one of the most striking findings from the primary research. There is near universal acceptance for raising long term debt for issues that are short term in nature. With debt levels now at such elevated levels, there would be so little room for any new crisis or even modest downturn in the coming years. Admittedly Ireland has survived a major economic crisis, only by maxing out all it can borrow on international credit markets, wiping out all of the old National Pension Reserve, securing billions in bilateral loans and of course being forced into the troika bailout. Though debt repayments in the next two years are low, beyond that there are really significant amounts of debt to be refinanced (€64bn by the end of 2021). For that refinancing, Ireland will be at the mercy of the international debt markets.

Ireland’s debt is projected to remain relatively unchanged at just over €200bn for the coming years. When compared to GDP and GNP, the level of national debt is projected to fall significantly. This highlights the problem of comparing the debt to GDP, a measure that is very susceptible to change, especially as Ireland is a small open economy and GDP is influenced by many uncontrollable factors. When compared to GDP, there’s no wonder why the official verdict is that Ireland’s national debt is sustainable.

Ireland is a small open economy; its performance is highly correlated to the global economy. Tracing its transition to an open economy, from one heavily dependent on agriculture and manufacturing, Ireland today is a key location for global technology, pharmaceutical and
financial services companies. After Luxembourg, Ireland is the second most successful location for global FDI in Europe. Therefore the value of GDP will often be volatile.

✓ Ireland's economic performance has a high beta and this has huge implications for the country’s ability to finance the national debt. Even when looking at the projections for future growth (see above discussion on economic projections from the CBI and Dept. of Finance), whilst Ireland is tipped to see strong growth, the nominal debt is set to remain. It will not be a smooth linear future – growth and debt levels will see peaks and troughs in sync with the wipeshaw movements of the global economy. Within the Irish economy, the gap between urban and rural Ireland will continue to grow. The Irish economy will almost certainly see more crises in the future, though hopefully not anywhere near the scale encountered during the financial crisis. Ireland does not arguably have a mature stable economy!

![Ireland's Annual GDP](image)

*Ireland’s recent GDP; Any graph with such a spike will greatly diminish normal peaks/ troughs*

✓ The government bond buying programme and quantitative easing that has been undertaken by Central Banks around the world has made funding government debt much cheaper. This is a phenomenon that by conventional economic wisdom can’t last and will surely end with some form of crash. What started initially as a way of injecting liquidity into the banking system, with the aim of reigniting economic activity and staving off a sovereign debt crisis has progressed to the ECB moving into investing in corporate bonds.

✓ A key recommendation from the academic participants in the research was that debt forgiveness on a grand scale must be considered if the global debt system is to get back to be functioning properly. Central Bankers need to become less involved in the financial and debt markets.
✓ The amount of debt in the global financial system is arguably reaching critical levels – Lucey likened it to the conditions on a mountain after a heavy snow fall. Everyone knows there is a danger of an avalanche – the problem is no one knows where or what the trigger point may be. And whilst there may only be a small gradual increase in temperature, history tells us that after a heavy snow fall big avalanches do occur. Economic history tells us that in post-World War Germany and Austria, a vast amount of money was issued to repay war reparations. However the subsequent implication was that it caused hyperinflation.

✓ Ireland’s continued membership and access of EU markets is central to long term debt sustainability and fiscal well-being. Whilst the downside is a so called loss of economic sovereignty, the upside is that access is absolutely essential for Ireland’s open economic model. EU membership has a huge influence on the levels of FDI Ireland receives and is the main determinant of the low interest rates and access to debt finance that Ireland avails of.

✓ Each new rule from the EU on government fiscal management reduces Ireland’s economic sovereignty. The research meeting with the CSO official took place a month before the release of the dramatically improved GDP results. At that time of the meeting there was no suggestion that there would be a material difference from the previously released estimates. This event brings into focus a number of salient points.

Reporting standards continue to be rolled out and dictated by the EU, some of which highlight the difficulty of applying a one size fits all economic model. Whilst these new rules, including the European System of National and Regional Accounts (ESA) framework were agreed in 2010, they only came into effect in 2016. As discussed before, their immediate impact on Ireland’s economic performance couldn’t have been more dramatic. It has led to some potentially damaging descriptions being made of Ireland’s finances and the reasons why the national debt actually fell from 93.8% to 78.7% overnight. The 2008 Nobel Prize winning economist Paul Krugman described the phenomenon as “leprechaun economics” whilst Finance Minister, Michael Noonan scrambled and said “other indicators of national economic health” would have to be used. (74)

A key rule, created in the Maastricht Treaty in 1992 is the limits on debt and budget deficits. The Growth & Stability Pact dictates that governments should not run a deficit of more than 3% of GDP. Since the EMU came into effect, there have been a number of breaches of this rule. Arguably there is now increased attention being paid to this rule. This could be a case of stronger lending countries forcing austerity and fiscal discipline on weaker, higher indebted countries.
A key recommendation that arose from multiple participants was that in order to aid a sustainable debt future, Ireland needs to implement a much wider tax base. In the current system, the vast majority of tax revenue comes from income tax, VAT, excise duties and corporation tax (when the economy is healthy). The evidence shows that other revenue sources need to be developed and whilst they won’t match these core income sources, smaller income streams need to be created. Since the crisis, the Irish government has only introduced the draconian Universal Social Charge (which participants advocated keeping, despite it being sold as a temporary crisis measure) and the very unpopular Local Property Tax. In summary, more revenue streams need to be developed and where possible ones that are counter cyclical.

Examples of how the tax base could be widened include applying a levy on the banks, a financial transaction tax, a carbon or energy tax, increases in existing taxes, such as corporation tax, a tax on e-cigarettes, a sugar tax or altering / abolishing some existing tax breaks.

There is more damage than good to be achieved by introducing austerity programmes for indebted nations during a recession. As the cuts in public spending are made and the general aura of spending cuts feed through the economy, this has the effect of also reducing consumer spending and a near vicious cycle takes effect. With less public and private consumption occurring, the level of economic activity gets depressed and the situation deteriorates. For debt management, the level of saving generated from spending cuts is often far out weighted by the drop in revenues.

The No vote by the UK to leave the European Union ("Brexit") will have both short and long term implications on Ireland’s debt dynamic. In the short term, the CBI estimates a drop in Irish GDP growth of 0.3% to 0.7% for 2016. The continuing depreciation of GBP since the June 2016 vote is a big competitive disadvantage to Irish exporters. Uncertainty remains the buzz word beyond that. There should be no implications on Ireland’s bilateral loans with the UK (£3.5bn) as the amount is already hedged to Euro.

As a recommendation, and taking inspiration from the way that the NTMA has managed the national debt since been set up in 1990, there is a reasoned logic to suggest that politicians should be removed from the running of the national finances. Reasons to support this include the fact that arguably the worst decisions are made for purely political reasons. Without politicians deciding the budgets, there wouldn’t be spending splurges ahead of elections, spending wouldn’t be done to favour certain areas where Ministers live, certain groups in the population wouldn’t be favoured for increased payments and capital expenditure would be strategically planned. In a corporate structure, the leader would arguably be more long term focused, certainly beyond the next election.
Of course there would be concerns about democracy, helping the poorer in society, providing services to rural areas, spending on the sick or investing in young people – but none of these groups are that fantastically well treated under the current regime!

Central bankers need to begin the process of getting out of the QE process and unwinding the extraordinary level of debt they have created. The latest programme, announced by the ECB in February 2015, the Expanded Asset Purchase Programme (EAPP), is effectively where the Bank will buy €60bn of high grade corporate debt each month. “Aimed at fulfilling the ECB’s price stability mandate, the EAPP included a new Public Sector Purchase Programme (PSPP) in addition to its existing private sector asset purchase programmes, the asset-backed securities purchase programme (ABSPP) and the covered bond purchase programme (CBPP3)”. There is arguably no justification for the ECB to be buying corporate bonds!

The final recommendation centres on the ownership of government debt and the fact that almost €48bn of Ireland’s debt is held by the CBI. Whilst the CBI is an independent body, it is still a de facto arm of the government – there is an argument that this debt could be written off as it is an asset in one Account (CBI) and a liability in another (government).
Chapter 7  Personal Reflections

7.1  Introductory note

This concluding chapter is a personal reflection of my time preparing this dissertation and indeed the overall MBA programme. It has been a thoroughly enjoyable and challenging two years and has really helped me develop into a more rounded scholar. The course and this dissertation in particular have challenged me to get the best out of myself and to be more of a leader, to speak out and present my opinion on matters and to be much more confident in my abilities and beliefs. Of all that I have gained during this time, the increased belief in my own abilities and convictions has been the most significant.

From the start, I was eager and enthusiastic to get involved in class discussions and coursework, and make a contribution. This eagerness and enthusiasm remained as heightened throughout the course, which is a testament to how much I enjoyed the course and the quality of lecturers at Dublin Business School. I could not recommend this course any more highly. For future potential students, there is a lot to be said for spending time in the workplace and out of the academic world from between completing a primary degree and undertaking the MBA programme.

When it came to the primary research, I was sufficiently confident in my knowledge of the topic to be able to talk to the senior people in Ireland’s Department of Finance, National Treasury Management Agency, Central Bank of Ireland and the Central Statistics Office, in addition to really knowledgeable experts in academic world. As the project progressed, I felt more confident in terms of been able to talk to these experts and also to explain my dissertation and MBA. On a personal and professional level, I feel this has been the most beneficial course I’ve undertaken in terms of what I’ve achieved academically, personally, socially and psychologically.

7.2  Why choose Ireland’s national debt?

When deciding on the topic upon which I would write my dissertation, from the outset I wanted to work on a financial topic, and ideally in macro finance. After initially looking at topics such as Ireland’s economic performance since the financial crisis, financial products including hedging instruments and derivatives, Ireland’s urban v rural economy, developments in banking regulation an the corporate debt market, I finally came to the realization that Ireland’s national debt was where my greatest interest lay.

The main reason I choose Ireland’s national debt was my very keen interest in our national finances and how, especially around 2013 the alarm I felt when realizing how much we had to pay each year
just on interest costs. As a big fan of reading financial literature, including some classic corporate scandals (Enron, LTCM, and Bernie Madoff) I was particularly influenced by a number of great reads in the year or so before embarking on my MBA. These included Cormac Lucey’s Plan B (49), Larry McDonald’s “Lehman Brothers” (75), Alex Brummer’s “Bad banks” (76) and “What if Ireland defaults” by Lucey, Larkin & Gurdgiev. (77)

With so much news appearing in the financial and non-financial press on a daily basis it has proved to be a thoroughly excellent choice, and I feel my decision was correct. I’ve learned so much more about the topic by completing this dissertation.

7.3 What I have gained from my MBA studies

By completing this dissertation, it has required me to be a lot more independent in my studies and has forced me to take responsibility for what I want to get out of this work. For scheduling, in terms of tracking down participants to interview, arranging meetings and setting up meetings based on what I wanted to get from them based on the background of the participant was a very fulfilling challenge. This has really been of invaluable experience in terms of further developing my skills in planning, coordinating, managing, organising and strategically thinking about such a project.

On one specific aspect of the dissertation, that I believe has been the best learning experience – is the decision to choose a topic that required one to one interviews. Alternative approaches, such as issuing survey questionnaires would not have given me near the same personal interactions and experiences as having to plan real life interviews and conducting them in person. By having to select industry experts and converse with them and ask probing questions has required me to really know my topic area in advance. That said, I feel each interview added a new layer of knowledge to my understanding and has delivered more valuable information as the interviews progressed. It has been a real learning experience.

7.4 Reflections on the Learning experience

According to David Kolb (78), knowledge results from the combination of grasping experience and transforming it.

In his Learning Cycles model, Kolb uses a perpetual cycle with four steps: the concrete experience (CE), the experience-reflective observation (RO), the abstract conceptualization (AC) and the active experimentation (AE) to show the process of learning by experience. One can enter this cycle at every step as there is no required starting point. Then the four steps are followed as the learning experience is encountered.
The experiential learning cycle, David Kolb

The concrete experience represents the occasion when the participant is doing something and therefore experiencing a new situation. The reflective observation is reflecting on the experience from the previous step. The abstract conceptualisation draws conclusions from which new ideas might arise. With the active experimentation stage, the person is testing their new concepts.

All four steps are needed, according to Kolb in order to experience a perfect learning process. This theoretical model can be seen to perfectly occur in the dissertation writing process. Initially there is the real experience of seeing the country getting hit with the brunt of an economic crisis (jobs being lost, taxes increasing, salaries increasing, overall austerity), the visualization of seeing friends and former colleagues leave the country and how that impacts rural economies in particular, then forming an understanding as to what has happened and why. The final step is proposing ideas and investigating the true extent of the economic crisis and the resulting rise in the national debt.

7.5 Completing this MBA has been a life changing experience

During the course of this two year MBA, I feel I have learned a lot, and my approach to life and work has really improved as my learning has developed. By way of example, below are the results of two sittings of a very famous personality test that I completed at the start and end of the course - the Humanmetrics Jung Typology Test (79) The overall conclusion to be drawn from these test results is that my personality is now one of being less extroverted, and arguably more balanced with a better understanding of using intuition than just acting by sensing things.
My results from completing the Jung test in August 2016 (end of MBA)

ENTJ - Extraverted Intuitive Thinking Judging

Phrase: "I don't care to sit by the window on an airplane. If I can't control it, why look?"

ENTJs have a natural tendency to marshal and direct. This may be expressed with the charm and finesse of a world leader or with the insensitivity of a cult leader. The ENTJ requires little encouragement to make a plan. One ENTJ put it this way... "I make these little plans that really don't have any importance to anyone else, and then feel compelled to carry them out." While "compelled" may not describe ENTJs as a group, nevertheless the bent to plan creatively and to make those plans reality is a common theme for NJ types.

ENTJs are often "larger than life" in describing their projects or proposals. This ability may be expressed as salesmanship, story-telling facility or stand-up comedy. In combination with the natural propensity for filibuster, our hero can make it very difficult for the customer to decline.

TRADEMARK: -- "I'm really sorry you have to die." (I realize this is an overstatement. However, most Fs and other gentle souls usually chuckle knowingly at this description.)

ENTJs are decisive. They see what needs to be done, and frequently assign roles to their fellows. Few other types can equal their ability to remain resolute in conflict, sending the valiant (and often leading the charge) into the mouth of hell. When challenged, the ENTJ may by reflex become argumentative. Alternatively (s) he may unleash an icy gaze that serves notice: the ENTJ is not one to be trifled with.
(ENTJ stands for Extravert, Intuitive, Thinking, Judging and represents individual's preferences in four dimensions characterising personality type, according to Jung's and Briggs Myers' theories of personality type.)

My results from completing the Jung test in September 2014 (start of MBA)

ESTJ - Extraverted Sensing Thinking Judging

ESTJs thrive on order and continuity. Being extraverted, their focus involves organization of people, which translates into supervision. While ENTJs enjoy organizing and mobilizing people according to their own theories and tactically based agendas, ESTJs are content to enforce "the rules," often dictated by tradition or handed down from a higher authority.

ESTJs are joiners. They seek out like-minded companions in clubs, civic groups, churches and other service organizations. The need for belonging is woven into the fibre of SJs. The family likewise is a central focus for ESTJs, and attendance at such events as weddings, funerals and family reunions is obligatory.

Tradition is important to the ESTJ. Holidays, birthdays and other annual celebrations are remembered and observed often religiously by this type. The ESTJ is inclined to seek out his roots, to trace the family heritage back to honoured ancestors both for a sense of family respectability and for a sense of security and belonging.

Service, the tangible expression of responsibility, is another key focus for ESTJs. They love to provide and to receive good service. The ESTJ merchant who provides dependable service has done much to enhance his or her self-image.
ESTJs have an acute sense for orthodoxy. Much of their evaluation of persons and activities reflects their strong sense of what is "normal" and what isn't. ESTJ humour is frequently centred around something or someone being off centre or behaving abnormally.

ESTJs promote the work ethic. Power, position and prestige should be worked for and earned. Laziness is rarely viewed with ambivalence or benevolence by this type.

7.6 Next steps

Whilst it's inevitable that most people say they'll never study again after they complete a major course, I won't say that now. At present I don't have any further studies in mind. The furthest I’d go at this stage is to say continual learning is really essential today in the Irish workplace, especially in the banking and financial services sector. As a CIMA accountant, I'm required to stay up to date with new accounting standards and manage my professional learning and development, so I'm going to continue meeting those requirements.

I’d certainly be open to working in the area of the national debt, be it with the NTMA or a similar function. In any case, the benefits I have gained from completing this dissertation and MBA will really stand to me in the future in terms of how I think, plan, organise and manage my approach to life and work.
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Appendices

So how does Ireland’s national debt compare to the rest of the world? Or at least the G20 nations – as usual red is not good! Not surprisingly, Ireland is in red on this map.
The above graph shows the yields (the interest rates) that investors pricing for lending their money, on the benchmark instrument that Governments use for raising money - the 10 year bond. Yields have fallen dramatically in recent years, spurred on by waves of quantitative easing and a flight to safety.
Whilst not part of the national debt, the above graphs give a sense of micro economic indebtedness in Ireland. The graph on the left tells us that Ireland’s corporates have been reducing their debt burden in recent years. Irish households are likewise reducing their debt, though the alarming rates of decrease are really only because the reduction is coming from such a high level in 2008-2009.

Above: Irish household’s net worth is increasing – the key here being that will boost economic activity and growth. Interest rates continue to fall, for both government and private borrowing.
Above: the point to note on these graphs is an important commentary on QE, which itself has impacted the national debt story in huge way. After any economic downturn, the natural reaction is to reduce or limit debt. This was highlighted in a number of interviews. Therefore and until the economic picture improves, can QE really work as intended – that is to increase liquidity in the real economy?

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<tr>
<th>% Export To Excel</th>
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<tr>
<td></td>
<td>Annual GDP (BLN USD)</td>
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<tr>
<td>11) United States</td>
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<td>12) Brazil</td>
<td>1,774.73</td>
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<tr>
<td>13) Canada</td>
<td>1,550.54</td>
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<tr>
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<tr>
<td>15) Argentina</td>
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<tr>
<td>22) Germany</td>
<td>3,355.77</td>
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<tr>
<td>23) United Kingdom</td>
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<tr>
<td>24) France</td>
<td>2,421.68</td>
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<tr>
<td>25) Italy</td>
<td>1,814.76</td>
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<tr>
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<td><strong>4) World</strong></td>
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The above screens show national data for GDP (nominal), GDP growth, budgetary surplus/deficit, inflation and unemployment. The stand out numbers in these tables has to be the sheer size of the US debt at almost $18tn, Argentine inflation at 14.3% and Spanish unemployment at 20.0%.

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Data from Bloomberg – retrieved 17Aug2016