

CAR SCRAPPAGE SCHEME A SUSTAINABLE STRATEGY FOR THE IRISH  
CAR INDUSTRY?

BY

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Innovation Management at Galway-Mayo Institute of Technology*

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Statement of Original Authorship

The work contained in this research has not been submitted for examination for degree or Diploma at any education at any other education institution. To the best of my knowledge and belief, this thesis contains no material previously written or published or written by any other author or student expect where due reference was made

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## **Abstract**

In the last decade a certain number of car scrappage incentive programs have been promulgated by western countries to instigate earlier replacement of older polluting vehicles with more cleaner and efficient ones. Traditionally, the main reason why various governments introduce car scrappage schemes was to reduce pollutant emission from older cars, and also improve the safety of transportation in general.

The more recent scrappage schemes being implemented by two western countries in the past two years or so, still maintains the traditional theme of replacing older vehicles with more efficient ones. However this time around, it's being implemented due to the economic meltdown which has impacted gravely on the car industry and sales figures of most dealerships in the western hemisphere. It could be conclusively stated that the recent introduction of car scrappage schemes, were motivated by the prevalent economic circumstances which has resulted in job losses, low consumer sentiment and the vulnerability of most world economies.

The researcher decided to undertake the subject of car scrappage scheme as focus of his research, in other to establish the economic viability of the scheme to the car industry in the west of Ireland. The researcher has compiled a detailed literature on previous and current scrappage schemes and its implications on the environment and also on the wider economy.

In conducting this research, the researcher compiled a detailed methodology to assist him in the research. In gathering information from the prospective respondents, the researcher used an open-ended questionnaire, this form of questionnaire was deployed to gain more in-depth information and to allow respondents give a more thoughtful response and comments to the desired question.

The analysis and discussion chapters threw up quite intriguing themes, which formed the platform for arguing the sustainability of the car scrappage scheme. Findings showed that the car scrappage scheme has being instrumental in job retention and stability in the car industry, the scheme has also being beneficial to the environment in the sense that more environmental and low emitting cars were sold through the scrappage scheme, which translates to reduction of CO<sub>2</sub> emissions in the environment. There were also resentment from the respondents on the Irish

governments' timing of the introduction of the car scrappage scheme. Most respondents stated that the government should have being swift in their action, rather than waiting to see how similar car scrappage schemes performs in other countries

This researcher recommends that the government should extend the scheme beyond its December 2010 expiration deadline, in order not forestall the economic gains of the scrappage scheme. The researcher is also advocating more partnership between government and car manufacturers/dealerships; with the view of developing more efficient and greener vehicles that would sustain the changing consumer trends.

# **Chapter 1: Introduction**

## **1.1 Background**

Car scrappage schemes were traditionally a program of government, which allows older polluting vehicles to be replaced by newer models and also to improve the transport fleet with better and safer vehicles. As earlier stated in the opening paragraphs of this thesis, the current schemes being implemented right around the western economies were all motivated due to slowdown in the world economy, which has crippled investors' confidence, and resulted in low consumer morale. These factors have had significant implications on the business operations of most car industry, which means that dealerships and garages are struggling to achieve their estimated sales targets.

## **1.2 Research Objectives**

The literature above suggests that most car scrappage schemes were implemented as a short term economical strategy for ailing car industry. But the truth is that most publication and economic reports having not being able to deal with the sustainability of most car scrappage schemes, maybe because the scheme has always being implemented as short term mechanism to stimulate the car industry. It is on this backdrop that the researcher has decided to pursue this line of research, and the following objectives have being set out for the research.

### **Primary Objectives**

- To gain an insight into the economic and environmental viability of car scrappage scheme.
- To establish how sustainable are the gains of the scrappage scheme, to the Irish car industry in the west of Ireland.

### **Secondary Objectives**

- To identify the underlying economic gains from the scrappage scheme to the Irish economy

- Would the car scrappage scheme ensure a greener environment and lead to reduction in Co2 emissions.

### **1.3 Plan of Research**

#### Chapter 1: Introduction

This chapter provides a brief background to the research detailing the emergence of the research and clearly identifying both the primary and secondary objectives of the research.

#### Chapter 2: literature Review

Chapter 2 is a full detailed literature, an account of previous and current car scrappage schemes being implemented by governments' around the world. It informs the reader of the historical evidence of the car scrappage schemes both in Ireland and other western economies. This chapter lays the arguments for and against the scrappage scheme, in addition makes an informed correlation between car scrappage schemes and C02 emissions and its impact on the environment.

#### Chapter 3: Research Methodology

Chapter 3 provides a detailed methodology, which the researcher proposes to use in garnering the desired information from respondents. The researcher concludes this chapter with the justification of the research approach utilised in this study, and provides an insight on how data's gathered from fieldwork would be analysed.

#### Chapter 4: The Research Findings

This chapter gives account of the outcome and analysis of various data gathered from the fieldwork with the view to generating common perspectives and opinions.

#### Chapter 5: Discussion

This chapter provides avenue for the researcher to discuss the answers from the findings and also determine if the research objectives were met. This chapter would also provide a framework for further research or discussion if any, on the research topic.

## **Chapter 2: Literature Review**

### **2.1 Introduction**

Car scrappage scheme has become a buzzword synonymous in every economic discussion in western world, since the beginning of the recession. The downturn in most developed economies has significantly impacted on some sectors of world economies, and one of such sectors that is feeling the pinch is the auto sector. There is no denial that consumers purchasing power are down due to the slowdown in the economy, coupled with fragile employment market, which has seen lots of lay-offs, downsizing/right-sizing by companies and employees. Consumers are sceptical about the prospects of a quick turnaround in the economy, therefore has resulted in postponement of major capital purchase like cars and properties to a future date. The situation is further compounded by the disarray state of the banking sector, which are cash strapped and has adopted a more stringent approach to credit facilitation. This has ultimately resulted in consumers not being able to acquire credit for their capital purchases.

### **2.2 Car Scrappage Scheme and the Economy**

The car sector is highly important to any economy; the sizeable amount of revenue being recouped from this sector by governments cannot be understated. Furthermore, the human personnel employed and other supply chain activities attached to the auto industry, also results in enormous amounts of tax returns to government coffers. That is one argument why some western economies advocated the car scrappage scheme in a bid help stimulate the ailing sector. Car scrappage scheme is an initiative by governments to limit the number of old cars usually ten years or more on the road and replacing them with more modern and efficient models (European Council of Ministers of Transport, 1999)

The primary objective of car scrappage schemes, has being stimulating the car industry and the national economy by boosting car purchases; improving transport safety by introducing newer and safer vehicles and finally reducing car emissions (European Council of Ministers of Transport, 1999)

### **2.2.1 Impact of Car Scrappage Scheme on Consumers and National Economy**

The first effect of the car scrappage incentive would be raising the value of the targeted vehicles, this increases the value assets owned by the consumers and ultimately raises their income. Depending on the particular type of scrappage scheme embarked on, the increment in the available income may or may not be spent, if the purchase of a replacement vehicle is not compulsory, the increase in available income can be spent by the consumer on another product or be saved (European Council of Ministers of Transport, 1999)

Introduction of car scrappage schemes generally brings in a price war or pricing strategy amongst the various car manufacturers, or dealerships trying to gain market share and lure consumers to their brand. It's being argued that significant reductions are always achieved during a car scrappage scheme, because prices in the new car sectors are so enticing to resist, while the second-hand market becomes a dumping ground of cars that has being ditched by consumers trading up.

Apart from potential savings and deals to consumers, car scrappage scheme has also undeniable huge advantages to the car manufacturers in the form profit and high volume of car sales. The car industry has rather high fixed cost and needs to produce certain amount of vehicles to reach the optimal scale output. A period of low sales will probably accumulate huge inventories for the car manufacturer and dealerships. This will compel them to lower selling prices and subsequently introduce privately funded buyback programmes for old car in order to stimulate the new car purchases. If the government pays for this part of price reduction, it would reduce considerably the cost faced by manufacturers. Furthermore it may help the car manufacturers smooth the effect of the economic downturn and to reach the optimal production scale (European Council of Ministers of Transport, 1999)

It is also imperative to highlight the impact of the car scrappage scheme on National economies. It's normally assumed that car scrappage schemes or incentives would normally impact positively on the GDP, growth and employment of countries with strong national car industry (European Council of Ministers of Transport, 1999)

Moreover it's claimed that this kind of scheme (car scrappage) benefits the public finance, since extra revenue in the form of VAT, excise and registration taxes on new vehicles could be greater than the total cost of the scheme. An estimate made by the

Central bank of Italy suggested that about 0.4% of 1997 GDP growth could be attributed to increase in car sales. It also stated there was a 40% increase in number of new car registered from 1.74million to 2.47 million between 1996 and 1997, when the Italian government had a car scrappage scheme in place (European Council of Ministers of Transport, 1999). Although this increase could not be entirely be attributed to the Italian scrappage scheme, after four consecutive years of stagnation the Italian market was actually showing signs of recovery at the end of 1996 and was boosted by the scrappage scheme.

### **2.3 Different variations of Car Scrappage Scheme**

For the purpose of reviewing this literature, it would be highly important to identify two different variations of car scrappage scheme. The first kind of scrappage scheme gives reward for any kind of car scrapped regardless of the subsequent replacement decision by the consumer; example a bonus is given to the consumer even if the car bought is older than the one scrapped or even no vehicle was bought in the process (European Council of Ministers of Transport, 1999).

The second scheme, which is more widely practised, gives a bonus or incentives to consumers to trade in their older cars for a newer version (European Council of Ministers of Transport, 1999). Both of these schemes are actually intended to influence the replacement choices made by consumers, but in the first variation, it gives the consumer an opportunity of choosing other means of transportation like motorcycles, public transport or bicycles. While the second form of scrappage scheme compels the consumer to replace their older vehicles with a new model, with the government or manufacturer backed incentive, this type of scheme is more prevalent in the auto industry at the moment.

### **2.4 Historical evidence of car scrappage scheme in Ireland**

The most recent scrappage scheme witnessed in the Republic of Ireland was the scheme of 1995 -1997. This scheme was introduced by the then government to get rid of cars over 10 years old with new ones. The old scrappage scheme offered £1000 for every new car traded in, within this period around 65,000 cars were sold all over Ireland (European Council of Ministers of Transport, 1999). However the recent calls



for re-introduction of scrappage scheme is due to declining fall in car sales triggered by the global economic downturn and the recession.

According to the Society of Irish Motor Industry (SIMI) an estimated 10,000 jobs were lost in the industry between the beginning of 2008 and end of March 2009. In a statement from the spokesperson of SIMI Ms Sheridan, she stated that “Seventy businesses have closed within the industry over the last year, with sales jobs obviously hit the hardest, 25% of the industry’s jobs were lost in 2009, approximately 11,000, and business overall was down around 70% (Irish Examiner, 2010).

In a further statement by Alan Nolan of the Society of the Irish Motor Industry says the scrappage scheme is “about survival and jobs”. He says 10,000 jobs have gone this year (2009) and warns that if nothing is done to stimulate the sector, the same number will go again in 2010(Scally, 2009). He points out that Government revenue from car sales has fallen by €1.5 billion to €500 million in 2009. “What we are proposing will give the opportunity to regain some tax. The average car generates €7,000 in revenue for the Exchequer so if it gives back €2,000, the State still has €5,000 to collect. (Scally, 2009) The clamour and lobby by motor industry bodies for scrappage scheme was heeded by the Irish government in its December 2009 budget, which made provision for a scrappage scheme to stimulate the car sector. The scrappage scheme would commence from 1<sup>st</sup> of January 2010 and end in December of same year.

## **2.5 Eligibility for car scrappage scheme in Ireland**

Under the scheme, Vehicle Registration Tax (VRT) relief of up to €1,500 will be available to purchasers of new cars where an old car is scrapped. With another nod towards the green agenda, the scheme will be restricted to the purchase of low-emission cars, specifically those with CO<sub>2</sub> emissions of 140g/km or less (O’Keefe, 2009).

Below are the criteria set out in the December 2009 Irish budget for eligibility of cars or car owners for the scheme;

- Must be registered in the State in the name of the registered owner of the new car for at least 18 months previous to the date of scrappage;
- Must be 10 years old or more from the date of first registration;

**Table 2.1: Scrappage scheme top 10 brands**

Make	Total	% share
Renault	1992	19%
Ford	1415	14%
Skoda	137	11%
VW	988	11%
Toyota	743	7%
Kia	674	6%
Hyundai	633	6%
Opel	563	5%
Peugeot	358	3%

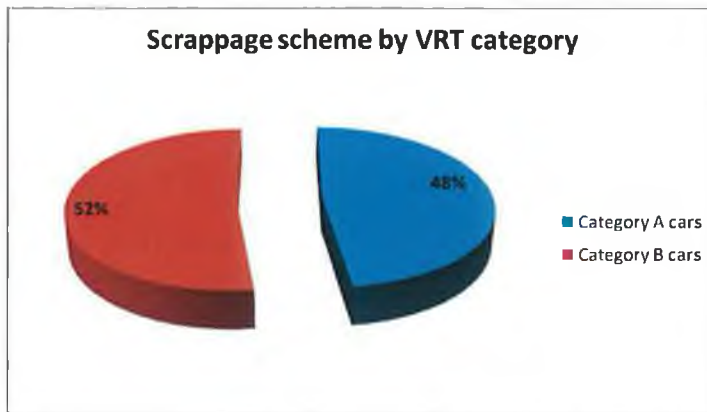
(Society of Irish Motor Industry , 2010)

From the table above we can see that Renault is the dominant brand most consumers availing of the car scrappage scheme are purchasing

**Table 2.2: Scrappage Scheme by VRT**

Category	Units	% Share
Category A Cars	5025	48%
Category B Cars	5447	52%
Total	10,472	100.00%

**Fig 2.1: Scrappage Scheme by VRT Category**



(Society of Irish Motor Industry , 2010)

**Table 2.3: Scrappage Scheme by month**

Month	Units	% Share
January	1488	14%
February	1796	17%
March	2325	22%
April	1733	17%
May	1503	14%
June	1306	12%
July	321	3%
Total	10,472	100%

**Fig 2.2: Scrappage Scheme by month**



(Society of Irish Motor Industry , 2010)

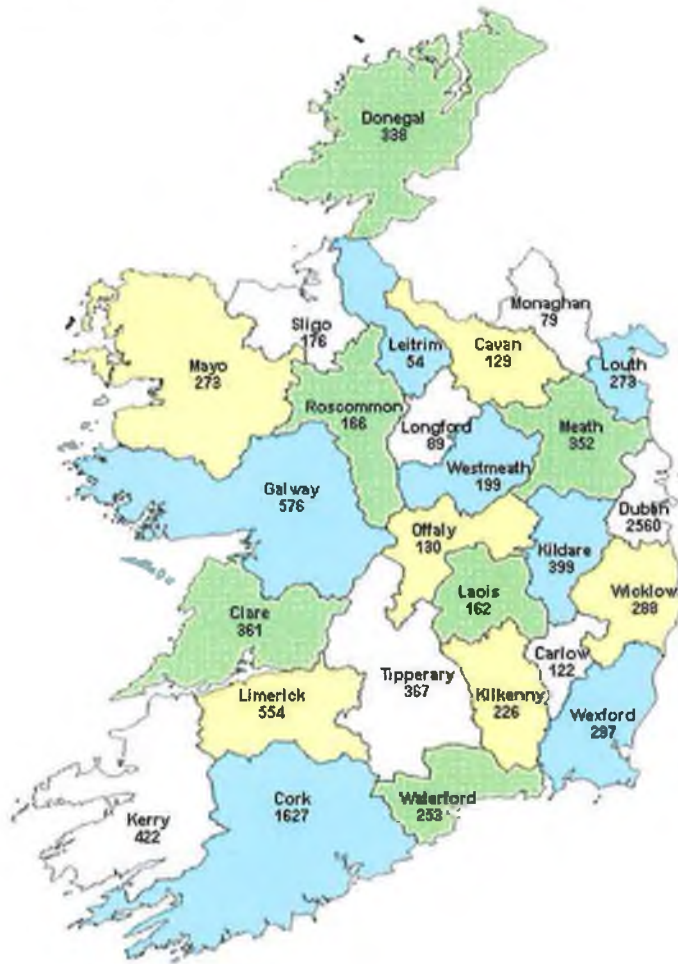
**Table 2.4: Scrappage Scheme by County**

County	Units	% Share
Carlow	122	1.1%
Cavan	129	1.23%
Clare	361	3.45%
Cork	1627	15.54%
Donegal	338	3.23%
Dublin	2560	24.45%
Galway	576	5.50%
Kerry	422	4.03%
Kildare	399	3.81%
Kilkenny	226	2.16%
Laois	162	1.55%
Leitrim	54	0.52%
Limerick	554	5.29%
Longford	89	0.85%
Louth	273	2.61%
Mayo	273	2.61%
Meath	352	3.36%
Monaghan	79	0.75%
Offaly	130	1.24%
Roscommon	166	1.59%
Sligo	176	1.68%
Tipperary	367	3.50%
Waterford	253	2.42%
Westmeath	199	1.90%
Wexford	297	2.84%
Wicklow	288	2.75%
Total	10472	100%

(Society of Irish Motor Industry , 2010)

It is not surprising, from the above table that Dublin shares the most percentage of all cars sold under the scrappage scheme

**Fig 2.3: Geographical Mapping of Scrappage Scheme by County**



(Society of Irish Motor Industry , 2010)

### **2.5.1 Car Manufacturers' Scrappage Incentives**

#### **2.5.2 Renault Scrappage Offers**

Renault Ireland was the first manufacturer/dealership to offer a scrappage scheme of €1500 in September 2009, before the Irish government's introduction of the scheme in December budget of same year. Currently the company is offering double scrappage (Renault and Government) on cars aged 10 years and older. It also offers up to €3,300 trade-in allowance on any brand, year, make or model. In addition Renault has extended the €1,500 scrappage plus up to €3,300 trade-in allowance on cars eight years or older (Galway Advertiser, 2010).

#### **Scrappage Deals from Renault**

➤ Clio 1.2 16V Royale 3 doors	€13,990
➤ Trade-in allowance	€3,180
➤ Renault Scrappage Scheme cars over 8 years	€1,500
➤ Government Scrappage Scheme cars over 10 years	€320
➤ New Price	€8,990

(Reporter, 2010)

#### **2.5.3 Peugeot Scrappage Offers**

The car scrappage deals offered by Peugeot Customers can avail of €3,750 off new models of Peugeot cars, This Peugeot Scrappage Scheme will run till the 31st May 2010.

- A new Peugeot 107 SE 1.0 petrol 5dr model, retailing from €11,845 is now available at a scrappage price of €7,995.
- A new Peugeot 207 S 1.4 HDi 70bhp 5dr model, retailing from €16,170 is now available at a scrappage price of €12,170.
- The Peugeot 308 S 1.6 HDi 90bhp 5dr model, which secured a Guinness World Record for fuel efficiency when it achieved 126MPG, retails from €19,795 and is now available at a scrappage price of €15,795.
- The new Peugeot 407 Executive 1.6 HDi 4dr saloon model retails from €26,825 and is now available at a scrappage price of €21,825
- A scrappage deal of €4000 is offered on the new Peugeot 3008 SE 1.6 HDi model, Continental Irish Car of the Year 2010, retails from €24,780 and is now available at a scrappage price of €20,780 (Peugeot Ireland, 2010).

- Customers who do not qualify for the scrappage allowance will receive a €500 Eco bonus on any 207, 308 or 3008 model, registered before the end of May.

#### 2.5.4 Citroen Scrappage Offers

Citroen Ireland are also offering scrappage deals on some of their newer range or cars, the table below shows some of the deals on offer by Citroen;

**Table 2.5: Citroen Scrappage Offers**

Model	Recommended Retail Price	Government Scrappage	Citroen Scrappage offer	Scrappage Customer Price
Citroen C1	From € 12,200	€1500	€1500	€9200
Citroen Berlingo Multispace	From €20900	€1500	€2000	€17400
Citroen Xsara Picasso	From €20500	€1500	€2000	€17000
Citroen C4	From €20500	€1500	€2000	€17000
Citroen C4 Picasso	From €26600	€1500	€2000	€23100
Citroen Grand C4 Picasso	From €28600	€1500	€2000	€25100
Citroen C5 Saloon	From €25900	€1500	€2000	€22400
Citroen C5 Tourer	From €30400	€1500	€2000	€26900

(Citroen Ireland, 2010)

## **2.6 Arguments For and Against the Governments Car Scrappage scheme**

The arguments for scrappage scheme has being on number of fronts, on the economic side of the spectrum, the argument has being that a car scrappage scheme would help salvage the dwindling car sales and also boost the auto industry. While the environmental and green aisle argues that such a scheme would help get old, polluting vehicles off the road, replacing them with more efficient models.

### **2.6.1 Arguments for Car Scrappage Scheme**

- The Irish car industry has already lost 10,000 jobs (a fall from 45,000 to 35,000). Analyst say that if current sales statistics if repeated next year will only sustain 25,000 jobs meaning the industry and the Irish economy would see a further loss of 10,000 jobs (Teskey, 2009)
  
- Its argued that the scrappage scheme might only lead to an additional 10,000 new cars being sold but this would in itself be a significant help to an industry which is at the brink of collapse.
  
- A scheme funded by 100 million euro and co-financed by the industry would be revenue neutral with no net cost to the exchequer. The revenue would benefit from bringing sales of new cars forward with an increased VRT take in the short term.
  
- It's the environmentally friendly thing to implement a car scrappage scheme. A 10 year old used car car today creates 200 grammes of CO2 per kilometer travelled whereas a cleaner, greener replacement new car would save 70 grammes per kilometer for the rest of its life on the road. (Teskey, 2009)



### 2.6.2 Arguments Against Car Scrappage Scheme

- Car scrappage scheme may only boost car sales temporarily by bringing forward future demand. When the scheme eventually ends new car sales could fall, even if the economy is recovering. The *Economist* noted that: “In France, which offered a scrapping bonus in the mid1990s, sales fell by 20% in the year after it expired (Harari, 2009).
  
- It may divert consumer spending from other sectors of the economy to new cars, as the subsidy will only cover a portion of the cost of a new car. Critics state that these intensities consumers to either postpone their preferred purchase demand from one sector of the economy to the auto sector.
  
- The motor industry should not be singled out for specific support; there are lots of sectors feelings the pinch of the economic downturn. Critics believe that if the auto industry is receiving financial stimulus from the government, that there should be a correlation to other sectors of the economy, like the tourism and hospitality industry. Many believe that the global car industry needs to reduce capacity and scrappage schemes merely delay consolidation in the industry.
  
- Ireland is not a car manufacturing country; most of the cars sold in Ireland are manufactured outside our shores. Thus, a large portion of the money earmarked for the car scrappage scheme will go into the coffers’ of foreign car manufacturers like Toyota, BMW, Volkswagen and Renault

## **2.7 Car Scrappage Scheme in American context**

Unocal an oil company from California implemented the first scrappage scheme in 1990 which was tagged the South Coast Recycled Auto programme (SCRAP) this was initially intended at retiring pre 1971 which includes cars that are older than 19 years. An incentive of \$700 was offered to retire eligible vehicles (European Council of Ministers of Transport, 1999) while the scheme was ongoing the Ford Motor Company, some local dealers and The South Coast Air Quality Management District Authority gave additional funds so that the programme which ultimately scrapped 8376 vehicles(European Council of Ministers of Transport, 1999).

The California Air Resource Board also made contribution to the scrappage scheme by conducting emission testing on a sample of Scrap cars and analysing the related data to compute the net emission reduction achieved (European Council of Ministers of Transport, 1999).

Following the success of the SCRAP, two pilot programmes were launched in Chicago and Delaware non attainment areas scrapping few hundred old cars. Several other scrappage schemes were implemented in California from 1993 in the Joaquin Valley, San Diego and Los Angeles area. The schemes were usually privately funded, but in few cases the local authority pays for the scheme, usually the incentives were between the region of \$500 -\$600 per eligible car (European Council of Ministers of Transport, 1999).

The minimum age requirement for a car to be eligible for this scheme is 15 to 20 years old, the eligible cars were mostly selected from among those that have recently failed the Inspection and Maintenance test (I&M) similar to NCT in Ireland.

### **2.7.1 'Cash for Clunkers' An American Car Scrappage Scheme**

The recent car scrappage scheme in America dubbed 'Cash for Clunkers' or officially known as Car Allowance Rebate System was unveiled at an initial cost of \$1billion, but ended up costing the American government a whopping \$3billion in less than two months, because of the huge number of people that applied for the scheme. The scheme which became effective from 23<sup>rd</sup> July 2009 was intended and designed to boost American auto sales and also help the environment by providing an economic incentive for consumers to replace old, dirty, low-mileage vehicles with

new ones that are safer, use less fuel, and spew less pollution and fewer greenhouse gases into the atmosphere. Analyst believe that Cash for Clunkers or the Car Assistance Rebate System would lead to direct sale of, as many as over million new vehicles in a year(Business Monitor International Ltd, 2010).

Under the Cash for Clunkers program, the government would send vouchers worth up to \$4,500 to automobile dealers on behalf of consumers who trade in their older, low-mileage vehicles for new, fuel-efficient models.

Initial data from the US Department of Transport, on the US car scrappage scheme, or 'cash-for-clunkers', shows that it was largely successful in stimulating new vehicle sales. Of the US\$3bn allocated to the scheme by the government, dealers submitted applications for rebates worth US\$2.88bn from sales of 690,114 vehicles (Business Monitor International Ltd, 2010).

Although the program was ended two months earlier on 25<sup>th</sup> of August 2009 ahead of the November expiration date, analyst believes that the scheme has being a huge success with application for rebates by car owners to the tune of US\$611mn over the weekend from August 21-24, dealers made claims to the tune of just US\$229mn in the programme's last 36 hours, according to the data. In terms of the effect of the car scrappage scheme, on the American market, data show that 84% of the vehicles traded in were trucks (Business Monitor International Ltd, 2010).

. This is not to suggest that there is emergence or huge shift by consumers from the light truck market, however its worth mentioning that 41% of new vehicles bought under the scheme were also trucks (Business Monitor International Ltd, 2010).

Although available data's could attest to the market viability of car scrappage scheme on the American auto sector, the industry is bracing itself for a more conservative results in 2010 as the bulk of the scrappage sales were thought to have been brought forward due to the governments' incentive.

### **2.7.2 The Benefits of Cash for Clunkers**

**Energy saving:** Environmental Protection Agency of America estimates, that the average American drives 15,000 miles every year. By that measure, at 16 mpg, each clunker or older model vehicles were consuming about 937 gallons of gas per year.

Its newer and more efficient replacement would consume about 577 gallons a significant improvement of 360 gallons per year. Seven-hundred and fifty thousand such improvements would cut nationwide consumption of gasoline by 270 million gallons per year. These figures sounds impressive, but it's worth mentioning that Americans consume 378 million gallons of gasoline each day. In an unrealistically rosy scenario, then, Cash for Clunkers may have cut the American oil consumption by less than 0.2 percent per year, but failed to save a day of gas for consumers (Tucker, 2009)

**Environmental benefits:** it's believed that one the significant benefit of the American car scrappage scheme is the emission cuts. According to the carbon offset firm Terrapass, each individual driver putting 15,000 miles on their 16-mpg car would produce 18,341 pounds of CO<sub>2</sub> annually. Driving a 26-mpg car instead, they would produce 11,287 pounds each, an improvement of 7,054 pounds. Seven-hundred and fifty thousand such improvements would mean a 5.3 billion-pound reduction in our nationwide carbon output (Tucker, 2009). This is an impressive statistics until it's put in real perspective. America's total nationwide carbon footprint is hard to estimate, but Department of Energy projections put it somewhere north of 540 billion pounds annually (Tucker, 2009). This means that, even in unrealistically positive scenario, Cash for Clunkers will cut the carbon footprint by less than one percent but it's still a significant gain in the emission reduction.

**Economic benefits:** IHS the Global Source for Critical Information and Insight, an automotive research firm, is one of several industry analysts to revise its expectations in light of the program's success. IHS projected nationwide sales of 9.8 million cars in 2009. But with take up of the scheme, the firm was forced to revise its projection to 10.3 million car sales in year ended 2009 (Tucker, 2009). Some analysts wonder if Cash for Clunkers really created any new sales at all. It's possible that the program simply caused some people to bring forward their purchase. Although the scrappage scheme might have brought new buyers into the market, it must be pointed out that the scenario might have created its own economic problems. The scheme prompted hundreds and thousands of Americans, for instance, to take on new debt in the midst of a recession and an uncertain job market.

## **2.8 United Kingdom's Car Scrappage Scheme**

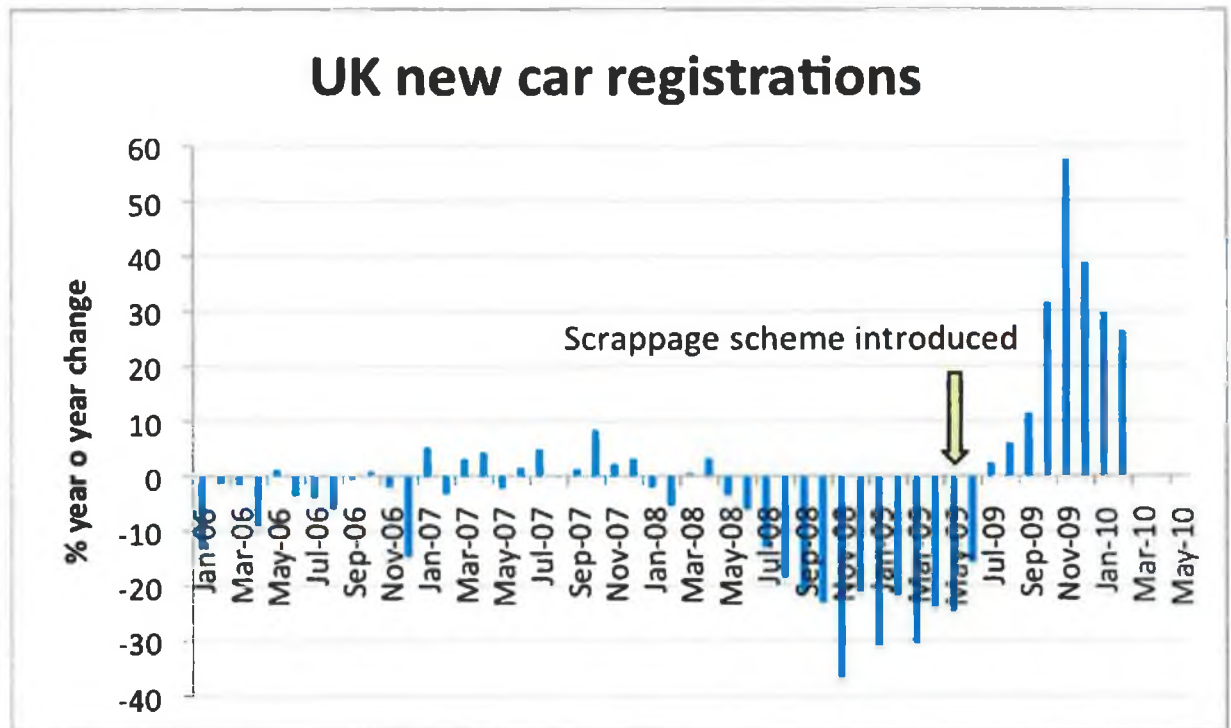
After months of dwindling sales, the UK the government finally introduced a car Scrappage scheme in partnership with the car manufacturers under the leadership of United Kingdom business secretary Lord Mandelson. The scheme is expected to elapse in March of 2010, costing the UK government a total of £300million, car owners will receive the sum of £2000 if they scrap their old car for a newer an a more efficient model. The UK government is not paying the rebate from its pockets alone; the car manufactures are also contributing £1000 towards the scheme.

### **2.8.1 Eligibility Criteria for UK's Car Scrappage Scheme**

- The old vehicle must be a Car or Light Commercial Vehicle not exceeding 3.5 tonnes (N1 class)
- It must be first registered in the UK before 31 August 1999 ("T" reg and earlier);
- The Claimant keeper must have been the registered keeper for at least 12 months before the new vehicle order date;
- The registered keeper must have a UK address;
- The vehicle must have a current MOT certificate;
- The vehicle must be clear of finance;
- Dealers can't trade in their own cars;
- Stolen cars are not eligible;
- Insurance write-offs are not eligible. (Karl, 2009)

Analyst believe that the UK car scrappage scheme which came to an end on March 31 2010 accounted for around 0.1% of UK GDP (Riley, 2010) and was instrumental in lifting the beleaguered car sector from its worst period in years. Motor retail industry figures suggest that almost one fifth of new cars were bought under the scheme and many have been older car owners who were encouraged to trade-up due to government incentives and bargains available at car dealerships. The graph below depicts a monthly increase in new car registration in UK from May 2009 when the scheme to February 2010

Fig 2.4: UK new car registrations



(Mearns, 2010)

## 2.9 Car Scrappage Scheme and the Environment

Environmentalists believe that car scrappage schemes have two main possible impacts on the environment. The first impact is that they may reduce the load of atmospheric emissions caused by the car fleet since they substitute older, more polluting vehicles with newer, cleaner ones (European Council of Ministers of Transport, 1999). The second impact is that they shorten the average car's life and, therefore, if car scrappage schemes are permanent or repeated over time, they increase the amount of energy and materials used and emissions caused by all the processes involved in car construction, dismantling, scrapping and recycling (European Council of Ministers of Transport, 1999).

It must be noted that the actual difference in environmental performance between older vehicles and most new ones are substantial; the positive effect of emission reduction is likely to prevail if the scrappage scheme is geared towards a green agenda. Newer vehicles are also more durable and maintain design emissions levels over greater mileages than older vehicles. The increasing incorporation of on-board diagnostics, which should reduce the likelihood of new vehicles performing below

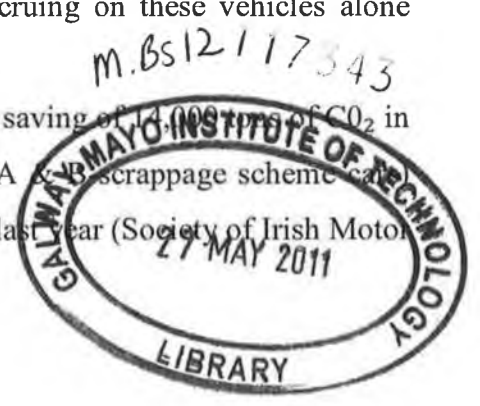
design emissions standards as they age, is also a positive factor. Scrappage schemes are likely to involve substantial reductions in emissions per km driven of hydrocarbons and carbon monoxide in particular. To a more limited extent, they may also reduce NOX emissions (European Council of Ministers of Transport, 1999)

The effects of scrappage schemes on greenhouse gas emissions are very uncertain, however may even be negative (i.e. they might increase the overall amount of CO<sub>2</sub> emitted), the sign and size of changes in CO<sub>2</sub> emissions will greatly depend on the detailed objectives of the scrappage scheme (European Council of Ministers of Transport, 1999). Reductions in specific emissions of all kinds may also be partially off-set by rebound effects. Consumers benefiting from governments incentives may take the opportunity to purchase a more fuel guzzling and Co<sub>2</sub> emitting vehicles.

This may result in limited improvement in emission reduction achieved through the car scrappage scheme becoming short-lived. This due to the fact that renewal rate of the fleet of cars, without any incentives, which would ultimately replace same old vehicles occurs two or three years later. The possible gains from car scrappage schemes depend on the improvements in average emissions from newer model vehicles and engines. Car scrappage schemes will achieve its net environmental benefits only if newer vehicles have emission rates substantially better than older models, in addition if the environmental impact of vehicle construction and dismantling processes is reduced.

A recent publication by the Society of Irish Motor Industry (SIMI) has indicated that consumers' buying choices and trends are taking a new dimension when it comes to purchasing their new car. Under scrappage scheme, the average saving per scrapped car to date is 74g/Km. Based on the 6,743 scrappage applications already processed, annual CO<sub>2</sub> savings of nearly 10,000 tonnes are accruing on these vehicles alone (Society of Irish Motor Industry , 2010).

Scrapping 10,000 cars in the current year will mean a saving of 14,000 tonnes of CO<sub>2</sub> in just one year. The lowest emission cars (categories A & B) scrappage scheme cars represent 82% of all new cars, compared to just 55% last year (Society of Irish Motor Industry , 2010).



Although It could noted that the car scrappage scheme has being instrumental in encouraging consumers to become more environmentally aware, however for the past two years there has being an upward trend towards low emitting cars. Consumers are beginning to witness the environmental and economic benefits in buying low emission vehicles. In the last couple of years, Ireland has seen a reasonable reduction in C02 emissions, but the car scrappage scheme has reduced the emissions even further. It is imperative to understand that the higher fuel efficiency of low emitting cars will also reduce Ireland’s fuel demand and reduce fuel transport costs, which will provide a long term benefit to the economic sectors

**Table 2.6: Average C02 emissions per (new) car**

2008	159g/km
2009	144g/km
2010	135g/km
2010 (scrappage scheme cars)	126g/km

(Society of Irish Motor Industry , 2010)

As depicted in the above table, the average C02 emissions of new vehicles are always coming down, this means that new vehicles being manufactured in the future will emit lower C02, which means that fewer emissions will be transmitted into the environment as car manufacturers become more innovative and develop new cleaner, greener and efficient vehicles.

### **2.10 Future of the Car Industry without Scrappage Schemes**

There is no doubt that the scrappage scheme has been an immense success, stabilising the motor industry across Europe and seeing it through one of the darkest financial periods in modern history. It has also done its bit for environmental concerns, removing older cars from the road and replacing them with new, more efficient and lower emission brands. The economic implications would not go unnoticed; it has kept people in jobs, not just retaining employment in the motor industry but also in the services Sector that supplies the motor trade with parts.

The scheme has been heavily publicised and thousands of consumers have taken up the opportunity to replace their old cars with newer ones at a much cheaper price. But the big question is, what does the future hold for the motor industry when most scrappage scheme elapses? How would the industry be able to stimulate the market



and ensure that customers visit car dealerships? Although it anticipated that with the end of a car scrappage scheme, that sales normally drops. But how does the car industry ensure that sales do not decline drastically and might eventually erode the gains of the scheme.

The figures from Germany are worrying the motor trade, car sales figure are down to 27%, after initial success 2009 boosted by the German government scrappage incentive. The industry is concerned and worried that these months of growth would be replaced by a sudden decline in new car registrations later part of 2010. While the scheme has given the industry a little bit of fresh air there could be much tougher times ahead for the motor trade, as customer numbers drop dramatically because they brought their purchases forward.

## **Chapter 3: Research Methodology**

### **3.1 Introduction**

In this chapter the researcher will outline the means or methodology which he intends to use to gather information on the research topic. The researcher will also inform the reader of the various methodologies they can be applied while conducting research

### **3.2 Methodology**

Methodology is the approach a researcher or an author uses to investigate a chosen topic or subject of research. Methodology can also be referred as the philosophical basis on which the research is founded (White, 2007)

### **3.3 Research Design**

Research design is a general term that covers a number of separate, but related issues associated with the problem or the research topic. This includes the aims of the research, the final selection of the appropriate methodology, the data collection techniques and the chosen method of data analysis (White, 2007)

Conducting a research or a marketing research is very complex and diverse, and can vary depending on the subject of research. Some research problems or topics may require only basic forms of research (e.g. interviews, focus group) while other forms (observation, surveys and case study) may require extensive research. The two most crucial factors in research design are validity and reliability. Validity implies that the research design embarked on, fully addresses the research questions and objectives that are set out. While reliability entails the consistency of the research and whether another researcher could use same design and obtain similar findings (White, 2007). This does not necessary mean that the conclusion drawn from the research would be same, since the judgement of the researchers come aboard while arriving at conclusion to a similar topic. In a nutshell, the research design should be seen as a blueprint for the whole research and thesis compilation.

Almost all research topics and problems are unique, and appropriate measures must be taken to select the definitive set of approaches to the problem or topic being researched. Any chosen method by the researcher must compliment the given

problem, in order to get the best outcome from the research process undertaken. Research design are often categorised under three main headings; Exploratory, Descriptive and Causal.

**Exploratory Study:** is a valuable means of finding out what is happening; to seek new insights; to ask questions and to assess phenomena in a new light (Saunders, Lewis, & Thornhill, 2009) exploratory research is mostly used when there is a need to clarify an understanding of a problem and could also show if the research is worth pursuing.

**Descriptive Research:** is the ability to portray an accurate profile of persons, events or situations.

**Causal Research:** is a form of research to determine whether a change in one variable produces a change in another dependent variable (Saunders, Lewis, & Thornhill, 2009)

**Table 3.1: Exploratory, Descriptive and Causal Research**

	<b>Exploratory</b>	<b>Descriptive</b>	<b>Causal</b>
<b>Objective</b>	Discovery of ideas and insights	Describes market characteristics or functions	Determines cause and effect relationships
<b>Characteristics</b>	Flexible and Versatile  Often the front end of total research design	Marked by the prior formulation of specific hypotheses  Pre-planned and structured design	Manipulation of one or more independent variables  Control of other mediating variable
<b>Methods</b>	Expert surveys Pilot surveys Secondary data Qualitative Research	Secondary data Surveys Panels Observational and other data's	Experiment

(Malhotra, 1996)

Having discussed the forms of research design, it's very important to outline the two forms of data, which would help the researcher in gathering in-depth information on the car scrappage scheme and the set out objectives for the thesis.

Qualitative data refers to all non-numeric data or data that have not being quantified and can be a product of all research strategies. It can range from a short list of response to open-ended questions to a more complex data such as transcripts of in-depth interviews or entire policy documents (Saunders, Lewis, & Thornhill, 2009). There is no point collecting data without analysing, so for a data to be meaningful it has to be analysed for easier comprehension.

Quantitative data, is data in a raw form, that is, before these data have been processed and analysed, it conveys little meaning to most people. Quantitative data needs to be processed to make them useful and turn them into information (Saunders, Lewis, & Thornhill, 2009)

**Table 3.2: Qualitative Research Vs Quantitative Research**

	<b>Qualitative Research</b>	<b>Quantitative Research</b>
<b>Objective</b>	Based on meanings derived from numbers	Based on meanings expressed through words
<b>Sample</b>	Small number of non representative cases	Large number of representative cases
<b>Data collection</b>	Collection results in numerical and standardised data	Collection results in non-standardised data enquiring classification into categories
<b>Data analysis</b>	Conducted through the use of diagrams and statistics	Conducted through the use of conceptualisation
<b>Outcome</b>	Develop an initial understanding	Recommend a final course of action

(Saunders, Lewis, & Thornhill, 2009)

### **3.4 Research Mechanism**

The author intends to use Descriptive Research to gain insight into the chosen topic of car scrappage scheme. The research would consist of in-depth qualitative analysis of the previous literatures on the chosen topic

#### **3.4.1 Ethical Considerations and Research**

Ethics is becoming more prominent in various research works, and researchers and students are becoming fully aware of the need for a good ethical stand, while conducting those research. Research ethics relates to the question of how we formulate and clarify our research topic, design our research and gain access, collect data, process and store our data, analyse data and write up our research findings in a moral responsible way (Saunders, Lewis, & Thornhill, 2009). The researcher in accordance with the general guidelines on ethics, intends to conduct this research with utmost honesty and integrity, maintain the confidentiality of data that might be provided by dealerships and car garages, would never withhold information on the true nature of the research, explain to all concerned what's the research is all about, finally when analysing, compiling data or results, would never misinterpret or misrepresent the information gathered.

#### **3.4.2 Techniques for Data Collection**

The author intends to use questionnaire as the major tool for gathering information on the subject of research. This technique is easy and widely used by businesses and business graduates in conducting their various researches. Respondents are asked to respond to same set of questions; it provides an efficient way of collecting responses from a large sample. However it's worth mentioning that it's somewhat hard to produce a good questionnaire that would answer the questions appropriately, the rule of thumb is to collect the precise data that is required to answer the research questions and to achieve the set objectives.

#### **3.4.3 Types of Questionnaire**

The design of a questionnaire differs according to how it's administered and, in particular, the amount of contact the researcher has with the respondents (Saunders, Lewis, & Thornhill, 2009). There are notably two main forms of questionnaire;

- **Postal questionnaire:** this is a form of questionnaire sent by mail and either returned by mail or collected individually, the wide use of Internet has made it easier for questionnaires to be sent via e-mail. Postal questionnaire is very popular with business students and some organisations, and may form a good base for writing a final report on the subject matter. One of demerits of postal questionnaire is the low response rate, even when such a questionnaire was drafted appropriately and follow up request letters and telephone calls made to the respondents (White, 2007) most respondents find it difficult answering those questions.
  
- **Self administered questionnaire:** this is a form of questionnaire where the questionnaire is filled in by the researcher, asking a respondent a series of questions (White, 2007). This is somewhat a structured form of interview, because the researcher is in direct contact with respondents, and respondents can easily give a feedback at the spot. The researcher intends to use this form of questionnaire to gather information on the objectives set out for the thesis.

#### **3.4.4 Forms of Questionnaire Design**

Designing a questionnaire seems like an easy task, but it should be highlighted that a poorly designed questionnaire will lead to complications and problems when analysing data for the predetermined research or survey. In order to achieve proper data processing or survey processing there should be a correct blend of questions in the questionnaire. The most important task in choosing the particular type of question, to add to a questionnaire is to choose the right types of questions that will ensure proper response from respondents. There are mainly two types or forms of questions that can be used when designing a questionnaire; Close ended questions and Open ended questions

**Close-Ended Questions:** this is a type of question where the respondent is given a range of answers and has to make a choice of one or more. These questions provide answers that are easier to tabulate, and are generally used to obtain quantitative data (Geoff). The main types of closed-ended question are;

- **Dichotomous questions** – these are questions with only two possible answers, e.g., Yes/No, True/False, Male/Female.
- **Multiple-choice questions** – these are questions with a definite range of answers (typically 4 or 5), from which the respondent makes a choice. E.g. which of the following age groups do you fall into?
  - Below 18
  - 18 –30
  - 31- 40
  - 41 – 50
  - 51 – 60
  - 61 or above
- **Likert Scale** – this style of question allows respondents to express their opinions to a limited degree. They involve giving a statement to which the respondent has to state their degree of agreement/disagreement. e.g. ‘The UK should join the Euro’
  - Strongly agree
  - Agree
  - Don’t know
  - Disagree
  - Strongly disagree
- **Semantic Differential** – this involves respondents making a choice between two extremes that most accurately reflects their feelings/opinions. This produces qualitative data that can be collated relatively easily.
  - E.g. Easyjet
 

Fast check-in speed	[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]	Slow speed
check-in		
Comfortable	[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]	
Cramped		
Economical	[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]	
Expensive		
- **Rating scale:** this involves the respondent giving a grade or rating to reflect their views/opinions from a limited range of answers that can be subsequently quantified.

- E.g.: ‘The quality of customer service I received during my stay at Hotel X was’
- Excellent
- Very good
- Good
- Acceptable
- 
- Poor

(Geoff)

**Open-Ended Question:** is used when the researcher is not sure of the expected response from the respondents or one wants to offer some 'space' to the respondent for answering a question (Bhate, 2007). The purpose of open ended questions is to obtain more detailed information, especially regarding respondent’s opinions and views on particular subjects. Below are some of the commonly used forms of open ended question

- **Completely unstructured:** this involves posing a question to respondents and allowing them to answer in their own words, e.g., ‘What do you think of the level of public transport provision in your local area? (Geoff)
- **Word association:** this involves presenting respondents with certain words, e.g., company or brand names, and asking them for the first word that comes to mind.

e.g.

Air travel \_\_\_\_\_

British Airways \_\_\_\_\_

Ryanair \_\_\_\_\_

(Geoff)



### **3.5 Justification for Deploying Open-Ended Questions**

The researcher has decided to design the questionnaire by using open-ended question, notably the completely unstructured format mentioned at the above paragraph. The reason why the researcher choose this type of question in designing the questionnaire is that, an open ended question would allow car dealerships and garages (respondents) include more information, including feelings, attitudes and understanding of the subject of car scrappage scheme. This would enable the researcher gain more insight and have a better understanding of the car scrappage scheme from the dealerships and garage's perspective.

By using an open ended question in the questionnaire, the researcher would be able limit or reduce respondent's errors. Garages and dealerships would respond freely to the questionnaire because they are inclined to read the questions and fill their thoughts rather than fill answers in a survey with options. Open ended question would accord the researcher opportunity to gain vital information, otherwise might have not be published about the car scrappage scheme from the various garages and dealerships

In addition the researcher is not ruling out using interviews in gathering the desired information. The significant advantage of interviews is that, it would provide the researcher the opportunity to probe answers where they want interviewee to explain, or build on their responses (Saunders, Lewis, & Thornhill, 2009). The fact remains that, sometimes interviewees may use words or ideas in a particular way and the opportunity to probe these meanings may be significant and add depth to the data the researcher obtains (Saunders, Lewis, & Thornhill, 2009). Due to being in direct contact with the interviewee, discussion between the two parties may lead to exploration of areas of importance not previously considered or thought by the researcher. The ability to conduct interviews on the chosen topic will depend on the willingness of the anticipated respondents (Car Dealerships managers & Sales Reps) to give the researcher the desired audience and time.

There are three main approaches to asking questions during an interview session, the approach to be used by the researcher depends on the type of data or information he/she is seeking from the participants or interviewee.

- **Open questions:** this allows participants to define and describe a situation or event. This is designed to encourage the interviewee to provide extensive and developmental answers and may be used to reveal attitudes or obtain facts (Saunders, Lewis, & Thornhill, 2009). This type of question encourages interviewee to respond to the questions as they see fit and mostly starts with phrases like ‘what’, ‘how’ or ‘why’
  
- **Probing questions:** this approach can be used to explore responses that are significance to the research topic. They may be worded like open questions but request a particular focus or direction (Saunders, Lewis, & Thornhill, 2009)
  
- **Specific and closed questions:** this types of question are similar to those used in structured interviews they can be used to obtain specific information or to confirm a fact or opinion (Saunders, Lewis, & Thornhill, 2009)

Having discussed the various approaches for asking questions, the researcher intends to use an open ended approach while conducting interview with the various car dealerships in Galway city. This approach will allow the researcher gain extensive information and more insight on the subject of research.

### **3.5.1 Sample Selection and Sample Size**

There are approximately around 36 car dealerships in Galway city and county, with this sizeable number of dealerships it would be very difficult to carry out research on all of them. This difficulty may be due to time constraints and the need to limit the number of dealerships to ensure less duplication and better garnering of qualitative data. The researcher has decided to limit the number of sample size to only 5 garages/dealerships. Sampling is the act, process, or technique of selecting a suitable sample, or a representative part of a population for the purpose of determining parameters or characteristics of the whole population (Birchall, 2009).

### 3.5.2 Sampling Methods

There are notably two basic ways of choosing sample; probability sampling and non-probability sampling. Probability or Random sampling gives all members of the population a known chance of being selected or inclusion in the sample and this does not depend upon previous events in the selection process. In other words, the selection of individuals does not affect the chance of anyone else in the population being selected (Birchall, 2009). There are three basic techniques of random sampling;

- **Simple random sampling:** This is the ideal choice as it is a 'perfect' random method. Using this method, individuals are randomly selected from a list of the population and every single individual has an equal chance of selection (Birchall, 2009).
  
- **Systematic random sampling:** this is a frequently used variant of simple random sampling. When performing systematic sampling, every key element from the list is selected (this is referred to as the sample interval) from a randomly selected starting point (Birchall, 2009)
  
- **Stratified sampling:** is a variant on simple random and systematic methods and is used when there are a number of distinct subgroups, within each of which it is required that there is full representation. A stratified sample is constructed by classifying the population in sub-populations (or strata), base on some well-known characteristics of the population, such as age, gender or socio-economic status (Birchall, 2009).

Non probability sampling is a sampling technique which involves the use of human judgement in selecting the sample; every member does not have an equal chance of being selected. There are three main techniques to non probability sampling;

- **Quota sampling:** this type of technique is mostly used in market research surveys, the population is divided into groups e.g., gender, income level. A quota is decided for each group and a number of interviewers are employed to

interview people in each group. It's left to the interviewer to decide on how to locate and organise their prescribed quotas (White, 2007).

- **Purposive or judgemental sampling:** this technique enables the researcher to use their judgement to pick the best sample they think would satisfy the research objectives in question (White, 2007). This form of sample is often used when working with very small samples such as in case study and when a researcher wish to select cases that are particularly informative (Saunders, Lewis, & Thornhill, 2009)
  
- **Convenience sampling:** this technique involves selecting samples of members of the population who can be contacted easily and willing to volunteer. This technique is quick and easy to use, but it's generally prone to bias because of location and influences beyond the researchers control.

### **3.5.3 Data Analysis**

This research is being undertaken by the researcher to ascertain how sustainable the car scrappage scheme is to the Irish auto industry. The researcher has chosen an open ended type of questionnaire to enable him garner the required information. Open ended questionnaire by its nature are very interpretative and phenomenological, because they seek to find information from respondents on the particular phenomena they are experiencing. This new phenomenal or insight would further enlighten the researcher on his chosen topic

The process of analysing the data from the questionnaire (open ended) will involve thorough familiarisation of answers from the respondents (garages and dealerships). The researcher would seek to find emerging themes from the respondents, this emerging themes will be broken down into sub themes, that would form a platform for subsequent analysis and reporting of its findings.

### **3.6 Conclusion**

The researcher in the above paragraphs, have outlined the methodology which he intends to use in conducting his research. The researcher has also outlined what type of questionnaire (open ended) will form the platform for his information gathering, and would also conduct interviews if the samples selected (car dealerships) were able to accord him that opportunity. The researcher also went further and highlighted the various sampling methods and the sample size, which he intends to use in carrying and gathering data for the topic of research.

The researcher also gave brief explanation how intends to analyse the data from the questionnaire, which involves developing and finding emerging themes from the respondents comments and further discussion of those themes.

## **Chapter 4: Research Findings**

### **4.1 Introduction**

The essence of the questionnaire was to gather an insight on the sustainability of the Irish car scrappage scheme from the perspective of the dealerships/garages in the west of Ireland. The author also envisages that the result of the findings would assist him in fulfilling the objectives set out in the introductory chapter of this research.

The author approached 7 garages in Galway city notably, Monaghan Motors, JJ Fleming, Western Motors, Renault Galway, Kennys of Galway, Tony Burke Motors and Windsor Garage with the view of completing questionnaires on the research topic. All the dealerships the author contacted with the questionnaire responded with the exception of Renault Galway, so I can categorically state, that there was 90% response rate to the questionnaire. The questionnaire is attached to the appendix

In reviewing the questionnaire, there were common themes that were emerging as each respondent (garages/dealerships) comments was analysed. All these themes would be reviewed and categorised into a main theme and a sub-theme which would eventually form the basis of the researcher's discussion and further analysis of the research topic in the final chapter of this thesis.

## 4.2 Results from the Questionnaire

Dealerships	Code
Monaghan & Sons	1
JJ Fleming	2
Windsor Garage	3
Tony Burke Motors	4
Western Motors	5

### Q1: How has the Scrappage scheme impacted on jobs in the car industry?

Dealerships	Theme 1	Theme 2
1	Job stability	
2		Job Retention
3		Job Retention
4		Job Retention
5	Job Stability	

- Most respondents concluded that the scrappage scheme has being instrumental in job retention within the car industry.
- Some concluded that the car scrappage scheme has being significant impact in maintaining their present curb of employees.
- Some respondents stated that there could have being more jobs losses, if the car scrappage scheme was not introduced by the government.

**Q2: In your opinion, do you think the car scrappage scheme is sufficient enough to save the car industry/dealerships from collapse?**

Dealerships	Theme 1	Theme 2
1	Limited longevity for the car Industry	
2	Limited longevity for the car Industry	
3		Respite for efficient Dealerships
4	Limited Longevity for the car industry	
5	Limited longevity for the car Industry	

- Most respondent were sceptical about the longevity of the car industry in the present economic climate.
- Some respondents feel that the car scrappage scheme would provide respite in the short term for some dealerships that have financial and operational proficiency
- Some respondents were of the view that government incentives is being offset by spiral cost of operations and would force more garages into closure.



**Q3: What is your opinion on the Irish governments' timing of the introduction of the car scrappage scheme?**

Dealerships	Theme 1	Theme 2	Theme 3
1	Resentment on Governments' timing of introduction		Changes in VRT
2	Resentment on Governments' timing of introduction		
3	Resentment on Governments' timing of introduction		
4	Resentment on Governments' timing of introduction		
5		Appropriate introductory timeframe	

- Most respondents feel that the scrappage scheme should have being introduced a year earlier.
- Some respondents were of the view that changes in VRT have being a detrimental factor in the car industry.
- Some respondents commended the introduction of the car scrappage scheme in 2010, rather than not having any stimulus in place at all.

**Q4: In your opinion, how do you intend to stimulate car sales after the expiration of the scheme, since evidence suggest that there is usually a sharp decline in car sales after expiration of a car scrappage scheme?**

Dealership	Theme 1	Theme 2
1	Customer Relationship Management	
2		Formidable partnership between manufacturers/dealerships/customers
3	Customer Relationship Management	
4	Customer Relationship Management	
5	Customer Relationship Management	

- Most respondent were advocating customer relationship management as the key to stimulating car sales beyond the car scrappage scheme.
- Some respondents believe that car manufactures should continue to offer more bargains and incentives to customers.
- Engaging with present curb of customers and informing of innovative products in the market.

**Q5 It is believed that most customers brought their car purchases forward because of the governments' incentive; do you think the car industry/dealerships would replicate the same sales figures after the expiration the car scrappage scheme?**

Dealerships	Theme 1	Theme 2
1	Prevailing economic circumstances	
2		Manufacturer partnership with government & customers
3	Prevailing economic circumstances	
4	Prevailing economic circumstances	
5	Prevailing economic circumstances	

- Some respondents believe that the sales figures witnessed during the scrappage scheme may not be reciprocated if the present economic slowdown persists.
- Some respondents were of the view that the economic condition is stabilising and inevitably would foster confidence in consumers to make purchase.
- One respondent maintained that if manufacturers continue to offer incentives, the industry would increase sales beyond the car scrappage scheme era.

**Q6: Can you comment on any strategies being formulated by the car industry/dealerships to ensure that the industry would not require any governments' support or incentives in the future?**

Dealerships	Theme 1	Theme 2
1	Consolidation in Dealerships	
2	Allied with SIMI's strategy	
3		Manufacturer partnership with Government
4	Manufacturer partnership with Government	
5	No comment	

- A respondent were of the view car manufacturers will push for a smaller and efficient dealerships
- Increased partnership between manufacturers and government to develop environmentally friendly and greener cars.
- One respondent declined to comment on this question

**Q7: Can you estimate the percentage increase in car sales in your company this year, as a result of the car scrappage scheme in comparison with last year's sales figures?**

Dealership	Theme 1
1	Increased Sales
2	Increased Sales
3	Increased Sales
4	Increased Sales
5	Increased Sales

- All respondents attested to the fact that the car scrappage scheme has boosted their company's sales compared to the previous years'

- Most respondent reported increased sales of 12% - 35% due to the car scrappage scheme.

**Q8: In your opinion, is there any significant trend or change in consumer's buying pattern emerging, with reference to the quality/price/capacity of cars being purchased as the car scrappage is ongoing?**

Dealerships	Theme 1	Theme 2
1	Consumers opting for efficient vehicles	Changing age prolife
2	Consumers opting for efficient vehicles	
3	Consumers opting for efficient vehicles	
4	Consumers opting for efficient vehicles	
5	Consumers opting for efficient vehicles	

- Most respondents reported that consumers are purchasing lower capacity cars
- Most consumers are putting into context the tax payable on each vehicle while making purchase.
- Diesel car seems to mostly purchased due to being cheaper run than petrol
- A rise in the number of over 50's making purchase due to availability of disposable income and secured employment

**Q9: Can you comment on any significant impact of the car scrappage scheme would, or is having on the environment; e.g. reducing C02 emissions?**

Dealerships	Theme 1
1	Environmental conscious
2	Environmental conscious
3	Environmental conscious
4	Environmental conscious
5	Environmental conscious

- Most respondents reported that most vehicles purchased under scrappage were mostly low emitting cars and therefore contribute to reduction of C02 emissions in the environment.

**Q10: Can you comment on the impact of the car scrappage scheme on the 2<sup>nd</sup> hand car market of your company/industry?**

Dealerships	Theme 1	Theme 2
1	Stagnant 2 <sup>nd</sup> Market	
2	Stagnant 2 <sup>nd</sup> Market	
3	Stagnant 2 <sup>nd</sup> Market	Galvanisation of 2 <sup>nd</sup> Market
4	Stagnant 2 <sup>nd</sup> Market	
5		Galvanisation of 2 <sup>nd</sup> Market

- Some respondents commented that the car scrappage has afforded consumers who might not sufficient funds to purchase from the 2<sup>nd</sup> hand market and has resulted to an increased sale.
- Most consumers availing of the car scrappage scheme are opting for new vehicles, this has seen availability of quality cars in the 2<sup>nd</sup> hand market
- Some respondents reported decline in their 2<sup>nd</sup> hand car market due to customers availing of the governments incentives and purchasing new vehicles instead of used vehicles

**Q11: In your opinion, do you think that it's vital for the car industry and the Irish economy, for the government to sustain or extend the car scrappage scheme for a longer term?**

Dealerships	Theme 1	Theme 2
1	Extension beneficial for economic growth	
2	Extension beneficial for economic growth	
3	Extension beneficial for economic growth	
4	Extension beneficial for economic growth	
5		

- Most respondents were of the view that the car scrappage should be extended beyond the December 2010 expiration date
- Some commented on the taxes (VRT & VAT) the government has taking in since the programme started.
- Some respondents advocated extension of the scheme into the first 6 months of the New Year when car sales are generally at low peak.
- A respondent argued that there was no base for further extension of the car scrappage scheme.

**Q12: In your view, do you think that there are significant economic gains ensuing from the car scrappage scheme?**

Dealerships	Theme 1
1	Improved Customer Spending
2	Improved Customer Spending
3	Improved Customer Spending
4	Improved Customer Spending
5	Improved Customer Spending

- The huge intake in VRT and Vat by government was mentioned as one of the economic gains.
- Increased consumer confidence and spending ideal for any economy.
- Growth in sales from the car scrappage has resulted in job retention.

### **4.3 Consolidation of Emerging Themes**

#### **Economic Themes**

- Job Retention
- Limited longevity for the car Industry
- Prevalent economic circumstances
- Manufacturer partnership with Government
- Increased Sales
- Extension beneficial for economy
- Stagnant 2<sup>nd</sup> Market

#### **Social Themes**

- Resentment on Governments' timing of introduction
- Customer Relationship Management
- Consumers opting for efficient vehicles
- Environmental conscious
- Improved Customer Spending



#### **4.4 Conclusion**

After careful analysis of the questionnaire, the results have thrown up some intriguing themes, which are detailed in the above paragraph. The objective of the questionnaire was to gain concise and in-depth information from the companies that are at forefront of this initiative, and are also implementing the scrappage scheme daily as part their business operations. These themes that have emerged from the questionnaire would guide the researcher in forming an argument in the next chapter on whether the car scrappage scheme is a sustainable strategy for the car industry in the west of Ireland.

## **Chapter 5: Discussions**

### **5.1 Introduction**

Having analysed the questionnaires in detail, the researcher deduced some common themes that have emerged from the respondent comments on the car scrappage scheme. These themes will set the ground work for discussion by the researcher. In this chapter, the researcher will discuss these themes, make a detailed and profound judgment on the sustainability of the Irish car scrappage scheme and make recommendation where he sees fit.

### **5.2 Economic Themes**

#### **5.2.1 Job Retention**

From the analysis of the questionnaire, most respondents were of the view that the car scrappage scheme has brought some well needed job stability in the industry. Most reported astronomical rate of job losses before the inception of the scheme, but since the scheme was introduced in early 2010, they are beginning to witness levelling up in job losses which have resulted in more jobs being retained within the industry.

In addition analysis of the employability within the industry has provided atmosphere positivity and renewed confidence. Some dealerships have started recruiting staff, while some are planning to do so in the foreseeable future, these entire positive outlooks attest to the fact, that there is a greater stability and confidence in the level of employability within the car industry because of the car scrappage scheme. It could be argued that without the governments' car scrappage scheme, most staff within the industry would have been out of employment and found themselves at the mercy of dole cues. I can conclusively state that the car scrappage has been instrumental in safeguarding employment not only within the car industry and its adjoining sectors but the economy in general.

#### **5.2.2 Limited Longevity for the Car Industry**

Most respondents believe that the car scrappage scheme would not provide the long term respite needed in the car industry. However, most welcomed the immense impact the car scrappage has had on their businesses, notably the dealerships that are backed by operational and financial proficiency. From my analysis, it could be said

that most sales witnessed in the industry was attributed to government scrappage scheme and some manufacturer's added incentives. From all indication, most respondent feel that upon expiration of the scheme in December 2010, the car industry might find itself storming back to the pre- recession era, when sales were stagnant and consumer confidence low. Another factor mentioned, that is proven detrimental to long-term viability of the industry, is the spiral cost of operations within the industry. Many agree that the rising cost, notably the cost of writing down old stock in their garages has had detrimental effects on their business activities. Despite the propitiated short-term gains from the scrappage scheme in terms of sustaining employment, more dealerships have gone into liquidation or seized operation entirely since the inception of the car scrappage scheme.

### **5.2.3 Prevalent Economic Circumstances**

Upon analysing the question on whether the car industry in Ireland would be able to replicate the same sales figures witnessed whilst the scrappage scheme was ongoing. Most respondent were somehow indifferent in their answers, they were all pointing towards the prevalent economic circumstances on expiration of the car scrappage scheme in December of 2010. Most respondents maintained that an improved economic condition would ensure that the forecasted sales figures for 2011 would be achieved. Reports' coming out from the UK and other European economies maintains that new car sales continue to perform above expectations. In UK new car sales figure in June 2010 were 10.8% higher than there were at the same period in 2009 and this steady increase has being recorded in each of the last 12 months (Matthey, 2010). According to the chief executive of UK's Society of Motor Manufactures and Traders (SMMT) Mr Paul Everitt this steady increase car sales can be attributed to renewed and rising business confidence and also an upturn in the UK economy (Matthey, 2010)

Irish dealerships can find solace in this impressive results coming out from the UK and hope that a renewed and improved confidence in the Irish economy will provide the car industry with much needed respite in the coming year. From all indications, the Irish dealerships have affirmed that there is big correlation between their sales figures and the current or prevalent economic conditions in Ireland. An

underperforming economy translates to weak consumer sentiments, which ultimately results to a low purchasing power, which means consumer's unwillingness to make decision or spend their monies on expensive commodities like cars. Car dealerships are entangled in this cycle of economic conundrum which currently dictates the direction of their business operation and are limited in their strategy and economic options that can that can assert authority on the greater and wider Irish economy. The car dealerships can only hope that the prospect of an improved economy going into the New Year would somehow help them achieve the estimated sales target for 2011.

#### **5.2.4 Manufacturer Partnership with Government**

On the issue of strategies being formulated by the car industry to ensure that the industry does not require governments' incentives in the future. The most common theme emerging from this analysis was a renewed and increased partnership with government to develop more efficient vehicles for the market. Most respondents were of the view that the Irish government should have modalities in place to support the green initiatives being embarked by most car manufacturers. They maintained that a corseted effort in this area by the government; example having regulations in place to ensure that car manufactures engage in their green innovations without inhibitions, continue their effort in ensuring that electric cars get a wider acceptance in the country.

The government recently announced €5000 grant for consumers who purchase Nissan-Renault electric cars and also exempted them from paying Vehicle Registration Tax (Melia, 2010). In addition the ESB will provide 3,500 charge points and 30 fast-charge points around the country by the end of 2011, and also promised to install a domestic charger to the first 2,000 motorists who sign up (Melia, 2010). All these steps being taken by the government in conjunction with car manufacturers would ensure that the car industry operates efficiently, produces what the market demands and guarantees their long term viability without requiring any stimulus package for the industry.

#### **5.2.5 Increased Sales due to Car Scrappage Scheme**

All publications since the introduction of the car scrappage scheme points to an increased sales due to the scheme. All respondents poled, reported sales increase between 12% - 35% in their dealerships compared to 2009, there is no doubt that the

car scrappage scheme has had a tremendous effect in generating sales for most dealerships. Figures coming out from the to the Society of the Irish Motor Industry (SIMI) states that new car sales have increased by 47 per cent between January and July this year compared to the same period last year (Pauric, 2010). This figure translates into 74,111 new cars being sold in the first seven months of 2010, compared to just 57,000 from January to July in 2009 (Pauric, 2010).

Arguably these sales figures could be the most significant impact or result of the car scrappage scheme in Ireland since its inception. From all analysis the car scrappage scheme has actually resulted in huge volume sales for most dealerships, this can only be good news for the car industry which was beleaguered with stagnant sales and closure of dealerships prior to introduction of the scrappage scheme.

#### **5.2.6 Extension of Car scrappage Scheme Beneficial for Economic Growth**

Most respondents expect one, indicated that an extension of the car scrappage scheme beyond its December 2010 expiration date, would be a welcomed gesture and reprieve for the car industry. In the UK the scrappage scheme was extended by a month beyond its February 2010 expiration deadline due to the scheme's huge success and also to allow the dealerships to prepare and operate the exit phase of the program (Kumar, 2010). Most respondents believe that an extension of the scheme would not only be beneficial to the car industry, but also to the wider Irish economy. Some respondents reported that car sales are traditionally sluggish during the first quarter of every New Year, but with a government backed incentive still in place, it would ensure continued resurgence by dealerships and the industry as a whole into the New Year.

The Society of the Irish Motor Industry (SIMI) has also renewed calls for the government to extend the scheme beyond its December 2010 deadline, with the view of protecting the resurgence being witnessed in the industry at the moment, and also to ensure that the industry does not fall back to the disastrous period of 2009 (McCarthaigh, 2010). An extension of the scheme from the researcher's analysis would be beneficial, not only fostering the improved confidence in the car industry at the moment, but would also increase consumer sentiments and protect thousands of jobs within the industry.

### **5.2.7 Stagnant 2<sup>nd</sup> Hand Car Market**

Although most respondents reported that the introduction of the car scrappage scheme has afforded their dealerships with quality used cars, but intuitively has also resulted in a stagnant used car market. Most customers who might have naturally be inclined to purchase a 2<sup>nd</sup> hand vehicle, has resorted to trading up and buying new vehicles due to the governments' incentives. Most dealership reported a decline in the uptake of 2<sup>nd</sup> hand cars, not only due to the car scrappage scheme, but also due to an increased emphasis on efficient, low emitting vehicles. The new motor tax system which came into place in 2008 meant that new cars registered or bought in Ireland are taxed based on their CO<sub>2</sub> emission, rather than their engine capacity. This changes means that a consumer who decides to buy a vehicle under the 'Band A' which emits 0-120g/km CO<sub>2</sub> will only pay a minimal road tax of €104 per year (AA Ireland, 2008). From all this analysis the researcher could say that the introduction of car scrappage scheme has produced a weak to used car market.

## **5.3 Social Themes**

### **5.3.1 Resentment on Governments' Timing of Introduction of Scrappage Scheme**

On the issue of governments' timing of the introduction, most respondents felt that the scrappage scheme should have being introduced earlier in 2009, when the car industry was going through its worst crisis. However many respondents applauded the government initiative for actually introducing the scheme. The car scrappage scheme at the moment, has helped stabilise the ailing car industry and put it in a path of recovery if the Irish and global economy continues with its upturn. Most respondents thought the Irish government played a waiting game, to ascertain how similar schemes might have worked out in other European countries, instead of implementing strategies and stimulus that would galvanise the car industry in Ireland. Although the global economic recession and saturation of credit played a big part in the slowdown witnessed by dealerships, a timely government intervention would have ensured that fewer dealerships and jobs would have being lost.

### **5.3.2 Customer Relationship Management**

Most respondents were advocating a proper customer relationship as the key to stimulating car sales beyond the car scrappage scheme. It could be argued that in light of the governments' incentives most consumers brought their purchase forward and has resulted in huge volume sales for car dealerships. These purchases brought forward might result in weaker sales when the scheme eventually comes to an end in December 2009. Most respondent are keen to fostering relationship with the present curb of customers, keeping them informed of the new and innovative products coming into market in a bid to ensure that such a scenario does not occur. Furthermore the researcher anticipates that upon the expiration of the car scrappage scheme that most car manufacturers' in conjunction with dealerships will maintain or develop a similar schemes that will keep consumers' engaged to the brand in the long-run and make a repeat purchase. All these modalities being set up by car dealerships are in view that the car scrappage would eventually come to an end one day and the industry has to look beyond the days when there is no government incentives stimulate sales.

### **5.3.3 Consumers' Preference for Efficient Vehicles**

One of the most significant outcomes of the car scrappage scheme has being consumers placing more emphasis on purchasing more efficient vehicles. Most respondents confirmed that most vehicles sold via the scrappage scheme were all low emitting vehicles and environmentally friendly. Already stated in the previous paragraph, the change in tax system of vehicles was one of the contributing factors to this change in car buying attitude/pattern. Consumers are more aware of the significant savings that can be made when they purchase vehicles in the low emitting tax bands. These changing trends can only be good news for the environment, the car industry and the wider economy. Furthermore these trends should provide vital information to the car industry, that consumers are becoming savvier in their demands, and would not settle for any product that would not justify their personal gratifications.

### **5.3.4 Environmental Conscious Consumers**

Another theme that emerged due to the introduction of the car scrappage scheme is the increased environmental consciousness of most consumers that are availing of the car scrappage scheme. Most respondent reported a huge increase in the number of customers seeking information on the c02 emissions of particular cars they are interested in purchasing. Respondents informed the researcher, that most consumers have developed greater awareness in the green agenda; they are readily informed on the environmental specification of most vehicles through print media and online. Most consumers are increasingly making concerted effort to ensure that they do their own part to ever prevalent green initiative.

### **5.3.5 Improved Consumer Spending**

The car scrappage scheme has resulted in an improved consumer spending according to the feedback from respondents. Most respondents believe that the Irish governments'' backed car scrappage scheme has being instrumental in changing consumer sentiments and fostering economic gains. They maintained that an improved consumer sentiment was ideal for car industry and the wider Irish economy, fewer jobs has being lost in the industry and more dealerships are still in operation because consumers are coming into garages and making a purchase. The huge VRT intake by the exchequer is a testimony to the viability of the scrappage scheme. According to the Society of the Irish Motor Industry, the scrappage scheme has contributed €470m to the Exchequer in VAT and VRT this year, over €70m more than last year (McCarthaigh, 2010). A continuation of similar consumer sentiments into 2011 coupled with a stable Irish economy would definitely be a reassurance and indication to the car industry that the worst days are behind them.



## **5.4 Conclusion**

There is no denying the fact that the Irish governments' car scrappage scheme has proven beneficial to the car industry in different folds. Although the car scrappage scheme has reached its half way mark, the short term gains resonating from the scheme cannot be under estimated. The scheme was primarily implemented to sell cars and stimulate the car industry, and according to sales figures coming out from the car industry, the car scrappage scheme has definitely achieved this aim.

Furthermore the car scrappage scheme has opened up a new customer dimension, base and trends for dealerships and garages. From the researcher's analysis most customers that availed of the scrappage scheme, took advantage of the government incentives to trade up to new vehicles instead of 2<sup>nd</sup> hand models. In addition the car scheme has given the car industry the vital support that it needed, boosting demand at their crisis period and helping the car industry to meet the challenges of developing innovative products and building a low carbon future.

Although primarily, Irish car scrappage scheme was intended to save jobs and ensure stability in the car industry, but one cannot deny other benefits ensuing form the car scrappage scheme like reduction in the C02 emitted in the environment by older cars being scrapped. Most cars sold by dealerships the scrappage scheme are all low emitting and environmentally friendly vehicles, from the literature, the average CO2 emission for older cars is around 179g/km, compared to a much lower 134g/km emissions average for new cars. This translates to a reduction of 45g/km emission, a significant 25% reduction in the amount C02 emitted by new vehicles compared to older ones. This point proves that the car scrappage scheme has had significant impact on the environment whilst fulfilling the initial objective set out by the government.

On embarking this research I was forced to question the reason why the Irish government should single out one sector of economy and invest taxpayers' money into that segment, bearing in mind that other sectors of the economy are bearing wrought of the economic meltdown. In addition Ireland is neither a car manufacturing country nor is she an assembling plant for car manufacturers, why then is the government adding stimulus to sector, when most profits recouped are

siphoned back to the foreign manufacturers. While reviewing articles, publications and literature on the car scrappage scheme, I was forced to quash my doubts on the government strategy, whether it actually makes a good economic sense. The single beneficiary of the car scrappage scheme has been the car industry and the Irish economy in general. The scheme has resulted in huge VAT and VRT returns for the economy, and above all the scheme has been instrumental in job retention and stabilising the car industry.

Questioning the fate of the car industry had the car scrappage scheme not been introduced, will throw a new dimension to this research and one the researcher believes will yield an interesting outcome. Most dealerships and garages polled during this research attested to the fact, that the Irish governments' car scrappage scheme has given them a renewed confidence, and an increased optimism going into next year.

## **5.6 Recommendation**

The final economic analysis of the car scrappage scheme is not at the researcher's disposal at the moment, because the scheme is still being implemented and due to expire in December 2010. The researcher can tentatively make recommendation from the short gains witnessed while conducting this research.

Firstly the Irish government should look into extension of the car scheme into the first six months of 2011. The gains of the car scrappage scheme are still fragile and can be compromised if the administration is forced into hasty conclusion about the sustainability of the car industry without scrappage scheme in place. The industry is still coming out from two years of diminished economic performance, therefore withdrawing the stimulus at the end of December means that the industry might be vulnerable to weak economic circumstances that might still persist in 2011.

The researcher also recommends an increased partnership between government, car manufacturers and dealerships. There is an upward trend towards cleaner, green cars, the government should support, put resources in place to ensure that car manufacturers are encouraged to produce more environmentally friendly vehicles. The government should implement more initiatives like the Renault-Nissan electric car initiative and the tax system based on CO<sub>2</sub> emissions to encourage consumer purchase more efficient and cleaner cars.

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**QUESTIONNAIRE: CAR SCRAPPAGE SCHEME**

Company Name \_\_\_\_\_

**(1) How has the Scrappage scheme impacted on jobs in the car industry?**

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**(2) In your opinion, do you think the car scrappage scheme is sufficient enough to save the car industry/dealerships from collapse?**

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**(3) What is your opinion on the Irish governments' timing of the introduction of the car scrappage scheme?**

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**(4) In your opinion, how do you intend to stimulate car sales after the expiration of the scheme, since evidence suggest that there is usually a sharp decline in car sales after expiration of a car scrappage scheme?**

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**(5) It is believed that most customers brought their car purchases forward because of the governments' incentive; do you think the car industry/dealerships would replicate the same sales figures after the expiration the car scrappage scheme?**

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**(6) Can you comment on any strategies being formulated by the car industry/dealerships to ensure that the industry would not require any governments' support or incentives in the future?**

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**(7) Can you estimate the percentage increase in car sales in your company this year, as a result of the car scrappage scheme in comparison with last year's sales figures?**

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**(8) In your opinion, is there any significant trend or change in consumer's buying pattern emerging, with reference to the quality/price/capacity of cars being purchased as the car scrappage is ongoing?**

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**(9) Can you comment on any significant impact of the car scrappage scheme would, or is having on the environment; e.g. reducing C02 emissions?**

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**(10) Can you comment on the impact of the car scrappage scheme on the 2<sup>nd</sup> hand car market of your company/industry?**

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**(11) In your opinion, do you think that it's vital for the car industry and the Irish economy, for the government to sustain or extend the car scrappage scheme for a longer term?**

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**(12) In your view, do you think that there are significant economic gains ensuing from the car scrappage scheme?**

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*Thank you*